HITSP Immunization Document Component

HITSP/C78

Submitted to:
Healthcare Information Technology Standards Panel

Submitted by:
Care Management and Health Records Domain Technical Committee
Population Perspective Technical Committee
(Formerly Population Health Technical Committee)
## DOCUMENT CHANGE HISTORY

<table>
<thead>
<tr>
<th>Version Number</th>
<th>Description of Change</th>
<th>Name of Author</th>
<th>Date Published</th>
</tr>
</thead>
<tbody>
<tr>
<td>Template V2.4</td>
<td></td>
<td>Project Team</td>
<td>July 31, 2008</td>
</tr>
<tr>
<td>0.0.1</td>
<td>Review Copy</td>
<td>Care Management and Health Records</td>
<td>September 26, 2008</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Domain Technical Committee</td>
<td></td>
</tr>
<tr>
<td>0.0.2</td>
<td>Review Copy</td>
<td>Care Management and Health Records</td>
<td>December 10, 2008</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Domain Technical Committee</td>
<td></td>
</tr>
<tr>
<td>1.0</td>
<td>Released for Implementation</td>
<td>Care Management and Health Records</td>
<td>December 18, 2008</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Domain Technical Committee</td>
<td></td>
</tr>
<tr>
<td>Template V2.5</td>
<td></td>
<td>Project Team</td>
<td>June 30, 2009</td>
</tr>
<tr>
<td>1.0.1</td>
<td>Review Copy</td>
<td>Care Management and Health Records</td>
<td>June 30, 2009</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Domain Technical Committee</td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>Released for Implementation</td>
<td>Care Management and Health Records</td>
<td>July 8, 2009</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Domain Technical Committee</td>
<td></td>
</tr>
</tbody>
</table>
# Table of Contents

1.0 **INTRODUCTION** ................................................................. 5
   1.1 Overview ............................................................................. 5
   1.2 Copyright Permissions ....................................................... 5
   1.3 Reference Documents ....................................................... 5
   1.4 Conformance ...................................................................... 5
       1.4.1 Conformance Criteria ................................................ 5
       1.4.2 Conformance Scoping, Subsetting and Options .......... 6

2.0 **COMPONENT DEFINITION** ............................................... 7
   2.1 Context Overview .............................................................. 7
       2.1.1 Component Constraints ............................................. 7
       2.1.2 Component Dependencies .......................................... 7
   2.2 Rules for Implementing ...................................................... 8
       2.2.1 Data Mapping .......................................................... 8
   2.3 Standards .......................................................................... 8
       2.3.1 Regulatory Guidance ............................................... 8
       2.3.2 Selected Standards .................................................. 9
       2.3.3 Informative Reference Standards ......................... 9

3.0 **APPENDIX** ..................................................................... 10
   3.1 HITSP Constraints Defined in this Document ..................... 10
   3.2 Template Identifiers ......................................................... 10

4.0 **DOCUMENT UPDATES** ...................................................... 11
   4.1 December 10, 2008 ......................................................... 11
   4.2 December 18, 2008 .......................................................... 11
   4.3 June 30, 2009 ................................................................. 11
   4.4 July 8, 2009 ................................................................. 11
FIGURES AND TABLES

Table 1-1 Reference Documents ................................................................. 5
Table 2-1 Component Constraints .............................................................. 7
Table 2-2 Component Dependencies .......................................................... 7
Table 2-3 Immunization Content Modules ............................................... 8
Table 2-4 Regulatory Guidance ................................................................. 8
Table 2-5 Selected Standards ................................................................. 9
Table 2-6 Informative Reference Standards ........................................ 9
1.0 INTRODUCTION

1.1 OVERVIEW

The HITSP Immunization Document Component defines the immunization data content to be exchanged between healthcare entities such as immunization information systems, Electronic Medical Record Systems, Personal Health Record Systems and other stakeholders. It is based upon the IHE Patient Care Coordination (PCC) Technical Framework Supplement 2008-2009, Immunization Content (IC), Trial Implementation Version 1.0.

1.2 COPYRIGHT PERMISSIONS

COPYRIGHT NOTICE

© 2009 ANSI. This material may be copied without permission from ANSI only if and to the extent that the text is not altered in any fashion and ANSI’s copyright is clearly noted.

IHE materials used in this document have been extracted from relevant copyrighted materials with permission of Integrating the Healthcare Enterprise (IHE) International. Copies of this standard may be retrieved from the IHE Web Site at www.ihe.net.

1.3 REFERENCE DOCUMENTS

This section provides a list of key reference documents and background material.

A list of key reference documents and background material is provided in the table below. These documents can be retrieved from www.hitsp.org.

<table>
<thead>
<tr>
<th>Reference Document</th>
<th>Document Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HITSP Acronyms List</td>
<td>Lists and defines the acronyms used in this document</td>
</tr>
<tr>
<td>HITSP Glossary</td>
<td>Provides definitions for relevant terms used by HITSP documents</td>
</tr>
<tr>
<td>TN901 – Technical Note for Clinical Documents</td>
<td>TN901 is a reference document to provide the overall context for use of the HITSP Care Management and Health Records constructs</td>
</tr>
</tbody>
</table>

1.4 CONFORMANCE

This section describes the conformance criteria, which are objective statements of requirements that can be used to determine if a specific behavior, function, interface, or code set has been implemented correctly.

1.4.1 CONFORMANCE CRITERIA

In order to claim conformance to this construct specification, an implementation must satisfy all the requirements and mandatory statements listed in this specification, the associated HITSP Interoperability Specification, its associated construct specifications, as well as conformance criteria from the selected base and composite standards. A conformant system must also implement all of the required interfaces within the scope, subset or implementation option that is selected from the associated Interoperability Specification.

Claims of conformance may only be made for the overall HITSP Interoperability Specification or Capability with which this construct is associated.
1.4.2 CONFORMANCE SCOPING, SUBSETTING AND OPTIONS

A HITSP Interoperability Specification must be implemented in its entirety for an implementation to claim conformance to the specification. HITSP may define the permissibility for interface scoping, subsetting or implementation options by which the specification may be implemented in a limited manner. Such scoping, subsetting and options may extend to associated constructs, such as this construct. This construct must implement all requirements within the selected scope, subset or options as defined in the associated Interoperability Specification to claim conformance.
2.0 COMPONENT DEFINITION

2.1 CONTEXT OVERVIEW

To support "Immunization Feed", HITSP is using the IHE Patient Care Coordination (PCC) Technical Framework Supplement 2008-2009, Immunization Content (IC), Trial Implementation Version 1.0.

As stated in IHE PCC-Technical Framework (TF):

The text for the PCC-TF specification begins here:

The Immunization Content Profile (IC) provides a standard document to exchange immunization data. It is intended to facilitate the exchange of immunization data among multiple systems belonging to a single or to multiple organizations. Data exchange with and among the installed base of U.S. Immunization Information System (IIS) base was a critical consideration in formulating this profile. However, its intention is to go beyond data exchange among IISs, and facilitate immunization data exchange on a healthcare information network that includes Electronic Medical Record (EMR) systems, Health Information Exchanges, other public health systems, Personal Health Record (PHR) systems, and other stakeholder systems. Thus, the profile specifies common data formats for exchanging immunization data only, or for exchanging immunization data along with medical summary data needed for the overall care of a patient related to immunizations.

To accomplish this, IC includes history of administered vaccines with such details as lot number, who administered the immunization, and so forth, and handles immunization as well as other information related to the patient's care. For example, it includes medical history, medications, allergies, vital signs, and so forth.

The text for the PCC-TF specification ends here.

The IHE PCC IC Integration Profile defines the Immunization Content Specification which is document based upon HL7 Version 3.0 Clinical Document Architecture (CDA).

2.1.1 COMPONENT CONSTRAINTS

Table 2-1 Component Constraints

<table>
<thead>
<tr>
<th>Constraint</th>
<th>Constraint Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shall support the Personal Information Content Module</td>
<td>See Section 2.2.1</td>
</tr>
</tbody>
</table>

2.1.2 COMPONENT DEPENDENCIES

Table 2-2 Component Dependencies

<table>
<thead>
<tr>
<th>Standard/HITSP Component</th>
<th>Depends On (Name of standard/HITSP Component that it depends on)</th>
<th>Dependency Type (Pre-condition, Post-condition, General)</th>
<th>Purpose (Reason for this dependency)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HITSP/C78 - Immunization Document</td>
<td>HITSP/C83 - CDA Content Modules</td>
<td>General</td>
<td>Identifies Content Modules constrained by this Component to be applied within the exchange</td>
</tr>
</tbody>
</table>
2.2 RULES FOR IMPLEMENTING

Implementations of this Component shall support the Immunization Content Modules as defined by IHE PCC Technical Framework Supplement 2008-2009, Immunization Content (IC), Trial Implementation Version 1.0. Implementations shall also support the HITSP constraints specified in Section 2.2.1.

2.2.1 DATA MAPPING

C78-[CT1-11] Implementations of this Component shall support the Immunization Content Modules as defined by IHE PCC Technical Framework Supplement 2008-2009, Immunization Content (IC), Trial Implementation Version 1.0. Implementations shall also support the HITSP constraints specified in Table 2-3.

The template identifier for this 2.16.840.1.113883.3.88.11.78.1

Table 2-3 Immunization Content Modules

<table>
<thead>
<tr>
<th>Constraint ID</th>
<th>Content Module</th>
<th>HITSP Optional Entry</th>
<th>HITSP Repeatable Entry</th>
<th>Specification Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>C78-[CT1-1]</td>
<td>Person Information</td>
<td>R</td>
<td>N</td>
<td>See HITSP/C83 Section 2.2.2.1 Personal Information</td>
</tr>
<tr>
<td>C78-[CT1-2]</td>
<td>History of Immunizations</td>
<td>R</td>
<td>N</td>
<td>See HITSP/C83 Section 2.2.1.17 Immunizations Section Data Element Constraints: 13.02 Administered Date Optionality = R2, Repeat = N 13.06 Drug Manufacturer Optionality = R2, Repeat = N</td>
</tr>
<tr>
<td>C78-[CT1-3]</td>
<td>Problem List</td>
<td>R2</td>
<td>N</td>
<td>See HITSP/C83 Section 2.2.1.3 Problems List Section</td>
</tr>
<tr>
<td>C78-[CT1-4]</td>
<td>History of Past Illness</td>
<td>R2</td>
<td>N</td>
<td>See HITSP/C83 Section 2.2.1.4 History of Past Illness Section</td>
</tr>
<tr>
<td>C78-[CT1-5]</td>
<td>Allergies and Intolerances</td>
<td>R2</td>
<td>N</td>
<td>See HITSP/C83 Section 2.2.1.2 Allergies and Other Adverse Reactions Section</td>
</tr>
<tr>
<td>C78-[CT1-6]</td>
<td>Medications</td>
<td>R2</td>
<td>N</td>
<td>See HITSP/C83 Section 2.2.1.12 Medications Section</td>
</tr>
<tr>
<td>C78-[CT1-7]</td>
<td>Coded Results</td>
<td>R2</td>
<td>N</td>
<td>See HITSP/C83 Section 2.2.1.22 Diagnostic Results Section</td>
</tr>
<tr>
<td>C78-[CT1-8]</td>
<td>Coded Vital Signs</td>
<td>R2</td>
<td>N</td>
<td>See HITSP/C83 Section 2.2.1.19 Vital Signs Section</td>
</tr>
<tr>
<td>C78-[CT1-9]</td>
<td>Pregnancy History</td>
<td>R2</td>
<td>N</td>
<td>See HITSP/C83 Section 2.2.1.9 Pregnancy</td>
</tr>
<tr>
<td>C78-[CT1-10]</td>
<td>Advance Directives</td>
<td>R2</td>
<td>N</td>
<td>See HITSP/C83 Section 2.2.1.16 Advance Directives Section</td>
</tr>
</tbody>
</table>

2.3 STANDARDS

2.3.1 REGULATORY GUIDANCE

Table 2-4 Regulatory Guidance

<table>
<thead>
<tr>
<th>Regulation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>No applicable regulatory guidance</td>
<td></td>
</tr>
</tbody>
</table>

1 We have added template identifiers to the document specifications that follow. These template identifiers are recommended be used in exchanges, but are not required due to restrictions on major change. It is possible that these identifiers could be required in future editions of this specification.

2 Optionality = “R” for Required, “R2” for Required if known, “O” for Optional, or “C#” for Conditional.
2.3.2 SELECTED STANDARDS

Table 2-5 Selected Standards

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Level Seven (HL7) HL7 Version 3 Standard: Clinical Document Architecture (CDA), Release 2</td>
<td>The HL7 Clinical Document Architecture is an XML-based document markup standard that specifies the structure and semantics of clinical documents for the purpose of exchange. CDA is one instantiation of HL7’s Version 3.0 Reference Information Model (RIM) into a specific message format. Of particular focus for HITSP Interoperability Specifications are message formats for Laboratory Results and Continuity of Care (CCD) documents. Release 2 of the HL7 Clinical Document Architecture (CDA) is an extension to the original CDA document markup standard that specifies the structure and semantics of clinical documents for the purpose of exchange. CDA R2 includes a prose document in HTML, XML schemas, data dictionary, and sample CDA documents. CDA R2 further builds upon other HL7 standards beyond just the Version 3.0 Reference Information Model (RIM) and incorporates Version 3.0 Data Structures, Vocabulary, and the XML Implementation Technology Specifications for Data Types and Structures. For more information visit <a href="http://www.hl7.org">www.hl7.org</a></td>
</tr>
<tr>
<td>Integrating the Healthcare Enterprise (IHE) Patient Care Coordination (PCC) Technical Framework Supplement 2008-2009, Immunization Content (IC), Trial Implementation Version 1.0</td>
<td>The IHE Patient Care Coordination Technical Framework (PCC TF) defines specific implementations (called Integration Profiles) of established standards to deal with integration issues that cross providers, patient problems or time. The Immunization Content (IC) Supplement enables sharing of a standard document to exchange immunization data. It is intended to facilitate the exchange of immunization data among multiple systems belonging to a single or to multiple organizations. For more information visit <a href="http://www.ihe.net">www.ihe.net</a></td>
</tr>
</tbody>
</table>

2.3.3 INFORMATIVE REFERENCE STANDARDS

Table 2-6 Informative Reference Standards

<table>
<thead>
<tr>
<th>Standard</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrating the Healthcare Enterprise (IHE) Patient Care Coordination (PCC) Technical Framework Revision 4.0</td>
<td>The IHE Patient Care Coordination Technical Framework (PCC TF) defines specific implementations (called Integration Profiles) of established standards to deal with integration issues that cross providers, patient problems or time. The Cross-Enterprise Document Content Transactions (PCC-5) enables sharing of immunization information between immunization registries and clinical data consumers. In the registry, healthcare providers publish pointers to documents stored in distributed repositories. Other healthcare providers may search and retrieve these and other documents. For more information visit <a href="http://www.ihe.net">www.ihe.net</a></td>
</tr>
</tbody>
</table>
3.0 APPENDIX

The following sections include relevant materials referenced throughout this document.

- A listing of all HITSP Constraints defined within this document.
- A listing of all HITSP Template identifiers defined within this document.

3.1 HITSP CONSTRAINTS DEFINED IN THIS DOCUMENT

C78-[CT1-1]  See HITSP/C83 Section 2.2.2.1 Personal Information
C78-[CT1-2]  See HITSP/C83 Section 2.2.1.17 Immunizations Section
C78-[CT1-3]  See HITSP/C83 Section 2.2.1.3 Problems List Section
C78-[CT1-4]  See HITSP/C83 Section 2.2.1.4 History of Past Illness Section
C78-[CT1-5]  See HITSP/C83 Section 2.2.1.2 Allergies and Other Adverse Reactions Section
C78-[CT1-6]  See HITSP/C83 Section 2.2.1.12 Medications Section
C78-[CT1-7]  See HITSP/C83 Section 2.2.1.22 Diagnostic Results Section
C78-[CT1-8]  See HITSP/C83 Section 2.2.1.19 Vital Signs Section
C78-[CT1-9]  See HITSP/C83 Section 2.2.1.9 Pregnancy
C78-[CT1-10] See HITSP/C83 Section 2.2.1.16 Advance Directives Section
C78-[CT1-11] Implementations of this Component shall support the Immunization Content Modules as defined by IHE PCC Technical Framework Supplement 2008-2009, Immunization Content (IC), Trial Implementation Version 1.0. Implementations shall also support the HITSP constraints specified in Table 2-3.

3.2 TEMPLATE IDENTIFIERS

See the relevant HL7 Implementation Guides and IHE Profiles for a complete listing of all other template identifiers that are required for declaring conformance to HITSP defined templates.

- 2.16.840.1.113883.3.88.11.78 HITSP/C78 Immunization Document
4.0 DOCUMENT UPDATES

The following sections provide the details of updates made to this document.

4.1 DECEMBER 10, 2008

The changes in this construct address the following comments received during the Public Comment and Inspection Testing period (September 29 – October 24, 2008).

5594

- Section 2.2.1 Data Mapping
  - Delete incorrect text related to discharge summary
  - Added text to require implementation support IHE PCC Technical Framework and HITSP constraints
  - Constrained Data Elements in History of Immunizations Content Module
  - Administered Date and Drug Manufacturer
- Section 2.3.3 Informative Reference Standards
  - Corrected Version for Integrating the Healthcare Enterprise (IHE) Patient Care Coordination (PCC) Technical Framework Revision 4.0 in Table 2-6 Informative Reference Standards
- Global
  - Document Name change from Immunization and Response Component to Immunization Query and Response Component (this change was applied throughout the document for consistency with the HITSP suite of Interoperability Specifications)

4.2 DECEMBER 18, 2008

Upon approval by the HITSP Panel on December 18, 2008, this document is now Released for Implementation.

4.3 JUNE 30, 2009

The changes in this cycle address the following:

- Revised the document based on HITSP/TN903 Data Architecture
- Section 2.2 Rules for Implementing
  - Addition of Note on usage of HITSP Constraints
- Section 2.2.1 Data Mapping
  - Added Template Identifier to the Immunization Document
  - Added Constraint IDs to identify all HITSP Constraints
- 3.0 Appendix
  - Addition links to all C78 Immunization Data Element and HITSP Constraints
- Changes based upon Public Comments
  - 7071, 7078, 7114

Minor editorial changes were made to this construct. Removed boilerplate text for simplification. The term “actor” was replaced with “interface”.

4.4 JULY 8, 2009

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