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HITSP CDA Content Modules Component

HITSP/C83

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Healthcare Information Technology Standards Panel

Submitted by:

Care Management and Health Records Domain Technical Committee

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Note to Reviewers: *This document serves as a catalog of data element-related information; as such it is subject to frequent and regular updates. To facilitate the review of this document, the changes specific to each published version will be highlighted within the document. A reviewer may review the entire document, but note that special emphasis is placed on the review of proposed changes and new items. All submitted comments must reference the specific version of the document being reviewed for proper resolution*

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1.0 INTRODUCTION

1.1 OVERVIEW

The purpose of the Healthcare Information Technology Standards Panel (HITSP) CDA Content Modules Component is to define the library of Components that may be used by CDA-based constructs developed by HITSP and others in standards based exchanges. The Components are organized into modules to simplify navigation. These modules are organized along the same principals as the HL7 Continuity of Care Document.

The data elements found in these modules are based on HL7 CDA Implementation Guides and the IHE PCC Technical Framework Volume II, Release 5 and its related supplements. These guides contain specifications for document sections that are consistent with all clinical documents currently selected for HITSP constructs.

1.2 COPYRIGHT PERMISSIONS

1.3 REFERENCE DOCUMENTS

A list of key reference documents and background material is provided in the table below. HITSP-maintained reference documents can be retrieved from the HITSP Web Site.

Table 1-1 Reference Documents

Reference Document	Document Description
HITSP Acronyms List	Lists and defines the acronyms used in this document
HITSP Glossary	Provides definitions for relevant terms used by HITSP documents
TN901 – Clinical Documents	TN901 is a reference document that provides the overall context for use of the HITSP Care Management and Health Records constructs
TN903 – Data Architecture	TN903 is a reference document that provides the overall context for use of the HITSP Data Architecture constructs

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 or Capability, 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 or Capability 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 or Capability to claim conformance.

1.4.3 USE OF VOCABULARY RECOMMENDED TO SUPPORT ARRA HITECH

This HITSP Component has been modified to support vocabularies allowed for meaningful use and other American Recovery and Reinvestment ACT (ARRA) HITECH requirements for all Components that rely upon it.

In almost all cases, coded values in the HITSP/C83 specifications are either optional (O) or required if known (R2) instead of required (R). In these cases, it is permissible to include a **<code>** element[1] using a **nullFlavor** of UNK indicating that the information is unknown, and include **<translation>** elements which indicate codes from other code systems.

The following example shows a case where the **<value>** element in a condition entry includes the optional coded value for the Problem Code data element.

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<observation classCode='OBS' moodCode='EVN'>
    <templateId root='2.16.840.1.113883.10.20.1.28'/>
        ...
    <value xsi:type='CD' code='37796009' displayName='Migraine'
        codeSystem='2.16.840.1.113883.96' codeSystemName='SNOMED CT'/>
</observation>
```

Because Problem Code is optional, the following is also a legal rendition for the **<value>** element. The value element is present; it just does not include the optional coded concept.

[1] or <value> or other element used for coded data.

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<observation classCode='OBS' moodCode='EVN'>
    <templateId root='2.16.840.1.113883.10.20.1.28'/>
        ...
    <value xsi:type='CD' nullFlavor='UNK'>
      <translation code='346.9' displayName='Migraine'
          codeSystem='2.16.840.1.113883.6.103'
         codeSystemName='ICD-9-CM'/>
    </value>
<observation>
```

To clarify this, we have changed the mapping for coded information in this specification to be more precise. Where these mappings formerly identified the XML element where the coded information is to be obtained (typically cda:code or cda:value elements), they now identify the specific attribute where the coded information is expected to be present. The effect on the mapping tables is that what was formerly:

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
cda:code	7.02 - Problem Type	R2/N	2.2.2.7.3
cda:value	7.04 - Problem Code	O/N	2.2.2.7.5

Optionality Legend: “R” for Required, “R2” for Required if known, “O” for Optional and Repeat = “Y” for Yes or “N” for No

Now appears as:

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
cda:code/@code	7.02 - Problem Type	R2/N	2.2.2.7.3
cda:value/@code	7.04 - Problem Code	O/N	2.2.2.7.5

Optionality Legend: “R” for Required, “R2” for Required if known, “O” for Optional and Repeat = “Y” for Yes or “N” for No

These changes are technical and reflect the original intent of the Care Management and Health Records Domain Technical Committee in the construction of the HITSP/C83 specification. Therefore no template identifiers have been changed where these changes have been made.

In only two cases does this specification require absolute adherence to a specific vocabulary.

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
cda:administrativeGenderCode/@code	1.06 – Gender	R/N	2.2.2.1.4
cda:code/@code	6.02 - Adverse Event Type	R/N	2.2.2.6.2

Optionality Legend: “R” for Required, “R2” for Required if known, “O” for Optional and Repeat = “Y” for Yes or “N” for No

- 1.06 Gender, it was felt that adherence to a vocabulary containing only 3 elements for a commonly understood construct could be met by all producers using the HITSP supplied vocabulary
- 6.02 Adverse Event Type, producers who are unable to classify allergies according to the HITSP vocabulary SHALL use the code 420134006 Propensity to adverse reactions as the code instead of using nullFlavor='UNK' value. In the context of adverse reactions, this code indicates the presence of an adverse reaction of an unknown type to an unknown substance and is preferable to (and equivalent in meaning to) the use of nullFlavor='UNK'

Vocabulary constraints were relaxed from Required (R) to Required if Known (R2) for the following two data elements and the template identifier was updated to reflect this change:

- 5.09 - Patient Relationship to Subscriber
- 5.14 - Financial Responsibility Party Type

Finally, while the requirements for codes on (laboratory) results have not been relaxed, the underlying vocabulary requirements on the result type data element recommend, rather than require specific vocabulary.

Request for Comments

In so changing this specification, the template identifier for the Payers section has changed. This will result in a major change and new template identifiers for the several HITSP CDA-related Components that rely on that section; including HITSP/C28, HITSP/C32, HITSP/C48 and HITSP/C84. Alternatives would include:

- Creating new template identifiers for these constructs that could be used with the updated template, but allowing the existing template identifiers to be used with the stronger criteria
- Maintaining the existing requirements for the two data elements where requirements were relaxed

1.5 DOCUMENT CONVENTIONS

1.5.1 KEY WORDS

The key words **SHALL**, **SHALL NOT**, **SHOULD**, **SHOULD NOT** and **MAY** are to be interpreted as described in RFC 2119 and will appear when used in that fashion in this **TYPEFACE**.

The key words **REQUIRED** and **OPTIONAL** are also to be interpreted as described in RFC 2119 when they are used to indicate the optionality of components used in an exchange.

1.5.2 CONSTRAINTS

Constraints in this document will appear as shown below.

C83-[DE-7.04-1]	The problem type **SHALL** be coded as specified in HITSP/C80 section 2.2.1.1.4.1.2 Problem Type. The first portion identifies the type of artifact being constrained. The second portion is the identifier for that artifact, and the final portion is the sequence number of the constraint on that artifact within this document. Constraints specific to CDA usage will contain the string CDA before the final number

2.0 COMPONENT DEFINITION

2.1 CONTEXT OVERVIEW

This Specification Describes the Mapping of Sections and Entries of CDA Documents to the HITSP Data Elements Defined in the HITSP/C154 Data Dictionary Component Dependencies below.

2.1.1 COMPONENT DEPENDENCIES

This section describes any specific mapping criteria for the standards underlying the Component. It elaborates on the relationships between different standards used by this Component, and how they map to each other. Additional required mapping criteria not currently enforced by the underlying standards, and any specific elements that are required for this mapping to succeed, are also provided.

Table 2-1 Component Dependencies

Standard/HITSP Component	Depends On (Name of standard/HITSP Component that it depends on)	Dependency Type (Pre-condition, Post-condition, General)	Purpose (Reason for this dependency)
HITSP/C83 - CDA Content Modules	HITSP/C80 - Clinical Document and Message Terminology	General	Identifies vocabulary constrained by this Component to be applied within the exchange
HITSP/C83 - CDA Content Modules	HITSP/C154 - Data Dictionary	General	Identification of Data Elements used within this Component

2.2 RULES FOR IMPLEMENTING COMPONENTS IN CDA

This section describes the rules for implementing the data elements described within this section when they are used in the context of the HL7 Clinical Document Architecture (CDA).

For CDA documents, this specification makes use of Templates as defined by the HL7 Version 3 Standard: Specification and Use of Reusable Constraint Templates Draft Standard for Trial Use. These templates declare a specific set of constraints on a document, section or clinical statement, and are assigned an OID to be uniquely identified over time. A clinical document created using this specification can then assert conformance to a template by the inclusion of the OID as the value for a **`templateID`** element in a document, section, or entries (clinical statements). These may have multiple **`templateIDs`** provided there are no conflicting requirements as a result of aggregating the rules.

Template may be nested – a template may require the presence of child templates in order to satisfy an exchange requirement. A document level template can require the presence of section level templates, which in turn may require entry templates to ensure a minimum level of information to be exchanged in a given context.

All HITSP constructs that reference sections or entries from this specification shall follow the applicable constraints from this specification.

All clinical documents specified using these sections or entries must conform to the Medical Document Specifications defined in the IHE PCC Technical Framework Volume II, Release 5. Furthermore, these documents are also defined by HITSP for the U.S. Realm. As such, they are required to include the information shown below.

Figure 2-1 Rules for Implementing Clinical Documents

```
<ClinicalDocument>
    <realmCode code='US'/>
    <typeId extension='POCD_HD000040' root='2.16.840.1.113883.1.3'/>    <templateId
root='1.3.6.1.4.1.19376.1.5.3.1.1.1'/>
    <templateId root='2.16.840.1.113883.10.20.3'/>
    <templateId root='2.16.840.1.113883.3.88.11.83.1'/>
        :
```

C83-[CDA-1]	A clinical document created using this specification **SHALL** contain a **`<realmCode>`** element with a value of US in the `code` attribute indicating that it conforms to U.S. Realm requirements
C83-[CDA-2]	A clinical document created using this specification **SHALL** contain the **`<templateId>`** element with a value of 1.3.6.1.4.1.19376.1.5.3.1.1.1 in the **`root`** attribute and no **`extension`** attribute indicating that it conforms to the IHE PCC Medical Documents specification
C83-[CDA-3]	A clinical document created using this specification **SHALL** contain the **`<templateId>`** element with a value of 2.16.840.1.113883.10.20.3 in the **`root`** attribute and no **`extension`** attribute, indicating that it conforms to the HL7 General Header constraints defined in the HL7 Implementation Guide for History and Physical Notes[2]
C83-[CDA-4]	A clinical document created using this specification **MAY** include other data elements not defined in this specification in an instance of a Content Module. Receivers are not required to process these elements and if they do not understand them, they **SHALL** ignore them. Thus, it is not an error to include more than is asked for, but it is an error to reject a Content Module because it contains more than is defined by the framework
C83-[CDA-5]	If a data element coded value may be derived from another data element coded value, the creator of a clinical document **SHALL** ensure the accuracy and consistency between the two data elements. If the receiver detects an inconsistency, it **SHALL NOT** correct the value without human intervention
C83-[CDA-6]	Required modules from this specification **SHALL** be present and follow the associated constraints
C83-[CDA-7]	Content Modules explicitly excluded from a clinical document specification **SHALL NOT** be present
C83-[CDA-8]	Optional modules, when present, **SHALL** follow the associated constraints if that module asserts conformance to this specification, i.e., includes the associated templates
C83-[CDA-9]	Additional CCD entry elements (the equivalent to Content Modules in this specification) **MAY** be present. The receiver of the document **MAY** choose to accept or exclude the additional content, but **SHALL NOT** reject the document solely based upon the presence of the additional content

Please note that the following constraints have been added to support the creation of structured documents using the templates defined in this section. The last two constraints are to ensure that a CDA document conforms to the HITSP defined sections and entities where these entries are available. If HITSP has not created an appropriate entry or section, the CDA document MAY contain include those.

C83-[CDA-10]	CDA document instances that adhere to the specifications for the sections and entries defined within this specification **MAY** declare their conformance to these constraints by including **`<templateId>`** element with a value of 2.16.840.1.113883.3.88.11.83.1 in the **`root`** attribute and no **`extension`** attribute

[2] Given that this is a U.S. Realm specification, the template id 2.16.840.1.113883.10.20.3 is already required by the PCC template for medical documents. We include this information here for completeness.

C83-[CDA-11] Conforming CDA document instances[3] **SHALL** conform to the HITSP defined sections where available[4]

C83-[CDA-12] Conforming CDA document instances **SHALL** conform to the HITSP defined entries for clinical statements where available[5]

The subsections below describe the specific document sections and entries defined by this Component. Due to the potentially large number of data elements in a particular standard, only the fields that HITSP is constraining differently from the standard will be described here.

This Component defines the section and entry Content Modules utilized by HITSP/C80 Clinical Documents and Message Terminology based upon HL7 CDA R2. Therefore the constraints are related to Content Modules and data mapping within the Content Modules.

The conventions for the mapping tables specified in this Component are shown below.

Table 2-2 Mapping Tables Conventions

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
The location of the data element in the CDA Document	The numeric identifier and name of the data element from the HITSP/C154 Data Dictionary	This column indicates whether the data element is required or not, and whether it is repeatable	References the sections providing additional explanation or constraints for use in the standard

CDA Location

This column identifies the location of the data element within CDA Document using W3C XPath Notation.

HITSP Data Element ID and Name

This column maps the CDA data element to the HITSP data element from HITSP/C154 Data Dictionary. The existence of this mapping can be translated into the following conformance statement:

> The (standard data element in the table) **SHALL** be communicated applying all constraints defined for (the HITSP Data Element in the table).

Optionality/Repeatability

This column identifies the conditions under which the data element is sent, and whether it may be repeated in the exchange. The column contains two fields separate by a slash (/). The first field indicates when the data element is to be sent and the list of values used in that column is described below in Table 2-3.

[3] Those declaring conformance by including the 2.16.840.1.113883.3.88.11.83.1 template identifier, or CDA documents specified by a HITSP Component (e.g., HITSP/C32 Structured Documents using CCD).

[4] If the intent of the section is to capture information that could be captured in an existing HITSP section, the section shall conform to the HITSP defined section (although it may be further constrained).

[5] If the intent of the entry (clinical statement) is to capture information that could be captured in an existing HITSP entry, the entry shall conform to the HITSP defined entry (although it may be further constrained).

Table 2-3 Optionality

Value	Definition
R	REQUIRED - Required data elements must always be sent. Data elements that are required may under exceptional circumstances have an unknown value (e.g., the name of an unconscious patient). In these cases the sending application is required to indicate the reason that the data are not available where the standard permits. Some standards may not permit an unknown value at all
R2	Required if known - If the sending application has data for the data element, it is REQUIRED to populate the data element. If the value is not known, the data element need not be sent
O	OPTIONAL - Data elements that are marked optional may be sent at the choice of the sending application. An optional element need not be sent, but when it is sent, the data module defines the meaning of that data element and a receiver can always be assured of what that data element represents when it is present. Senders should not send an optional data element with an unknown value. If the value is not known, simply do not send the data element
C	Conditional - Data elements that are marked conditional (C) are REQUIRED to be sent when the conditions specified in the HITSP additional specifications column are true. The conditions under which the data element is to be exchanged will be specified as a constraint on the data element in the last column

The second field indicates whether the data element is repeatable and the list of values used is described below in Table 2-4.

Table 2-4 Repeatability

Value	Definition
N	No. The data element SHALL NOT be repeated
Y	Yes. The data element MAY be repeated

Further constraints on repeatability with respect to minimum or maximum number of occurrences will be defined as more specific constraints in the last column.

Data Element Constraints

This column references additional sections providing more explanation about the use of the data element, or the constraints that are placed upon it by this specification (e.g., regarding optionality, cardinality and value sets to be used).

2.2.1 CDA SECTIONS

Two types of content components are specified in this section, they are:

- CDA Entries – a collection of Data Elements pertaining to a single instance of the specified concept. For example, the Allergy/Drug Sensitivity Entry Module describes all the Data Elements for one allergy
- CDA Sections – a collection of Entries pertaining to a single specified concept. For example, the Allergies and Other Adverse Reactions Section can contain a list of allergies (multiple Entry Content Modules)

CDA Sections are typically selected from specifications created by SDOs, such as the HL7 Implementation Guides and IHE Integration Profiles. Definitions for the document sections below are adapted from the IHE Patient Care Coordination Technical Framework, Volume II, Release 5.0, HL7 Implementation Guides for CDA Release 2.0: Consult Note, History and Physical (H&P) Notes, or Operative Note and are used with permission.

Please note that we have added template identifiers to each of the sections that follow. These template identifiers are recommended to 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.

2.2.1.1 PAYERS SECTION

The Payers Section contains data on the patient's payers, whether a 'third party' insurance, self-pay, other payer or guarantor, or some combination. At a minimum, the patient's pertinent current payment sources should be listed. If no payment sources are supplied, the reason shall be supplied as free text in the narrative block (e.g., Not Insured, Payer Unknown, Medicare Pending, etc.).

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.101.1

C83-[CT-101-1]	This section **SHALL** conform to the IHE Payers Section template, and **SHALL** contain a **`templateId`** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.1.5.3.7
C83-[CT-101-2]	The payers section **SHALL** include entries from the Insurance Provider module when this information is known

2.2.1.2 ALLERGIES AND OTHER ADVERSE REACTIONS SECTION

The Allergies and Other Adverse Reactions Section contains data on the substance intolerances and the associated adverse reactions suffered by the patient. At a minimum, currently active and any relevant historical allergies and adverse reactions shall be listed.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.102

C83-[CT-102-1]	The allergies and other adverse reactions section **SHALL** include entries from the Allergy/Drug Sensitivity module
C83-[CT-102-2]	This section **SHALL** conform to the IHE Allergies and Other Adverse Reactions Section template, and **SHALL** contain a **`templateId`** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.13

2.2.1.3 PROBLEM LIST SECTION

The Problem List Section contains data on the problems currently being monitored for the patient.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.103

C83-[CT-103-1]	The problem list section **SHALL** include entries from the Condition module
C83-[CT-103-2]	This section **SHALL** conform to the IHE Active Problems Section template, and **SHALL** contain a **`templateId`** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.6

2.2.1.4 HISTORY OF PAST ILLNESS SECTION

The History of Past Illness Section contains data about problems the patient suffered in the past.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.104

C83-[CT-104-1]	The History of Past Illness section **SHALL** include entries from the Condition module.
C83-[CT-104-2]	This section **SHALL** conform to the IHE History of Past Illness Section template, and **SHALL** contain a **`templateId`** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.8
C83-[CT-104-3]	This section **SHALL** conform to the HL7 History and Physical Note and HL7 Consultation Note implementation guide requirements for this section, and **SHALL** contain a **`templateId`** element whose root attribute is 2.16.840.1.113883.10.20.2.9

2.2.1.5 CHIEF COMPLAINT SECTION

The Chief Complaint Section contains information about the patient's chief complaint.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.105

C83-[CT-105-1] This section **SHALL** conform to the IHE Chief Complaint Section template, and **SHALL** contain a **`templateId`** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1

C83-[CT-105-2] This section **SHALL** conform to the HL7 History and Physical Note requirements for this section, and **SHALL** contain a **`templateId`** element whose root attribute is 2.16.840.1.113883.10.20.2.8

C83-[CT-105-3] The Chief Complaint section **MAY** include an entry from the Condition module to provide the chief complaint in coded form

2.2.1.6 REASON FOR REFERRAL SECTION

The Reason for Referral Section contains information about the reason that the patient is being referred.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.106

C83-[CT-106-1] This section **SHALL** conform to the IHE Reason for Referral Section template, and **SHALL** contain a **`templateId`** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.1.

C83-[CT-106-2] This section **SHALL** conform to the HL7 Consultation Note requirements for this section, and **SHALL** contain a **`templateId`** element whose root attribute is 2.16.840.1.113883.10.20.4.8

C83-[CT-106-3] This section **MAY** conform to the IHE Coded Reason for Referral Section template, in which case it **SHALL** contain a **`templateId`** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.2 to indicate conformance.

C83-[CT-106-4] The Reason for Referral section **MAY** include entries from the Condition module or actual events recorded using Result module to provide the reason for referral in coded form.

2.2.1.7 HISTORY OF PRESENT ILLNESS SECTION

The History of Present Illness Section contains information about the sequence of events preceding the patient's current complaints.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.107

C83-[CT-107-1] This section **SHALL** conform to the IHE History of Present Illness Section template, and **SHALL** contain a **`templateId`** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.4.

2.2.1.8 LIST OF SURGERIES SECTION

The List of Surgeries Section provides a list of surgeries the patient has received.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.108

C83-[CT-108-1] This section **SHALL** conform to the IHE Coded List of Surgeries template, and **SHALL** contain a **`templateId`** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.12

C83-[CT-108-2] The list of surgeries section **SHALL** include entries from the Procedure module.

2.2.1.9 FUNCTIONAL STATUS SECTION

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.109

The Functional Status Section provides information about the capability of the patient to perform acts of daily living.

C83-[CT-109-1] This section **SHALL** conform to the Continuity of Care Document Functional Status section described in section 3.4 of the CCD specification, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.1.5

2.2.1.10 HOSPITAL ADMISSION DIAGNOSIS SECTION

The Hospital Admission Diagnosis Section contains information about the primary reason for admission to a hospital facility.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.110

C83-[CT-110-1] This section **SHALL** conform to the IHE Hospital Admission Diagnosis section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.3

C83-[CT-110-2] The Hospital Admission Diagnosis section **SHALL** include an entry from the Condition module to provide the admission diagnosis in coded form

2.2.1.11 DISCHARGE DIAGNOSIS SECTION

The Discharge Diagnosis Section contains information about the conditions identified during the hospital stay that either need to be monitored after discharge from the hospital and/or where resolved during the hospital course.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.111

C83-[CT-111-1] This section **SHALL** conform to the IHE Hospital Discharge Diagnosis section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.7

C83-[CT-111-2] The Discharge Diagnosis section **SHALL** include entries from the Condition module to provide the discharge diagnosis in coded form

2.2.1.12 MEDICATIONS SECTION

The Medications Section contains information about the relevant medications for the patient. At a minimum, the currently active medications should be listed.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.112

C83-[CT-112-1] This section **SHALL** conform to the IHE Medications section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.19

C83-[CT-112-2] The Medications Section **SHALL** include entries from the Medication module to provide the relevant medications in coded form

2.2.1.13 ADMISSION MEDICATIONS HISTORY SECTION

The Admission Medications Section contains information about the relevant medications of a patient prior to admission to a facility.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.113

C83-[CT-113-1] This section **SHALL** conform to the IHE Admission Medications History section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.20

C83-[CT-113-2] The Admission Medications History section **SHALL** include entries from the Medication module to provide the relevant medications of a patient prior to admission in coded form

2.2.1.14 HOSPITAL DISCHARGE MEDICATIONS SECTION

The Hospital Discharge Medications Section contains information about the relevant medications of the medications ordered for the patient for use after discharge from the hospital.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.114

C83-[CT-114-1]	This section **SHALL** conform to the IHE Hospital Discharge Medications Section, and **SHALL** contain a **`templateId`** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.22
C83-[CT-114-2]	The Hospital Discharge Medications section **SHALL** include entries from the Medication module to provide the relevant medications of the medications ordered for the patient for use after discharge in coded form

2.2.1.15 MEDICATIONS ADMINISTERED SECTION

The Medications Administered Section contains information about the relevant medications administered to a patient during the course of an encounter.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.115

C83-[CT-115-1]	This section **SHALL** conform to the IHE Medications Administered Section, and **SHALL** contain a **`templateId`** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.21
C83-[CT-115-2]	The Medications Administered Section **SHALL** include entries from the Medication module to provide the relevant medications administered to a patient in coded form

2.2.1.16 ADVANCE DIRECTIVES SECTION

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.116

The Advance Directives Section contains information that defines the patient's expectations and requests for care along with the locations of the documents.

C83-[CT-116-1]	This section **SHALL** conform to the IHE Coded Advance Directives Section, and **SHALL** contain a **`templateId`** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.35
C83-[CT-116-2]	The Advance Directives Section **SHALL** include entries from the Advance Directive module

2.2.1.17 IMMUNIZATIONS SECTION

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.117

The Immunizations Section contains information describing the immunizations administered to the patient.

C83-[CT-117-1]	This section **SHALL** conform to the IHE Immunizations Section, and **SHALL** contain a **`templateId`** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.23
C83-[CT-117-2]	The Immunizations Section **SHALL** include entries from the Immunization module

2.2.1.18 PHYSICAL EXAMINATION SECTION

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.118

The Physical Examination Section contains information describing the physical findings.

C83-[CT-118-1] This section **SHALL** conform to the IHE Physical Examination Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.1.9.15

C83-[CT-118-2] This section **SHALL** conform to the HL7 History and Physical Note and HL7 Consultation Note requirements for this section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.2.10

C83-[CT-118-3] The Physical Examination Section **SHOULD** contain Condition entries conforming to the Condition module

C83-[CT-118-4] Condition entries appearing in the physical examination section **SHALL** conform the Condition module and **SHOULD** restrict the Condition Type as FINDING (404684003)or FUNCTIONAL LIMITATION (248536006) from the SNOMED CT Code System

2.2.1.19 VITAL SIGNS SECTION

The Vital Signs Section contains information documenting the patient vital signs.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.119

C83-[CT-119-1] This section **SHALL** conform to the IHE Coded Vital Signs Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.1.5.3.2

C83-[CT-119-2] The Vital Signs Section **SHALL** contain entries conforming to the Vital Sign module

2.2.1.20 REVIEW OF SYSTEMS SECTION

The Review of Systems Section contains information describing patient responses to questions about the function of various body systems.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.120

C83-[CT-120-1] This section **SHALL** conform to the IHE Review of Systems Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.18

C83-[CT-120-2] This section **SHALL** conform to the HL7 Consultation Note requirements for this section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.4.10

2.2.1.21 HOSPITAL COURSE SECTION

The Hospital Course Section contains information about of the sequence of events from admission to discharge in a hospital facility.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.121

C83-[CT-121-1] This section **SHALL** conform to the IHE Hospital Course Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.5

2.2.1.22 DIAGNOSTIC RESULTS SECTION

The Diagnostic Results Section contains information about the results from diagnostic procedures the patient received.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.122

C83-[CT-122-1] This section **SHALL** conform to the IHE Coded Results Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.28

C83-[CT-122-2] The Diagnostic Results Section **SHALL** include entries from the Procedure module to indicate the diagnostic procedure, and the events recorded using the Result module to provide the results of that procedure

2.2.1.23 ASSESSMENT AND PLAN SECTION

The Assessment and Plan Section contains information about the assessment of the patient's condition and expectations for care including proposals, goals, and order requests for monitoring, tracking, or improving the condition of the patient.

An assessment and plan section varies from the plan of care section defined later in that it includes a physician assessment of the patient condition.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.123

C83-[CT-123-1]	This section **SHALL** conform to the IHE Assessment and Plans Section, and **SHALL** contain a **`templateId`** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.5
C83-[CT-123-2]	This section **SHALL** conform to the HL7 History and Physical Note and HL7 Consultation Note requirements for this section, and **SHALL** contain a **`templateId`** element whose root attribute is 2.16.840.1.113883.10.20.2.7
C83-[CT-123-3]	The Assessments and Plan Section **MAY** include entries conforming to the Medication, Immunization, Encounter, and Procedure modules to provide information about the intended care plan

Please note that the assessments described in this section are physician assessments of the patient's current condition, and do not include assessments of functional status, or other assessments typically used in nursing. In Implementation Guides currently selected, when both the assessment and plan are documented, they are included together in a single section documenting both. When the physician assessment is not present, only the Plan of Care Section appears. There are no cases where a physician assessment is provided without a plan.

2.2.1.24 PLAN OF CARE SECTION

The Plan of Care Section contains information about the expectations for care to be provided including proposed interventions and goals for improving the condition of the patient.

A plan of care section varies from the assessment and plan section defined above in that it does not include a physician assessment of the patient condition.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.124

C83-[CT-124-1]	This section **SHALL** conform to the IHE Care Plan Section, and **SHALL** contain a **`templateId`** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.31
C83-[CT-124-2]	This section **SHALL** conform to the HL7 History and Physical Note and HL7 Consultation Note requirements for this section, and **SHALL** contain a **`templateId`** element whose root attribute is 2.16.840.1.113883.10.20.2.7
C83-[CT-124-3]	The Plan of Care Section **MAY** include entries conforming to the Medication, Immunization, Encounter, and Procedure modules to provide information about the intended care plan

2.2.1.25 FAMILY HISTORY SECTION

The Family History Section contains information about the genetic family members, to the extent that they are known, the diseases they suffered from, their ages at death, and other relevant genetic information.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.125

C83-[CT-125-1]	This section **SHALL** conform to the IHE Family Medical History Section, and **SHALL** contain a **`templateId`** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.14

C83-[CT-125-2] When used to convey structured family histories, this section **SHALL** conform to the IHE Coded Family History Section, and **SHALL** contain a **`templateId`** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.15

C83-[CT-125-3] When providing structured Family History Information this section **SHALL** include entries conforming to the Family History module

2.2.1.25.1 Procedures Constraints

C83-[DE-17-CDA-1] Procedure entries **SHALL** declare conformance for the procedures module by including a **`<templateID>`** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.17

C83-[DE-17-CDA-2] Procedure entries **SHALL** declare conformance to the IHE Procedure entry by including a **`<templateID>`** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.19

2.2.1.25.2 Body Site Constraints

C83-[DE-17-CDA-3] The body site **SHALL** be coded according as specified in HITSP/C80 Section 2.2.3.2.1 Body Site

2.2.1.26 SOCIAL HISTORY SECTION

The Social History Section contains information about the person's beliefs, home life, community life, work life, hobbies, and risky habits.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.126

C83-[CT-126-1] This section **SHALL** conform to the IHE Social History Section, and **SHALL** contain a **`templateId`** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.16

C83-[CT-126-2] The Social History Section **MAY** contain entries conforming to the Social History module

2.2.1.27 ENCOUNTERS SECTION

The Encounters Section contains information describing the patient history of encounters. At a minimum, current and pertinent historical encounters should be included; a full encounter history may be included.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.127

C83-[CT-127-1] This section **SHALL** conform to the IHE Encounters History Section, and **SHALL** contain a **`templateId`** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.1.5.3.3

C83-[CT-127-2] The Encounters Section **SHALL** contain entries conforming to the Encounters module

2.2.1.28 MEDICAL EQUIPMENT SECTION

The Medical Equipment Section contains information describing a patient's implanted and external medical devices and equipment that their health status depends on, as well as any pertinent equipment or device history.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.128

C83-[CT-128-1] This section **SHALL** conform to the HL7 CCD Medical Equipment Section, and **SHALL** contain a **`templateId`** element whose root attribute is 2.16.840.1.113883.10.20.1.7.

C83-[CT-128-2] This section **SHALL** conform to the IHE Medical Devices Section, and **SHALL** contain a **`templateId`** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.1.5.3.5

2.2.1.29 PREOPERATIVE DIAGNOSIS SECTION

The Preoperative Diagnosis Section records the surgical diagnosis or diagnoses that are assigned to the patient before the surgical procedure, and is the reason for the surgery. The Preoperative Diagnosis is, in the opinion of the surgeon, the diagnosis that will be confirmed during surgery.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.129

C83-[CT-129-1]	This section **SHALL** conform to the HL7 Operative Note Preoperative Diagnosis Section, and **SHALL** contain a **`templateId`** element whose root attribute is 2.16.840.1.113883.10.20.7.1
C83-[CT-129-2]	This section **SHALL** contain a **`templateId`** element whose root attribute is 2.16.840.1.113883.3.88.11.83.129
C83-[CT-129-3]	The Preoperative Diagnosis Section **SHALL** contain entries conforming to the Condition module to record the diagnoses
C83-[CT-129-4]	The Conditions entries in the preoperative diagnosis section **SHALL** use the SNOMED CT Code 282291009 (Diagnosis) for the value of data element 7.02 Problem Type

2.2.1.30 POSTOPERATIVE DIAGNOSIS SECTION

The Postoperative Diagnosis Section records the diagnosis or diagnoses discovered or confirmed during the surgery. Often it is the same as the Preoperative Diagnosis.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.130

C83-[CT-130-1]	This section **SHALL** conform to the HL7 Operative Note Postoperative Diagnosis Section, and **SHALL** contain a **`templateId`** element whose root attribute is 2.16.840.1.113883.10.20.7.2
C83-[CT-130-2]	This section **SHALL** contain a **`templateId`** element whose root attribute is 2.16.840.1.113883.3.88.11.83.130
C83-[CT-130-3]	The Postoperative Diagnosis Section **SHALL** contain entries conforming to the Condition module to record the diagnoses
C83-[CT-130-4]	The Conditions entries in the Postoperative Diagnosis Section **SHALL** use the SNOMED CT Code 282291009 (Diagnosis) for the value of data element 7.02 Problem Type

2.2.1.31 SURGERY DESCRIPTION SECTION

The Operative Note Surgery Description Section records the particulars of the surgery with an extensive narrative describing the surgery.

The template identifier for this section[6] is 2.16.840.1.113883.10.20.7.3

C83-[CT-131-1]	This section **SHALL** conform to the HL7 Operative Note Postoperative Diagnosis Section, and **SHALL** contain a **`templateId`** element whose root attribute is 2.16.840.1.113883.10.20.7.3.

2.2.1.32 SURGICAL OPERATION NOTE FINDINGS SECTION

The Surgical Operation Note Findings Section records clinically significant observations confirmed or discovered during the surgery.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.132

[6] This is the HL7 Template Identifier, as HITSP places no new constraints on this section.

C83-[CT-132-1]	This section **SHALL** conform to the HL7 Operative Note Findings Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.4
C83-[CT-132-2]	The Surgical Operation Note Findings Section **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.3.88.11.83.132
C83-[CT-132-3]	Surgical Operative Note Findings **MAY** be present and **shall** be recorded in entries conforming to the Condition module to record any findings

2.2.1.33 ANESTHESIA SECTION

The Anesthesia Section briefly records the type of anesthesia (e.g., general or local) and may state the actual agent used.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.133

C83-[CT-133-1]	This section **SHALL** conform to the HL7 Operative Note Anesthesia Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.5
C83-[CT-133-2]	The Anesthesia Section **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.3.88.11.83.133
C83-[CT-133-3]	Structured entries describing anesthesia used **MAY** be present and **shall** be recorded using entries conforming to the Medication or Procedures module to record any the anesthesia substance or procedure used.

2.2.1.34 ESTIMATED BLOOD LOSS SECTION

The Estimated Blood Loss Section records the approximate amount of blood that the patient lost during the surgery.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.134

C83-[CT-134-1]	This section **SHALL** conform to the HL7 Operative Note Estimated Blood Loss Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.6
C83-[CT-134-2]	The Estimated Blood Loss Section **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.3.88.11.83.134
C83-[CT-134-3]	The Estimated Blood Loss section **SHALL** be coded using the LOINC code 55103-6 Estimated Blood Loss (nar).

2.2.1.35 SPECIMENS REMOVED

The Specimens Removed Section records the tissues, objects, or samples taken from the patient during surgery.

The template identifier for this section[7] is 2.16.840.1.113883.10.20.7.7

C83-[CT-135-1]	This section **SHALL** conform to the HL7 Operative Note Specimens Removed Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.7.

2.2.1.36 COMPLICATIONS SECTION

The Complications Section records problems that occurred during surgery. The complications may have been known risks or unanticipated problems.

[7] This is the HL7 Template Identifier, as HITSP places no new constraints on this section.

The template identifier for this section is 2.16.840.1.113883.10.20.7.10

C83-[CT-136-1]	This section **SHALL** conform to the HL7 Operative Note Complications Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.10.
C83-[CT-136-2]	Structured entries describing complications **May** be present and **SHALL** contain entries conforming to the Condition module.

2.2.1.37 PLANNED PROCEDURE SECTION

The Planned Procedure Section records the procedure(s) that the surgeon thought would need to be done based on the preoperative assessment.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.137

C83-[CT-137-1]	This section **SHALL** conform to the HL7 Operative Note Planned Procedure Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.8
C83-[CT-137-2]	The Planned Procedure Section **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.3.88.11.83.137
C83-[CT-137-3]	The Planned Procedure Section **SHALL** contain at least one entry conforming to the Procedures module to record the planned procedure

2.2.1.38 INDICATIONS SECTION

The Indications Section records further details about the reason for the surgery.

The template identifier for this section[8] is 2.16.840.1.113883.10.20.7.9

C83-[CT-138-1]	This section **SHALL** conform to the HL7 Operative Note Indications Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.9
C83-[CT-138-2]	Structured indications entries **MAY** be present and **SHALL** conform to the Condition module

2.2.1.39 DISPOSITION SECTION

The Disposition Section records the status and condition of the patient at the completion of the surgery. It often also states where the patent was transferred to for the next level of care.

The template identifier for this section[9] is 2.16.840.1.113883.10.20.7.11

C83-[CT-139-1]	This section **SHALL** conform to the HL7 Operative Note Dispositions Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.11

2.2.1.40 OPERATIVE NOTE FLUIDS SECTION

The Operative Note Fluids Section may be used to record fluids administered during the surgical procedure.

The template identifier for this section[10] is 2.16.840.1.113883.10.20.7.12

[8] This is the HL7 Template Identifier, as HITSP places no new constraints on this section.

[9] This is the HL7 Template Identifier, as HITSP places no new constraints on this section.

[10] This is the HL7 Template Identifier, as HITSP places no new constraints on this section.

C83-[CT-140-1] This section **SHALL** conform to the HL7 Operative Note Fluids Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.12

2.2.1.41 OPERATIVE NOTE SURGICAL PROCEDURE SECTION

The Operative Note Surgical Procedure Section may be used to restate the procedures performed if appropriate for an enterprise workflow.

The template identifier for this section[11] is 2.16.840.1.113883.10.20.7.14

C83-[CT-141-1] This section **SHALL** conform to the HL7 Operative Note Surgical Procedure Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.14.

2.2.1.42 SURGICAL DRAINS SECTION

The Surgical Drains Section may be used to record drains placed during the surgical procedure.

The template identifier for this section[12] is 2.16.840.1.113883.10.20.7.13

C83-[CT-142-1] This section **SHALL** conform to the HL7 Operative Note Surgical Drains, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.13

2.2.1.43 IMPLANTS SECTION

The Implants Section may be used to record implants placed during the surgical procedure.

The template identifier for this section[13] is 2.16.840.1.113883.10.20.7.15

C83-[CT-143-1] This section **SHALL** conform to the HL7 Operative Note Dispositions Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.15

2.2.1.44 ASSESSMENTS SECTION

The Assessments Section may be used to record assessments of the patient status.
The template identifier for this section[14] is 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.4

C83-[CT-144-1] This section **SHALL** conform to the IHE Assessments Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.4

2.2.1.45 PROCEDURES AND INTERVENTIONS SECTION

The Procedures and Interventions Section may be used to record the procedures and interventions that have been performed.
The template identifier for this section is 2.16.840.1.113883.3.88.11.83.145

C83-[CT-145-1] This section **SHALL** conform to the IHE Procedures and Interventions Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.11

C83-[CT-145-2] The Procedures and Assessments Section **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.3.88.11.83.144

C83-[CT-145-3] This section **SHALL** contain entries describing procedures using the Procedure module

[11] This is the HL7 Template Identifier, as HITSP places no new constraints on this section.

[12] This is the HL7 Template Identifier, as HITSP places no new constraints on this section.

[13] This is the HL7 Template Identifier, as HITSP places no new constraints on this section.

[14] This is the IHE Template Identifier, as HITSP places no new constraints on this section.

2.2.1.46 PROVIDER ORDERS SECTION

The Provider Orders Section may be used to record orders that are to be implemented, including any orders for treatment (e.g., medications, therapy, et cetera), monitoring (testing, monitoring, etc.), education and follow-up care.

The template identifier for this section is 2.16.840.1.113883.3.88.11.83.146

C83-[CT-146-1]	This section **SHALL** conform to the IHE Provider Orders Section, and **SHALL** contain a **`templateId`** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.1.20.2.1.
C83-[CT-146-2]	This section **SHALL** contain a **`templateId`** element whose root attribute is 2.16.840.1.113883.3.88.11.83.146
C83-[CT-146-3]	Entries for medications, encounters, procedures or results found in this section shall conform to the specifications for the Medication, Encounter, Procedure and Result modules
C83-[CT-146-4]	Entries for medications, encounters, procedures or results found in this section shall have */@moodCode = INT or PRP as allowed by those modules to indicate that these are activities intended as part of the care plan, rather than actual events that have occurred

2.2.2 ENTRY CONTENT MODULES

2.2.2.1 PERSONAL INFORMATION

Within a CDA document, the following information maps to the HITSP/C154 Data Dictionary. Additional constraints applicable to this information can be found in the Continuity of Care Document Section 2.5.

Table 2-5 Person Information Data Mapping Table – Requirements

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
/cda:ClinicalDocument/cda:effectiveTime	1.01 - Document Timestamp	R/N	
/cda:ClinicalDocument/cda:recordTarget/cda:patientRole	Patient Information Entry	R/N	
cda:id	1.02 - Person ID	R/N	
cda:addr	1.03 - Person Address	R/Y	2.2.2.1.2
cda:telecom	1.04 - Person Phone /Email /URL	R/Y	2.2.2.1.3
cda:patient	Personal Information		
cda:name	1.05 - Person Name	R/Y	
cda:administrativeGenderCode/@code	1.06 – Gender	R/N	2.2.2.1.4
cda:birthTime	1.07 - Person Date of Birth	R/N	
cda:maritalStatusCode/@code	1.08 - Marital Status	R2/Y	2.2.2.1.5
cda:religiousAffiliationCode/@code	1.09 - Religious Affiliation	O/N	2.2.2.1.8
cda:raceCode/@code sdtc:raceCode/@code	1.10 – Race	O/Y	2.2.2.1.6
cda:ethnicGroupCode/@code	1.11 – Ethnicity	O/N	2.2.2.1.7
cda:birthplace/cda:place/cda:addr	1.16 - Birth Place	O/N	2.2.2.1.9
	1.12 - Mother's Maiden Name		See Section 2.2.2.3 Support
	1.13 - Multiple Birth Indicator		Family History
	1.14 - Birth Order		Family History
	1.15 – Age		Family History

Optionality Legend: "R" for Required, "R2" for Required if known, "O" for Optional and Repeat = "Y" for Yes or "N" for No

2.2.2.1.1 Person Name Constraints

The HL7 Clinical Document Architecture indicates how names are to be represented. A person's name appears in a **<name>** element, as a collection of name parts.

Figure 2-2 Person Name Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<!-- example 1 -->
<name use="L">
    <prefix qualifier="AC">Dr.</prefix>
    <given>Margaret</given>
    <given>Ross</given>
    <family>Ellen</family>
</name>
<!-- example 2 -->
<name use="P">
    <given qualifier="CL">Meg</given>
    <family>Ellen</family>
</name>
<!-- example 3 -->
<name use="P">
    <given>Margaret</given>
    <given qualifier="BR">Josephine</given>
    <family qualifier ="BR">Ross</family>
</name>
<!-- example 4 -->
<name use="P">
    <prefix use="AC">Dr.</prefix>
    <given>Margaret</given>
    <given>Josephine</given>
    <family qualifier="BR">Ross</family>
</name>
```

C83-[DE-1.05-CDA-1]	Each name part **SHALL** be identified using one of the tags **<given>**, **<family>**, **<prefix>** or **<suffix>**
C83-[DE-1.05-CDA-2]	The "first" name of the patient **SHALL** appear in the first **<given>** tag. In example 1 given below, "Margaret" is the patient's first name
C83-[DE-1.05-CDA-3]	The "middle" name of the patient, if it exists, **SHALL** appear in the second **<given>** tag. In example 1 given below, "Ross" is the patient's middle name
C83-[DE-1.05-CDA-4]	Name parts within a **<name>** tag **SHALL** be ordered in proper display order
C83-[DE-1.05-CDA-5]	At most one **<name>** tag **SHALL** have a **use** attribute containing the value "L", indicating that it is the legal name of the patient
C83-[DE-1.05-CDA-6]	More than one **<name>** tag **MAY** be present to retain birth name, maiden name and aliases
C83-[DE-1.05-CDA-7]	An alias or former name **MAY** be identified by the inclusion of a **use** attribute containing the value "P"
C83-[DE-1.05-CDA-8]	Name parts **MAY** be identified as being a name given at birth or adoption by the inclusion of a **qualifier** attribute containing the value "BR" for birth or "AD" for adoption
C83-[DE-1.05-CDA-9]	A name part **SHALL** be identified as the patient's preferred name by the inclusion of a **qualifier** attribute containing the value "CL" on the name part
C83-[DE-1.05-CDA-10]	A prefix or suffix that is an academic title or credential **SHALL** be identified by the inclusion of a **qualifier** attribute containing the value "AC" on the name part

2.2.2.1.2 Address Constraints

The HL7 Clinical Document Architecture indicates how addresses are to be represented. An address appears in a **<addr>** element, as a collection of address parts

Figure 2-3 Address Examples

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<!-- example 1 -->
<addr use="HP">
    <streetAddressLine>17 Daws Road</streetAddressLine>
    <city>Blue Bell</city> <state>MA</state> <postalCode>00000</postalCode>
    <country>US</country>
</addr>
<!-- example 2 -->
<addr use="HV">
    <streetAddressLine>41 IDX Dr </streetAddressLine>
    <city>South Burlington </city> <state>VT</state> <postalCode>05403</postalCode>
    <country>US</country>
</addr>
<!-- example 3 -->
<addr use="WP">
    <streetAddressLine>116 Huntington Ave</streetAddressLine>
    <streetAddressLine>2nd Floor</streetAddressLine>
    <city>Boston</city> <state>MA</state> <postalCode>02116</postalCode>
    <country>US</country>
</addr>
```

C83-[DE-1.03-CDA-1]	For the address parts that are known, they **SHALL** be identified using the **<streetAddressLine>**, **<city>**, **<state>**, **<postalCode>** and **<country>** tags
C83-[DE-1.03-CDA-2]	More than one **<streetAddressLine>** **MAY** be present
C83-[DE-1.03-CDA-3]	No more than four **<streetAddressLine>** elements **SHALL** be present
C83-[DE-1.03-CDA-4]	The **<country>** element **SHALL** be present for addresses outside of the United States
C83-[DE-1.03-CDA-5]	At most one address for a person **SHALL** have a **use** attribute with a value containing "HP"
C83-[DE-1.03-CDA-6]	At least one address for a patient **SHOULD** have a **use** attribute with a value containing "HP"
C83-[DE-1.03-CDA-7]	One or more vacation addresses **MAY** be present for a person
C83-[DE-1.03-CDA-8]	A vacation address **SHALL** be recorded with a **use** attribute containing the value "HV"
C83-[DE-1.03-CDA-9]	One or more work addresses **MAY** be present
C83-[DE-1.03-CDA-10]	A work address **SHALL** be recorded with a **use** attribute containing the value "WP"
C154--[DE-1.03-3]	The **<country>** **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.3 Country
C154-[DE-1.03-1]	The state part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.1 State
C154-[DE-1.03-2]	The postal code part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.2 Postal Code

2.2.2.1.3 Person Phone/Email/URL Constraints

The HL7 Clinical Document Architecture indicates how telecommunications addresses are to be represented. A telecommunications address appears in a **<telecom>** element.

Figure 2-4 Telephone Numbers and E-mail Addresses Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<!-- example 1 -->
<telecom use="HP" value='tel:+1-999-999-9999'/>
<!-- example 2 -->
<telecom use="WP" value='tel:+1-888-888-8888;ext=9999'/>
<!-- example 3 -->
<telecom use="MC" value='tel:+1-777-777-7777'/>
<!-- example 4 -->
<telecom value='mailto:user@hostname'/>
```

C83-[DE-1.04-CDA-1] A home phone number **SHALL** be represented with a **use** attribute containing the value "HP"

C83-[DE-1.04-CDA-2] A vacation home phone number **SHALL** be represented with a **use** attribute containing the value "HV"

C83-[DE-1.04-CDA-3] A work phone number **SHALL** be represented with a **use** attribute containing the value "WP"

C83-[DE-1.04-CDA-4] A mobile phone number **SHALL** be represented with a **use** attribute containing the value "MC"

C83-[DE-1.04-CDA-5] An e-mail address **SHALL** appear in a **<telecom>** element using the 'mailto:' URL scheme (see IETF/RFC-2368), and **SHALL** encode only a single mailing address, without any headers

2.2.2.1.4 Gender Constraints

Figure 2-5 Gender Code Examples

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<!-- example 1 -->
<genderCode code="M" displayName="Male" codeSystem="2.16.840.1.113883.5.1"
    codeSystemName="AdministrativeGenderCode"/>
<!-- example 2 -->
<genderCode code="F" displayName="Female" codeSystem="2.16.840.1.113883.5.1"
    codeSystemName="AdministrativeGenderCode"/>
```

C154-[DE-1.06-1] Gender **SHALL** be coded as specified in HITSP/C80 Section 2.2.1.2.1.2 V3 Administrative Gender

2.2.2.1.5 Marital Status Constraints

Figure 2-6 Marital Status Example

```
<maritalStatusCode code='M' displayName='Married'
    codeSystem='2.16.840.1.113883.5.2'
    codeSystemName='MaritalStatusCode'/>
```

C154-[DE-1.08-1] Marital Status **SHALL** be coded as specified in HITSP/C80 Section 2.2.1.2.3.2 Marital Status CDA and HLV3

2.2.2.1.6 Race Constraints

Race is reported at the discretion of the patient, according to Federal Guidelines for race reporting.

Figure 2-7 Race Coding Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<!-- example 1 -->
<raceCode code='1004-1' displayName='American Indian'
    codeSystem='2.16.840.1.113883.6.238' codeSystemName='CDC Race and Ethnicity'/>
<!-- example 2 -->
<sdtc:raceCode code='2058-6' displayName='African American'
    codeSystem='2.16.840.1.113883.6.238' codeSystemName='CDC Race and Ethnicity'/>
```

C83-[DE-1.09-CDA-1]	Second and subsequent raceCode elements **MAY** be recorded using the sdtc:raceCode extension
C154-[DE-1.09-1]	Race **SHALL** be coded as specified in HITSP/C80 Section 2.2.1.2.7 Race

2.2.2.1.7 Ethnicity Constraints

Ethnicity is reported at the discretion of the patient, according to Federal Guidelines for ethnicity reporting.

Figure 2-8 Ethnicity Coding Example

```
<!-- This example assumes the default namespace is 'urn:hl7-org:v3' -->
<!-- example 1 -->
<ethnicGroupCode code='2178-2' displayName='Latin American'
    codeSystem='2.16.840.1.113883.6.238' codeSystemName='CDC Race and Ethnicity'/>
```

C154-[DE-1.11-1]	Ethnicity **SHALL** be coded as specified in HITSP/C80 Section 2.2.1.2.2 Ethnicity

2.2.2.1.8 Religious Affiliation Constraints

Religious affiliation is recorded at the discretion of the patient.

Figure 2-9 Religious Affiliation Example

```
<!-- This example assumes the default namespace is 'urn:hl7-org:v3' -->
<religiousAffilliationCode code='1022' displayName='Independent'
    codeSystem='2.16.840.1.113883.5.1076' codeSystemName='ReligiousAffiliation' />
```

C83-[DE-1.10-CDA-1]	The primary religious affiliation **MAY** appear in the **`<religiousAffilliationCode>`** element
C154-[DE-1.10--1]	Religious affiliation **SHALL** be coded as specified in HITSP/C80 Section 2.2.1.2.8 Religious Affiliation

2.2.2.1.9 Birth Place Constraints

C154-[DE-1.16-1]	The state part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.1 State
C154-[DE-1.16-2]	The postal code part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.2 Postal Code
C154-[DE-1.16-3]	The country part of an address **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.3 Country

2.2.2.2 LANGUAGE SPOKEN

Within a CDA document, the following information maps to the HITSP/C154 Data Dictionary.

This module contains the primary and secondary languages of communication for the patient. The template identifier for this module is 2.16.840.1.113883.3.88.11.83.2.

Table 2-6 Language Spoken Data Mapping Table - Requirements

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
cda:recordTarget/cda:patientRole/cda:patient/ cda:languageCommunication	2.01 – Language	R/Y	

Optionality Legend: “R” for Required, “R2” for Required if known, “O” for Optional and Repeat = “Y” for Yes or “N” for No

2.2.2.2.1 Language Constraints

Figure 2-10 Language Communication Examples

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<!-- example 1 -->
<languageCommunication>
    <templateId root='2.16.840.1.113883.3.88.11.83.2'/>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.2.1'/>
    <languageCode code='fr-CN' />
    <preferenceInd value='true'/>
</languageCommunication>
<!-- example 2 -->
<languageCommunication>
    <templateId root='2.16.840.1.113883.3.88.11.83.2'/>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.2.1'/>
    <languageCode code='en-US' />
    <modeCode code='RWR' displayName='Recieve Written'
        codeSystem='2.16.840.1.113883.5.60'
codeSystemName='LanguageAbilityMode'/>
    <preferenceInd value='false'/>
</languageCommunication>
<!-- example 3 -->
<languageCommunication>
    <templateId root='2.16.840.1.113883.3.88.11.83.2'/>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.2.1'/>
    <languageCode code='sgn-US' />
    <preferenceInd value='true'/>
</languageCommunication>
<!-- example 4 – not known-->
<languageCommunication>
    <templateId root="2.16.840.1.113883.3.88.11.83.2"/>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.2.1'/>
    <languageCode nullFlavor="UNK"/>
</languageCommunication>
```

C83-[DE-2.01-CDA-1] Languages spoken shall be recorded using the **<languageCommunication>** infrastructure class associated with the patient. The **<languageCommunication>** element describes the primary and secondary languages of communication for a person

C83-[DE-2.01-CDA-2] A CDA Document **SHALL** declare conformance for the Language Spoken module by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.2

C83-[DE-2.01-CDA-3] All Language Spoken entries **SHALL** declare conformance to the IHE Language Communication module by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.2.1

C83-[DE-2.01-CDA-4] The codes for the **<modeCode>** element **SHALL** be coded as specified in HITSP/C80 section 2.2.1.2.10 Language Ability Mode. Mode codes **SHALL** be appropriate to the type of language. Thus English, as spoken in the U.S. **SHOULD** use the code en-US and **SHOULD** only use mode codes for written and verbal communications (see example 2 in Figure 2-10 above). On the other hand, American Sign Language would

	be represented using the code sign-US (see example 3 in Figure 2-10 above), and would only use mode codes for signed communication
C83-[DE-2.01-CDA-5]	While this HL7 CDA allows for the specification of proficiency using the **<proficiencyLevelCode>** element, this element **SHOULD NOT** be used[15]
C154-[DE-2.01-1]	Language **SHALL** be coded as specified in HITSP/C80 Section 2.2.1.2.9 Language
C154-[DE-2.01-2]	Sign language **SHALL** be treated as a separate language

2.2.2.3 SUPPORT

Within a CDA document, the following information maps to the HITSP/C154 Data Dictionary. At a minimum, key support contacts relative to healthcare decisions, including next of kin, should be included. If no healthcare providers are supplied, the reason should be supplied as free text in the narrative block (e.g., Unknown, etc).

See the HL7 Continuity of Care Document Section 3.3 for constraints applicable to these data elements.

The template identifier for a CDA artifact conforming to this specification is 2.16.840.1.113883.3.88.11.83.3

Table 2-7 Support Data Mapping Table – Requirements

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
/cda:ClinicalDocument/cda:participant	Support	R2/Y	
cda:time	3.01 - Date	R/N	
cda:associatedEntity or cda:patientRole/cda:patient/cda:guardian	Contact	R2/Y	
@classCode	3.02 - Contact Type	R/N	2.2.2.3.2
cda:code/@code	3.03 - Contact Relationship	R2/N	2.2.2.3.3
cda:addr	3.04 - Contact Address	R2/Y	2.2.2.3.4
cda:telecom	3.05 - Contact Phone / Email / URL	R2/Y	
cda:associatedPerson/cda:name or cda:guardianPerson/cda:name	3.06 - Contact Name	R/Y	
cda:associatedPerson/cda:name or cda:guardianPerson/cda:name	1.12 - Mother's Maiden Name	O/N	2.2.2.3.5

Optionality Legend: "R" for Required, "R2" for Required if known, "O" for Optional and Repeat = "Y" for Yes or "N" for No

[15] Judgments about language proficiency are subjective, and could have a negative impact on consumers.

Figure 2-11 Support Examples

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<!-- example 1 -->
<patient>
        …
    <guardian classCode='GUARD'>
        <templateId root='2.16.840.1.113883.3.88.11.83.3'/>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.2.4'/>
        <code code='GRMTH' displayName='Grandmother'
            codeSystem='2.16.840.1.113883.5.111' codeSystemName='RoleCode'/>
        <addr>…</addr>
        <telecom …/>
        <guardianPerson>
            <name>…</name>
        </guardianPerson>
    </guardian>
</patient>

<!-- example 2 -->
<participant typeCode='IND'>
    <templateId root='2.16.840.1.113883.3.88.11.83.3'/>
    <time value='20070213'/>
    <associatedEntity classCode='AGNT'>
        <code code='STPDAU' displayName='Step-Daughter'
            codeSystem='2.16.840.1.113883.5.111' codeSystemName='RoleCode'/>
        <addr>…</addr>
        <telecom …/>
        <assignedPerson>
            <name>…</name>
        </assignedPerson>
    </associatedEntity>
<participant>
```

2.2.2.3.1 Support Constraints

C83-[DE-3-CDA-1] A CDA Document **SHALL** declare conformance for the Support entry by including a **`<templateID>`** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.3

C83-[DE-3-CDA-2] All support entries **SHALL also** declare conformance to the IHE Patient Contacts module by including a **`<templateID>`** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.2.4

2.2.2.3.2 Contact Type Constraints

Figure 2-12 Contact Type Examples

```
<assignedEntity classCode='AGNT'> …</assignedEntity>
<assignedEntity classCode='CAREGIVER'> …</assignedEntity>
<assignedEntity classCode='ECON'> …</assignedEntity>
<guardian classCode='GUARD'> …</guardian>
<assignedEntity classCode='NOK'> …</assignedEntity>
<assignedEntity classCode='PRS'> …</assignedEntity>
```

C83-[DE-3.01-CDA-1] The **`classCode`** attribute **SHALL** be coded as specified in HITSP/C80 section 2.2.1.2.6 Contact Type

2.2.2.3.3 Contact Relationship Constraints

C154-[DE-3.03-1] The contact relationship **SHALL** have be coded as specified in HITSP/C80 section 2.2.1.2.4 Personal Relationships

2.2.2.3.4 Contact Address Constraints

C154-[DE-3.04-1]	The state part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.1 State
C154-[DE-3.04-2]	The postal code part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.2 Postal Code
C154-[DE-3.04-3]	The country part of an address **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.3 Country

2.2.2.3.5 Mother's Maiden Name

The mother's maiden name may appear in the <family qualifier='BR'> name element of the support person that is identified by the <code> element containing the code attribute identifying the person as the patient's mother. The use of the qualifier attribute identifies it as the family name the mother had at birth. This data element is often used to facilitate the unique identification of newborns.

2.2.2.4 HEALTHCARE PROVIDER

Within a CDA document, the following information maps to the HITSP/C154 Data Dictionary. These entries contain the healthcare providers involved in the current or pertinent historical care of the patient. See the HL7 Continuity of Care Document Section 3.17 for constraints applicable to these data elements. If no healthcare providers are supplied, the reason shall be supplied as free text in the narrative block (e.g., No Providers, Provider Unknown, etc.).

The template identifier for this module is 2.16.840.1.113883.3.88.11.83.4.

Table 2-8 Healthcare Providers Data Mapping Table – Requirements

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
/cda:ClinicalDocument/cda:documentationOf/ cda:serviceEvent/cda:performer	Provider	R2/Y	2.2.2.4.1
cda:time	4.01 - Date Range	R/N	
cda:functionCode/@code	4.02 - Provider Role Coded	R2/N	2.2.2.4.3
cda:functionCode/cda:originalText	4.03 - Provider Role Free Text	R2/N	2.2.2.4.3
cda:assignedEntity	Provider Entity	R/N	
cda:id	4.10 - National Provider ID	R2/N	2.2.2.4.4
cda:code/@code	4.04 - Provider Type	R2/N	2.2.2.4.5
cda:addr	4.05 - Provider Address	R2/Y	2.2.2.4.6
cda:telecom	4.06 - Provider Phone / Email / URL	R2/Y	
cda:assignedPerson/cda:name	4.07 - Provider Name	R2/N	
cda:representedOrganization/cda:name	4.08 - Provider's Organization Name	R2/Y	
sdtc:patient/sdtc:id	4.09 - Provider's Patient ID	R2/N	

Optionality Legend: "R" for Required, "R2" for Required if known, "O" for Optional and Repeat = "Y" for Yes or "N" for No

Figure 2-13 Healthcare Provider Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<documentationOf>
    <serviceEvent classCode="PCPR">
        <effectiveTime><low value="19650120"/><high
value="20070209"/></effectiveTime>
        <performer typeCode="PRF">
            <templateId root='2.16.840.1.113883.3.88.11.83.4'/>
            <templateId root='1.3.6.1.4.1.19376.1.5.3.1.2.3'/>
             <functionCode code='CP' displayName='Consulting Provider'
                codeSystem='2.16.840.1.113883.12.443' codeSystemName='Provider
Role'/>
                <originalText>Consulting Provider</originalText>
            <time>
                <low value=''/>
                <high value=""/>
            </time>
            <assignedEntity>
                <id root='2.16.840.1.113883.4.6 '
                    extension="NationalProviderID"/>
                <code code='200000000X '
                    displayName='Allopathic and Osteopathic Physicians'
                    codeSystem='2.16.840.1.113883.6.101'
                    codeSystemName='ProviderCodes'/>
                <assignedPerson>
                    <name>...</name>
                </assignedPerson>
                <sdtc:patient>
                    <sdtc:id root='78A150ED-B890-49dc-B716-5EC0027B3983'
                        extension='MedicalRecordNumber'/>
                </sdtc:patient>
            </assignedEntity>
        </performer>
    </serviceEvent>
</documentationOf>
```

2.2.2.4.1 Healthcare Provider Constraints

C83-[DE-4-CDA-1]	A CDA Document **SHALL** declare conformance for the Healthcare Provider entry by including a **`<templateID>`** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.4
C83-[DE-4-CDA-2]	All healthcare providers entries **SHALL** declare conformance to the IHE Healthcare Providers and Pharmacies specification by including a **`<templateID>`** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.2.3

2.2.2.4.2 Provider

Healthcare providers are encoded as shown above. This is reflected in the **`<serviceEvent classCode='PCPR'>`** element in the example below. The value ‘PCPR’ is required, and is a code meaning "provision of care".

2.2.2.4.3 Provider Role

C154-[DE-4.02-1]	Provider role **SHALL** be coded as specified in HITSP/C80 section 2.2.3.8.1 Provider Role

2.2.2.4.4 National Provider Identifier

C83-[DE-4.10-CDA-1]	The extension attribute **SHALL** contain the National Provider Identifier.
C83-[DE-4.10-CDA-2]	The root attribute **SHALL** contain the value 2.16.840.1.113883.4.6 to indicate that this identifier is the provider’s assigned NPI.

2.2.2.4.5 Provider Type

C154-[DE-4.04-1] Provider type **SHALL** be coded as specified in HITSP/C80 section 2.2.3.8.2 Provider Type

2.2.2.4.6 Provider Address

C154-[DE-4.05-1] The state part of an address **SHALL** in the United States be recorded using HITSP/C80 Section 2.2.1.1.1 State

C154-[DE-4.05-2] The postal code part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.2 Postal Code

C154-[DE-4.05-3] The country part of an address **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.3 Country

2.2.2.5 INSURANCE PROVIDER

Within a CDA document, the following information maps to the HITSP/C154 Data Dictionary. See the HL7 Continuity of Care Document Section 3.1.2.1.2 for constraints applicable to these data elements. Each unique instance of a payer or party with financial responsibility will include all the pertinent data needed to contact, bill to and collect from that party. The template identifier for these entries is 2.16.840.1.113883.3.88.11.83.5.1.

Table 2-9 Insurance Provider Data Mapping Table – Requirements

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
cda:act[cda:templateId/@root= '2.16.840.1.113883.10.20.1.26']	Payment Provider Event Entry	See Note[16]	2.2.2.5.2
cda:id	5.01 -- Result ID	R/N	2.2.2.5.3
cda:code/@code	5.02 - Health Insurance Type	R2/N	2.2.2.5.4
cda:performer/cda:assignedEntity	Payer	R/N	
cda:id	5.03 - Health Plan Insurance Information Source ID	O/Y	2.2.2.5.5
cda:addr	5.04 - Health Plan Insurance Information Source Address	O/Y	2.2.2.5.6
cda:telecom	5.05 - Health Plan Insurance Information Source Phone / Email / URL	O/Y	
cda:representedOrganization/cda:name	5.06 - Health Plan Insurance Information Source Name	R2/N	
cda:participant[@typeCode='COV']	Member Information	R/N	2.2.2.5.7
cda:time	5.07 - Health Plan Coverage Dates	R2/N	2.2.2.5.8
cda:participantRole[@classCode='PAT']	Patient	R/N	
cda:id	5.08 - Member ID	R2/N	2.2.2.5.9
cda:code/@code	5.09 - Patient Relationship to Subscriber	R2/N	2.2.2.5.10
cda:addr	5.10 - Patient Address	R2/Y	2.2.2.5.11
cda:telecom	5.11 - Patient Phone/Email/URL	R2/Y	
cda:playingEntity/cda:name	5.12 - Patient Name	R/N	2.2.2.5.12
cda:playingEntity/sdtc:birthTime	5.13 - Patient Date of Birth	R/N	2.2.2.5.13

[16] Requirements for Entries are defined at a higher level than the Entry Content Module (i.e. Section Content Modules, HITSP CDA-based constructs and Interoperability Specifications).

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
cda:performer/cda:assignedEntity/cda:code/@code	5.14 - Financial Responsibility Party Type	R2/N	2.2.2.5.14
cda:participant[@typeCode='HLD']/ cda:participantRole	Subscriber Information	R2/N	2.2.2.5.15
cda:id	5.15 - Subscriber ID	R/N	2.2.2.5.16
cda:addr	5.16 - Subscriber Address	R/N	2.2.2.5.20
cda:telecom	5.17 - Subscriber Phone/Email/URL	R2/Y	
cda:playingEntity/cda:name	5.18 - Subscriber Name	R/N	
cda:playingEntity/sdtc:birthTime	5.19 - Subscriber Date of Birth	R/N	2.2.2.5.17
cda:performer[cda:assignedEntity/ cda:code[@code='' and @codeSystem='']	Guarantor Information	R2/Y	
cda:time	5.20 - Effective Date of Financial Responsibility	R2/N	
cda:assignedEntity/cda:addr	5.21 - Financial Responsibility Party Address	R2/Y	2.2.2.5.18
cda:assignedEntity/cda:telecom	5.22 - Financial Responsibility Party Phone/Email/URL	R2/Y	
cda:assignedEntity/cda:assignedPerson/ cda:name - AND/OR - cda:assignedEntity/ cda:representedOrganization/ cda:name	5.23 - Financial Responsibility Party Name	R2/N	
cda:entryRelationship[@typeCode='REFR']/ cda:act[@classCode='ACT' and @moodCode='DEF']	Health Plan	R2/N	2.2.2.5.19
cda:text	5.24 - Health Plan Name	R2/N	

Optionality Legend: “R” for Required, “R2” for Required if known, “O” for Optional and Repeat = “Y” for Yes or “N” for No

2.2.2.5.1 Insurance Provider Constraints

C83-[DE-5-CDA-1] A CDA Document **SHALL** declare conformance for the Insurance Provider module by including a **`<templateID>`** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.5

C83-[DE-5-CDA-2] All Insurance Provider entries **SHALL** declare conformance to the IHE Coverage Entry by including a **`<templateID>`** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.17

2.2.2.5.2 Payment Provider Constraints

Information for payment providers shall be recorded as a policy act inside the coverage act as described in Section 3.1 of the Continuity of Care Document Implementation Guide.

Figure 2-14 Insurance Provider Examples

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<!-- example 1 -->
<act classCode='ACT' moodCode='DEF'>
    <templateId root='2.16.840.1.113883.10.20.1.20'/>
    <templateId root=1.3.6.1.4.1.19376.1.5.3.1.4.17'/>
     <id root=''/>
    <code code='48768-6' displayName='Payment Sources'
        codeSystem='2.16.840.1.113883.6.1' codeSystemName='LOINC'/>
    <statusCode code='completed'/>

    <!-- Example 1, A health plan -->
    <entryRelationship typeCode='COMP'>
        <sequenceNumber value='1'/>
    <act classCode='ACT' moodCode='EVN'>
            <templateId root='2.16.840.1.113883.10.20.1.26'/>
            <templateId root='2.16.840.1.113883.3.88.11.83.5'/>
        <id root='2844AF96-37D5-42a8-9FE3-3995C110B4F8'
                extension='GroupOrContract#'/>
        <code code='' displayName=''
                codeSystem='2.16.840.1.113883.6.255.1336'
codeSystemName='X12N-1336'/>
        <statusCode code='completed'/>
        <performer typeCode='PRF'>…</performer>
            <participant typeCode='COV'>…</participant>
        <participant typeCode='HLD'>…</participant>
            <entryRelationship typeCode='REFR'>
            <act classCode='ACT' moodCode='DEF'>…</act>
            </entryRelationship>
    </act>
    </entryRelationship>

    <!-- Example 2, A guarantor -->
    <entryRelationship typeCode='COMP'>
        <sequenceNumber value='2'/>
    <act classCode='ACT' moodCode='EVN'>
            <templateId root='2.16.840.1.113883.10.20.1.26'/>
            <templateId root='2.16.840.1.113883.3.88.11.83.5'/>
        <id root='2844AF96-37D5-42a8-9FE3-3995C110B4F9'/>
            <code code='PP' displayName='Personal Payment'
                codeSystem='2.16.840.1.113883.6.255.1336'
codeSystemName='X12N-1336'/>
        <statusCode code='completed'/>
        <performer typeCode='PRF'>
            <time value='…'/>
            <assignedEntity>
                <id …/>
                <code code='GUAR' displayName='Guarantor'
                        codeSystem='2.16.840.1.113883.5.110'
codeSystemName='RoleClass'/>
                <assignedPerson><name>…</name></assignedPerson>
            </assignedEntity>
        </performer>
    </act>
    </entryRelationship>
</act>
```

C83-[DE-5-CDA-3] Information for payment providers **SHALL** be recorded as a policy act inside the coverage act.

2.2.2.5.3 Group Number Constraints

The group number identifies the sponsor to the health plan with respect to the sponsored contract or policy.

Figure 2-15 Group Number Example

```
  …
<id root='2844AF96-37D5-42a8-9FE3-3995C110B4F8' extension='GroupOrContract#'/>
  …
```

C83-[DE-5.01-CDA-1]	All Insurance Provider modules **SHALL** declare conformance to the IHE Payer Entry by including a **`<templateID>`** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.18
C83-[DE-5.01-CDA-2]	The **`root`** attribute **SHOULD** be the OID of the assigning authority for the identifier; however, determining the assigning authority is not feasible in all settings
C83-[DE-5.01-CDA-3]	A GUID **MAY** be used in place of the OID of the assigning authority
C83-[DE-5.01-CDA-4]	Implementers **SHOULD** use the same GUID for each instance of the same group or contract number

2.2.2.5.4 Healthcare Insurance Type Constraints

Figure 2-16 Health Insurance Type Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
    <act classCode='ACT' moodCode='EVN'>
        <templateId root='2.16.840.1.113883.10.20.1.26'/>
            …
        <code code='IP' displayName='Individual Policy'
            codeSystem='2.16.840.1.113883.6.255.1336' codeSystemName='X12N-
1336'/>
            …
    </act>
```

C154-[DE-5.02-1]	The Health Insurance Type **SHALL** be coded as specified in HITSP/C80 Section 2.2.2.1 Health Insurance Type

2.2.2.5.5 Health Plan Insurance Information Source ID Constraints

The information source identifier corresponds to the RxBIN and RxPCN fields found on pharmacy benefit cards. When a national payer identifier is standardized, it would also go in this field.

The OID for RxBIN is 2.16.840.1.113883.3.88.3.1

The OID for an RxPCN is 2.16.840.1.113883.3.88.3.1 plus the numeric identifier used in the RxBIN

Figure 2-17 Payer Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<!-- These examples assume an RxBIN of 699999 and an RxPCN of PZZZZ -->
<performer typeCode='PRF'>
    <assignedEntity classCode='ASSIGNED'>
        <id root='2.16.840.1.113883.3.88.3.1' extension='699999'/>
        <id root='2.16.840.1.113883.3.88.3.1.699999' extension='PZZZZ'/>
        <addr>…</addr>
        <telecom value='…'/>
        <representedOrganization classCode='ORG'>
            <name>…</name>
        </representedOrganization>
    </assignedEntity>
</performer>
```

2.2.2.5.6 Health Plan Insurance Information Source Address Constraints

C154-[DE-5.04-1]	The state part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.1 State
C154-[DE-5.042]	The postal code part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.2 Postal Code
C154-[DE-5.04-3]	The country part of an address **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.3 Country

2.2.2.5.7 Member Information Constraints

The data elements described below identify the member (patient) to the health plan for eligibility and/or claims processing. For various reasons, the health plan may not have the member's name, address or data of birth recorded in the same way as the provider has recorded the patient information. Using the member information as recorded by the health plan will improve the healthcare provider's ability to determine eligibility for benefits and reduce rejections of claims.

Figure 2-18 Member Information Examples

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<!-- Example 1, The patient is the subscriber -->
<participant typeCode='COV'>
    <time>
        <low value='20070101'/>
    </time>
    <participantRole classCode='PAT'>
        <id root='' extension=''/>
        <code code='SUBSCR' displayName='subscriber'
            codeSystem='2.16.840.1.113883.5.111'  codeSystemName='RoleCode'/>
        <playingEntity>
            <name>…</name>
            <sdtc:birthTime value='…'/>
        </playingEntity>
    </participant>
</participant>

<!-- Example 2, The patient is a dependent of the subscriber -->
<participant typeCode='COV'>
    <time>
        <low value='20070209'/>
    </time>
    <participantRole classCode='PAT'>
        <id root='' extension=''/>
        <code code='DEPEND' displayName='dependent'
            codeSystem='2.16.840.1.113883.5.111'  codeSystemName='RoleCode'/>
        <playingEntity>
            <name><given>Baby</given><family>Ross</family></name>
            <sdtc:birthTime value='20070209'/>
        </playingEntity>
    </participant>
</participant>
```

2.2.2.5.8 Health Plan Coverage Dates Constraints

C83-[DE-5.07-CDA-1]	The date when the plan began covering the member **SHOULD** be recorded in the **`<low>`** element of the **`<time>`** element beneath the **`<participant>`** element
C83-[DE-5.07-CDA-2]	The date when the plan stops covering the member **SHOULD** be recorded in the **`<high>`** element of the **`<time>`** element beneath the **`<participant>`** element

2.2.2.5.9 Member ID Constraints

C83-[DE-5.08-CDA-1]	The member identifier number **SHALL** be recorded in the **`extension`** attribute of the **`<id>`** element found in the **`<participantRole>`** element
C83-[DE-5.08-CDA-2]	The **`root`** attribute **SHOULD** be the OID of the assigning authority for the identifier; however, determining the assigning authority is not feasible in all settings
C83-[DE-5.08-CDA-3]	A GUID **MAY** be used in place of the OID of the assigning authority
C83-[DE-5.08-CDA-4]	Implementers **SHOULD** use the same GUID for each instance of a member identifier from the same health plan

2.2.2.5.10 Relationship to Subscriber Constraints

C83-[DE-5.09-CDA-1]	The relationship to the subscriber **SHALL** be present and **SHALL** be recorded in the **`<code>`** element underneath the **`<participantRole>`** element recording the member information
C154-[DE-5.09-1]	The Patient Relationship to Subscriber **SHALL** be coded as specified in HITSP/C80 section 2.2.2.2 Subscriber Relationship

2.2.2.5.11 Patient Address Constraints

C154-[DE-5.10-1]	The state part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.1 State
C154-[DE-5.10-2]	The postal code part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.2 Postal Code
C154-[DE-5.10-3]	The country part of an address **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.3 Country

2.2.2.5.12 Patient Name Constraints

C83-[DE-5.12-CDA-1]	If the member name as recorded by the health plan differs from the patient name as recorded in the registration/medication summary (e.g., due to marriage or for other reasons), then the member name **SHALL** be recorded in the **`<name>`** element of the **`<playingEntity>`** element beneath the **`<participantRole>`** element

2.2.2.5.13 Patient Date of Birth Constraints

C83-[DE-5.13-CDA-1]	If the member date of birth as recorded by the health plan differs from the patient date of birth as recorded in the registration/medication summary, then the member date of birth **SHALL** be recorded in the **`<sdtc:birthTime>`** element of the **`<playingEntity>`** element beneath the **`<participantRole>`** element

2.2.2.5.14 Financial Responsibility Party Type Constraints

This data element identifies the type of the financially responsible party.

C83-[DE-5.14-CDA-1]	The code attribute **SHALL** be coded as specified in HITSP/C80 Section 2.2.2.3 Financially Responsible Party Type
C83-[DE-5.14-CDA-2]	When the **`code`** of the encompassing act is PP, the **`code`** attribute value **SHALL** be set to GUAR or PAT to represent a guarantor or self-paying patient respectively
C83-[DE-5.14-CDA-3]	The **`code`** attribute **SHALL** be set to PAYOR when the **`code`** of the encompassing act is other than PP

2.2.2.5.15 Subscriber Constraints

These data elements identify the subscriber to the health plan for eligibility and/or claims processing. For various reasons, the health plan's eligibility system may not have the subscriber's name, address or data of birth recorded in the same way as the provider records it. Using the subscriber information as recorded by the eligibility system will improve the healthcare provider's ability to determine eligibility for benefits and reduce rejections of claims.

Figure 2-19 Subscriber Information Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<participant typeCode='HLD'>
    <participantRole classCode='IND'>
        <id root='...' extension='...'/>
        <playingEntity>
            <name><given>Meg</given><family>Ellen</family></name>
            <sdtc:birthTime value='19600127'/>
        </playingEntity>
    </participant>
</participant>
```

C83-[DE-5-CDA-1]	When the Subscriber is the patient, the **`<participant>`** element describing the subscriber **SHALL NOT** be present. This information will be recorded instead in the data elements used to record member information

2.2.2.5.16 Subscriber ID Constraints

C83-[DE-5.15-CDA-1]	The **`root`** attribute **SHOULD** be the OID of the assigning authority for the identifier; however, determining the assigning authority is not feasible in all settings
C83-[DE-5.15-CDA-2]	A GUID **MAY** be used in place of the OID of the assigning authority. Implementers **SHOULD** use the same GUID for each instance of a subscriber identifier from the same health plan

2.2.2.5.17 Subscriber Date of Birth Constraints

C83-[DE-5.19-CDA-1]	The subscriber date of birth **SHALL** be recorded in the **`<sdtc:birthTime>`** element of the **`<playingEntity>`** element beneath the **`<participantRole>`** element. The **`<sdtc:birthTime>`** element represents an extension to the HL7 CDA Release 2.0

2.2.2.5.18 Financial Responsibility Party Address Constraints

C154-[DE-5.21-1]	The state part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.1 State
C154-[DE-5.21-2]	The postal code part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.2 Postal Code
C154-[DE-5.21-3]	The country part of an address **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.3 Country

2.2.2.5.19 Health Plan Constraints

The health plan description is recorded as specified by the Policy Activity Section of the HL7 Continuity of Care Document Implementation Guide.

Figure 2-20 Health Plan Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
    <entryRelationship typeCode='REFR'>
        <act classCode='ACT' moodCode='DEF'>
            <id root='2844AF96-37D5-42a8-9FE3-3995C110B4FA' extension='PlanCode'/>
            <code code='HMO' displayName='health maintenance organization policy'
                codeSystem='2.16.840.1.113883.5.4' codeSystemName='ActCode'/>
            <text>Health Plan Name</text>
        </act>
    </entryRelationship>
```

2.2.2.5.20 Subscriber Address Constraints

C154-[DE-5.16-1]	The state part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.1 State
C154-[DE-5.16-2]	The postal code part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.2 Postal Code
C154-[DE-5.16-3]	The country part of an address **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.3 Country

2.2.2.6 ALLERGY/DRUG SENSITIVITY

Within a CDA document, the following information maps to the HITSP/C154 Data Dictionary. See the HL7 Continuity of Care Document Section 3.8 for constraints applicable to these data elements.

The template identifier for this module is 2.16.840.1.113883.3.88.11.83.6.

Table 2-10 Allergy/Drug Sensitivity Data Mapping Table – Requirements

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
cda:act[cda:templateId/@root= '2.16.840.1.113883.10.20.1.27']/ cda:entryRelationship[@typeCode='SUBJ']/ cda:observation[cda:templateId/@root= '2.16.840.1.113883.10.20.1.18']	Adverse Event Entry	See Note[17]	
cda:effectiveTime	6.01 - Adverse Event Date	R2/N	
cda:code/@code	6.02 - Adverse Event Type	R/N	2.2.2.6.2
cda:participant[@typeCode='CSM']/	Product	R2/Y	
cda:participantRole[@classCode='MANU']/ cda:playingEntity[@classCode='MMAT']/	Product Detail	R/N	
cda:name	6.03 - Product Free-Text	R/N	
cda:code/@code	6.04 - Product Coded	R2/N	2.2.2.6.3
cda:entryRelationship[@typeCode='MFST']/ cda:observation[templateId/@root= '2.16.840.1.113883.10.20.1.54']	Reaction	O/Y	
cda:text	6.05 - Reaction Free-Text	R2/N	
cda:value/@code	6.06 - Reaction Coded	R2/N	2.2.2.6.4
cda:entryRelationship[@typeCode='SUBJ']/ cda:observation[templateId/@root= '2.16.840.1.113883.10.20.1.55']	Severity	R2/N	
cda:text	6.07 - Severity Free-Text	R2/N	
cda:value/@code	6.08 - Severity Coded	R2/N	2.2.2.6.5

Optionality Legend: “R” for Required, “R2” for Required if known, “O” for Optional and Repeat = “Y” for Yes or “N” for No

[17] Requirements for Entries are defined at a higher level than the Entry Content Module (i.e. Section Content Modules, HITSP CDA-based constructs and Interoperability Specifications).

Figure 2-21 Allergies and Drug Sensitivities Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<text>
    <content ID='severity-1'>Severe</content> Penicillin Allergy on February 2, 2001
    <content ID='reaction-1'>Anaphylaxis</content>
</text>
<entry>
    <act classCode='ACT' moodCode='EVN'>
        <templateId root='2.16.840.1.113883.10.20.1.27'/>
        <templateId root='2.16.840.1.113883.3.88.11.83.6'/>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.5.3'/>
        <id root='2C748172-7CC2-4902-8AF0-23A105C4401B'/>
        <code nullFlavor='NA'/>
        <entryRelationship typeCode='SUBJ'>
        <observation classCode='OBS' moodCode='EVN'>
            <templateId root='2.16.840.1.113883.10.20.1.18'/>
            <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.5'/>
            <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.6'/>
            <code code='416098002' displayName='drug allergy'
                codeSystem='2.16.840.1.113883.6.96' codeSystemName='SNOMED CT'/>
            <effectiveTime>
                <low value='20010209'/>
            </effectiveTime>
            <participant typeCode='CSM'>
                <participantRole classCode='MANU'>
                    <playingEntity classCode='MMAT'>
                        <code code='70618' displayName='Penicillin'
                            codeSystem='2.16.840.1.113883.6.88'
                             codeSystemName='RxNorm'/>
                        <name>Penicillin</name>
                    </playingEntity>
                </participantRole>
            </participant>
            <entryRelationship  typeCode='SUBJ' inversionInd='true'>
                <observation classCode='OBS' moodCode='EVN'>
                    <templateId root='2.16.840.1.113883.10.20.1.55'/>

                    <code code='SEV' displayName='Severity'
                        codeSystem='2.16.840.1.113883.5.4'
                         codeSystemName='ActCode' />
                    <text><reference value='#severity-1'/></text>
                    <statusCode code='completed'/>
                    <value xsi:type='CD' code='24484000' displayName='Severe'
                        codeSystem='2.16.840.1.113883.6.96'
                        codeSystemName='SNOMED CT' />
                </observation>
            </entryRelationship>
            <entryRelationship typeCode='MFST' inversionInd='true'>
                <templateId root='2.16.840.1.113883.10.20.1.54'/>
                <text><reference value='#reaction-1'/></text>
        <value xsi:type='CD' code='39579001' displayName='Anaphylaxis'
            codeSystem='2.16.840.1.113883.6.96'
                codeSystemName='SNOMED CT' />
            </entryRelationship>
        </observation>
    </entryRelationship>
  </act>
</entry>
```


2.2.2.6.1 Allergy/Drug Sensitivity Module Constraints

C83-[DE-6-CDA-1] A CDA Document **SHALL** declare conformance for the Allergy/Drug Sensitivity Module by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.6

C83-[DE-6-CDA-2] All allergy entries **SHALL** conform to the IHE PCC Allergy and Intolerance Concern template by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.5.3

2.2.2.6.2 Adverse Event Vocabulary Constraints

C154-[DE-6.02-1] Adverse event types **SHALL be** coded as specified in HITSP/C80 Section 2.2.3.4.2 Allergy/Adverse Event Type

2.2.2.6.3 Product Coded Vocabulary Constraints

C154-[DE-6.04-1] Food and substance allergies **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.3.11 Ingredient Name

C154-[DE-6.04-2] Allergies to a class of medication **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.3.9 Medication Drug Class

C154-[DE-6.04-3] Allergies to a specific medication **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.3.7 Medication Brand Name or HITSP/C80 Section 2.2.3.3.8 Medication Clinical Drug Names.

2.2.2.6.4 Reaction Coded Constraints

C154-[DE-6.06-1] The reaction **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.4.1 Allergy/Adverse Event (Reaction)

2.2.2.6.5 Severity Coded Constraints

C154-[DE-6.08-1] The severity of the adverse event **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.4.3 Allergy/Adverse Event Severity

2.2.2.7 CONDITION

Within a CDA document, the following information maps to the HITSP/C154 Data Dictionary. See the HL7 Continuity of Care Document Section 3.5 for constraints applicable to these data elements.

The template identifier for this module is 2.16.840.1.113883.3.88.11.83.7

Table 2-11 Conditions Data Mapping Table – Requirements

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
cda:act[cda:templateId/@root= '2.16.840.1.113883.10.20.1.27']/ cda:entryRelationship[@typeCode='SUBJ']/	Problem Entry	See Note[18]	
cda:sequenceNumber	7.10 Diagnosis Priority	R2/N	
cda:observation[cda:templateId/@root= '2.16.840.1.113883.10.20.1.28']			
cda:effectiveTime	7.01 - Problem Date	R2/N	2.2.2.7.2
cda:code/@code	7.02 - Problem Type	R2/N	2.2.2.7.3
cda:text	7.03 - Problem Name	R/N	2.2.2.7.4

[18] Requirements for Entries are defined at a higher level than the Entry Content Module (i.e. Section Content Modules, HITSP CDA-based constructs and Interoperability Specifications).

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
cda:value/@code	7.04 - Problem Code	O/N	2.2.2.7.5
cda:act[cda:templateId/@root= '2.16.840.1.113883.10.20.1.27']/ cda:performer	7.05 - Treating Provider	O/Y	2.2.2.7.6
cda:assignedEntity/cda:id	7.11 - Treating Provider ID	R2/N	2.2.2.7.6
cda:entryRelationship/cda:observation [cda:templateId/@root = '2.16.840.1.113883.10.20.1.38']	7.06 - Age (at Onset)	O/N	2.2.2.18.11
cda:entryRelationship[@typeCode='CAUS']/ cda:observation	7.07 - Cause of Death	O/N	2.2.2.18.12
cda:effectiveTime	7.09 – Time of Death	O/N	See 2.2.2.18.12 for example
cda:entryRelationship/ cda:observation [cda:templateId/@root = '2.16.840.1.113883.10.20.1.38']	7.08 - Age (at Death)	O/N	2.2.2.18.11
cda:entryRelationship/cda:observation [cda:templateId/@root = '2.16.840.1.113883.10.20.1.50']/ value/@code	7.12 - Problem Status	O/N	2.2.2.18.17

Optionality Legend: “R” for Required, “R2” for Required if known, “O” for Optional and Repeat = “Y” for Yes or “N” for No

2.2.2.7.1 Condition Module Constraints

C83-[DE-7-CDA-1] A CDA Document **SHALL** declare conformance for the Condition Module by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.7

C83-[DE-7-CDA-2] Problem Entries **SHALL** also declare conformance to the IHE Problem Concern by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.5.2

2.2.2.7.2 Problem Date Constraints

The problem date constraints include the onset and resolution dates for the problem. These dates represent the clinically effective time span over which the problem existed.

C83-[DE-7.01-1] The onset date **SHALL** be recorded in the **<low>** element of the **<effectiveTime>** element when known (see example 1 below).

C83-[DE-7.01-2] The resolution data **SHALL** be recorded in the **<high>** element of the **<effectiveTime>** element when known.

C83-[DE-7.01-3] If the problem is known to be resolved, but the date of resolution is not known, then the **<high>** element **SHALL** be present, and the nullFlavor attribute **SHALL** be set to 'UNK'. Therefore, the existence of an **<high>** element within a problem does indicate that the problem has been resolved.

Figure 2-22 Problem Date Examples

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<!-- example 1 -->
<effectiveTime>
    <low value='20070209'/>
    <high value='20070210'/>
</effectiveTime>
<!-- example 2 -->
<effectiveTime>
    <low value='20070209'/>
    <high nullFlavor='UNK'/>
</effectiveTime>
```

2.2.2.7.3 Problem Type Constraints

Figure 2-23 Problem Type Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<observation classCode='OBS' moodCode='EVN'>
    <templateId root='2.16.840.1.113883.10.20.1.28'/>
        ...
    <code code='404684003' displayName='Finding'
            codeSystem='2.16.840.1.113883.96' codeSystemName='SNOMED CT'/>
        ...
```

C154-[DE-7.02-1] The problem type **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.1.2 Problem Type

2.2.2.7.4 Problem Name Constraints

C83-[DE-7.04-1] The problem name **SHALL** be recorded in the entry by recording a **`<reference>`** where the **`value`** attribute points to the narrative text containing the name of the problem.

Figure 2-24 Problem Name Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<text><p ID='problem-1'>migraine</p><text>
<entry>
    <act classCode='ACT' moodCode='EVN'>
        <templateId root='2.16.840.1.113883.10.20.1.27'/>
        <templateId root='2.16.840.1.113883.3.88.11.83.7'/>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.5.2'/>
        <id root='...'/>
        <code nullFlavor='NA'/>
        <entryRelationship typeCode='SUBJ'>
            <observation classCode='OBS' moodCode='EVN'>
                <templateId root='2.16.840.1.113883.10.20.1.28'/>
                    ...
                <text><reference value='#problem-1'/></text>
            </observation>
        </entryRelationship>
    </act>
</entry>
```

2.2.2.7.5 Problem Code Constraints

Figure 2-25 Problem Code Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<observation classCode='OBS' moodCode='EVN'>
    <templateId root='2.16.840.1.113883.10.20.1.28'/>
        ...
    <value xsi:type='CD' code='37796009' displayName='Migraine'
        codeSystem='2.16.840.1.113883.96' codeSystemName='SNOMED CT'/>
</observation>
```

C154-[DE-7.04-1] If the code attribute is present, the problem **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.1.1 Problem

2.2.2.7.6 Treating Provider Constraints

Figure 2-26 Treating Provider Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<text><p ID='problem-1'>Migraine</p><text>
<entry>
    <act classCode='ACT' moodCode='EVN'>
        <templateId root='2.16.840.1.113883.10.20.1.27'/>
        <templateId root='2.16.840.1.113883.3.88.11.83.7'/>
        <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.5.2'/>
        <id root='...'/>
        <code nullFlavor='NA'/>
        <performer typeCode='PRF'>
            <time><low value='...'/><high value='...'/></time>
            <assignedEntity>
                <id root='...' extension='...'/>
            </assignedEntity>
        </performer>
            ...
    </act>
</entry>
```

C83-[DE-7.05-CDA-1] The time over which this provider treated the condition **MAY** be recorded in the **<time>** element beneath the **<performer>** element

C83-[DE-7.05-CDA-2] The identifier of the treating provider **SHALL** be present in the **<id>** element beneath the **<assignedEntity>**. This identifier **SHALL** be the identifier of one of the providers listed in the healthcare providers module described in Section 2.2.2.4

C83-[DE-7.05-CDA-3] The treating provider or providers **SHALL** be recorded in a **<performer>** element under the **<act>** that describes the condition of concern

2.2.2.8 MEDICATION

Within a CDA document, the following information maps to the HITSP/C154 Data Dictionary. See the HL7 Continuity of Care Document Section 3.9 for constraints applicable to these data elements.

The template identifier for this module is 2.16.840.1.113883.3.88.11.83.8

Table 2-12 Medication – Prescription and Non-Prescription Data Mapping Table – Requirements

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
cda:substanceAdministration[templateId/@root = '2.16.840.1.113883.10.20.1.24']	Administration Information Event Entry	See Note[19]	
cda:text	8.01 - Free Text Sig	O/N	2.2.2.8.2
cda:effectiveTime[1]/cda:high	8.02 - Indicate Medication Stopped	O/N	2.2.2.8.3
cda:effectiveTime[2]	8.03 - Administration Timing	O/Y	2.2.2.8.4
cda:effectiveTime[2]	8.04 – Frequency	O/Y	2.2.2.8.4
cda:effectiveTime[2]	8.05 – Interval	O/Y	2.2.2.8.4
cda:effectiveTime[2]	8.06 – Duration	O/Y	2.2.2.8.4
cda:routeCode/@code	8.07 – Route	O/Y	2.2.2.8.5
cda:doseQuantity	8.08 – Dose	O/Y	2.2.2.8.6
cda:approachSiteCode/@code	8.09 - Site	O/Y	2.2.2.8.7
cda:maxDoseQuantity	8.10 - Dose Restriction	O/Y	
cda:administrationUnitCode/@code	8.11 - Product Form	O/N	2.2.2.8.8
cda:code/@code	8.12 - Delivery Method	O/Y	2.2.2.8.9
cda:consumable/cda:manufacturedProduct	Medication Information	R/Y	2.2.2.8.10
cda:manufacturedMaterial/cda:code/@code	8.13 - Coded Product Name	R2/Y	2.2.2.8.11
cda:translation/@code	8.14 - Coded Brand Name	R2/Y	2.2.2.8.12
cda:originalText	8.15 - Free Text Product Name	R/N	2.2.2.8.13
cda:manufacturedMaterial/cda:name	8.16 - Free Text Brand Name	R2/N	2.2.2.8.14
cda:manufacturerOrganization	8.17 - Drug Manufacturer	O/N	
	8.18 - Product Concentration	see Note	2.2.2.8.15
cda:entryRelationship[@typeCode='SUBJ']/ cda:observation[cda:templateId/@root= '2.16.840.1.113883.3.88.11.83.8.1']/ cda:value/@code	8.19 - Type of Medication	R2/N	2.2.2.8.16
cda:entryRelationship[@typeCode='REFR']/ cda:observation[cda:templateId/@root= '2.16.840.1.113883.10.20.1.47']/ cda:value/@code	8.20 - Status of Medication	R2/N	2.2.2.8.17
cda:entryRelationship[@typeCode='RSON']/ cda:observation[cda:templateId/@root= '2.16.840.1.113883.10.20.1.28']	8.21 - Indication	O/Y	2.2.2.8.18

[19] Requirements for Entries are defined at a higher level than the Entry Content Module (i.e. Section Content Modules, HITSP CDA-based constructs and Interoperability Specifications).

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
cda:entryRelationship/cda:act[cda:templateId/@root= '2.16.840.1.113883.10.20.1.49']/ cda:text	8.22 - Patient Instructions	O/N	2.2.2.8.19
cda:entryRelationship[@typeCode='CAUS']/ cda:observation[cda:templateId/@root= '2.16.840.1.113883.10.20.1.54']	8.23 - Reaction	O/N	
cda:participant/cda:participantRole[cda:code/@code = '412307009' and cda:code/@codeSystem= '2.16.840.1.113883.6.96']	8.24 - Vehicle	O/Y	2.2.2.8.20
cda:criterion	8.25 - Dose Indicator	O/Y	
cda:entryRelationship[@typeCode='REFR']/ cda:supply[moodCode='INT']	Order Information	R2/Y	2.2.2.8.21
cda:id	8.26 - Order Number	R2/N	
cda:repeatNumber	8.27 - Fills	O/N	2.2.2.8.22
cda:quantity	8.28 - Quantity Ordered	R2/N	2.2.2.8.23
cda:effectivetime/cda:high	8.29 - Order Expiration Date/Time	R2/N	
cda:author/cda:time	8.30 - Order Date/Time	O/N	
cda:author/cda: assignedAuthor/ cda:assignedPerson/cda:name	8.31 - Ordering Provider	O/N	
cda:entryRelationship/ cda:act[cda:templateId/@root= '2.16.840.1.113883.10.20.1.43']/ cda:text	8.32 - Fulfillment Instructions	O/N	2.2.2.8.24
cda:supply[@moodCode='EVN']	8.33 - Fulfillment History	O/Y	
cda:id	8.34 - Prescription Number	R2/N	2.2.2.8.25
cda:performer/cda:assignedEntity	8.35 - Provider	O/N	2.2.2.8.26
cda:performer/cda:assignedEntity/ cda:addr	8.36 - Dispensing Pharmacy Location (Previously known as Location)	O/N	2.2.2.8.1
cda:effectiveTime	8.37 - Dispense Date	O/N	
cda:quantity	8.38 - Quantity Dispensed	R2/N	2.2.2.8.27
cda:entryRelationship[@typeCode='COMP']/ cda:sequenceNumber	8.39 - Fill number	R2/N	2.2.2.8.28
cda:statusCode	8.40 - Fill Status	O/N	2.2.2.8.29

Optionality Legend: "R" for Required, "R2" for Required if known, "O" for Optional and Repeat = "Y" for Yes or "N" for No

2.2.2.8.1 Medication – Prescription and Non-Prescription Module Constraints

C83-[DE-8-CDA-1] A CDA Document **SHALL** declare conformance for the Medication – Prescription and Non-Prescription module by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.8

C83-[DE-8-CDA-2] Substance Administration acts conforming to this module **SHALL** also declare conformance to the IHE Medications entity by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.7

2.2.2.8.2 Free Text Sig Constraints

Figure 2-27 Free Text Sig Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<section>
        ...
    <text>
            ...
        <content ID='sig-1'> Acetaminophen 325 mg tablet tid po prn</content>
            ...
    </text>
        ...
    <entry>
        <substanceAdministration classCode='SBADM' moodCode='INT'>
            <templateId root='2.16.840.1.113883.10.20.1.24'/>
            <templateId root='2.16.840.1.113883.3.88.11.83.8'/>
            <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.7'/>
                ...
            <text><reference value='#sig-1'/></text>
                ...
        </substanceAdministration>
    </entry>
</section>
```

2.2.2.8.3 Indicate Medication Stopped Constraints

The time at which the medication was stopped is determined based on the content of the **<high>** element of the first **<effectiveTime>** element.

2.2.2.8.4 Administrative Timing Constraints

The HL7 data type for PIVL_TS uses the **institutionSpecified** attribute to indicate whether it is the interval (time between dosing), or frequency (number of doses in a time period) that is important. If **instititutionSpecified** is not present or is set to false, then the time between dosing is important (every 8 hours). If true, then the frequency of administration is important (e.g., 3 times per day).

Figure 2-28 Administration Timing Examples

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<!-- twice a day for 10 days from 2/1/07 to 2/10/07 -->
<effectiveTime xsi:type='IVL_TS'>
    <low value='20070201'/>
    <high value='20070210'/>
</effectiveTime>
<effectiveTime xsi:type='PIVL_TS' institutionSpecified='true'  operator='A'>
    <period value='12' unit='h' />
</effectiveTime>

<!-- every 12 hours for 10 days from 2/1/07 to 2/10/07 -->
<effectiveTime xsi:type='IVL_TS'>
    <low value='20070201'/>
    <high value='20070210'/>
</effectiveTime>
<effectiveTime xsi:type='PIVL_TS' institutionSpecified='false' operator='A'>
    <period value='12' unit='h' />
</effectiveTime>

<!-- Once, on 2005-09-01 at 1:18am. -->
<effectiveTime value='200509010118'/>

<!-- Three times a day, for 10 days from 2/1/07 to 2/10/07 -->
<effectiveTime xsi:type='IVL_TS'>
    <low value='20070201'/>
    <high value='20070210'/>
</effectiveTime>
<effectiveTime xsi:type='PIVL_TS' institutionSpecified='true' operator='A'>
    <period value='8' unit='h' />
</effectiveTime>

<!-- every 8 hours for 10 days from 2/1/07 to 2/10/07 -->
<effectiveTime xsi:type='IVL_TS'>
    <low value='20070201'/>
    <high value='20070210'/>
</effectiveTime>
<effectiveTime xsi:type='PIVL_TS' institutionSpecified='false' operator='A'>
    <period value='8' unit='h' />
</effectiveTime>

<!-- in the morning for 10 days from 2/1/07 to 2/10/07 -->
<effectiveTime xsi:type='IVL_TS'>
    <low value='20070201'/>
    <high value='20070210'/>
</effectiveTime>
<effectiveTime xsi:type='EIVL' operator='A'>
    <event code='ACM'/>
</effectiveTime>

<!-- Every day at 8 in the morning for 10 minutes for 10 days from 2/1/07 to 2/10/07 -->
<effectiveTime xsi:type='IVL_TS'>
    <low value='20070201'/>
    <high value='20070210'/>
</effectiveTime>
<effectiveTime xsi:type='PIVL_TS' operator='A'>
    <phase>
        <low  value="198701010800" inclusive="true"/>
        <width value="10" unit="min"/>
    </phase>
    <period value='1' unit='d'/>
</effectiveTime>
```

C83-[DE-8-CDA-3] The first **<effectiveTime> SHALL** use the IVL_TS data type unless for a single administration, in which case, it **SHALL** use the TS data type

C83-[DE-8.03-CDA-1] Medications that are administered based on activities of daily living **SHALL** identify the events that trigger administration in the **<event>** element beneath the **<effectiveTime>** element. The **<effectiveTime>** element **SHALL** be of type EIVL_TS

C83-[DE-8.04-CDA-1] Medications that are administered at a specified frequency **SHALL** record the expected interval between doses in the **<period>** element beneath an **<effectiveTime>** of type PIVL_TS. The **<effectiveTime>** element **SHALL** have an institutionSpecified attribute value of "true"

C83-[DE-8.05-CDA-1] Medications that are administered at a specified interval **SHALL** record interval between doses in the **<period>** element beneath an **<effectiveTime>** element of type PIVL_TS. The **<effectiveTime>** element **SHALL** have an institutionSpecified attribute value of "false"

2.2.2.8.5 Route of Administration Constraints

Figure 2-29 Route of Administration Example

```
        ...
<routeCode code='C38288' displayName='ORAL'
        codeSystem='2.16.840.1.113883.3.26.1.1' codeSystemName='NCI Thesaurus'/>
        ...
```

C83-[DE-8.07-CDA-1] **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.3.4.1 Medication Route FDA.

2.2.2.8.6 Dose Constraints

The units of presentation can be found at www.fda.gov, and include only those terms that have not been mapped to Unified Code for Units of Measure (UCUM). Terms with mappings to UCUM are units of administration.

Figure 2-30 Dose Examples

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<!-- example 1, dose is in units of tablets -->
<code code='' displayName='Acetaminophen 325 mg tablet'
    codeSystem='2.16.840.1.113883.6.88' codeSystemName='RxNorm'/>
    ...
<doseQuantity value='1' unit='{TABLET}'/>

<!-- example 2, dose is in measurable units -->
<code code='' displayName='Tylenol'
    codeSystem='2.16.840.1.113883.6.88' codeSystemName='RxNorm'/>
    ...
<doseQuantity value='325' unit='mg'/>
```

C154-[DE-8.08-1] Units **MAY** be present when needed. If present it **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.6.6 Units of Measurement

C154-[DE-8.08-2] When the coded product or brand name describes the strength or concentration of the medication, and the dosing is in administration units (e.g., 1 tablet, 2 capsules), units **SHOULD** contain the preferred name of the presentation units within braces { } using the units of presentation from the NCI Thesaurus

2.2.2.8.7 Site Constraints

C154-[DE-8.09-1] The Site **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.2.1 Body Site

2.2.2.8.8 Product Form Constraints

Figure 2-31 Product Form Example

```
    ...
<administrationUnitCode code="C42998" displayName="TABLET"
    codeSystem="2.16.840.1.113883.3.26.1.1" codeSystemName="NCI Thesaurus" />
    ...
```

C154-[DE-8.11-1] **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.3.3 Medication Product Form

2.2.2.8.9 Delivery Method Constraints

Figure 2-32 Delivery Method

```
<cda:code  code='...' displayName='...' codeSystem='...' codeSystemName='...' >
    <cda:originalText>Intraveinous Injection</cda:originalText>
</cda:code>
```

Please note that HITSP has not specified a vocabulary for Delivery Method because ongoing harmonization work with the NCPDP Industry SIG Task Force and the e-Prescribing pilots has not yet published results.

C83-[DE-8.12-CDA-1] The Delivery Method **MAY** be recorded in the **<cda:code>** element

C83-[DE-8.12-CDA-2] The free text description of the delivery method **MAY** be included within a **<cda:originalText>** element beneath the **<cda:code>** element

2.2.2.8.10 Medication Information Constraints

The template identifier for this data element is 2.16.840.1.113883.3.88.11.83.8.2.

The name and code for the medication are recorded in the **<consumable>** element, as shown below.

Figure 2-33 Medication Information Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<substanceAdministration classCode='SBADM' moodCode='INT'>
        ...
    <consumable>
        <manufacturedProduct classCode='MANU'>
            <templateId root='2.16.840.1.113883.10.20.1.53'/>
            <templateId root='2.16.840.1.113883.3.88.11.83.8.2'/>
            <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.7.2'/>
            <manufacturedMaterial classCode='MMAT' determinerCode='KIND'>
                <code code='161' displayName='Acetaminophen'
                    codeSystem='2.16.840.1.113883.6.88' codeSystemName='RxNorm'>
                    <originalText>Acetaminophen</originalText>
                    <translation code='202433' displayName='Tylenol'
                        codeSystem='2.16.840.1.113883.6.88'
codeSystemName='RxNorm'/>
                </code>
                <name>Tylenol</name>
            </manufacturedMaterial>
        </manufacturedProduct>
    </consumable>
        ...
</substanceAdministration>
```

C83-[DE-8-CDA-4] Medication Information data elements **SHALL** declare conformance to the IHE Product Entry template by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.7.2

C83-[DE-8-CDA-5] A CDA Document **SHALL** declare conformance for the Medication Information data element by including a **<templateID>** element with the root attribute set to the value 2.16.840.1.113883.3.88.11.83.8.2

2.2.2.8.11 Coded Product Name Constraints

C83-[DE-8.13-CDA-1] The coded product name **SHALL** appear in the **code** attribute of the **<code>** element.

C83-[DE-8.13-CDA-2] If the code for the generic product is unknown, the **code** and **codeSystem** attributes **MAY** be omitted

C154-[DE-8.13-1] The coded product name **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.3.8 Medication Clinical Drug Names.

C154-[DE-8.13-2] When only the class of the drug is known (e.g., Beta Blocker or Sulfa Drug), it **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.3.9 Medication Drug Class.

C154-[DE-8.13-3] When only the medication ingredient name is know, the coded product name **MAY** be coded as specified in HITSP/C80 Section 2.2.3.3.11 Ingredient Name

2.2.2.8.12 Coded Brand Name Constraints

C83-[DE-8.14-CDA-1] The code for the specific brand of product **SHALL** appear in a **<translation>** element

C154-[DE-8.14-1] The brand name **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.3.7 Medication Brand Name or 2.2.3.3.10 Medication Packaged Product.

2.2.2.8.13 Free Text Product Name Constraints

C83-[DE-8.15-CDA-1] The product (generic) name **SHALL** appear in the **<originalText>** element beneath the **<code>** element

2.2.2.8.14 Free Text Brand Name Constraints

C83-[DE-8.14-CDA-1] The coded product name **SHALL** appear in the **code** attribute of the **<translation>** element

C83-[DE-8.14-CDA-2] The brand name **SHALL** appear in the **<name>** element of the **<manufacturedMaterial>**

2.2.2.8.15 Product Concentration Constraints

The product concentration is determined from the coded product or brand name using knowledge base information in the vocabularies specified for these fields, and therefore this information is not explicitly included.

2.2.2.8.16 Type of Medication Constraints

The template identifier for this data element is 2.16.840.1.113883.3.88.11.83.8.1.

Figure 2-34 Type of Medication

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<substanceAdministration classCode='SBADM' moodCode='INT'>
        ...
    <entryRelationship typeCode='SUBJ'>
        <observation classCode='OBS' moodCode='EVN'>
            <templateId root='2.16.840.1.113883.3.88.11.83.8.1'/>
            <code code='73639000' displayName='Prescription Drug'
                codeSystem='2.16.840.1.113883.6.96' codeSystemName='SNOMED CT'/>
            <statusCode code='completed'/>
        </observation>
    </entryRelationship>
        ...
</substanceAdministration>
```

C83-[DE-8.19-CDA-1] A CDA Document **SHALL** declare conformance for the Type of Medication by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.8.1

C83-[DE-8.19-CDA-2] Each **<supply>** or **<substanceAdministration>** act **MAY** reference an **<observation>** element that describes the type of medication, by including an **<entryRelationship typeCode=SUBJ/>** element

C83-[DE-8.19-CDA-3] The type of a medication **SHALL** be represented with an **<observation>** element in the **<entryRelationship>**

C83-[DE-8.19-CDA-4] The **<observation>** element **SHALL** have a **<templateId>** with a **root** attribute set to 2.16.840.1.113883.3.88.11.83.8.1

C83-[DE-8.19-CDA-5] The **<observation>** **SHALL** have a **<code>** element that represents the kind of medication actually or intended to be administered or supplied

C154-[DE-8.19-1] The type of medication **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.3.5 Medication Type.

2.2.2.8.17 Status of Medication Constraints

See Sections 3.9.2.3 and 5.1 of the HL7 Continuity of Care Document Implementation Guide for additional requirements for this data element.

Figure 2-35 Status of Medication Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<substanceAdministration classCode='SBADM' moodCode='INT'>
        ...
    <entryRelationship typeCode='REFR'>
        <observation classCode='OBS' moodCode='EVN'>
            <code code='33999-4' displayName='Status'
                codeSystem='2.16.840.1.113883.6.1' codeSystemName='LOINC'/>
            <statusCode code='completed'/>
            <value xsi:type='CE' code='55561003' displayName='Active'
                codeSystem='2.16.840.1.113883.6.96' codeSystemName='SNOMED CT'/>
        </observation>
    </entryRelationship>
        ...
</substanceAdministration>
```

C154-[DE-8.20-1] The medication status **MAY** be recorded using the CCD Medication Status observation using the value set defined in the CCD

2.2.2.8.18 Indication Constraints

Figure 2-36 Indication Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<substanceAdministration classCode='SBADM' moodCode='INT'>
        ...
    <entryRelationship typeCode="RSON">
        <observation classCode="OBS" moodCode="EVN">
            <templateId root="2.16.840.1.113883.10.20.1.28"/>
            <code code='' displayName=''
                codeSystem='2.16.840.1.113883.6.96' codeSystemName='SNOMED CT'/>
            <text><reference value="#indication-1"/></text>
            <statusCode code="completed"/>
            <effectiveTime value="..."/>
        </observation>
    </entryRelationship>
        ...
</substanceAdministration>
```

C83-[DE-8.20-CDA-1]	The indication **SHALL** be recorded using the Indication **`<observation>`** described in Section 3.9.2.2.1 of the HL7 Continuity of Care Document Implementation Guide, and which conforms
C83-[DE-8.20-CDA-2]	The indication **`<observation>`** **SHALL** contain a **`<text>`** element that includes a **`<reference>`** element whose **`value`** attribute points to the narrative text that is the indication for the medication
C154-[DE-8.20-1]	The indication **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.1.1 Problem

2.2.2.8.19 Patient Instructions Constraints

External patient educational materials can be referenced with an appropriate URL entry in the `text/reference/value`.

Figure 2-37 Patient Instructions Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->

<!-- an example of a patient instruction embedded in the document -->
<text>
        ...
    <content ID='patient-instruction'>Take with food</content>
        ...
</text>
<entry>
    <substanceAdministration>
            ...
        <entryRelationship typeCode='SUBJ' inversionInd='true'>
            <act classCode='ACT' moodCode='INT'>
                <templateId root='2.16.840.1.113883.10.20.1.49'/>
                <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.3'/>
                <code code='PINSTRUCT' codeSystem='1.3.6.1.4.1.19376.1.5.3.2'
                    codeSystemName='IHEActCode' />
                <text><reference value='#patient-instruction'/></text>
            </act>
        </entryRelationship>
    </substanceAdministration>
</entry>
    ...

<!-- an example of a reference to an external document-->
<text>
    <reference value='http://www.fda.gov/cder/drug/infopage/COX2/NSAIDmedguide.pdf' />
</text>
```

C83-[DE-8.22-CDA-1] Medication Information data elements **SHALL** declare conformance to the IHE Patient Medication Instructions template by including a **`<templateID>`** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.3

2.2.2.8.20 Vehicle Constraints

Figure 2-38 Vehicle Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<substanceAdministration classCode='SBADM' moodCode='...'>
        ...
    <participant typeCode='CSM'>
        <participantRole classCode='MANU'>
            <code code='412307009' displayName='drug vehicle'
                codeSystem='2.16.840.1.113883.6.96' codeSystemName='SNOMED CT'/>
            <playingEntity classCode='MMAT'>
                <code .../>
                <name>...</name>
            </playingEntity>
        </participantRole>
    </participant>
</substanceAdministration>
```

C83-[DE-8.24-CDA-1] The vehicle for administering a medication **MAY** be recorded in a **`<participantRole>`** element inside a **`<participant>`** element in the **`<substanceAdministration>`** element

C83-[DE-8.24-CDA-2] The typeCode attribute of the **`<participant>`** element **SHALL** be CSM

C83-[DE-8.24-CDA-3] The classCode of the **`<participantRole>`** **SHALL** be MANU

C83-[DE-8.24-CDA-4] A **`<code>`** element for the **`<participantRole>`** **SHALL** be present and **SHALL** contain the code 412307009 from the SNOMED CT code system as shown above

C83-[DE-8.24-CDA-5]	The **<name>** element in the **<playingEntity>** element **SHALL** record the name of the drug vehicle
C83-[DE-8.24-CDA-6]	The **<code>** element in the **<playingEntity>** element **MAY** be used to supply a coded term for the drug vehicle
C154-[DE-8.24-1]	The Medication Vehicle shall be coded as specified in HITSP/C80 Section 2.2.3.3.12 Medication Vehicle

2.2.2.8.21 Order Information Constraints

Order information may be recorded as part of the fulfillment history or as part of the administration information.

Figure 2-39 Order Information Examples

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<!-- example 1, recording order information with substance administration event or intent --
>
<substanceAdministration classCode='SBADM' moodCode='…'>
        …
    <entryRelationship typeCode='REFR'>
        <supply classCode='SPLY' moodCode='INT'>
            <templateId root='2.16.840.1.113883.3.88.11.83.8.3'/>
            <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.7.3'/>
            <id root='14ED7742-2428-4e2c-9446-A9B0D0075272' extension='SCRIP#'/>
            <repeatNumber value='1'/>
            <quantity value='30'/>
            <author>
                <time value='20070210'/>
                <assignedAuthor>
                    <id …/>
                    <assignedPerson>
                        <name>…</name>
                    </assignedPerson>
                </assignedAuthor>
            </author>
        </supply>
    </entryRelationship>
</substanceAdministration>

<!-- example 2, recording order information with supply event -->
<supply classCode='SPLY' moodCode='EVN'>
        …
    <entryRelationship typeCode='REFR'>
        <supply classCode='SPLY' moodCode='INT'>
            <templateId root='2.16.840.1.113883.3.88.11.83.8.3'/>
            <id root='14ED7742-2428-4e2c-9446-A9B0D0075272' extension='SCRIP#'/>
            <repeatNumber value='3'/>
            <quantity value='30'/>
            <author>
                <time value='20070210'/>
                <assignedAuthor>
                    <id …/>
                    <assignedPerson><name>…</name></assignedPerson>
                </assignedAuthor>
            </author>
        </supply>
    </entryRelationship>
</supply>
```

C83-[DE-8-CDA-6]	A CDA Document **SHALL** declare conformance for the Order Information data element by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.8.3

C83-[DE-8-CDA-7] Order Information data elements **SHALL** declare conformance to the IHE Supply Entry template by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.7.3

C83-[DE-8.26-CDA-1] The order number, i.e., the identifier from the perspective of the ordering provider, **SHOULD** be recorded in the **<id>** element within the **<supply>** element used to record order information

2.2.2.8.22 Fills Constraints

Figure 2-40 Fills Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<!-- Example 1, 1 fill, no refills -->
<repeatNumber value='1'/>

<!-- Example 2, 3 fills = 1 initial fill + 2 refills -->
<repeatNumber value='3'/>

<!—Example 3, unbounded number of fills -->
<repeatNumber nullFlavor='PINF'/>
```

Please note that the number of fills requested is what is recorded in the document, not the number of refills. The number of refills is simply one less than the number of fills.

2.2.2.8.23 Quantity Ordered Constraints

The units of presentation can be retrieved from www.fda.gov, and include only those terms which have not been mapped to UCUM. Terms with mappings to UCUM are units of administration, rather than units of presentation.

Figure 2-41 Quantity Ordered Examples

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<!-- Example 1, 100 tablets -->
<quantity value='100' unit='{TABLET}'/>

<!-- Example 2, 0.5 liters -->
<quantity value='0.5' unit='l'/>
```

C83-[DE-8.26-CDA-1] The quantity ordered **SHALL** be recorded in the **value** attribute of **<quantity>** element inside a **<supply>** element used to record order information

C83-[DE-8.26-CDA-2] The **unit** attribute **SHALL** be present

C83-[DE-8.26-CDA-3] When the quantity ordered is in other than administration units (e.g., when the quantity ordered is a volume of liquid or mass of substance) units **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.6.6 Units of Measure

C83-[DE-8.26-CDA-4] When the quantity ordered is in administration units, the **unit** attribute **SHOULD** contain the preferred name of the presentation units within braces { } using the units of presentation as specified in HITSP/C80 Section 2.2.3.3.3 Medication Product Form

2.2.2.8.24 Fulfillment Instructions Constraints

Figure 2-42 Fulfillment Instructions Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->

<!—This examples illustrates a fullfillment instruction allowing generic substition-->
<text>
        ...
    <content ID='fulfillment-instruction1'>Generic Substitition Allowed</content>
        ...
</text>
<entry>
    <substanceAdministration moodCode='INT'>
            ...
        <entryRelationship typeCode='SUBJ' inversionInd='true'>
            <act classCode='ACT' moodCode='INT'>
                <templateId root='2.16.840.1.113883.10.20.1.43'/>
                <text><reference '#fulfillment-instruction1'/></text>
            </act>
        </entryRelationship>
    </substanceAdministration>
</entry>
    ...

<!—This examples illustrates when the prescriber requires/required the medication to be
available by a specific time -->
<text>
        ...
    <content ID='fulfillment-instruction2'> must be available by Friday noon.</content>
        ...
</text>
<entry>
    <substanceAdministration moodCode='INT'>
            ...
        <entryRelationship typeCode='SUBJ' inversionInd='true'>
            <act classCode='ACT' moodCode='INT'>
                <templateId root='2.16.840.1.113883.10.20.1.43'/>
                <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.3.1'/>
                <code code='FINSTRUCT' codeSystem='1.3.6.1.4.1.19376.1.5.3.2'
                    codeSystemName='IHEActCode' />
                <text><reference value='#comment-2'/></text>
                <statusCode code='completed' />
            </act>
        </entryRelationship>
    </substanceAdministration>
</entry>
```

C83-[DE-8.32-CDA-1] Fulfillment instructions data elements **SHALL** declare conformance to the IHE Medication Fulfillment Instructions template by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.3.1

2.2.2.8.25 Prescription Number Constraints

Figure 2-43 Prescription Number Example

```
<supply moodCode='EVN'>
    <id root='14ED7742-2428-4e2c-9446-A9B0D0075272' extension='SCRIP#'/>
        ...
</supply>
```

C83-[DE-8.34-CDA-1] The prescription number **SHALL** be recorded in the **extension** attribute of the **<id>** element within a **<supply>** element having a moodCode attribute of EVN

C83-[DE-8.34-CDA-2] The **root** attribute of the **<id>** element **SHOULD** be the OID of the assigning authority for the identifier; however, determining the assigning authority is not feasible in all settings

C83-[DE-8.34-CDA-3] A GUID **MAY** be used in place of the OID of the assigning authority

2.2.2.8.26 Provider Constraints

C83-[DE-8.35-CDA-1] The provider **SHALL** be recorded in the **<assignedEntity>** element

C83-[DE-8.35-CDA-2] At least one of **<assignedPerson>** or **<representedOrganization>** elements **SHALL** appear inside the **<assignedEntity>** to indicate the name of the person or the organization fulfilling the prescription

C83-[DE-8.35-CDA-3] The name of the person **SHALL** appear in the **<name>** element of the **<assignedPerson>** element beneath the **<assignedEntity>** element

C83-[DE-8.35-CDA-4] The name of the organization **SHALL** appear in the **<name>** element of the **<representedOrganization>** element beneath the **<assignedEntity>** element

2.2.2.8.27 Quantity Dispensed Constraints

C83-[DE-8.38-CDA-1] The quantity dispensed **SHALL** be recorded in the **value** attribute of **<quantity>** element inside a **<supply>** element with a **moodCode** attribute set to EVN

C83-[DE-8.38-CDA-2] When the quantity dispensed is in other than administration units (e.g., when the quantity ordered is a volume of liquid or mass of substance) units **SHALL** be recorded as specified in HITSP/C80 Section 2.2.3.6.6 Units of Measure

C83-[DE-8.38-CDA-3] When the quantity dispensed is in administration units the **unit** attribute **SHOULD** contain the preferred name of the presentation units within braces { } using the units of presentation as specified in HITSP/C80 Section 2.2.3.3.3 Medication Product Form.

The units of presentation can be found at www.fda.gov, and include only those terms which have not been mapped to UCUM. Terms with mappings to UCUM are units of administration, rather than units of presentation.

2.2.2.8.28 Fill Number Constraints

The fill number identifies the supply (dispense) event as a distinct activities against the prescription.

C83-[DE-8.39-CDA-1] The fill number **SHOULD** be recorded in the **sequenceNumber** attribute of a **<entryRelationship>** element with a **typeCode** attribute set to COMP

2.2.2.8.29 Fill Status Constraints

C83-[DE-8.40-CDA-1] The fill status **MAY** be recorded in the **statusCode** attribute

C83-[DE-8.40-CDA-2] The **statusCode** attribute **SHALL** contain be coded as specified in HITSP/C80 Section 2.2.3.3.1 Medication Fill Status.

2.2.2.8.1 Dispensing Pharmacy Location (Previously known as Location) Constraints

C154-[DE-8.36-1] The state part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.1 State

C154-[DE-8.36-2] The postal code part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.2 Postal Code

C154-[DE-8.36-3] The country part of an address **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.3 Country

2.2.2.9 PREGNANCY

Within a CDA document, the following information maps to the HITSP/C154 Data Dictionary. This section describes a coded entry indicating whether the patient is currently pregnant.

Figure 2-44 Pregnancy Coding Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->

<observation typeCode='OBS' moodCode='EVN'>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.13'/>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.13.5'/>
    <value xsi:type='CD' code='77386006' displayName='patient currently pregnant'
        codeSystem='2.16.840.1.113883.6.96' codeSystemName='SNOMED CT'/>
</observation>
```

Table 2-13 Pregnancy Data Mapping Table – Requirements

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
cda:observation/cda:value[@code='77386006' and @codeSystem='2.16.840.1.113883.6.96']	9.01 – Pregnancy	See Note[20]	

Optionality Legend: “R” for Required, “R2” for Required if known, “O” for Optional and Repeat = “Y” for Yes or “N” for No

2.2.2.10 INFORMATION SOURCE

This module contains information about the original author to be supplied and for a reference to the original document to be provided. This module may be applied to all other entry Content Modules. See the HL7 Continuity of Care Document Section 5.2 for constraints applicable to this module.

Table 2-14 Information Source Data Mapping Table – Requirements

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
ancestor-or-self::../cda:author[1]	Author	R/N	
cda:time	10.01 - Author Time	R/N	
cda:assignedAuthor/cda:assignedPerson/ cda:name	10.02 - Author Name	R/N	
cda:reference/cda:externalDocument	10.03 – Reference	R2/Y	
cda:id	10.04 - Reference Document ID	R/N	
cda:text/cda:reference/@value	10.05 - Reference Document URL	O/N	
ancestor-or-self::../cda:informant	Information Source	O/Y	
cda:assignedEntity/cda:assignedPerson/cda:name| cda:assignedEntity/ cda:representedOrganization/cda:name | cda:relatedEntity/cda:relatedPerson/cda:name	10.06 - Information Source Name	R/N	

Optionality Legend: “R” for Required, “R2” for Required if known, “O” for Optional and Repeat = “Y” for Yes or “N” for No

2.2.2.10.1 Information Source Name Constraints

C83-[DE-10.02-CDA-1] The name of the information source **SHALL** be provided in the <name> element

[20] Requirements for Entries are defined at a higher level than the Entry Content Module (i.e. Section Content Modules, HITSP CDA-based constructs and Interoperability Specifications).

C83-[DE-10.02-CDA-2] The <name> element **SHALL** appear within an <assignedPerson> or <representedOrganization> element appearing in an <assignedEntity>, or within a <relatedPerson> element within a <relatedEntity> element beneath the <informant> element

2.2.2.11 COMMENT

This module contains a comment to be supplied for any other entry Content Modules. See the HL7 Continuity of Care Document Section 4.3 for constraints applicable to this module.

The template identifier for this module is 2.16.840.1.113883.3.88.11.83.11.

Figure 2-45 Comment Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<entry>
    <act><!-- could also be observation, substanceAdministration, supply, et cetera -->
            ...
        <entryRelationship typeCode='SUBJ' inversionInd='true'>
            <act classCode='ACT' moodCode='EVN'>
                <templateId root='2.16.840.1.113883.10.20.1.40'/>
                <templateId root='2.16.840.1.113883.3.88.11.83.11'/>
                <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.2'/>
                <code code='' displayName='Annotation Comment'
                    codeSystem='2.16.840.1.113883.6.1' codeSystemName='LOINC'/>
                <text><reference value='#comment-1'/></text>
                <author>
                    <assignedAuthor>
                        <assignedPerson>
                            <name>…</name>
                        </assignedPerson>
                    </assignedAuthor>
                </author>
            </act>
        </entryRelationship>
    </act>
</entry>
```

Table 2-15 Comments Data Mapping Table – Definitions: Author

Data Element ID	Data Element	Description
11.01	Free Text Comment	A free text comment

Table 2-16 Comments Data Mapping Table – Requirements

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
cda:act[cda:templateId/@root = '2.16.840.1.113883.10.20.1.40']	Comment	O/Y	
ancestor-or-self::./cda:author[1]	Author	R/N	
cda:text/cda:reference/@value	11.01 - Free Text Comment	R/N	2.2.2.11.2
cda:entryRelationship[@typeCode='RSON']/ cda:act[cda:templateId/@root= '2.16.840.1.113883.10.20.1.27']	11.02 – Reason	O/N	2.2.2.11.3

Optionality Legend: “R” for Required, “R2” for Required if known, “O” for Optional and Repeat = “Y” for Yes or “N” for No

2.2.2.11.1 Comments Module Constraints

C83-[DE-10-CDA-1] Data elements defined elsewhere in the specification **SHALL NOT** be recorded using the Comments Module.

C83-[DE-10-CDA-2] A CDA Document **SHALL** declare conformance for the Comments module by including a **`<templateID>`** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.11

C83-[DE-10-CDA-3] Each comment module **SHALL** be conformant with the IHE Comment module and **SHALL** include a **`<templateID>`** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.2

2.2.2.11.2 Free Text Comment Constraints

Comments are free text data that cannot otherwise be recorded using data elements already defined by this specification. They are not to be used to record information that can be recorded elsewhere. For example, a free text description of the severity of an allergic reaction would not be recorded in a comment. Instead, it would be recorded using data element 6.07 defined above.

C83-[DE-10-CDA-4] The author of a comment **SHALL** be recorded as specified for authors in the Information Source module.

2.2.2.11.3 Reason

Reasons can be associated with many different events, including treatment events such as procedures or the use of medications or immunizations, encounters, performance of a diagnostic test, etc. The general pattern for including a reason in a CDA document appears below.

```
<cda:entryRelationship typeCode='RSON'>
  . . .
</cda:entryRelationship>
```

The content of the of the <entryRelationship> element includes an appropriate act describing the particular reason that the outer element was (or was not) performed.

2.2.2.12 ADVANCE DIRECTIVE

Within a CDA document, the following information maps to the HITSP/C154 Data Dictionary. See the HL7 Continuity of Care Document Section 3.2 for constraints applicable to these data elements. This module contains data describing the patient's Advance Directives and any reference to supporting documentation. This section contains data such as the existence of living wills, healthcare proxies and CPR and resuscitation status. The custodian of these documents may be described. See the HL7 Continuity of Care Document Section 3.2 for constraints applicable to this module.

The template identifier for this module is 2.16.840.1.113883.3.88.11.83.12.

Table 2-17 Advance Directives Data Mapping Table – Requirements

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
cda:observation[cda:templateId/@root= '2.16.840.1.113883.10.20.1.17']	Advance Directive Event Entry	See Below[21]	
cda:code/@code	12.01 - Advance Directive Type	R2/N	2.2.2.12.2
cda:originalText/cda:reference/@value	12.02 - Advance Directive Free Text Type	R/N	2.2.2.12.3
cda:effectiveTime	12.03 - Effective Date	R/N	2.2.2.12.4

[21] Requirements for Entries are defined at a higher level than the Entry Content Module (i.e. Section Content Modules, HITSP CDA-based constructs and Interoperability Specifications).

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
cda:participant[@typeCode='CST']/ cda:participantRole[@classCode='AGNT']	12.04 - Custodian of the Document	R/N	2.2.2.12.5

Optionality Legend: “R” for Required, “R2” for Required if known, “O” for Optional and Repeat = “Y” for Yes or “N” for No

Please note that the existence of an Advance Directive of a particular type (e.g., intubation) is a signal to the provider that such a directive exists. When determining how to care for a patient, the provider is advised to review the Advance Directive directly, rather than relying upon summary information.

Figure 2-46 Advance Directive Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<observation classCode='OBS' moodCode='EVN'>
    <templateId root='2.16.840.1.113883.10.20.1.17'/>
    <templateId root='2.16.840.1.113883.3.88.11.83.12'/>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.13.7'/>
    <code code='...' displayName='...'
        codeSystem='2.16.840.1.113883.6.96' codeSystemName='SNOMED CT'>
        <originalText><reference value='#directive-1'/></originalText>
    </code>
    <effectiveTime>
        <low value='...'/>
        <high value='...'/>
    </effectiveTime>
    <participant typeCode='CST'>
        <participantRole classCode='AGNT'>
            <addr>…</addr>
            <telecom>…</telecom>
            <playingEntity>
                <name>…</name>
            </playingEntity>
        </participantRole>
    </participant>
</observation>
```

2.2.2.12.1 Advance Directive Module Constraints

C83-[DE-12-CDA-1] A CDA Document **SHALL** declare conformance for the Advance Directive module by including a **`<templateID>`** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.12

C83-[DE-12-CDA-2] An advance directive data element **SHALL** declare conformance to the IHE Advance Directive Observation by including a **`<templateID>`** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.13.7

2.2.2.12.2 Advance Directive Coded Type Constraints

C154-[DE-12.01-1] The advance directive **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.10.1 Advance Directive Type

2.2.2.12.3 Advance Directive Free Text Type Constraints

C83-[DE-12.CDA-3] The human readable description of the type of Advance Directive **SHALL** appear in the narrative text and **SHALL** be pointed to by the **`value`** attribute of the **`<reference>`** element inside the **`<originalText>`** element of the **`<code>`**

2.2.2.12.4 Effective Date Constraints

C83-[DE-12CDA-4] The starting time of the Advance Directive **SHALL** be recorded in the **`<low>`** element of the **`<effectiveTime>`** element in the Advance Directive **`<observation>`**

C83-[DE-12CDA-5]	If the starting time is unknown, the **<low>** element **SHALL** have the nullFlavor attribute set to UNK
C83-[DE-12.CDA-6]	The ending time of the Advance Directive **SHALL** be recorded in the **<high>** element of the **<effectiveTime>** element in the Advance Directive **<observation>**
C83-[DE-12.CDA-7]	If the ending time is unknown, the **<high>** element **SHALL** have the nullFlavor attribute set to UNK
C83-[DE-12CDA-8]	If the Advance Directive does not have a specified ending time, the **<high>** element **SHALL** have the nullFlavor attribute set to NA

2.2.2.12.5 Custodian of the Document Constraints

C83-[DE-12.CDA-9]	Information required to obtain a copy of the Advance Directive **SHALL** be recorded in a **<participantRole>** element within a **<participant>** element of the Advance Directive **<observation>**
C83-[DE-12.CDA-10]	The typeCode attribute of the **<participant>** element **SHALL** be CST
C83-[DE-12.CDA-11]	The classCode of the **<participantRole>** element **SHALL** be AGNT
C83-[DE-12CDA-12]	The address of the agent **SHALL** be recorded in an **<addr>** element when known
C83-[DE-12CDA-13]	The telephone number or other electronic communications address for the agent **SHALL** be recorded in a **<telecom>** element when known
C83-[DE-12CDA-14]	The name of the agent who can provide a copy of the Advance Directive **SHALL** be recorded in the **<name>** element inside the **<playingEntity>** element

2.2.2.13 IMMUNIZATION

Within a CDA document, the following information maps to the HITSP/C154 Data Dictionary. See the HL7 Continuity of Care Document Section 3.11 for constraints applicable to these data elements. This module contains data describing the patient's immunization history. The HL7 Continuity of Care (CCD) Implementation Guide defines Immunizations using the same data objects and constraints as for Medications. See the HL7 Continuity of Care Document, Sections 3.9 Medications and 3.11 Immunizations; and also the Medication module Section 2.2.2.8 of this construct for constraints applicable to this module.

The template identifier for this module is 2.16.840.1.113883.3.88.11.83.13.

Table 2-18 Immunizations Data Mapping Table – Requirements

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
cda:substanceAdministration[cda:templateId/@root = '2.16.840.1.113883.10.20.1.24']	Immunization Event Entry	See Below[22]	
@negationInd	13.01 - Refusal	R/N	
cda:effectiveTime	13.02 - Administered Date	O/N	
cda:entryRelationship [@typeCode='SUBJ']/ cda:observation/cda:value	13.03 - Medication Series Number	O/N	
cda:entryRelationship[@typeCode='CAUS']/ cda:observation[cda:templateId/@root= '2.16.840.1.113883.10.20.1.54']	13.04 - Reaction	O/Y	
cda:performer/cda:assignedEntity	13.05 - Performer	O/N	
cda:consumable/cda:manufacturedProduct	Medication Information	R/Y	
cda:manufacturedMaterial/cda:code/@code	13.06 - Coded Product Name	R2/Y	2.2.2.13.1

[22] Requirements for Entries are defined at a higher level than the Entry Content Module (i.e. Section Content Modules, HITSP CDA-based constructs and Interoperability Specifications).

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
cda:originalText	13.07 - Free Text Product Name	R/N	
cda:manufacturerOrganization	13.08 - Drug Manufacturer	O/N	
cda:manufacturedMaterial/ cda:lotNumberText	13.09 - Lot Number	R2/N	
cda:entryRelationship[@typeCode='RSON']/ cda:act[cda:templateId/@root= '2.16.840.1.113883.10.20.1.27']	13.10 - Refusal Reason	R2/N	2.2.2.13.2

Optionality Legend: "R" for Required, "R2" for Required if known, "O" for Optional and Repeat = "Y" for Yes or "N" for No

Figure 2-47 Immunization Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<substanceAdministration classCode='SBADM' moodCode='EVN'>
    <templateId root='2.16.840.1.113883.10.20.1.24'/>
    <templateId root='2.16.840.1.113883.3.88.11.83.13'/>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.12'/>
    <code code='11369-6' displayName=' History of immunizations '
        codeSystem='2.16.840.1.113883.6.1' codeSystemName='LOINC'>
    </code>
  <entryRelationship typeCode='SUBJ'>          <!-- medication series -->
    <observation>
        <value xsi:type='INT' value='2'/>
    </observation>
  </entryRelationship>
  <entryRelationship typeCode='CAUS'>          <!-- reaction -->
    <observation>
        ...
    </observation>
  </entryRelationship>
  <performer typeCode='PRF'>
    <assignedEntity>
        ...
    </assignedEntity>
  </performer>
  <consumable>
    <manufacturedProduct classCode='MANU'>
        <templateId root='2.16.840.1.113883.10.20.1.53'/>
        <organization>
            ...
        </organization>
        <material>
            ...
            <code code='...' displayName='...' codeSystem='...' codeSystemName='...'/>
            <lotNumberText>...</lotNumberText>
        </material>
    </manufacturedProduct>
  </consumable>
</substanceAdministration >
```

C83-[DE-13-CDA-1] A CDA Document **SHALL** declare conformance for the Immunization module by including a **`<templateID>`** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.13

C83-[DE-13-CDA-2] Immunization data elements **SHALL** declare conformance to the IHE Immunization entry by including a **`<templateID>`** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.12

2.2.2.13.1 Coded Product Name Constraints

C83-[DE-13.06-CDA-1]	The code **SHALL** appear in the **code** attribute of the **<code>** or **<translation>** element
C154-[DE-13.06-1]	Immunizations **SHALL** be coded using CVX as specified in HITSP/C80 Section 2.2.3.5.1 Vaccines Administered.

2.2.2.13.2 Refusal Reason Constraints

C154-[DE-13.10-1]	The reason for refusal **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.5.3 No Immunization Reason

2.2.2.14 VITAL SIGN

Within a CDA document, the following information maps to the HITSP/C154 Data Dictionary. See the HL7 Continuity of Care Document Section 3.12 for constraints applicable to these data elements.

These entries are used to record current and relevant historical vital signs for the patient. Vital Signs are a subset of Results (see Section 2.2.2.15), but are reported in this section to follow clinical conventions.

The template identifier for this module is 2.16.840.1.113883.3.88.11.83.14.

The differentiation between Vital Signs and Results varies by clinical context. Common examples of vital signs include temperature, height, weight, blood pressure, etc. However, some clinical contexts may alter these common vitals, for example in neonatology “height” may be replaced by “crown-to-rump” measurement.

Table 2-19 Vital Signs Data Mapping Table – Requirements

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
	See Data Element Definitions for Results in Section 2.2.2.15		

Optionality Legend: “R” for Required, “R2” for Required if known, “O” for Optional and Repeat = “Y” for Yes or “N” for No

2.2.2.14.1 Vital Signs Module Constraints

C83-[DE-14-CDA-1]	A CDA Document **SHALL** declare conformance for the Vital Signs module by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.14
C83-[DE-14-CDA-2]	Vital signs information elements **SHALL** be contained in a conforming IHE Vital Signs Organizer element that includes a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.13.1

2.2.2.14.2 Vital Sign/Result Type Constraints

C154-[DE-14.03-1]	Vital signs **SHOULD** be coded as specified in HITSP/C80 Section 2.2.3.6.4 Vital Sign Result Type

2.2.2.15 RESULT

Within a CDA document, the following information maps to the HITSP/C154 Data Dictionary. See the HL7 Continuity of Care Document Section 3.13 for constraints applicable to these data elements. This module contains current and relevant historical result observations for the patient. The scope of “observations” is broad with the exception of “vital signs” which are contained in the Vital Signs sections (see Section 2.2.2.14 above).

The template identifier for this module is 2.16.840.1.113883.3.88.11.83.15.1.

The Results section is intended as a summary and not as an official, legally sanctioned report. For example, regulatory requirements for lab reports are not necessarily supported in the following Data Element Definitions. In the case of lab reports, the official report is supported in HITSP/C37 Laboratory Report Document Using IHE XD* Lab.

Table 2-20 Results Data Mapping Table – Requirements

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
cda:observation[cda:templateId/@root = '2.16.840.1.113883.10.20.1.31']	Result Event Entry	See Below[23]	
cda:id	15.01 - Result ID	R/Y	
cda:effectiveTime	15.02 - Result Date/Time	R/N	
cda:code/@code	15.03 - Result Type	R/N	2.2.2.15.2
cda:statusCode	15.04 - Result Status	R/N	
cda:value	15.05 - Result Value	C/N	2.2.2.15.3
cda:interpretationCode/@code	15.06 - Result Interpretation	O/N	
cda:referenceRange	15.07 - Result Reference Range	O/Y	

Optionality Legend: “R” for Required, “R2” for Required if known, “O” for Optional and Repeat = “Y” for Yes or “N” for No

Figure 2-48 Results Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<observation classCode='OBS' moodCode='EVN'>
    <templateId root='2.16.840.1.113883.10.20.1.31'/>
    <templateId root='2.16.840.1.113883.3.88.11.83.15'/>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.13'/>
    <code code='...' displayName='...'  codeSystem='2.16.840.1.113883.6.1'
codeSystemName='LOINC'/>
    <effectiveTime low value='...'/>
    <statusCode value='N'/>
    <value xsi:type="PQ" value="100" unit="g/dl"/>
  <interpretationCode code="N" codeSystem="2.16.840.1.113883.5.83"/>
    <referenceRange>
        <observationRange>
            <text>M 13-18 g/dl; F 12-16 g/dl</text>
        </observationRange>
    </referenceRange>
</observation>
```

2.2.2.15.1 Results Module Constraints

C83-[DE-15-CDA-1]	A CDA Document **SHALL** declare conformance for the Results module by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.15.1
C83-[DE-15-CDA-2]	Results data elements reporting specific events **SHALL** declare conformance to the IHE Simple Observation entry by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.13
[C83-[DE-15-CDA-3]	Results data elements reporting specific events **SHALL** declare conformance to the CCD Result entry by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.10.20.1.31

[23] Requirements for Entries are defined at a higher level than the Entry Content Module (i.e. Section Content Modules, HITSP CDA-based constructs and Interoperability Specifications).

2.2.2.15.2 Result Type Constraints

C154-[DE-15.03-1] Result Type **SHOULD** be selected from LOINC (codeSystem 2.16.840.1.113883.6.1) or SNOMED CT (codeSystem 2.16.840.1.113883.6.96)

C154-[DE-15.03-2] Result Type for laboratory results **SHOULD** be coded as specified in HITSP/C80 Section 2.2.3.6.1 Laboratory Observations.

2.2.2.15.3 Result Value Constraints

The Result value records the desired result in a goal or recorded event, and will not present when recording an intent, request or proposal to measure a result.

C83-[DE-15.05-CDA-1] Result Value **SHALL** be present when the observation/@moodCode is EVN or GOL, and **SHALL NOT** be present when observation/@moodCode is INT or PRP.

2.2.2.16 ENCOUNTER

Within a CDA document, the following information maps to the HITSP/C154 Data Dictionary. See the HL7 Continuity of Care Document Section 3.15 for constraints applicable to these data elements. The encounter entry contains data describing the interactions between the patient and clinicians. Interaction includes both in-person and non-in-person encounters such as telephone and e-mail communication.

The template identifier for this module is 2.16.840.1.113883.3.88.11.83.16.

Table 2-21 Encounters Data Mapping Table – Requirements

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
cda:encounter[cda:templateId/@root = '2.16.840.1.113883.10.20.1.21']	Encounter Event Entry	See Below[24]	2.2.2.16.1
cda:id	16.01 - Encounter ID	R/Y	
cda:code/@code	16.02 - Encounter Type	R2/N	2.2.2.16.2
cda:code/cda:originalText/cda:reference/@value	16.03 - Encounter Free Text Type	R/N	
cda:effectiveTime	16.04 - Encounter Date / Time	R/N	
sdtc:dischargeDispositionCode	16.09 - Discharge Disposition	O/N	
cda:priorityCode	16.07 - Admission Type	O/N	2.2.2.16.3
cda:performer/cda:assignedEntity	16.05 - Encounter Provider	R2/Y	
cda:participant[@typeCode='ORG']/cda:code	16.06 - Admission Source	O/N	2.2.2.16.4
cda:participant[@typeCode='LOC']	16.11 - Facility Location	O/N	
cda:time	16.20 - In facility Location Duration	O/N	
cda:low	16.12 - Arrival Date / Time	O/N	
cda:high	Departure Date / Time		
cda:entryRelationship[@typeCode='RSON']	16.13 - Reason for Visit	O/N	
/cda:ClinicalDocument/cda:componentOf/ cda:encompassingEncounter			
cda:code/@code	16.10 - Patient Class	O/N	2.2.2.16.5
cda:dischargeDispositionCode	16.09 - Discharge Disposition	O/N	
cda:location/cda:healthCareFacility	Healthcare Facility		
cda:code/@code	Healthcare Facility Location Type		
cda:location	Healthcare Facility Location Detail		

[24] Requirements for Entries are defined at a higher level than the Entry Content Module (i.e. Section Content Modules, HITSP CDA-based constructs and Interoperability Specifications).

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
cda:id	16.17 Facility ID	O/N	
cda:addr	16.19 Facility Address	O/N	2.2.2.16.6
cda:name	16.20 Facility Name	O/N	

Optionality Legend: “R” for Required, “R2” for Required if known, “O” for Optional and Repeat = “Y” for Yes or “N” for No

Figure 2-49 Encounters Example

```
<!-- These examples assume the default namespace is 'urn:hl7-org:v3' -->
<text><ID
<encounter classCode='ENC' moodCode='EVN'>
    <templateId root='2.16.840.1.113883.10.20.1.21'/>
    <templateId root='2.16.840.1.113883.3.88.11.83.16'/>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.14'/>
    <code code='...' displayName='...' codeSystem='...' codeSystemName='...'>
        <originalText><reference value='#encounter-1'/></originalText>
    </code>
    <effectiveTime>
        <low value='20070610'/>
    </effectiveTime>
    <performer typeCode='PRF'>
        <assignedEntity classCode='ASSIGNED'>
            <id .../>
            <addr>...</addr>
            <telecom>...</telecom>
            <assignedPerson>
                <name>...</name>
            </assignedPerson>
            <representedOrganization>
                <name>...</name>
            </representedOrganization>
        </assignedEntity>
    </performer>
</encounter>
```

2.2.2.16.1 Encounters Module Constraints

Note: Each clinical document describes services performed in an encompassing encounter. This encounter may also be documented in the CDA header in the /cda:ClinicalDocument/cda:componentOf/cda:encompassingEncounter element.

C83-[DE-16-CDA-1] Encounter entries other than the encompassingEncounter **SHALL** declare conformance for the Encounters module by including a **`<templateID>`** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.16

C83-[DE-16-CDA-2] Encounter entries other than the encompassingEncounter **SHALL** declare conformance to the IHE Encounter entry by including a **`<templateID>`** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.14

2.2.2.16.2 Encounter Type Constraints

Encounter Type should be sent when available, and should be coded to the specified value set when possible. If the selected value set is not available but other coded values are, the desire is that these other coded values be sent.

C83-[DE-16.02-1] Encounter Type **SHOULD** be coded as specified in HITSP/C80 Section 2.2.3.9.3 Encounter Type.

2.2.2.16.3 Admission Type Constraints

C154-[DE-16.07-1] Admission Type **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.9.2 Admission Type.

2.2.2.16.4 Admission Source Constraints

C154-[DE-16.06-1] Admission Source **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.9.1 Admission Source.

2.2.2.16.5 Patient Class Constraints

C154-[DE-16.10-1] Patient Class **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.9.5 Patient Class.

2.2.2.16.6 Facility Address Constraints

C154-[DE-16.19-1] The state part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.1 State

C154-[DE-16.19-2] The postal code part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.2 Postal Code

C154-[DE-16.19-3] The country part of an address **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.3 Country

2.2.2.17 PROCEDURE

Within a CDA document, the following information maps to the HITSP/C154 Data Dictionary. See the HL7 Continuity of Care Document Section 3.14 for constraints applicable to these data elements.

This section defines a coded entry describing a procedure performed on a patient. The template identifier for this module is 2.16.840.1.113883.3.88.11.83.17.

Table 2-22 Procedure Data Mapping Table - Requirements

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
cda:procedure[cda:templateId/@root= '2.16.840.1.113883.10.20.1.29']	Procedures	See Below[25]	
cda:id	17.01 - Procedure ID	R/Y	
cda:code/@code	17.02 - Procedure Type	R2/N	
cda:code/cda:originalText/cda:reference/@value	17.03 - Procedure Free Text Type	R/N	
cda:effectiveTime	17.04 - Procedure Date / Time	R2/N	
cda:targetSiteCode	17.06 - Body Site	R2/N	2.2.2.17.2
cda:performer/cda:assignedEntity	17.05 - Procedure Provider	R2/Y	

Optionality Legend: “R” for Required, “R2” for Required if known, “O” for Optional and Repeat = “Y” for Yes or “N” for No

2.2.2.17.1 Procedures Constraints

C83-[DE-17-CDA-1] Procedure entries **SHALL** declare conformance for the procedures module by including a **`<templateID>`** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.17

C83-[DE-17-CDA-2] Procedure entries **SHALL** declare conformance to the IHE Procedure entry by including a **`<templateID>`** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.19

[25] Requirements for Entries are defined at a higher level than the Entry Content Module (i.e. Section Content Modules, HITSP CDA-based constructs and Interoperability Specifications).

2.2.2.17.2 Body Site Constraints

C83-[DE-17-CDA-3] The body site **SHALL** be coded according as specified in HITSP/C80 Section 2.2.3.2.1 Body Site

2.2.2.18 FAMILY HISTORY

Within a CDA document, the following information maps to the HITSP/C154 Data Dictionary. See the HL7 Continuity of Care Document Section 3.6 for constraints applicable to these data elements.

The text for the HL7 CDA Release 2 - Continuity of Care Document (CCD), Section 3.6 Family History, p.33 begins here:

> This section contains data defining the patient's genetic relatives in terms of possible or relevant health risk factors that have a potential impact on the patient's healthcare risk profile.

The text for the HL7 CDA Release 2 - Continuity of Care Document (CCD), Section 3.6 Family History, p.33 ends here.

The template identifier for this module is 2.16.840.1.113883.3.88.11.83.18.1.

While blood relatives are the focus of family history, this specification recognizes that it is necessary also to communicate information about spouses, partners, and adopted or foster children, in order to clarify the consanguinity of relationships between family members. For family histories recorded in a clinical document the individual who is the focus of the family history is the patient, and represents the index case for the family history.

The current concept can be stated as follows:

Quoted Material from MedicineNet.com – MedTerms Dictionary starts here.

> Family: 1. A group of individuals related by blood or marriage or by a feeling of closeness.
>
> Family history: The family structure and relationships within the family, including information about diseases in family members.

Quoted Material from MedicineNet.com – MedTerms Dictionary ends here.

Table 2-23 Family History Data Mapping Table – Requirements

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
cda:section[cda:templateId/@root = '2.16.840.1.113883.10.20.1.23']	Family History Section	See Note[26]	
cda:entry/cda:observationMedia	18.01 - Pedigree	O/N	2.2.2.18.2
cda:entry/cda:organizer[cda:templateId/@root = '2.16.840.1.113883.3.88.11.83.18']	18.02 - Family Member Information	R/Y	
cda:subject/cda:relatedSubject	18.03 - Family Member Demographics	R/N	
cda:code/@code	18.04 - Family Member Relationship (to Patient)	R2/N	2.2.2.18.3
cda:code/cda:originalText	18.05 - Family Member Relationship Free Text	O/N	
cda:subject	Family Member Person Information	R/N	

[26] Requirements for Entries are defined at a higher level than the Entry Content Module (i.e. Section Content Modules, HITSP CDA-based constructs and Interoperability Specifications).

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
sdtc:id	18.06 - Family Member Identifier	R/Y	2.2.2.18.4
cda:name	18.07 - Family Member Name	R2/Y	2.2.2.18.5
cda:birthTime	18.08 - Family Member Date of Birth	R2/N	
cda:administrativeGenderCode/ @code	18.24 Family Member Administrative Gender	O/N	2.2.2.18.6
sdtc:raceCode/@code	18.09 - Family Member Race	R2/Y	2.2.2.18.7
sdtc:ethnicGroupCode/@code	18.10 - Family Member Ethnicity	R2/N	2.2.2.18.8
cda:participant/cda:participantRole/ cda:playingEntity/sdtc:id	18.04 - Family Member Relationship (to other Family Member)	R2/Y	2.2.2.18.9
cda:component	18.11 - Family Member Medical History	R2/Y	
cda:observation[cda:templateId/@root = '1.3.6.1.4.1.19376.1.5.3.1.4.13.3']	18.12 - Family Member Condition	R2/N	2.2.2.18.10
cda:entryRelationship/cda:observation [cda:templateId/@root = '2.16.840.1.113883.10.20.1.38']	18.13 - Family Member Age (at Onset)	R2/N	2.2.2.18.11
cda:entryRelationship[@typeCode='CAUS'] cda:observation	18.14 - Family Member Cause of Death	R2/N	2.2.2.18.12
cda:entryRelationship/ cda:observation [cda:templateId/@root = '2.16.840.1.113883.10.20.1.38']	18.15 - Family Member Age (at Death)	R2/N	2.2.2.18.11
cda:entryRelationship/cda:observation [cda:templateId/@root = '2.16.840.1.113883.10.20.1.50']/ value/@code	18.25 - Family Member Problem Status	O/N	
cda:observation[cda:templateId/@root = ' 1.3.6.1.4.1.19376.1.5.3.1.4.13.3']	18.16 - Family Member Biological Sex	O/N	2.2.2.18.13
cda:observation[cda:templateId/@root = ' 1.3.6.1.4.1.19376.1.5.3.1.4.13.3']	18.17 - Family Member Multiple Birth Status - OR - 1.13 Multiple Birth Indicator	O/N	2.2.2.18.14
cda: observation[cda:templateId/@root = ' 1.3.6.1.4.1.19376.1.5.3.1.4.13.3']	18.26 - Family Member Multiple Birth Order - OR - 1.14 - Birth Order	O/N	2.2.2.18.15
cda:observation [cda:templateId/@root = '2.16.840.1.113883.10.20.1.38']	18.23 - Family Member Age - OR - 1.14 - Age	R2/N	
cda:observation[cda:templateId/@root = ' 1.3.6.1.4.1.19376.1.5.3.1.4.13.3']	18.18 - Family Member Genetic Test Information	R2/Y	2.2.2.18.16
cda:code/@code	18.19 - Family Member Genetic Test Code	R2/N	
cda:code/cda:originalText	18.20 - Family Member Genetic Test Name	R/N	
cda:value	18.21 - Family Member Genetic Test Result	R2/N	
cda:effectiveTime	18.22 - Family Member Genetic Test Date	R2/N	

Optionality Legend: “R” for Required, “R2” for Required if known, “O” for Optional and Repeat = “Y” for Yes or “N” for No

2.2.2.18.1 Family History Constraints

C83-[DE-18-CDA-1]	A CDA Document **SHALL** declare conformance for the Family History module by including a **`<templateID>`** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.18
C83-[DE-18-CDA-2]	Family History data elements **SHALL** declare conformance to the IHE Family History Organizer entry by including a **`<templateID>`** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.15

Figure 2-50 Family History Example

```
<section>
<templateId root=''2.16.840.1.113883.10.20.1.23'/>
…
  <entry>
    <organizer classCode='CLUSTER' moodCode='EVN'>
      <templateId root='2.16.840.1.113883.3.88.11.83.18'/>
      <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.15'/>
      <subject typeCode='SUBJ'>
        <relatedSubject classCode='PRS'>
          <code code='' displayName=''
            codeSystem='2.16.840.1.113883.5.111' codeSystemName='RoleCode'/>
          <subject>
            <sdtc:id root='' extension=''/>
            <administrativeGenderCode code='' displayName=''
              codeSystem='' codeSystemName=''/>
          </subject>
        </relatedSubject>
      </subject>
      <!-- zero or more participants linking to other relations -->
      <participant typeCode='PART'>
        <participantRole classCode='PRS'>
          <code code='' displayName=''
            codeSystem='2.16.840.1.113883.5.111' codeSystemName='RoleCode'/>
          <playingEntity classCode='PSN'>
            <sdtc:id root='' extension=''/>
          </playingEntity>
        </participantRole>
      </participant>
      <!-- one or more entry relationships for family history observations -->
      <entryRelationship typeCode='COMP'>
        <observation classCode='OBS' moodCode='EVN'>
          <templateId root='2.16.840.1.113883.10.20.1.22'/>
        </observation>
    <  /entryRelationship>
    </organizer>
  </entry>
</section>
```

2.2.2.18.2 Pedigree

The pedigree graph may be included within the Family History section. This is a graphic image that would appear in the document to represents the pedigree of the patient, and can highlight key family history information. The example given below shows how a Family History section can include a pedigree graph.

Figure 2-51 Pedigree Example

```
<section>
  <templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.15'/>
  <templateId root='1.3.6.1.4.1.19376.1.5.3.1.3.14'/>
  <templateId root='2.16.840.1.113883.10.20.1.4'/>
  <code code="10157-6" displayName="HISTORY OF FAMILY MEMBER DISEASES"
    codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
  <title>Family History</title>
  <text><renderMultiMedia referencedObject="MM1"/></text>
  <entry>
    <observationMedia classCode="OBS" moodCode="EVN" ID="MM1">
        <id root="2.16.840.1.113883.19.2.1"/>
        <value xsi:type="ED" mediaType="image/jpeg" representation="B64">
            Based 64 encoded data for the image
        </value>
    </observationMedia>
  </entry>
    :
    .
</section>
```

C83-[DE-18.01-CDA-1] A pedigree image **MAY** be included in an **`observationMedia`** element in an **`entry`** under the Family History section

C83-[DE-18.01-CDA-2] The **`mediaType`** of the **`observationMedia`** element **SHALL** be application/pdf, image/jpeg or image/png

C83-[DE-18.01-CDA-3] The **`representation`** of the **`observationMedia`** element **SHALL** be B64, and the data for the image **SHALL** be included within the **`value`** element

2.2.2.18.3 Family Member Relationship (to Patient)

The family member relationship to the patient is recorded by expressing that relationship in the code element.

C154-[DE-18.04-1] The Family Member Relationship (to Patient) **SHALL** be coded as specified in HITSP/C80 Section 2.2.1.2.5 Family Relationship Type

2.2.2.18.4 Family Member Identifier

Each family member in a family history must be identified to allow for reconciliation of updated family histories when exchanged between providers.

C83-[DE-18.06-CDA-1] An **`sdtc:id`** element **SHALL** be present on family members

2.2.2.18.5 Family Member Name

The family member name need not be the actual name of the family member. It may be a string (such as aunt1 or aunt2) to help the patient and providers distinguish between different family members with the same relationship to the patient.

2.2.2.18.6 Family Member Administrative Gender Constraints

C154-[DE-18.24-1] Gender **SHALL** be coded as specified in HITSP/C80 Section 2.2.1.2.1.2 V3 Administrative Gender

2.2.2.18.7 Family Member Race

The race of the family member should be included to help in the assessment of risk for genetic disease. This information is recorded using an extension to the HL7 CDA specification.

C83-[DE-18.09-CDA-1] The race of the family member, when recorded, **SHALL** appear in an **`sdtc:race`** element

C154-[DE-18.09-1] Race **SHALL** be coded as specified in HITSP/C80 Section 2.2.1.2.7 Race

2.2.2.18.8 Family Member Ethnicity

The ethnicity of the family member should be included to help in the assessment of risk for genetic disease. This information is recorded using an extension to the HL7 CDA specification.

C83-[DE-18.10-CDA-1] The ethnicity of the family member, when recorded, **SHALL** appear in an **`sdtc:ethnicGroupCode`** element.

C154-[DE-18.10-1] Ethnicity **SHALL** be coded as specified in HITSP/C80 Section 2.2.1.2.2 Ethnicity

2.2.2.18.9 Family Member Relationship (to other Family Member)

2.2.2.18.10 Family Member Condition

Family member conditions are recorded using the IHE Family History Observation, and otherwise have the same constraints on the subfields as are found in the Condition Module described earlier with respect to vocabulary.

C83-[DE-18.12-CDA-1] Family History Condition data elements **SHALL** declare conformance to the IHE Family History Observation entry by including a **`<templateID>`** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.13.3

C154-[DE-18.12-1] The data element 7.02 Problem Type **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.1.2 Problem Type.

C154-[DE-18.12-2] The problem **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.1.1 Problem

2.2.2.18.11 Family Member Age at Onset or at Death

The age of onset of disease or age at death of a family member should be computable from the family member date of birth and the effective time of the observation of the disease or the death. When that data are not available, the age of the patient at the time of the observation shall be recorded within a condition or test result observation using the Age Observation described in CCD 3.6.2.4.

Figure 2-52 Age Example

```
<entryRelationship typeCode='SUBJ' inversionInd='true'>
  <observation classCode='OBS' moodCode='EVN'>
    <templateId root='2.16.840.1.113883.10.20.1.38'/>
    <code code='397659008' displayName='age'
        codeSystem='2.16.840.1.113883.6.96' codeSystemName='SNOMED CT'/>
    <value value='55' unit='a' xsi:type='PQ'/>
  </observation>
</entryRelationship>
```

C83-[DE-18.13-CDA-1] Family History Condition data elements **SHALL** declare conformance to the IHE Family History Observation entry by including a **`<templateID>`** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.13.3

2.2.2.18.12 Family Member Cause of Death

When a condition is one of the causes of death for the patient, that fact is related using the Cause of Death Observation described in CCD 3.6.2.1.1.

Figure 2-53 Cause of Death Example

```
<entryRelationship typeCode='CAUS'>
  <observation classCode='OBS' moodCode='EVN'>
    <templateId root='2.16.840.1.113883.10.20.1.42'/>
    <code code='419620001' displayName='death'
        codeSystem='2.16.840.1.113883.6.96' codeSystemName='SNOMED CT'/>
    <effectiveTime value='20090510063913'/>
  </observation>
</entryRelationship>
```

2.2.2.18.13 Family Member Biological Sex

The biological sex may be recorded as a Family History observation to identify the biological sex of the subject where it differs from the administrative gender.

2.2.2.18.14 Family Member Multiple Birth Status

Multiple birth status is may be recorded as a Family History observation on the subject when it is relevant for a family member (18.17 Family Member Multiple Birth Status) or the patient (1.13 Multiple Birth Indicator).

2.2.2.18.15 Family Member Multiple Birth Order

Multiple birth order is may be recorded as a Family History observation on the subject when it is relevant for a family member (18.26 - Family Member Multiple Birth Order) or the patient (1.14 - Birth Order). Family Member Age.

The age may be recorded as a Family History observation on the subject when it is relevant for a family member (18.23 - Family Member Age) or the patient (1.14 - Age).

2.2.2.18.16 Family Member Genetic Test Information

Genetic test results may be recorded as Family History observations on the subject.

C154-[DE-18.18-1]	Components of a Genetic Laboratory Test **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.11 Genetic Testing

2.2.2.18.17 Family Member Problem Status

The problem status records whether the indicated problem is active, inactive, or resolved for the family member.

Please note that the following example and constraints apply to both the Family Member Problem Status data element from the Family History and to the Problem Status data element from the Condition module.

Figure 2-54 Problem Status Example

```
<entryRelationship typeCode='REFR'>
  <observation classCode='OBS' moodCode='EVN'>
    <templateId root='2.16.840.1.113883.10.20.1.50'/>
    <templateId root='2.16.840.1.113883.10.20.1.57'/>
    <templateId root='1.3.6.1.4.1.19376.1.5.3.1.4.1.1'/>
    <code code='33999-4' displayName='Status'
        codeSystem='2.16.840.1.113883.6.1' codeSystemName='LOINC'/>
    <text><reference value='#cstatus-2'/></text>
    <statusCode code='completed'/>
    <value xsi:type='CD' code='55561003' displayName='Active'
        codeSystem='2.16.840.1.113883.6.96' codeSystemName='SNOMED CT'/>
  </observation>
</entryRelationship>
```

C83-[DE-18.25-CDA-1]	A problem status observation **SHALL** conform to the CCD Templates 2.16.840.1.113883.10.20.1.50 and 2.16.840.1.113883.10.20.1.57.
C83-[DE-18.25-CDA-2]	A problem status observation **SHALL** conform to the IHE Template 1.3.6.1.4.1.19376.1.5.3.1.4.1.1 for problem status.
C154-[DE-18.23-1]	The problem **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.1.1 Problem Status

2.2.2.19 SOCIAL HISTORY

Within a CDA document, the following information maps to the HITSP/C154 Data Dictionary. See the HL7 Continuity of Care Document Section 3.7 for constraints applicable to these data elements.

The text for the HL7 CDA Release 2 - Continuity of Care Document (CCD), Section 3.7 Social History, p.37.begins here:

> This section contains data defining the patient's occupational, personal (e.g. lifestyle), social, and environmental history and health risk factors, as well as administrative data such as marital status, race, ethnicity and religious affiliation.

The text for the HL7 CDA Release 2 - Continuity of Care Document (CCD), Section 3.7 Social History, p.37 ends here.

The template identifier for this module is 2.16.840.1.113883.3.88.11.83.19.

Table 2-24 Social History Mapping Table - Requirements

CDA Data Location	HITSP Data Element Identifier and Name	O/R	Additional Specification
cda:observation[cda:templateId/@root= '2.16.840.1.113883.10.20.1.33']	Social History Event Entry	See Below[27]	
cda:effectiveTime	19.01 - Social History Dates	R2/N	
cda:code/@code	19.02 - Social History Type	R2/N	2.2.2.19.1
cda:text	19.03 - Social History Free Text	R/N	
cda:value	19.04 - Social History Observed Value	O/N	

Optionality Legend: "R" for Required, "R2" for Required if known, "O" for Optional and Repeat = "Y" for Yes or "N" for No

C83-[DE-19-CDA-1] A CDA Document **SHALL** declare conformance for the Social History module by including a **`<templateID>`** element with the `root` attribute set to the value 2.16.840.1.113883.10.20.1.33

[27] Requirements for Entries are defined at a higher level than the Entry Content Module (i.e. Section Content Modules, HITSP CDA-based constructs and Interoperability Specifications).

C83-[DE-19-CDA-2] Social History data elements **SHALL** declare conformance to the IHE Social History Observation entry by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.13.4

2.2.2.19.1 Social History Type Constraints

C154-[DE-19.02-1] The Social History type **SHALL** be coded as specified in HITSP/C80 Section 2.2.2.4 Social History Type

2.2.2.20 MEDICAL EQUIPMENT

No CDA document mappings have been defined at this time.

The template identifier for this module is 2.16.840.1.113883.3.88.11.83.20.

2.2.2.21 FUNCTIONAL STATUS

No CDA document mappings have been defined at this time..

The template identifier for this module is 2.16.840.1.113883.3.88.11.83.21.

2.2.2.22 PLAN OF CARE

No CDA document mappings have been defined at this time..

The template identifier for this module is 2.16.840.1.113883.3.88.11.83.22.

2.3 STANDARDS

2.3.1 REGULATORY GUIDANCE

Table 2-25 Regulatory Guidance

Regulation	Description
No applicable regulatory guidance	

2.3.2 SELECTED STANDARDS

Table 2-26 Selected Standards

Standard	Description
Health Level Seven (HL7) HL7 Version 3 Standard: Clinical Document Architecture (CDA), Release 2	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 www.hl7.org

Standard	Description
Health Level Seven (HL7) Implementation Guide: CDA Release 2.0 – Continuity of Care Document (CCD), April 01, 2007	The Continuity of Care Document Implementation Guide describes constraints on the HL7 Clinical Document Architecture, Release 2 (CDA) specification in accordance with requirements set forward in ASTM E2369-05 Standard Specification for Continuity of Care Record (CCR). The resulting specification, known as the Continuity of Care Document (CCD), is developed as a collaborative effort between ASTM and HL7. It is intended as an alternate implementation to the one specified in ASTM ADJE2369 for those institutions or organizations committed to implementation of the HL7 Clinical Document Architecture. For more information visit www.hl7.org
Health Level Seven (HL7) Implementation Guide for CDA Release 2.0: Consultation Note.	The HL7 Implementation Guide for CDA Release 2: Consultation Note defines additional constraints on the CDA Header and Body used in a Consultation document in the U.S. realm, and provides examples of conforming fragments in the body of the document and an example of a conforming XML instance
Health Level Seven (HL7) Implementation Guide for CDA Release 2.0: History and Physical (H&P) Notes (DTSU Release 1)	The HL7 Implementation Guide for CDA Release 2: History and Physical (H&P) Notes defines additional constraints on the CDA Header and Body used in a History and Physical document in the U.S. realm, and provides examples of conforming fragments in the body of the document and an example of a conforming XML instance
Health Level Seven (HL7) Implementation Guide: CDA Release 2.0: Operative Note, DTSU Release 1	The HL7 Implementation Guide for CDA Release 2: Operative Note defines additional constraints on the CDA Header and Body used in an Operative Note document in the U.S. realm, and provides examples of conforming fragments in the body of the document and an example of a conforming XML instance
Integrating the Healthcare Enterprise (IHE) Patient Care Coordination (PCC), Revision 5.0	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. For more information visit www.ihe.net

2.3.3 INFORMATIVE REFERENCE STANDARDS

Table 2-27 Informative Reference Standards

Standard Name	Reason for Use
CDA Quick Start Guide (v1.5)	The CDA Quick Start Guide was created by Alschuler Associates, LLC. The guide helps implementers create a simple CDA document and then as they increase their knowledge of CDA, go on to create more complex versions using the resources cited in this *QSG* and their own experience. For more information visit www.alschulerassociates.com/library/documents/cda_qsg_v1.5.zip
Continuity of Care Document (CCD) Quick Start Guide	This CCD Quick Start Guide was created by the Healthcare Information and Management Systems Society Electronic Health Record Vendors Association (EHRVA). This guide was developed to support CCD implementers. The scope is "just enough" to get started – it is *not* a standalone or complete guide or reference. For more information visit www.ehrva.org/docs/ccd_qsg.zip

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

C83-[DE-7.04-1] The problem type **SHALL** be coded as specified in HITSP/C80 section 2.2.1.1.4.1.2 Problem Type. The first portion identifies the type of artifact being constrained. The second portion is the identifier for that artifact, and the final portion is the sequence number of the constraint on that artifact within this document. Constraints specific to CDA usage will contain the string CDA before the final number

C83-[CDA-1] A clinical document created using this specification **SHALL** contain a **<realmCode>** element with a value of US in the code attribute indicating that it conforms to U.S. Realm requirements

C83-[CDA-2] A clinical document created using this specification **SHALL** contain the **<templateId>** element with a value of 1.3.6.1.4.1.19376.1.5.3.1.1.1 in the **root** attribute and no **extension** attribute indicating that it conforms to the IHE PCC Medical Documents specification

C83-[CDA-3] A clinical document created using this specification **SHALL** contain the **<templateId>** element with a value of 2.16.840.1.113883.10.20.3 in the **root** attribute and no **extension** attribute, indicating that it conforms to the HL7 General Header constraints defined in the HL7 Implementation Guide for History and Physical Notes

C83-[CDA-4] A clinical document created using this specification **MAY** include other data elements not defined in this specification in an instance of a Content Module. Receivers are not required to process these elements and if they do not understand them, they **SHALL** ignore them. Thus, it is not an error to include more than is asked for, but it is an error to reject a Content Module because it contains more than is defined by the framework

C83-[CDA-5] If a data element coded value may be derived from another data element coded value, the creator of a clinical document **SHALL** ensure the accuracy and consistency between the two data elements. If the receiver detects an inconsistency, it **SHALL NOT** correct the value without human intervention

C83-[CDA-6] Required modules from this specification **SHALL** be present and follow the associated constraints

C83-[CDA-7] Content Modules explicitly excluded from a clinical document specification **SHALL NOT** be present

C83-[CDA-8] Optional modules, when present, **SHALL** follow the associated constraints if that module asserts conformance to this specification, i.e., includes the associated templates

C83-[CDA-9] Additional CCD entry elements (the equivalent to Content Modules in this specification) **MAY** be present. The receiver of the document **MAY** choose to accept or exclude the additional content, but **SHALL NOT** reject the document solely based upon the presence of the additional content

C83-[CDA-10] CDA document instances that adhere to the specifications for the sections and entries defined within this specification **MAY** declare their conformance to these constraints by including **<templateId>** element with a value of 2.16.840.1.113883.3.88.11.83.1 in the **root** attribute and no **extension** attribute

C83-[CDA-11] Conforming CDA document instances **SHALL** conform to the HITSP defined sections where available

C83-[CDA-12] Conforming CDA document instances **SHALL** conform to the HITSP defined entries for clinical statements where available

The (standard data element in the table) **SHALL** be communicated applying all constraints defined for (the HITSP Data Element in the table).

C83-[CT-101-1] This section **SHALL** conform to the IHE Payers Section template, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.1.5.3.7

C83-[CT-101-2] The payers section **SHALL** include entries from the Insurance Provider module when this information is known

C83-[CT-102-1] The allergies and other adverse reactions section **SHALL** include entries from the Allergy/Drug Sensitivity

module

C83-[CT-102-2] This section **SHALL** conform to the IHE Allergies and Other Adverse Reactions Section template, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.13

C83-[CT-103-1] The problem list section **SHALL** include entries from the Condition module

C83-[CT-103-2] This section **SHALL** conform to the IHE Active Problems Section template, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.6

C83-[CT-104-1] The History of Past Illness section **SHALL** include entries from the Condition module.

C83-[CT-104-2] This section **SHALL** conform to the IHE History of Past Illness Section template, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.8

C83-[CT-104-3] This section **SHALL** conform to the HL7 History and Physical Note and HL7 Consultation Note implementation guide requirements for this section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.2.9

C83-[CT-105-1] This section **SHALL** conform to the IHE Chief Complaint Section template, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1

C83-[CT-105-2] This section **SHALL** conform to the HL7 History and Physical Note requirements for this section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.2.8

C83-[CT-105-3] The Chief Complaint section **MAY** include an entry from the Condition module to provide the chief complaint in coded form

C83-[CT-106-1] This section **SHALL** conform to the IHE Reason for Referral Section template, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.1.

C83-[CT-106-2] This section **SHALL** conform to the HL7 Consultation Note requirements for this section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.4.8

C83-[CT-106-3] This section **MAY** conform to the IHE Coded Reason for Referral Section template, in which case it **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.2 to indicate conformance.

C83-[CT-106-4] The Reason for Referral section **MAY** include entries from the Condition module or actual events recorded using Result module to provide the reason for referral in coded form.

C83-[CT-107-1] This section **SHALL** conform to the IHE History of Present Illness Section template, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.4.

C83-[CT-108-1] This section **SHALL** conform to the IHE Coded List of Surgeries template, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.12

C83-[CT-108-2] The list of surgeries section **SHALL** include entries from the Procedure module.

C83-[CT-109-1] This section **SHALL** conform to the Continuity of Care Document Functional Status section described in section 3.4 of the CCD specification, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.1.5

C83-[CT-110-1] This section **SHALL** conform to the IHE Hospital Admission Diagnosis section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.3

C83-[CT-110-2] The Hospital Admission Diagnosis section **SHALL** include an entry from the Condition module to provide the admission diagnosis in coded form

C83-[CT-111-1] This section **SHALL** conform to the IHE Hospital Discharge Diagnosis section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.7

C83-[CT-111-2] The Discharge Diagnosis section **SHALL** include entries from the Condition module to provide the discharge diagnosis in coded form

C83-[CT-112-1] This section **SHALL** conform to the IHE Medications section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.19

C83-[CT-112-2] The Medications Section **SHALL** include entries from the Medication module to provide the relevant medications in coded form

C83-[CT-113-1] This section **SHALL** conform to the IHE Admission Medications History section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.20

C83-[CT-113-2] The Admission Medications History section **SHALL** include entries from the Medication module to provide the relevant medications of a patient prior to admission in coded form

C83-[CT-114-1] This section **SHALL** conform to the IHE Hospital Discharge Medications Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.22

C83-[CT-114-2] The Hospital Discharge Medications section **SHALL** include entries from the Medication module to provide the relevant medications of the medications ordered for the patient for use after discharge in coded form

C83-[CT-115-1] This section **SHALL** conform to the IHE Medications Administered Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.21

C83-[CT-115-2] The Medications Administered Section **SHALL** include entries from the Medication module to provide the relevant medications administered to a patient in coded form

C83-[CT-116-1] This section **SHALL** conform to the IHE Coded Advance Directives Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.35

C83-[CT-116-2] The Advance Directives Section **SHALL** include entries from the Advance Directive module

C83-[CT-117-1] This section **SHALL** conform to the IHE Immunizations Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.23

C83-[CT-117-2] The Immunizations Section **SHALL** include entries from the Immunization module

C83-[CT-118-1] This section **SHALL** conform to the IHE Physical Examination Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.1.9.15

C83-[CT-118-2] This section **SHALL** conform to the HL7 History and Physical Note and HL7 Consultation Note requirements for this section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.2.10

C83-[CT-118-3] The Physical Examination Section **SHOULD** contain Condition entries conforming to the Condition module

C83-[CT-118-4] Condition entries appearing in the physical examination section **SHALL** conform the Condition module and **SHOULD** restrict the Condition Type as FINDING (404684003)or FUNCTIONAL LIMITATION (248536006) from the SNOMED CT Code System

C83-[CT-119-1] This section **SHALL** conform to the IHE Coded Vital Signs Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.1.5.3.2

C83-[CT-119-2] The Vital Signs Section **SHALL** contain entries conforming to the Vital Sign module

C83-[CT-120-1] This section **SHALL** conform to the IHE Review of Systems Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.18

C83-[CT-120-2] This section **SHALL** conform to the HL7 Consultation Note requirements for this section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.4.10

C83-[CT-121-1] This section **SHALL** conform to the IHE Hospital Course Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.5

C83-[CT-122-1] This section **SHALL** conform to the IHE Coded Results Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.28

C83-[CT-122-2] The Diagnostic Results Section **SHALL** include entries from the Procedure module to indicate the diagnostic procedure, and the events recorded using the Result module to provide the results of that procedure

C83-[CT-123-1] This section **SHALL** conform to the IHE Assessment and Plans Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.5

C83-[CT-123-2] This section **SHALL** conform to the HL7 History and Physical Note and HL7 Consultation Note requirements for this section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.2.7

C83-[CT-123-3] The Assessments and Plan Section **MAY** include entries conforming to the Medication, Immunization, Encounter, and Procedure modules to provide information about the intended care plan

C83-[CT-124-1] This section **SHALL** conform to the IHE Care Plan Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.31

C83-[CT-124-2] This section **SHALL** conform to the HL7 History and Physical Note and HL7 Consultation Note requirements for this section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.2.7

C83-[CT-124-3] The Plan of Care Section **MAY** include entries conforming to the Medication, Immunization, Encounter, and Procedure modules to provide information about the intended care plan

C83-[CT-125-1] This section **SHALL** conform to the IHE Family Medical History Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.14

C83-[CT-125-2] When used to convey structured family histories, this section **SHALL** conform to the IHE Coded Family History Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.15

C83-[DE-17-CDA-1] Procedure entries **SHALL** declare conformance for the procedures module by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.17

C83-[DE-17-CDA-2] Procedure entries **SHALL** declare conformance to the IHE Procedure entry by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.19

C83-[DE-17-CDA-3] The body site **SHALL** be coded according as specified in HITSP/C80 Section 2.2.3.2.1 Body Site

Family History module

C83-[CT-126-1] This section **SHALL** conform to the IHE Social History Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.3.16

C83-[CT-126-2] The Social History Section **MAY** contain entries conforming to the Social History module

C83-[CT-127-1] This section **SHALL** conform to the IHE Encounters History Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.1.5.3.3

C83-[CT-127-2] The Encounters Section **SHALL** contain entries conforming to the Encounters module

C83-[CT-128-1] This section **SHALL** conform to the HL7 CCD Medical Equipment Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.1.7.

C83-[CT-128-2] This section **SHALL** conform to the IHE Medical Devices Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.1.5.3.5

C83-[CT-129-1] This section **SHALL** conform to the HL7 Operative Note Preoperative Diagnosis Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.1

C83-[CT-129-2] This section **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.3.88.11.83.129

C83-[CT-129-3] The Preoperative Diagnosis Section **SHALL** contain entries conforming to the Condition module to record the diagnoses

C83-[CT-129-4] The Conditions entries in the preoperative diagnosis section **SHALL** use the SNOMED CT Code 282291009 (Diagnosis) for the value of data element 7.02 Problem Type

C83-[CT-130-1] This section **SHALL** conform to the HL7 Operative Note Postoperative Diagnosis Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.2

C83-[CT-130-2] This section **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.3.88.11.83.130

C83-[CT-130-3] The Postoperative Diagnosis Section **SHALL** contain entries conforming to the Condition module to record the diagnoses

C83-[CT-130-4] The Conditions entries in the Postoperative Diagnosis Section **SHALL** use the SNOMED CT Code 282291009 (Diagnosis) for the value of data element 7.02 Problem Type

C83-[CT-131-1] This section **SHALL** conform to the HL7 Operative Note Postoperative Diagnosis Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.3.

C83-[CT-132-1] This section **SHALL** conform to the HL7 Operative Note Findings Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.4

C83-[CT-132-2] The Surgical Operation Note Findings Section **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.3.88.11.83.132

C83-[CT-132-3] Surgical Operative Note Findings **MAY** be present and **shall** be recorded in entries conforming to the Condition module to record any findings

C83-[CT-133-1] This section **SHALL** conform to the HL7 Operative Note Anesthesia Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.5

C83-[CT-133-2] The Anesthesia Section **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.3.88.11.83.133

C83-[CT-133-3] Structured entries describing anesthesia used **MAY** be present and **shall** be recorded using entries conforming to the Medication or Procedures module to record any the anesthesia substance or procedure used.

C83-[CT-134-1] This section **SHALL** conform to the HL7 Operative Note Estimated Blood Loss Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.6

C83-[CT-134-2] The Estimated Blood Loss Section **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.3.88.11.83.134

C83-[CT-134-3] The Estimated Blood Loss section **SHALL** be coded using the LOINC code 55103-6 Estimated Blood Loss (nar).

C83-[CT-135-1] This section **SHALL** conform to the HL7 Operative Note Specimens Removed Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.7.

C83-[CT-136-1] This section **SHALL** conform to the HL7 Operative Note Complications Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.10.

C83-[CT-136-2] Structured entries describing complications **May** be present and **SHALL** contain entries conforming to the Condition module.

C83-[CT-137-1] This section **SHALL** conform to the HL7 Operative Note Planned Procedure Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.8

C83-[CT-137-2] The Planned Procedure Section **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.3.88.11.83.137

C83-[CT-137-3] The Planned Procedure Section **SHALL** contain at least one entry conforming to the Procedures module to record the planned procedure

C83-[CT-138-1] This section **SHALL** conform to the HL7 Operative Note Indications Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.9

C83-[CT-138-2] Structured indications entries **MAY** be present and **SHALL** conform to the Condition module

C83-[CT-139-1] This section **SHALL** conform to the HL7 Operative Note Dispositions Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.11

C83-[CT-140-1] This section **SHALL** conform to the HL7 Operative Note Fluids Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.12

C83-[CT-141-1] This section **SHALL** conform to the HL7 Operative Note Surgical Procedure Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.14.

C83-[CT-142-1] This section **SHALL** conform to the HL7 Operative Note Surgical Drains, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.13

C83-[CT-143-1] This section **SHALL** conform to the HL7 Operative Note Dispositions Section, and **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.10.20.7.15

C83-[CT-144-1] This section **SHALL** conform to the IHE Assessments Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.4

C83-[CT-145-1] This section **SHALL** conform to the IHE Procedures and Interventions Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.11

C83-[CT-145-2] The Procedures and Assessments Section **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.3.88.11.83.144

C83-[CT-1453] This section **SHALL** contain entries describing procedures using the Procedure module

C83-[CT-146-1] This section **SHALL** conform to the IHE Provider Orders Section, and **SHALL** contain a **templateId** element whose root attribute is 1.3.6.1.4.1.19376.1.5.3.1.1.20.2.1.

C83-[CT-146-2] This section **SHALL** contain a **templateId** element whose root attribute is 2.16.840.1.113883.3.88.11.83.146

C83-[CT-146-3] Entries for medications, encounters, procedures or results found in this section shall conform to the specifications for the Medication, Encounter, Procedure and Result modules

C83-[CT-146-4] Entries for medications, encounters, procedures or results found in this section shall have */@moodCode = INT or PRP as allowed by those modules to indicate that these are activities intended as part of the care plan, rather than actual events that have occurred

C83-[DE-17-CDA-1] Procedure entries **SHALL** declare conformance for the procedures module by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.17

C83-[DE-17-CDA-2] Procedure entries **SHALL** declare conformance to the IHE Procedure entry by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.19

C83-[DE-17-CDA-3] The body site **SHALL** be coded according as specified in HITSP/C80 Section 2.2.3.2.1 Body Site

C83-[DE-17-CDA-1] Procedure entries **SHALL** declare conformance for the procedures module by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.17

C83-[DE-17-CDA-2] Procedure entries **SHALL** declare conformance to the IHE Procedure entry by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.19

C83-[DE-17-CDA-3] The body site **SHALL** be coded according as specified in HITSP/C80 Section 2.2.3.2.1 Body Site

C83-[DE-17-CDA-1] Procedure entries **SHALL** declare conformance for the procedures module by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.17

C83-[DE-17-CDA-2] Procedure entries **SHALL** declare conformance to the IHE Procedure entry by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.19

C83-[DE-17-CDA-3] The body site **SHALL** be coded according as specified in HITSP/C80 Section 2.2.3.2.1 Body Site

C83-[DE-1.05-CDA-1] Each name part **SHALL** be identified using one of the tags **<given>**, **<family>**, **<prefix>** or **<suffix>**

C83-[DE-1.05-CDA-2] The "first" name of the patient **SHALL** appear in the first **<given>** tag. In example 1 given below, "Margaret" is the patient's first name

C83-[DE-1.05-CDA-3] The "middle" name of the patient, if it exists, **SHALL** appear in the second **<given>** tag. In example 1 given below, "Ross" is the patient's middle name

C83-[DE-1.05-CDA-4] Name parts within a **<name>** tag **SHALL** be ordered in proper display order

C83-[DE-1.05-CDA-5] At most one **<name>** tag **SHALL** have a **use** attribute containing the value "L", indicating that it is the legal name of the patient

C83-[DE-1.05-CDA-6] More than one **<name>** tag **MAY** be present to retain birth name, maiden name and aliases

C83-[DE-1.05-CDA-7] An alias or former name **MAY** be identified by the inclusion of a **use** attribute containing the value "P"

C83-[DE-1.05-CDA-8] Name parts **MAY** be identified as being a name given at birth or adoption by the inclusion of a **qualifier** attribute containing the value "BR" for birth or "AD" for adoption

C83-[DE-1.05-CDA-9] A name part **SHALL** be identified as the patient's preferred name by the inclusion of a **qualifier** attribute containing the value "CL" on the name part

C83-[DE-1.05-CDA-10] A prefix or suffix that is an academic title or credential **SHALL** be identified by the inclusion of a **qualifier** attribute containing the value "AC" on the name part

C83-[DE-1.03-CDA-1] For the address parts that are known, they **SHALL** be identified using the **<streetAddressLine>**, **<city>**, **<state>**, **<postalCode>** and **<country>** tags

C83-[DE-1.03-CDA-2] More than one **<streetAddressLine>** **MAY** be present

C83-[DE-1.03-CDA-3] No more than four **<streetAddressLine>** elements **SHALL** be present

C83-[DE-1.03-CDA-4] The **<country>** element **SHALL** be present for addresses outside of the United States

C83-[DE-1.03-CDA-5] At most one address for a person **SHALL** have a **use** attribute with a value containing "HP"

C83-[DE-1.03-CDA-6] At least one address for a patient **SHOULD** have a **use** attribute with a value containing "HP"

C83-[DE-1.03-CDA-7] One or more vacation addresses **MAY** be present for a person

C83-[DE-1.03-CDA-8] A vacation address **SHALL** be recorded with a **use** attribute containing the value "HV"

C83-[DE-1.03-CDA-9] One or more work addresses **MAY** be present

C83-[DE-1.03-CDA-10] A work address **SHALL** be recorded with a **use** attribute containing the value "WP"

C154--[DE-1.03-3] The **<country>** **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.3 Country

C154-[DE-1.03-1] The state part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.1 State

C154-[DE-1.03-2] The postal code part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.2 Postal Code

C83-[DE-1.04-CDA-1] A home phone number **SHALL** be represented with a **use** attribute containing the value "HP"

C83-[DE-1.04-CDA-2] A vacation home phone number **SHALL** be represented with a **use** attribute containing the value "HV"

C83-[DE-1.04-CDA-3] A work phone number **SHALL** be represented with a **use** attribute containing the value "WP"

C83-[DE-1.04-CDA-4] A mobile phone number **SHALL** be represented with a **use** attribute containing the value "MC"

C83-[DE-1.04-CDA-5] An e-mail address **SHALL** appear in a **<telecom>** element using the 'mailto:' URL scheme (see IETF/RFC-2368), and **SHALL** encode only a single mailing address, without any headers

C154-[DE-1.06-1] Gender **SHALL** be coded as specified in HITSP/C80 Section 2.2.1.2.1.2 V3 Administrative Gender

C154-[DE-1.08-1] Marital Status **SHALL** be coded as specified in HITSP/C80 Section 2.2.1.2.3.2 Marital Status CDA and HLV3

C83-[DE-1.09-CDA-1] Second and subsequent raceCode elements **MAY** be recorded using the sdtc:raceCode extension

C154-[DE-1.09-1] Race **SHALL** be coded as specified in HITSP/C80 Section 2.2.1.2.7 Race

C154-[DE-1.11-1] Ethnicity **SHALL** be coded as specified in HITSP/C80 Section 2.2.1.2.2 Ethnicity

C83-[DE-1.10-CDA-1] The primary religious affiliation **MAY** appear in the **<religiousAffilliationCode>** element

C154-[DE-1.10--1] Religious affiliation **SHALL** be coded as specified in HITSP/C80 Section 2.2.1.2.8 Religious Affiliation

C154-[DE-1.16-1] The state part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.1 State

C154-[DE-1.16-2] The postal code part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.2 Postal Code

C154-[DE-1.16-3] The country part of an address **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.3 Country

C83-[DE-2.01-CDA-1] Languages spoken shall be recorded using the **<languageCommunication>** infrastructure class associated with the patient. The **<languageCommunication>** element describes the primary and secondary languages of communication for a person

C83-[DE-2.01-CDA-2] A CDA Document **SHALL** declare conformance for the Language Spoken module by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.2

C83-[DE-2.01-CDA-3] All Language Spoken entries **SHALL** declare conformance to the IHE Language Communication module by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.2.1

C83-[DE-2.01-CDA-4] The codes for the **<modeCode>** element **SHALL** be coded as specified in HITSP/C80 section 2.2.1.2.10 Language Ability Mode. Mode codes **SHALL** be appropriate to the type of language. Thus English, as spoken in the U.S. **SHOULD** use the code en-US and **SHOULD** only use mode codes for written and verbal communications (see example 2 in Figure 2-10 above). On the other hand, American Sign Language would be represented using the code sign-US (see example 3 in Figure 2-10 above), and would only use mode codes for signed communication

C83-[DE-2.01-CDA-5] While this HL7 CDA allows for the specification of proficiency using the **<proficiencyLevelCode>** element, this element **SHOULD NOT** be used

C154-[DE-2.01-1] Language **SHALL** be coded as specified in HITSP/C80 Section 2.2.1.2.9 Language

C154-[DE-2.01-2] Sign language **SHALL** be treated as a separate language

C83-[DE-3-CDA-1] A CDA Document **SHALL** declare conformance for the Support entry by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.3

C83-[DE-3-CDA-2] All support entries **SHALL also** declare conformance to the IHE Patient Contacts module by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.2.4

C83-[DE-3.01-CDA-1] The **classCode** attribute **SHALL** be coded as specified in HITSP/C80 section 2.2.1.2.6 Contact Type

C154-[DE-3.03-1] The contact relationship **SHALL** have be coded as specified in HITSP/C80 section 2.2.1.2.4 Personal Relationships

C154-[DE-3.04-1] The state part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.1 State

C154-[DE-3.04-2] The postal code part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.2 Postal Code

C154-[DE-3.04-3] The country part of an address **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.3 Country

C83-[DE-4-CDA-1] A CDA Document **SHALL** declare conformance for the Healthcare Provider entry by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.4

C83-[DE-4-CDA-2] All healthcare providers entries **SHALL** declare conformance to the IHE Healthcare Providers and Pharmacies specification by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.2.3

C154-[DE-4.02-1] Provider role **SHALL** be coded as specified in HITSP/C80 section 2.2.3.8.1 Provider Role

C83-[DE-4.10-CDA-1] The extension attribute **SHALL** contain the National Provider Identifier.

C83-[DE-4.10-CDA-2] The root attribute **SHALL** contain the value 2.16.840.1.113883.4.6 to indicate that this identifier is the provider's assigned NPI.

C154-[DE-4.04-1] Provider type **SHALL** be coded as specified in HITSP/C80 section 2.2.3.8.2 Provider Type

C154-[DE-4.05-1] The state part of an address **SHALL** in the United States be recorded using HITSP/C80 Section 2.2.1.1.1 State

C154-[DE-4.05-2] The postal code part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.2 Postal Code

C154-[DE-4.05-3] The country part of an address **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.3 Country

C83-[DE-5-CDA-1] A CDA Document **SHALL** declare conformance for the Insurance Provider module by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.5

C83-[DE-5-CDA-2] All Insurance Provider entries **SHALL** declare conformance to the IHE Coverage Entry by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.17

C83-[DE-5-CDA-3] Information for payment providers **SHALL** be recorded as a policy act inside the coverage act.

C83-[DE-5.01-CDA-1] All Insurance Provider modules **SHALL** declare conformance to the IHE Payer Entry by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.18

C83-[DE-5.01-CDA-2] The **root** attribute **SHOULD** be the OID of the assigning authority for the identifier; however, determining the assigning authority is not feasible in all settings

C83-[DE-5.01-CDA-3] A GUID **MAY** be used in place of the OID of the assigning authority

C83-[DE-5.01-CDA-4] Implementers **SHOULD** use the same GUID for each instance of the same group or contract number

C154-[DE-5.02-1] The Health Insurance Type **SHALL** be coded as specified in HITSP/C80 Section 2.2.2.1 Health Insurance Type

C154-[DE-5.04-1] The state part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.1 State

C154-[DE-5.042] The postal code part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.2 Postal Code

C154-[DE-5.04-3] The country part of an address **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.3 Country

C83-[DE-5.07-CDA-1] The date when the plan began covering the member **SHOULD** be recorded in the **<low>** element of the **<time>** element beneath the **<participant>** element

C83-[DE-5.07-CDA-2] The date when the plan stops covering the member **SHOULD** be recorded in the **<high>** element of the **<time>** element beneath the **<participant>** element

C83-[DE-5.08-CDA-1] The member identifier number **SHALL** be recorded in the **`extension`** attribute of the **`<id>`** element found in the **`<participantRole>`** element

C83-[DE-5.08-CDA-2] The **`root`** attribute **SHOULD** be the OID of the assigning authority for the identifier; however, determining the assigning authority is not feasible in all settings

C83-[DE-5.08-CDA-3] A GUID **MAY** be used in place of the OID of the assigning authority

C83-[DE-5.08-CDA-4] Implementers **SHOULD** use the same GUID for each instance of a member identifier from the same health plan

C83-[DE-5.09-CDA-1] The relationship to the subscriber **SHALL** be present and **SHALL** be recorded in the **`<code>`** element underneath the **`<participantRole>`** element recording the member information

C154-[DE-5.09-1] The Patient Relationship to Subscriber **SHALL** be coded as specified in HITSP/C80 section 2.2.2.2 Subscriber Relationship

C154-[DE-5.10-1] The state part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.1 State

C154-[DE-5.10-2] The postal code part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.2 Postal Code

C154-[DE-5.10-3] The country part of an address **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.3 Country

C83-[DE-5.12-CDA-1] If the member name as recorded by the health plan differs from the patient name as recorded in the registration/medication summary (e.g., due to marriage or for other reasons), then the member name **SHALL** be recorded in the **`<name>`** element of the **`<playingEntity>`** element beneath the **`<participantRole>`** element

C83-[DE-5.13-CDA-1] If the member date of birth as recorded by the health plan differs from the patient date of birth as recorded in the registration/medication summary, then the member date of birth **SHALL** be recorded in the **`<sdtc:birthTime>`** element of the **`<playingEntity>`** element beneath the **`<participantRole>`** element

C83-[DE-5.14-CDA-1] The code attribute **SHALL** be coded as specified in HITSP/C80 Section 2.2.2.3 Financially Responsible Party Type

C83-[DE-5.14-CDA-2] When the **`code`** of the encompassing act is PP, the **`code`** attribute value **SHALL** be set to GUAR or PAT to represent a guarantor or self-paying patient respectively

C83-[DE-5.14-CDA-3] The **`code`** attribute **SHALL** be set to PAYOR when the **`code`** of the encompassing act is other than PP

C83-[DE-5-CDA-1] When the Subscriber is the patient, the **`<participant>`** element describing the subscriber **SHALL NOT** be present. This information will be recorded instead in the data elements used to record member information

C83-[DE-5.15-CDA-1] The **`root`** attribute **SHOULD** be the OID of the assigning authority for the identifier; however, determining the assigning authority is not feasible in all settings

C83-[DE-5.15-CDA-2] A GUID **MAY** be used in place of the OID of the assigning authority. Implementers **SHOULD** use the same GUID for each instance of a subscriber identifier from the same health plan

C83-[DE-5.19-CDA-1] The subscriber date of birth **SHALL** be recorded in the **`<sdtc:birthTime>`** element of the **`<playingEntity>`** element beneath the **`<participantRole>`** element. The **`<sdtc:birthTime>`** element represents an extension to the HL7 CDA Release 2.0

C154-[DE-5.21-1] The state part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.1 State

C154-[DE-5.21-2] The postal code part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.2 Postal Code

C154-[DE-5.21-3] The country part of an address **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.3 Country

C154-[DE-5.16-1] The state part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.1 State

C154-[DE-5.16-2] The postal code part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.2 Postal Code

C154-[DE-5.16-3] The country part of an address **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.3 Country

C83-[DE-6-CDA-1] A CDA Document **SHALL** declare conformance for the Allergy/Drug Sensitivity Module by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.6

C83-[DE-6-CDA-2] All allergy entries **SHALL** conform to the IHE PCC Allergy and Intolerance Concern template by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.5.3

C154-[DE-6.02-1] Adverse event types **SHALL be** coded as specified in HITSP/C80 Section 2.2.3.4.2 Allergy/Adverse Event Type

C154-[DE-6.04-1] Food and substance allergies **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.3.11 Ingredient Name

C154-[DE-6.04-2] Allergies to a class of medication **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.3.9 Medication Drug Class

C154-[DE-6.04-3] Allergies to a specific medication **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.3.7 Medication Brand Name or HITSP/C80 Section 2.2.3.3.8 Medication Clinical Drug Names.

C154-[DE-6.06-1] The reaction **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.4.1 Allergy/Adverse Event (Reaction)

C154-[DE-6.08-1] The severity of the adverse event **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.4.3 Allergy/Adverse Event Severity

C83-[DE-7-CDA-1] A CDA Document **SHALL** declare conformance for the Condition Module by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.7

C83-[DE-7-CDA-2] Problem Entries **SHALL** also declare conformance to the IHE Problem Concern by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.5.2

C83-[DE-7.01-1] The onset date **SHALL** be recorded in the **<low>** element of the **<effectiveTime>** element when known (see example 1 below).

C83-[DE-7.01-2] The resolution data **SHALL** be recorded in the **<high>** element of the **<effectiveTime>** element when known.

C83-[DE-7.01-3] If the problem is known to be resolved, but the date of resolution is not known, then the **<high>** element **SHALL** be present, and the nullFlavor attribute **SHALL** be set to 'UNK'. Therefore, the existence of an **<high>** element within a problem does indicate that the problem has been resolved.

C154-[DE-7.02-1] The problem type **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.1.2 Problem Type

C83-[DE-7.04-1] The problem name **SHALL** be recorded in the entry by recording a **<reference>** where the **value** attribute points to the narrative text containing the name of the problem.

C154-[DE-7.04-1] If the code attribute is present, the problem **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.1.1 Problem

C83-[DE-7.05-CDA-1] The time over which this provider treated the condition **MAY** be recorded in the **<time>** element beneath the **<performer>** element

C83-[DE-7.05-CDA-2] The identifier of the treating provider **SHALL** be present in the **<id>** element beneath the **<assignedEntity>**. This identifier **SHALL** be the identifier

of one of the providers listed in the healthcare providers module described in Section 2.2.2.4

C83-[DE-7.05-CDA-3] The treating provider or providers **SHALL** be recorded in a **<performer>** element under the **<act>** that describes the condition of concern

C83-[DE-8-CDA-1] A CDA Document **SHALL** declare conformance for the Medication – Prescription and Non-Prescription module by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.8

C83-[DE-8-CDA-2] Substance Administration acts conforming to this module **SHALL** also declare conformance to the IHE Medications entity by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.7

C83-[DE-8-CDA-3] The first **<effectiveTime>** **SHALL** use the IVL_TS data type unless for a single administration, in which case, it **SHALL** use the TS data type

C83-[DE-8.03-CDA-1] Medications that are administered based on activities of daily living **SHALL** identify the events that trigger administration in the **<event>** element beneath the **<effectiveTime>** element. The **<effectiveTime>** element **SHALL** be of type EIVL_TS

C83-[DE-8.04-CDA-1] Medications that are administered at a specified frequency **SHALL** record the expected interval between doses in the **<period>** element beneath an **<effectiveTime>** of type PIVL_TS. The **<effectiveTime>** element **SHALL** have an institutionSpecified attribute value of "true"

C83-[DE-8.05-CDA-1] Medications that are administered at a specified interval **SHALL** record interval between doses in the **<period>** element beneath an **<effectiveTime>** element of type PIVL_TS. The **<effectiveTime>** element **SHALL** have an institutionSpecified attribute value of "false"

C83-[DE-8.07-CDA-1] **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.3.4.1 Medication Route FDA.

C154-[DE-8.08-1] Units **MAY** be present when needed. If present it **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.6.6 Units of Measurement

C154-[DE-8.08-2] When the coded product or brand name describes the strength or concentration of the medication, and the dosing is in administration units (e.g., 1 tablet, 2 capsules), units **SHOULD** contain the preferred name of the presentation units within braces { } using the units of presentation from the NCI Thesaurus

C154-[DE-8.09-1] The Site **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.2.1 Body Site

C154-[DE-8.11-1] **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.3.3 Medication Product Form

C83-[DE-8.12-CDA-1] The Delivery Method **MAY** be recorded in the **<cda:code>** element

C83-[DE-8.12-CDA-2] The free text description of the delivery method **MAY** be included within a **<cda:originalText>** element beneath the **<cda:code>** element

C83-[DE-8-CDA-4] Medication Information data elements **SHALL** declare conformance to the IHE Product Entry template by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.7.2

C83-[DE-8-CDA-5] A CDA Document **SHALL** declare conformance for the Medication Information data element by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.8.2

C83-[DE-8.13-CDA-1] The coded product name **SHALL** appear in the **code** attribute of the **<code>** element.

C83-[DE-8.13-CDA-2] If the code for the generic product is unknown, the **code** and **codeSystem** attributes **MAY** be omitted

C154-[DE-8.13-1] The coded product name **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.3.8 Medication Clinical Drug Names.

C154-[DE-8.13-2] When only the class of the drug is known (e.g., Beta Blocker or Sulfa Drug), it **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.3.9 Medication Drug Class.

C154-[DE-8.13-3] When only the medication ingredient name is know, the coded product name **MAY** be coded as specified in HITSP/C80 Section 2.2.3.3.11 Ingredient Name

C83-[DE-8.14-CDA-1] The code for the specific brand of product **SHALL** appear in a **<translation>** element

C154-[DE-8.14-1] The brand name **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.3.7 Medication Brand Name or 2.2.3.3.10 Medication Packaged Product.

C83-[DE-8.15-CDA-1] The product (generic) name **SHALL** appear in the **<originalText>** element beneath the **<code>** element

C83-[DE-8.14-CDA-1] The coded product name **SHALL** appear in the **code** attribute of the **<translation>** element

C83-[DE-8.14-CDA-2] The brand name **SHALL** appear in the **<name>** element of the **<manufacturedMaterial>**

C83-[DE-8.19-CDA-1] A CDA Document **SHALL** declare conformance for the Type of Medication by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.8.1

C83-[DE-8.19-CDA-2] Each **<supply>** or **<substanceAdministration>** act **MAY** reference an **<observation>** element that describes the type of medication, by including an **<entryRelationship typeCode=SUBJ/>** element

C83-[DE-8.19-CDA-3] The type of a medication **SHALL** be represented with an **<observation>** element in the **<entryRelationship>**

C83-[DE-8.19-CDA-4] The **<observation>** element **SHALL** have a **<templateId>** with a **root** attribute set to 2.16.840.1.113883.3.88.11.83.8.1

C83-[DE-8.19-CDA-5] The **<observation>** **SHALL** have a **<code>** element that represents the kind of medication actually or intended to be administered or supplied

C154-[DE-8.19-1] The type of medication **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.3.5 Medication Type.

C154-[DE-8.20-1] The medication status **MAY** be recorded using the CCD Medication Status observation using the value set defined in the CCD

C83-[DE-8.20-CDA-1] The indication **SHALL** be recorded using the Indication **<observation>** described in Section 3.9.2.2.1 of the HL7 Continuity of Care Document Implementation Guide, and which conforms

C83-[DE-8.20-CDA-2] The indication **<observation>** **SHALL** contain a **<text>** element that includes a **<reference>** element whose **value** attribute points to the narrative text that is the indication for the medication

C154-[DE-8.20-1] The indication **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.1.1 Problem

C83-[DE-8.22-CDA-1] Medication Information data elements **SHALL** declare conformance to the IHE Patient Medication Instructions template by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.3

C83-[DE-8.24-CDA-1] The vehicle for administering a medication **MAY** be recorded in a **<participantRole>** element inside a **<participant>** element in the **<substanceAdministration>** element

C83-[DE-8.24-CDA-2] The typeCode attribute of the **<participant>** element **SHALL** be CSM

C83-[DE-8.24-CDA-3] The classCode of the **<participantRole>** **SHALL** be MANU

C83-[DE-8.24-CDA-4] A **<code>** element for the **<participantRole>** **SHALL** be present and **SHALL** contain the code 412307009 from the SNOMED CT code system as shown above

C83-[DE-8.24-CDA-5] The **<name>** element in the **<playingEntity>** element **SHALL** record the name of the drug vehicle

C83-[DE-8.24-CDA-6] The **<code>** element in the **<playingEntity>** element **MAY** be used to supply a coded term for the drug vehicle

C154-[DE-8.24-1] The Medication Vehicle shall be coded as specified in HITSP/C80 Section 2.2.3.3.12 Medication Vehicle

C83-[DE-8-CDA-6] A CDA Document **SHALL** declare conformance for the Order Information data element by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.8.3

C83-[DE-8-CDA-7] Order Information data elements **SHALL** declare conformance to the IHE Supply Entry template by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.7.3

C83-[DE-8.26-CDA-1] The order number, i.e., the identifier from the perspective of the ordering provider, **SHOULD** be recorded in the **<id>** element within the **<supply>** element used to record order information

C83-[DE-8.26-CDA-1] The quantity ordered **SHALL** be recorded in the **value** attribute of **<quantity>** element inside a **<supply>** element used to record order information

C83-[DE-8.26-CDA-2] The **unit** attribute **SHALL** be present

C83-[DE-8.26-CDA-3] When the quantity ordered is in other than administration units (e.g., when the quantity ordered is a volume of liquid or mass of substance) units **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.6.6 Units of Measure

C83-[DE-8.26-CDA-4] When the quantity ordered is in administration units, the **unit** attribute **SHOULD** contain the preferred name of the presentation units within braces { } using the units of presentation as specified in HITSP/C80 Section 2.2.3.3.3 Medication Product Form

C83-[DE-8.32-CDA-1] Fulfillment instructions data elements **SHALL** declare conformance to the IHE Medication Fulfillment Instructions template by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.3.1

C83-[DE-8.34-CDA-1] The prescription number **SHALL** be recorded in the **extension** attribute of the **<id>** element within a **<supply>** element having a moodCode attribute of EVN

C83-[DE-8.34-CDA-2] The **root** attribute of the **<id>** element **SHOULD** be the OID of the assigning authority for the identifier; however, determining the assigning authority is not feasible in all settings

C83-[DE-8.34-CDA-3] A GUID **MAY** be used in place of the OID of the assigning authority

C83-[DE-8.35-CDA-1] The provider **SHALL** be recorded in the **<assignedEntity>** element

C83-[DE-8.35-CDA-2] At least one of **<assignedPerson>** or **<representedOrganization>** elements **SHALL** appear inside the **<assignedEntity>** to indicate the name of the person or the organization fulfilling the prescription

C83-[DE-8.35-CDA-3] The name of the person **SHALL** appear in the **<name>** element of the **<assignedPerson>** element beneath the **<assignedEntity>** element

C83-[DE-8.35-CDA-4] The name of the organization **SHALL** appear in the **<name>** element of the **<representedOrganization>** element beneath the **<assignedEntity>** element

C83-[DE-8.38-CDA-1] The quantity dispensed **SHALL** be recorded in the **value** attribute of **<quantity>** element inside a **<supply>** element with a **moodCode** attribute set to EVN

C83-[DE-8.38-CDA-2] When the quantity dispensed is in other than administration units (e.g., when the quantity ordered is a volume of liquid or mass of substance) units **SHALL** be recorded as specified in HITSP/C80 Section 2.2.3.6.6 Units of Measure

C83-[DE-8.38-CDA-3] When the quantity dispensed is in administration units the **`unit`** attribute **SHOULD** contain the preferred name of the presentation units within braces { } using the units of presentation as specified in HITSP/C80 Section 2.2.3.3.3 Medication Product Form.

C83-[DE-8.39-CDA-1] The fill number **SHOULD** be recorded in the **`sequenceNumber`** attribute of a **`<entryRelationship>`** element with a **`typeCode`** attribute set to COMP

C83-[DE-8.40-CDA-1] The fill status **MAY** be recorded in the **`statusCode`** attribute

C83-[DE-8.40-CDA-2] The **`statusCode`** attribute **SHALL** contain be coded as specified in HITSP/C80 Section 2.2.3.3.1 Medication Fill Status.

C154-[DE-8.36-1] The state part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.1 State

C154-[DE-8.36-2] The postal code part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.2 Postal Code

C154-[DE-8.36-3] The country part of an address **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.3 Country

C83-[DE-10.02-CDA-1] The name of the information source **SHALL** be provided in the <name> element

C83-[DE-10.02-CDA-2] The <name> element **SHALL** appear within an <assignedPerson> or <representedOrganization> element appearing in an <assignedEntity>, or within a <relatedPerson> element within a <relatedEntity> element beneath the <informant> element

C83-[DE-10-CDA-1] Data elements defined elsewhere in the specification **SHALL NOT** be recorded using the Comments Module.

C83-[DE-10-CDA-2] A CDA Document **SHALL** declare conformance for the Comments module by including a **`<templateID>`** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.11

C83-[DE-10-CDA-3] Each comment module **SHALL** be conformant with the IHE Comment module and **SHALL** include a **`<templateID>`** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.2

C83-[DE-10-CDA-4] The author of a comment **SHALL** be recorded as specified for authors in the Information Source module.

C83-[DE-12-CDA-1] A CDA Document **SHALL** declare conformance for the Advance Directive module by including a **`<templateID>`** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.12

C83-[DE-12-CDA-2] An advance directive data element **SHALL** declare conformance to the IHE Advance Directive Observation by including a **`<templateID>`** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.13.7

C154-[DE-12.01-1] The advance directive **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.10.1 Advance Directive Type

C83-[DE-12.CDA-3] The human readable description of the type of Advance Directive **SHALL** appear in the narrative text and **SHALL** be pointed to by the **`value`** attribute of the **`<reference>`** element inside the **`<originalText>`** element of the **`<code>`**

C83-[DE-12CDA-4] The starting time of the Advance Directive **SHALL** be recorded in the **`<low>`** element of the **`<effectiveTime>`** element in the Advance Directive **`<observation>`**

C83-[DE-12CDA-5] If the starting time is unknown, the **`<low>`** element **SHALL** have the nullFlavor attribute set to UNK

C83-[DE-12.CDA-6] The ending time of the Advance Directive **SHALL** be recorded in the **`<high>`** element of the **`<effectiveTime>`** element in the Advance Directive **`<observation>`**

C83-[DE-12.CDA-7] If the ending time is unknown, the **`<high>`** element **SHALL** have the nullFlavor attribute set to UNK

C83-[DE-12CDA-8] If the Advance Directive does not have a specified ending time, the **<high>** element **SHALL** have the nullFlavor attribute set to NA

C83-[DE-12.CDA-9] Information required to obtain a copy of the Advance Directive **SHALL** be recorded in a **<participantRole>** element within a **<participant>** element of the Advance Directive **<observation>**

C83-[DE-12.CDA-10] The typeCode attribute of the **<participant>** element **SHALL** be CST

C83-[DE-12.CDA-11] The classCode of the **<participantRole>** element **SHALL** be AGNT

C83-[DE-12CDA-12] The address of the agent **SHALL** be recorded in an **<addr>** element when known

C83-[DE-12CDA-13] The telephone number or other electronic communications address for the agent **SHALL** be recorded in a **<telecom>** element when known

C83-[DE-12CDA-14] The name of the agent who can provide a copy of the Advance Directive **SHALL** be recorded in the **<name>** element inside the **<playingEntity>** element

C83-[DE-13-CDA-1] A CDA Document **SHALL** declare conformance for the Immunization module by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.13

C83-[DE-13-CDA-2] Immunization data elements **SHALL** declare conformance to the IHE Immunization entry by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.12

C83-[DE-13.06-CDA-1] The code **SHALL** appear in the **code** attribute of the **<code>** or **<translation>** element

C154-[DE-13.06-1] Immunizations **SHALL** be coded using CVX as specified in HITSP/C80 Section 2.2.3.5.1 Vaccines Administered.

C154-[DE-13.10-1] The reason for refusal **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.5.3 No Immunization Reason

C83-[DE-14-CDA-1] A CDA Document **SHALL** declare conformance for the Vital Signs module by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.14

C83-[DE-14-CDA-2] Vital signs information elements **SHALL** be contained in a conforming IHE Vital Signs Organizer element that includes a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.13.1

C154-[DE-14.03-1] Vital signs **SHOULD** be coded as specified in HITSP/C80 Section 2.2.3.6.4 Vital Sign Result Type

C83-[DE-15-CDA-1] A CDA Document **SHALL** declare conformance for the Results module by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.3.88.11.83.15.1

C83-[DE-15-CDA-2] Results data elements reporting specific events **SHALL** declare conformance to the IHE Simple Observation entry by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.13

[C83-[DE-15-CDA-3] Results data elements reporting specific events **SHALL** declare conformance to the CCD Result entry by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.10.20.1.31

C154-[DE-15.03-1] Result Type **SHOULD** be selected from LOINC (codeSystem 2.16.840.1.113883.6.1) or SNOMED CT (codeSystem 2.16.840.1.113883.6.96)

C154-[DE-15.03-2] Result Type for laboratory results **SHOULD** be coded as specified in HITSP/C80 Section 2.2.3.6.1 Laboratory Observations.

C83-[DE-15.05-CDA-1] Result Value **SHALL** be present when the observation/@moodCode is EVN or GOL, and **SHALL NOT** be present when observation/@moodCode is INT or PRP.

C83-[DE-16-CDA-1] Encounter entries other than the encompassingEncounter **SHALL** declare conformance for the Encounters module by including a **<templateID>** element with the root attribute set to the value 2.16.840.1.113883.3.88.11.83.16

C83-[DE-16-CDA-2] Encounter entries other than the encompassingEncounter **SHALL** declare conformance to the IHE Encounter entry by including a **<templateID>** element with the root attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.14

C83-[DE-16.02-1] Encounter Type **SHOULD** be coded as specified in HITSP/C80 Section 2.2.3.9.3 Encounter Type.

C154-[DE-16.07-1] Admission Type **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.9.2 Admission Type.

C154-[DE-16.06-1] Admission Source **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.9.1 Admission Source.

C154-[DE-16.10-1] Patient Class **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.9.5 Patient Class.

C154-[DE-16.19-1] The state part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.1 State

C154-[DE-16.19-2] The postal code part of an address in the United States **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.2 Postal Code

C154-[DE-16.19-3] The country part of an address **SHALL** be recorded using HITSP/C80 Section 2.2.1.1.3 Country

C83-[DE-17-CDA-1] Procedure entries **SHALL** declare conformance for the procedures module by including a **<templateID>** element with the root attribute set to the value 2.16.840.1.113883.3.88.11.83.17

C83-[DE-17-CDA-2] Procedure entries **SHALL** declare conformance to the IHE Procedure entry by including a **<templateID>** element with the root attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.19

C83-[DE-17-CDA-3] The body site **SHALL** be coded according as specified in HITSP/C80 Section 2.2.3.2.1 Body Site

C83-[DE-18-CDA-1] A CDA Document **SHALL** declare conformance for the Family History module by including a **<templateID>** element with the root attribute set to the value 2.16.840.1.113883.3.88.11.83.18

C83-[DE-18-CDA-2] Family History data elements **SHALL** declare conformance to the IHE Family History Organizer entry by including a **<templateID>** element with the root attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.15

C83-[DE-18.01-CDA-1] A pedigree image **MAY** be included in an **observationMedia** element in an **entry** under the Family History section

C83-[DE-18.01-CDA-2] The **mediaType** of the **observationMedia** element **SHALL** be application/pdf, image/jpeg or image/png

C83-[DE-18.01-CDA-3] The **representation** of the **observationMedia** element **SHALL** be B64, and the data for the image **SHALL** be included within the **value** element

C154-[DE-18.04-1] The Family Member Relationship (to Patient) **SHALL** be coded as specified in HITSP/C80 Section 2.2.1.2.5 Family Relationship Type

C83-[DE-18.06-CDA-1] An **sdtc:id** element **SHALL** be present on family members

C154-[DE-18.24-1] Gender **SHALL** be coded as specified in HITSP/C80 Section 2.2.1.2.1.2 V3 Administrative Gender

C83-[DE-18.09-CDA-1] The race of the family member, when recorded, **SHALL** appear in an **sdtc:race** element

C154-[DE-18.09-1] Race **SHALL** be coded as specified in HITSP/C80 Section 2.2.1.2.7 Race

C83-[DE-18.10-CDA-1] The ethnicity of the family member, when recorded, **SHALL** appear in an **sdtc:ethnicGroupCode** element.

C154-[DE-18.10-1] Ethnicity **SHALL** be coded as specified in HITSP/C80 Section 2.2.1.2.2 Ethnicity

C83-[DE-18.12-CDA-1] Family History Condition data elements **SHALL** declare conformance to the IHE Family History Observation entry by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.13.3

C154-[DE-18.12-1] The data element 7.02 Problem Type **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.1.2 Problem Type.

C154-[DE-18.12-2] The problem **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.1.1 Problem

C83-[DE-18.13-CDA-1] Family History Condition data elements **SHALL** declare conformance to the IHE Family History Observation entry by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.13.3

C154-[DE-18.18-1] Components of a Genetic Laboratory Test **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.11 Genetic Testing

C83-[DE-18.25-CDA-1] A problem status observation **SHALL** conform to the CCD Templates 2.16.840.1.113883.10.20.1.50 and 2.16.840.1.113883.10.20.1.57.

C83-[DE-18.25-CDA-2] A problem status observation **SHALL** conform to the IHE Template 1.3.6.1.4.1.19376.1.5.3.1.4.1.1 for problem status.

C154-[DE-18.23-1] The problem **SHALL** be coded as specified in HITSP/C80 Section 2.2.3.1.1 Problem Status

C83-[DE-19-CDA-1] A CDA Document **SHALL** declare conformance for the Social History module by including a **<templateID>** element with the `root` attribute set to the value 2.16.840.1.113883.10.20.1.33

C83-[DE-19-CDA-2] Social History data elements **SHALL** declare conformance to the IHE Social History Observation entry by including a **<templateID>** element with the `root` attribute set to the value 1.3.6.1.4.1.19376.1.5.3.1.4.13.4

C154-[DE-19.02-1] The Social History type **SHALL** be coded as specified in HITSP/C80 Section 2.2.2.4 Social History Type

Multiple **<sdtc:raceCode>** extension elements may appear after a CDA **<raceCode>** to report multiple races.

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.

Table 3-1 Template Identifiers

Template	Template Identifier	Description	Notes
N/A	2.16.840.1.113883.10	HL7 Registered Templates Root	
N/A	2.16.840.1.113883.10.20	HL7 SDTC Registered Templates Root	
N/A	2.16.840.1.113883.10.20.1	CCD v1.0 Templates Root	See CCD IG, Section 1.4 Asserting conformance to this Implementation Guide; 2.3 Version
N/A	2.16.840.1.113883.10.20.2	HL7 History and Physical Root	See HL7 H&P Note IG, Section 1.6 Scope
N/A	2.16.840.1.113883.10.20.4	HL7 Consult Note Root	See HL7 Consult Note IG, Section 1.6 Scope
N/A	1.3.6.1.4.1.19376.1.5.3.1	IHE Patient Care Coordination Template Identifier Root	See IHE PCC TF Volume 2, Namespaces and Vocabularies
HITSP Document Templates	2.16.840.1.113883.3.88.11.32.1	HITSP/C32 - Summary Documents Using HL7 Continuity of Care Document (CCD)	Further constraints may be found in HITSP Interoperability Specifications that require this document

Template	Template Identifier	Description	Notes
	2.16.840.1.113883.3.88.11.28	Reserved for HITSP/C28 Emergency Care Summary Document	These template identifiers are reserved for HITSP use to register the constraints it applies on these components as templates.
	2.16.840.1.113883.3.88.11.37	Reserved for HITSP/C37 Lab Report Document	
	2.16.840.1.113883.3.88.11.48.1	Reserved for HITSP/C48 Referral Summary	
	2.16.840.1.113883.3.88.11.48.2	Reserved for HITSP/C48 Encounter Document Using IHE Medical Summary (XDS-MS)	
	2.16.840.1.113883.3.88.11.78	Reserved for HITSP/C78 Immunization Document	
	2.16.840.1.113883.3.88.11.84.1	Reserved for HITSP/C84 Consult and History & Physical Note	
	2.16.840.1.113883.3.88.11.84.2	Reserved for HITSP/C84 Consult and History & Physical Note	
	2.16.840.1.113883.3.88.11.105.1	Reserved for HITSP/C105 Patient Level Quality Data	
	2.16.840.1.113883.3.88.11.148.1	Reserved for HITSP/C154 EMS Transfers of Care	
	2.16.840.1.113883.3.88.11.162.1	Reserved for HITSP/C62 Unstructured Document Plan of Care	
HITSP CDA Entry Templates	2.16.840.1.113883.3.88.11.83.2	Language Spoken	
	2.16.840.1.113883.3.88.11.83.3	Support	
	2.16.840.1.113883.3.88.11.83.4	Healthcare Provider	
	2.16.840.1.113883.3.88.11.83.5	Insurance Provider	
	2.16.840.1.113883.3.88.11.83.6	Allergy/Drug Sensitivity	
	2.16.840.1.113883.3.88.11.83.7	Condition	
	2.16.840.1.113883.3.88.11.83.8	Medication	
	2.16.840.1.113883.3.88.11.83.8.1	Type of Medication Constraints	
	2.16.840.1.113883.3.88.11.83.8.2	Medication Information Constraints	
	2.16.840.1.113883.3.88.11.83.8.3	Order Information Constraints	
	2.16.840.1.113883.3.88.11.83.11	Comment	
	2.16.840.1.113883.3.88.11.83.12	Advance Directive	
	2.16.840.1.113883.3.88.11.83.13	Immunization	
	2.16.840.1.113883.3.88.11.83.14	Vital Sign	
	2.16.840.1.113883.3.88.11.83.15	Result	
	2.16.840.1.113883.3.88.11.83.16	Encounter	
	2.16.840.1.113883.3.88.11.83.17	Procedure	
	2.16.840.1.113883.3.88.11.83.18	Family History	
	2.16.840.1.113883.3.88.11.83.19	Social History	
	2.16.840.1.113883.3.88.11.83.20	Medical Equipment	
	2.16.840.1.113883.3.88.11.83.21	Functional Status	
	2.16.840.1.113883.3.88.11.83.22	Plan Of Care	

Template	Template Identifier	Description	Notes
HITSP CDA Section Templates	2.16.840.1.113883.3.88.11.83.101	Payers Section	
	2.16.840.1.113883.3.88.11.83.102	Allergies and Other Adverse Reactions Section	
	2.16.840.1.113883.3.88.11.83.103	Problem List Section	
	2.16.840.1.113883.3.88.11.83.104	History of Past Illness Section	
	2.16.840.1.113883.3.88.11.83.105	Chief Complaint Section	
	2.16.840.1.113883.3.88.11.83.106	Reason for Referral Section	
	2.16.840.1.113883.3.88.11.83.107	History of Present Illness Section	
	2.16.840.1.113883.3.88.11.83.108	List of Surgeries Section	
	2.16.840.1.113883.3.88.11.83.109	Functional Status Section	
	2.16.840.1.113883.3.88.11.83.110	Hospital Admission Diagnosis Section	
	2.16.840.1.113883.3.88.11.83.111	Discharge Diagnosis Section	
	2.16.840.1.113883.3.88.11.83.112	Medications Section	
	2.16.840.1.113883.3.88.11.83.113	Admission Medications History Section	
	2.16.840.1.113883.3.88.11.83.114	Hospital Discharge Medications Section	
	2.16.840.1.113883.3.88.11.83.115	Medications Administered Section	
	2.16.840.1.113883.3.88.11.83.116	Advance Directives Section	
	2.16.840.1.113883.3.88.11.83.117	Immunizations Section	
	2.16.840.1.113883.3.88.11.83.118	Physical Examination Section	
	2.16.840.1.113883.3.88.11.83.119	Vital Signs Section	
	2.16.840.1.113883.3.88.11.83.120	Review of Systems Section	
	2.16.840.1.113883.3.88.11.83.121	Hospital Course Section	
	2.16.840.1.113883.3.88.11.83.122	Diagnostic Results Section	
	2.16.840.1.113883.3.88.11.83.123	Assessment and Plan Section	
	2.16.840.1.113883.3.88.11.83.124	Plan of Care Section	
	2.16.840.1.113883.3.88.11.83.125	Family History Section	
	2.16.840.1.113883.3.88.11.83.126	Social History Section	
	2.16.840.1.113883.3.88.11.83.127	Encounters Section	
	2.16.840.1.113883.3.88.11.83.128	Medical Equipment Section	
	2.16.840.1.113883.3.88.11.83.129	Preoperative Diagnosis	
	2.16.840.1.113883.3.88.11.83.130	Postoperative Diagnosis	
	2.16.840.1.113883.3.88.11.83.131	Reserved for Surgery Description	Template is reserved for future use with this section should additional constraints be necessary
	2.16.840.1.113883.3.88.11.83.132	Surgical Operation Note Findings	
	2.16.840.1.113883.3.88.11.83.133	Reserved for Anesthesia	Templates are reserved for future use with these sections should additional constraints be necessary
	2.16.840.1.113883.3.88.11.83.134	Reserved for Estimated Blood Loss	
	2.16.840.1.113883.3.88.11.83.135	Reserved for Specimens Removed	
	2.16.840.1.113883.3.88.11.83.136	Reserved for Complications	
	2.16.840.1.113883.3.88.11.83.137	Planned Procedure	
	2.16.840.1.113883.3.88.11.83.138	Indications	
	2.16.840.1.113883.3.88.11.83.139	Reserved for Disposition	Templates are reserved for future use with these sections should additional constraints be necessary
	2.16.840.1.113883.3.88.11.83.140	Reserved for Operative Note Fluids	
	2.16.840.1.113883.3.88.11.83.141	Reserved for Operative Note Surgical Procedure	

Template	Template Identifier	Description	Notes
	2.16.840.1.113883.3.88.11.83.142	Reserved for Surgical Drains	
	2.16.840.1.113883.3.88.11.83.143	Reserved for Implants	

4.0 EXTENSIONS

During the development of the original HITSP/C32 specification, it became necessary to extend the HL7 Clinical Document Architecture standard in a few places. The Consumer Empowerment Technical Committee has used the following guidelines in creating extensions:

- An extension is a collection of element or attribute declarations and rules for their application to the applicable HL7 Version 3 standard, in this case HL7 CDA Release 2.0
- A single namespace for all extension elements or attributes defined by HITSP will be defined.
- The namespace for these extensions shall be urn:ansi-org:sdtc
- This namespace shall be used as the namespace for any extension elements or attributes that are defined by this implementation guide
- Each extension element shall use the same HL7 vocabularies and data types used by the relevant HL7 Version 3 standard
- Each extension element shall use the same conventions for order and naming as is used by the current HL7 tooling
- An extension element shall appear in XML where the expected RIM element of the same name would have appeared had that element not been otherwise constrained from appearing in the CDA XML schema

These guidelines are very similar to the guideline used by the HL7 Structured Documents Technical Committee in the development of the Continuity of Care Document Implementation Guide. The HL7 Structured Documents Technical Committee has agreed to publish these extensions on the CDA Release 3.0 open issues list, and be responsible for maintaining them.

4.1 EXTENSIONS TO CDA

4.1.1 sdtc:raceCode

The raceCode extension allows for multiple races to be reported for a patient. Example use of this extension appears below in Figure 4-1.

Multiple **<sdtc:raceCode>** extension elements may appear after a CDA **<raceCode>** to report multiple races.

Figure 4-1 sdtc:raceCode extension example

```
<raceCode code='' displayName='' codeSystem='' codeSystemName=''/>
<sdtc:raceCode code='' displayName='' codeSystem='' codeSystemName=''/>
```

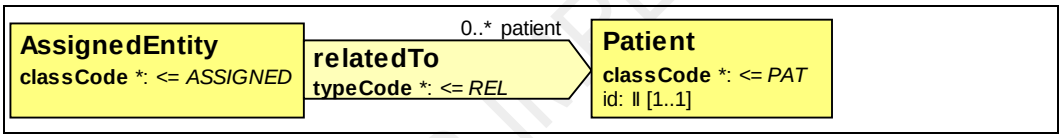
4.1.2 sdtc:patient

The **<sdtc:patient>** extension element allows for the patient identifier used by a given provider to be reported. The provider in their role as an assigned entity is related to the patient.

Figure 4-2 sdtc:patient extension example

```
<assignedEntity>
    <id root='78A150ED-B890-49dc-B716-5EC0027B3982' extension="ProviderID"/>
    <code code='200000000X '
        displayName='Allopathic and Osteopathic Physicians'
        codeSystem='2.16.840.1.113883.6.101'
        codeSystemName='ProviderCodes'/>
    <assignedPerson>
        <name>...</name>
    </assignedPerson>
    <sdtc:patient>
        <sdtc:id root='78A150ED-B890-49dc-B716-5EC0027B3983' extension='MRN'/>
    </sdtc:patient>
</assignedEntity>
```

Figure 4-3 sdtc:patient Extension



4.1.3 sdtc:birthTime

The **<sdtc:birthTime>** element allows for the birth date of any person to be recorded. The purpose of this extension is to allow the recording of the subscriber or member of a health plan in cases where the health plan eligibility system has different information on file than the provider does for the patient. This element appears after the **<name>** of the person.

Figure 4-4 sdtc:birthTime extension example

```
<playingEntity>
    <name><given>Baby</given><family>Ross</family></name>
    <sdtc:birthTime value='20070209'/>
</playingEntity>
```

5.0 DOCUMENT UPDATES

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

5.1 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).

- 5081, 5082, 5109, 5192, 5468, 5473, 5485, 5489, 5621, 5623, 5631, 5463, 5028, 5626, 5624

The full text of the comments along with the Technical Committee's disposition can be reviewed on the HITSP Public Web Site.

5.1.1 GLOBAL

The following changes were applies through-out the document for consistency with the HITSP suite of Interoperability Specifications

- Changed the name of the document to HITSP/C83 – CDA Content Modules
- Fixed various table numbering errors
- Many Entry Content Modules contained descriptions pertaining to related Section Content Modules. This text has been moved to the appropriate Section Content Module and re-worded when needed. The sections modified are:
  - 2.2.2.3, 2.2.2.5, 2.2.1.1, 2.2.2.6, 2.2.1.2, 2.2.2.7, 2.2.2.8, 2.2.1.12, 2.2.2.16, 2.2.1.27, 2.2.2.19
- Added the following footnote under all Entry Content Module tables
  - **NOTE:** Optionality **=** "R" for Required, "R2" for Required if known, "O" for Optional and Repeat = "Y" for Yes or "N" for No
- Fixed incorrect references to "Discharge Diagnosis" in sections:
  - 2.2.1.12, 2.2.1.13, 2.2.1.14, 2.2.1.15
- Fixed incorrect template IDs for the following sections:
  - 2.2.1.7 - IHE History of Present Illness
  - 2.2.1.12 - IHE Medications
  - 2.2.1.23 - IHE Assessment and Plans
- Added text and removed requirements in Entry data elements in the Entry Content Modules
  - Requirements for Entries are defined at a higher level than the Entry Content Module (i.e. Section Content Modules, HITSP CDA based constructs and Interoperability Specifications), for:
    - 2.2.2.5, 2.2.2.6, 2.2.2.7, 2.2.2.8, 2.2.2.9, 2.2.2.12, 2.2.2.13, 2.2.2.14, 2.2.2.15,2.2.2.16, 2.2.2.17, 2.2.2.18, 2.2.2.19
- Fixed various IHE Template Ids defined in Entry Content Module Constraints
  IHE Patient Contacts

5.1.2 SECTION 2.1 CONTECT OVERVIEW

- Updated the overview text to improve the explanation of HITSP/C83
- Added text to describe why Template IDs may have changed from HITSP/C32 to HITSP/C83
- Introduced Entry and Section Content Module descriptions

5.1.3 SECTION 2.2 RULES FOR IMPLEMENTING

Added constraints that were previously specified in HITSP/C32 but now apply to all HITSP CDA based documents. Added C[83] 4 – 11.

5.1.4 SECTION 2.2.1.X SECTION CONTENT MODULES

Editorial update to names of various IHE Section Content Modules:

- 2.2.1.22, 2.2.1.24, 2.2.1.25, 2.2.1.27

5.1.5 SECTION 2.2.1.23 ASSESSMENTS AND PLAN SECTION

Clarified and moved note related to Assessments and Plan.

5.1.6 SECTION 2.2.1.28 MEDICAL EQUIPMENT SECTION

Added new Section Content Module.

5.1.7 SECTION 2.2.2.5 INSURANCE PROVIDER

This section is based upon HL7 CCD and HITSP cannot lower a field requirement if required by the CCD, thus two requirements have been modified.

- Data Element 5.01 Group Number was changed from O to R
- Member Information was changed from R2 to R

5.1.8 SECTION 2.2.2.7 CONDITION

Removed text related to Registration and Medication History. This information is part of IS03.

5.1.9 SECTION 2.2.2.11 COMMENT

Added requirements for Comment and Author.

5.1.10 SECTION 2.2.2.15.2 RESULTS TYPE

Deleted Results Type reference for imaging procedures.

5.1.11 SECTION 2.2.2.17 PROCEDURE

Deleted and moved text to TN901 that described standard's overlap for procedure terminologies.

5.1.12 SECTION 2.2.2.18 FAMILY HISTORY

- Update text description for Pedigree (18.01)
- Clarified that Family Member Relationships (18.04) can reference beyond 2nd degree
- Added requirements to data elements that were missing specification
- Fixed Temp Id for Family History Section to '2.16.840.1.113883.10.20.1.23'
- Updated Family History Example

5.1.13 SECTION 2.2.2.19 SOCIAL HISTORY

- Modified text description of Social History
- Corrected Temp ID for Social History Event to 2.16.840.1.113883.10.20.1.33'

5.1.14 SECTION 2.3.2 SELECTED STANDARDS

- Corrected the reference to the Integrating the Healthcare Enterprise (IHE) Patient Care Coordination (PCC) from version 3 to version 4
- Minor editorial changes were made to this document.

5.2 DECEMBER 18, 2008

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

5.3 JUNE 30, 2009

Changes based upon Public Comments:

- 7071, 7078, 7079, 7080, 7081, 7086, 7089, 7090, 7091, 7094, 7096, 7097, 7098, 7112, 7116, 7117, 7118, 7126, 7122

The full text of the comments along with the Technical Committee's disposition can be reviewed on the HITSP Public Web Site.

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

Revised the document based on HITSP/TN903 Data Architecture

- Section 1.4 Document Conventions
  - Added this section to indicate conventions for Constraints
- Section 2.1 Context Overview
  - Updated to include descriptions of Data Modules.
- Section 2.1.1 Component Constraints
  - Updated to describe the tables used to describe HITSP Data Elements
- Section 2.1.2 HITSP Data Elements
  - Added this section, which now contains the Data Element Definitions previously found in the Entry Content Modules Section.
  - Moved common value set constraints from the Entry Content Modules Section to this section where these constraints should be applied across exchanges using different selected standards.
  - Added common constraints on addresses across all addresses in this section.
- Section 2.2 Rules for Implementing Components in CDA
  - Change the name of the Rules for Implementing Components to Rules for Implementing Components in CDA to reflect the purpose of this section.
- Section 2.2.2 Entry Content Modules
  - Removed Data Element Definitions from the Entry Content Modules
  - Change the Constraint Numbers to reflect the numbering scheme agreed upon by the Data Architecture Tiger Team.
  - Reordered and re-titled the Mapping Tables to conform to material provided in TN903.
  - Moved common value set constraints to the Data Element table in Section 2.1.2
- Section 2.2.2.8.10 Medication Information
  - Moved constraints to appropriate subsections.
- Section 2.2.2.8.11 – 2.2.2.8.14
  - Added these sections to re-factor constraints assigned to Section 2.2.2.8.10
- Section 2.2.2.8.20 Vehicle Constraints

  - Fixed errors in this section with respect to constraints.
- Section 2.2.2 Section Content Modules
  - Changed constraints to conform to identification scheme.
  - Added Section Template Identifiers
  - Renumbered Tables and Figured to conform to new template

5.4 JULY 8, 2009

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

5.5 NOVEMBER 9, 2009

This document has been modified to reflect HITSP/TN903 Data Architecture approach.

- Section 2.1 Removal of text related to HITSP defined data elements. This information has all been moved to HITSP/C154 Data Dictionary. This includes removal of Table 2-1 Table 2-38
- Section 2.1 Addition of HITSP/C154 Data Dictionary as C83 Dependency; All C83 Data Element Components now
- Section 2.1 Re-numbering Tables starting with 2-39
- Section 2.2 Re-numbering of HITSP/C83 Data Element Constraints to HITSP/C154 Data Dictionary constraints within the C83 Entry Modules (As a result of the creation of the HITSP/C154 Data Dictionary)
- Added Sections 2.2.2.20, 2.2.2.21 and 2.2.2.22 to match HITSP/C154 Data Dictionary Data Element Modules. No content was added
- Section 3.2 Update of Table 3-1 Template Identifiers to include HITSP/C105 Patient Level Quality Data

The following corrections have been made to HITSP/C83:

- Section 2.2.1.2 Modification of Country Constraint to HITSP/C154 Data Dictionary constraint, and addition of State and Postal Code Constraints
- Section 2.2.2.12.3 Advance Directive Free Text Type constraint correction of data mapping
- Section 2.2.2.12.2 Advance Directive Free Text Type constraint correction of data mapping
- Section 2.2.2.12.5 Custodian of the Document Constraint correction of data mapping

The following addition was made to the Encounter:

- Section 2.2.7 Added Diagnosis Priority as a cda data location.
- Section 3.2 Table 3-1 Addition of C105 QRDA TemplateID.

Changes based upon Public Comments:

- 5486, 5629, 7059, 7092, 7095, 7118, 7123, 7127, 7131, 7364, 7404, 7449, 7582, 7688

The full text of the comments along with the Technical Committee's disposition can be reviewed on the HITSP Public Web Site.

The document was modified to address Wave 1 Items for the 2009 Extensions and Gaps.

- The table of contents was extended to four levels to support access to the CDA Sections and Entries
- Added Sections 2.2.1.29 Preoperative Diagnosis through 2.2.1.43 Implants based upon the HL7 Implementation Guide for CDA Release 2.0 Operative Note
- Added Sections 2.2.1.44 Assessments through 2.2.1.46 Provider Orders based upon the IHE Patient Plan of Care Profile Supplement

- Modified Result module to support intended, requested or goal results as needed by above sections
- Added CDA model for updated data elements:
- 1.12 through 1.16, 4.10, 7.09 through 7.12, 11.01 through11.02, 13.11, 16.10 through 16.20, 18.23 through 18.25, 22.01

5.6 JANUARY 18, 2010

Changes based upon Public Comments:

- 7404, 7916, 7926, 7960, 8199, 8334, 8336, 8337, 8338, 8339, 8340, 8342, 8348, 8349, 9032, 9057

The full text of the comments along with the Technical Committee's disposition can be reviewed on the HITSP Public Web Site.

5.7 JANUARY 25, 2010

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