Implementation Guide for CDA Release 2
HITSP Summary Documents using CCD and CDA Content Modules
C32, C83, and C80

C32 Version 2.5, C83 Version 2.0
DRAFT: FOR DEVELOPMENT USE ONLY
(Consolidated Developer Documentation)

Contents

Acknowledgments

Revision History

Rev	Date	By Whom	Changes
New	July 2010	Dave Carlson	
First draft for posting	August 31, 2010	Dave Carlson	Updated model content and publication format

Chapter 1

INTRODUCTION

Topics:

Overview

This implementation guide is generated from UML models developed in the Open Health Tools (OHT) Model-Driven Health Tools (MDHT) project. The HITSP specifications have been formalized into computational models expressed in UML. These models are used by automated tooling to generate this publication, plus validation tools and Java libraries for implementers.

This document combines specifications from several HITSP documents, as summarized in the following sections. For the authoritative source, please refer to the approved specifications from HITSP.

C32 Patient Summary

The HITSP Summary Documents Using HL7 Continuity of Care Document (CCD) Component describes the document content summarizing a consumer's medical status for the purpose of information exchange. The content may include administrative (e.g., registration, demographics, insurance, etc.) and clinical (problem list, medication list, allergies, test results, etc) information. Any specific use of this Component by another HITSP specification may constrain the content further based upon the requirements and context of the document exchange. This specification defines content in order to promote interoperability between participating systems. Any given system creating or consuming the document may contain much more information than conveyed by this specification. Such systems may include Personal Health Record Systems (.1.s), Electronic Health Record Systems (EHRs), Practice Management Applications and other persons and systems as identified and permitted.

This Component is essentially a subset of the healthcare data that has been developed for specific business Use Cases. This subset contains the minimum critical or pertinent medical information sections as specified by the business case. Information conveyed according to the Component Construct is a representative extract of the information available on the creating system. The information in the HITSP Summary Documents Using HL7 Continuity of Care Document (CCD) Component and the creating systems must be consistent. Furthermore there should be no data elsewhere in the creating systemthat would contradict the meaning of any data in this construct. The expectation is that consuming systems will be able to use this specification as a source of information to input and/or update information in their instantiation of the healthcare record. This specification does not define the policies applicable to the import of this information.

It is anticipated and desirable that some implementers of the HITSP Summary Documents Using HL7 Continuity of Care Document (CCD) Component will want to add data and sections to permit greater communication between systems. The underlying standards (primarily HL7 CCD – Continuity of Care Document) have additional modules that may serve such purposes. This practice is beyond the scope of this HITSP Component. Implementers should be aware that they must assume that receivers of the document may only be able to view or process content modules as described in this specification, and may not be able to use the additional modules in the document. This means that the HITSP Summary Documents Using HL7 Continuity of Care Document (CCD) Component must be able to stand-alone. Applications may wish to display the document in two different user-selected views, one of which is restricted to the minimal dataset contents of this component. Adding optional sections and data elements should not generate errors. Optional data should be used if understood by the receiving system, but must not change the meaning of the document.

This Component refers to the HITSP 2008 work cycle. It expands upon the prior version of the specification for a consumer’s registration/medication history information to include content to support the consumer's access to clinical information, medication management activities and supportive information for quality of care assessment.

C83 Content Modules

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.

C80 Clinical Document and Message Terminology

The purpose of the Health Information Technology Standards Panel (HITSP) Clinical Document and Message Terminology Component is to define the vocabulary for either document-based or message-based HITSP constructs such as Clinical Document Architecture (CDA) documents, HL7 V2 messages, etc. For more in-depth information about how this Component relates to other HITSP constructs, see HITSP/TN901 Clinical Documents.

Approach

Working with an initial portion of the data provides the opportunity to work with the data from the perspective of the underlying model and electronic format and to explore many design issues thoroughly. Taking this as an initial step ensures that the data set developers and standards community can reach consensus prior to the larger commitment of time that would be required to bring the full data set into standard format.

This project supports reusability and ease of data collection through a standard data representation harmonized with work developed through Health Information Technology Expert Panel (HITEP), balloted through Health Level Seven (HL7) and/or recognized by the Health Information Technology Standards Panel (HITSP).

This implementation guide (IG) specifies a standard for electronic submission of NCRs in a Clinical Document Architecture (CDA), Release 2 format.

Scope

TODO: scope of this implementation guide.

Audience

The audience for this document includes software developers and implementers who wish to develop...

Organization of This Guide

The requirements as laid out in the body of this document are subject to change per the policy on implementation guides (see section 13.02" Draft Standard for Trial Use Documents" within the HL7 Governance and Operations Manual, *http://www.hl7.org/documentcenter/public/membership/HL7_Governance_and_Operations_Manual.pdf*).

Templates

Templates are organized by document (see Document Templates), by section (see Section Templates), and by clinical statements (see Clinical Statement Templates). Within a section, templates are arranged hierarchically, where a more specific template is nested under the more generic template that it conforms to. See Templates by Containment for a listing of the higher level templates by containment; the appendix Templates Used in This Guide includes a table of all of the templates Organized Hierarchically.

Vocabulary and Value Sets

Vocabularies recommended in this guide are from standard vocabularies. When SNOMED codes are used, rules defined in Using SNOMED CT in HL7 Version 3 are adhered to. In many cases, these vocabularies are further constrained into value sets for use within this guide. Value set names and OIDs are summarized in the table Summary

of Value Sets. Each named value set in this summary table is stored in a template database that will be maintained by CHCA.

Use of Templates

When valued in an instance, the template identifier (`templateId`) signals the imposition of a set of template-defined constraints. The value of this attribute provides a unique identifier for the templates in question.

Originator Responsibilities

An originator can apply a `templateId` to assert conformance with a particular template.

In the most general forms of CDA exchange, an originator need not apply a `templateId` for every template that an object in an instance document conforms to. This implementation guide asserts when `templateId`s are required for conformance.

Recipient Responsibilities

A recipient may reject an instance that does not contain a particular `templateId` (e.g., a recipient looking to receive only CCD documents can reject an instance without the appropriate `templateId`).

A recipient may process objects in an instance document that do not contain a `templateId` (e.g., a recipient can process entries that contain Observation acts within a Problems section, even if the entries do not have `templateId`s).

Conventions Used in This Guide

Conformance Requirements

Conformance statements are grouped and identified by the name of the template, along with the templateId and the context of the template (e.g., ClinicalDocument, section, observation), which specifies the element under constraint. If a template is a specialization of another template, its first constraint indicates the more general template. In all cases where a more specific template conforms to a more general template, asserting the more specific template also implies conformance to the more general template. An example is shown below.

Template name

`[<type of template>: templateId <XXXX.XX.XXX.XXX>]`

Description of the template will be here .....

1. Conforms to <The template name> Template (templateId: XXXX<XX>XXX>YYY).
2. **SHALL** contain [1..1] @classCode = <AAA> <code display name> (CodeSystem: 123.456.789 <XXX> Class) **STATIC** (CONF:<number>).
3. .....

Figure 1: Template name and "conforms to" appearance

The conformance verb keyword at the start of a constraint (**SHALL** , **SHOULD** , **MAY**, etc.) indicates business conformance, whereas the cardinality indicator (0..1, 1..1, 1..*, etc.) specifies the allowable occurrences within an instance. Thus, " **MAY** contain 0..1" and " **SHOULD** contain 0..1" both allow for a document to omit the particular component, but the latter is a stronger recommendation that the component be included if it is known.

The following cardinality indicators may be interpreted as follows:

0..1 as zero to one present
1..1 as one and only one present
2..2 as two must be present

1..* as one or more present
0..* as zero to many present

Value set bindings adhere to HL7 Vocabulary Working Group best practices, and include both a conformance verb (**SHALL** , **SHOULD** , **MAY,** etc.) and an indication of **DYNAMIC** vs. **STATIC** binding. The use of **SHALL** requires that the component be valued with a member from the cited value set; however, in every case any HL7 "null" value such as other (OTH) or unknown (UNK) may be used.

Each constraint is uniquely identified (e.g., "CONF:605") by an identifier placed at or near the end of the constraint. These identifiers are not sequential as they are based on the order of creation of the constraint.

1. **SHALL** contain [1..1] component/structuredBody (CONF:4082).
    a. This component/structuredBody **SHOULD** contain [0..1] component (CONF:4130) such that it
        a. **SHALL** contain [1..1] Reporting Parameters section (templateId:2.16.840.1.113883.10.20.17.2.1) (CONF:4131).
    b. This component/structuredBody **SHALL** contain [1..1] component (CONF:4132) such that it
        a. **SHALL** contain [1..1] Patient data section - NCR (templateId:2.16.840.1.113883.10.20.17.2.5) (CONF:4133).

Figure 2: Template-based conformance statements example

CCD templates are included within this implementation guide for ease of reference. CCD templates contained within this implementation guide are formatted WITHOUT typical **KEYWORD** and **XML** element styles. A WIKI site is available if you would like to make a comment to be considered for the next release of CCD: *http://wiki.hl7.org/index.php?title=CCD_Suggested_Enhancements* The user name and password are: wiki/wikiwiki. You will need to create an account to edit the page and add your suggestion.

1. The value for "Observation / @moodCode" in a problem observation SHALL be "EVN" 2.16.840.1.113883.5.1001 ActMood STATIC. (CONF: 814).
2. A problem observation SHALL include exactly one Observation / statusCode. (CONF: 815).
3. The value for "Observation / statusCode" in a problem observation SHALL be "completed" 2.16.840.1.113883.5.14 ActStatus STATIC. (CONF: 816).
4. A problem observation SHOULD contain exactly one Observation / effectiveTime, to indicate the biological timing of condition (e.g. the time the condition started, the onset of the illness or symptom, the duration of a condition). (CONF: 817).

Figure 3: CCD conformance statements example

Keywords

The keywords SHALL, SHALL NOT, SHOULD, SHOULD NOT, MAY, and NEED NOT in this document are to be interpreted as described in the *HL7 Version 3 Publishing Facilitator's Guide*:

- **SHALL**: an absolute requirement
- **SHALL NOT**: an absolute prohibition against inclusion
- **SHOULD/SHOULD NOT**: valid reasons to include or ignore a particular item, but must be understood and carefully weighed
- **MAY/NEED NOT**: truly optional; can be included or omitted as the author decides with no implications

XML Examples

XML samples appear in various figures in this document in a fixed-width font. Portions of the XML content may be omitted from the content for brevity, marked by an ellipsis (…) as shown in the example below.

```
<ClinicalDocument xmlns='urn:h17-org:v3'>
  ...
</ClinicalDocument>
```

Figure 4: ClinicalDocument example

XPath expressions are used in the narrative and conformance requirements to identify elements because they are familiar to many XML implementers.

Chapter 2

DOCUMENT TEMPLATES

Topics:

This section contains the document level constraints for CDA documents that are compliant with this implementation guide.

Patient Summary

[ClinicalDocument: templateId `2.16.840.1.113883.3.88.11.32.1`]

1. Conforms to *CCD Continuity Of Care Document* template (templateId: `2.16.840.1.113883.10.20.1`)
2. Conforms to *CDT General Header Constraints* template (templateId: `2.16.840.1.113883.10.20.3`)
3. Conforms to *RIM Infrastructure Root*
4. Conforms to *RIM Act*
5. Conforms to *CDA Clinical Document*
6. Conforms to *IHE Medical Document* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.1.1`)
7. [CCD] **SHOULD** contain [0..1] `component`, such that it
   a. contains *CCD Problem Section* (templateId: `2.16.840.1.113883.10.20.1.11`)
8. [CCD] **SHOULD** contain [0..1] `component`, such that it
   a. contains *CCD Family History Section* (templateId: `2.16.840.1.113883.10.20.1.4`)
9. [CCD] **SHOULD** contain [0..1] `component`, such that it
   a. contains *CCD Social History Section* (templateId: `2.16.840.1.113883.10.20.1.15`)
10. [CCD] **SHOULD** contain [0..1] `component`, such that it
    a. contains *CCD Alerts Section* (templateId: `2.16.840.1.113883.10.20.1.2`)
11. [HITSP] **C32-[CT1-11]: MAY** contain [0..1] `component`, such that it
    a. contains *Medications Section* (templateId: `2.16.840.1.113883.3.88.11.83.112`)
12. [CCD] **SHOULD** contain [0..1] `component`, such that it
    a. contains *CCD Results Section* (templateId: `2.16.840.1.113883.10.20.1.14`)
13. [CCD] **SHOULD** contain [0..1] `component`, such that it
    a. contains *CCD Procedures Section* (templateId: `2.16.840.1.113883.10.20.1.12`)
14. [HITSP] **C32-[CT1-5]: MAY** contain [0..1] `component`, such that it
    a. contains *Encounters Section* (templateId: `2.16.840.1.113883.3.88.11.83.127`)
15. [CCD] **SHOULD** contain [0..1] `component`, such that it
    a. contains *CCD Plan Of Care Section* (templateId: `2.16.840.1.113883.10.20.1.10`)
16. [HITSP] **C32-[CT1-7]: MAY** contain [0..1] `component`, such that it
    a. contains *Immunizations Section* (templateId: `2.16.840.1.113883.3.88.11.83.117`)
17. [CCD] **SHOULD** contain [0..1] `component`, such that it
    a. contains *CCD Vital Signs Section* (templateId: `2.16.840.1.113883.10.20.1.16`)
18. [CCD] **SHOULD** contain [0..1] `component`, such that it
    a. contains *CCD Medical Equipment Section* (templateId: `2.16.840.1.113883.10.20.1.7`)
19. [CCD] **SHOULD** contain [0..1] `component`, such that it
    a. contains *CCD Functional Status Section* (templateId: `2.16.840.1.113883.10.20.1.5`)
20. [HITSP] **C32-[CT1-1]: MAY** contain [0..1] `component`, such that it
    a. contains *Advance Directives Section* (templateId: `2.16.840.1.113883.3.88.11.83.116`)
21. [HITSP] **C32-[CT1-9]: MAY** contain [0..1] `component`, such that it
    a. contains *Payers Section* (templateId: `2.16.840.1.113883.3.88.11.83.101`)
22. [CDT] **CONF-HP-21: SHALL** contain [1..1] `code`
23. [CDT] **CONF-HP-24: SHALL** contain [1..1] `languageCode`
24. [CCD] **CONF-15: MAY** contain [0..1] `component`, such that it
    a. contains *CCD Purpose Section* (templateId: `2.16.840.1.113883.10.20.1.13`)
25. [CDT] **SHALL** contain [1..1] `confidentialityCode`

26. [CDT] **CONF-HP-23: SHALL** contain [1..1] `effectiveTime`
27. [CDT] **SHALL** contain [1..1] `id`
28. [CDT] **SHALL** contain [1..1] `realmCode/@code` = "US"
29. [CDT] **CONF-HP-22: SHALL** contain [1..1] `title`
30. [CDT] **SHALL** contain [1..1] `typeId`
31. [HITSP] **C32-[CT1-2]: MAY** contain [0..1] `component`, such that it
  a. contains *Allergies Reactions Section* (templateId: `2.16.840.1.113883.3.88.11.83.102`)
32. [HITSP] **C32-[CT1-3]: MAY** contain [0..*] `component`, such that it
  a. contains *Comment* (templateId: `2.16.840.1.113883.3.88.11.83.11`)
33. [HITSP] **C32-[CT1-4]: MAY** contain [0..1] `component`, such that it
  a. contains *Problem List Section* (templateId: `2.16.840.1.113883.3.88.11.83.103`)
34. [HITSP] **MAY** contain [0..1] `component`, such that it
  a. contains *Surgeries Section* (templateId: `2.16.840.1.113883.3.88.11.83.108`)
35. [CCD] **CONF-2: SHALL** satisfy: Contains exactly one documentationOf / serviceEvent
36. [CCD] **CONF-3: SHALL** satisfy: documentationOf / serviceEvent / @classCode SHALL be 'PCPR'
37. [CCD] **CONF-4: SHALL** satisfy: documentationOf / serviceEvent contains exactly one serviceEvent / effectiveTime / low and exactly one serviveEvent / effectiveTime / high
38. [CCD] **CONF-6: SHALL** satisfy: languageCode has the form nn, or nn-CC. The nn portion SHALL be an ISO-639-1 language code in lower case. The CC portion, if present, SHALL be an ISO-3166 country code in upper case
39. [CCD] **CONF-8: SHALL** satisfy: SHALL NOT contain templateId / @extension
40. [CCD] **CONF-9: SHALL** satisfy: effectiveTime is expressed with precision to include seconds
41. [CCD] **CONF-10: SHALL** satisfy: effectiveTime includes an explicit time zone offset
42. [CCD] **CONF-11: SHALL** satisfy: Contains one or two recordTarget
43. [CCD] **CONF-12: SHOULD** satisfy: Contains one or more author / assignedAuthor / assignedPerson and/or author / assignedAuthor / representedOrganization
44. [CCD] **CONF-13: SHALL** satisfy: If author has an associated representedOrganization with no assignedPerson or assignedAuthoringDevice, then the value for author / assignedAuthor / id / @NullFlavor SHALL be 'NA'
45. [CCD] **CONF-14: MAY** satisfy: Contains one or more informationRecipient
46. [CCD] **CONF-28: MAY** satisfy: The value for component / structuredBody / component / section / entry / @typeCode MAY be 'DRIV' "is derived from" 2.16.840.1.113883.5.1002 ActRelationshipType STATIC, to indicate that the CDA Narrative Block is fully derived from the structured entries.
47. [CCD] **CONF-29: SHOULD** satisfy: A CCD entry SHOULD explicitly reference its corresponding narrative (using the approach defined in CDA Release 2, section 4.3.5.1 <content>).
48. [CDT] **CONF-HP-16: SHALL** satisfy: The extension attribute of the typeId element SHALL be POCD_HD000040.
49. [CDT] **CONF-HP-17: SHALL** satisfy: The ClinicalDocument/id element SHALL be present. The ClinicalDocument/id/@root attribute SHALL be a syntactically correct UUID or OID.
50. [CDT] **CONF-HP-18: SHALL** satisfy: UUIDs SHALL be represented in the form XXXXXXXX-XXXX-XXXX-XXXXXXXXXXXXXXXX, where each X is a character from the set [A-Fa-f0-9].
51. [CDT] **CONF-HP-19: SHALL** satisfy: OIDs SHALL be represented in dotted decimal notation, where each decimal number is either 0, or starts with a nonzero digit. More formally, an OID SHALL be in the form ([0-2])(.([1-9][0-9]*|0))+.
52. [CDT] **CONF-HP-20: SHALL** satisfy: OIDs SHALL be no more than 64 characters in length.
53. [CDT] **CONF-HP-25: SHALL** satisfy: languageCode SHALL be in the form nn, or nn-CC.
54. [CDT] **CONF-HP-26: SHALL** satisfy: The nn portion of languageCode SHALL be a legal ISO-639-1 language code in lowercase.
55. [CDT] **CONF-HP-27: SHALL** satisfy: The CC portion languageCode, if present, SHALL be an ISO-3166 country code in uppercase.
56. [CDT] **CONF-HP-28: SHALL** satisfy: Both setId and versionNumber SHALL be present or both SHALL be absent.
57. [CDT] **CONF-HP-29: SHALL** satisfy: The @extension and/or @root of setId and id SHALL be different when both are present.
58. [CDT] **CONF-HP-30: SHALL** satisfy: A copyTime element SHALL NOT be present.

59. [HITSP] **C32-[CT1-6]: MAY** satisfy: Contains 0..* HealthcareProvider in cda:documentationOf/cda:serviceEvent/cda:performer

60. [HITSP] **C32-[CT1-8]: SHALL** satisfy: Contains 0..* InformationSource in ancestor-or-self::./cda:author[1]

61. [HITSP] **C32-[CT1-10]: SHOULD** satisfy: Contains 0..* LanguageSpoken in cda:recordTarget/cda:patientRole/cda:patient/cda:languageCommunication

62. [HITSP] **C32-[CT1-12]: SHALL** satisfy: Contains 1..1 Person Information in cda:recordTarget/cda:patientRole

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <realmCode code="US"/>
  <templateId root="2.16.840.1.113883.10.20.1" assigningAuthorityName="CCD
 Continuity Of Care Document"/>
  <templateId root="2.16.840.1.113883.10.20.3" assigningAuthorityName="CDT
 General Header Constraints"/>
  <templateId root="1.3.6.1.4.1.19376.1.5.3.1.1.1" assigningAuthorityName="IHE
 Medical Document"/>
  <templateId root="2.16.840.1.113883.3.88.11.32.1"
 assigningAuthorityName="HITSP Patient Summary"/>
  <id root="13a912a3-1493-4d63-ba26-b6c8934002de"/>
  <code code="34133-9" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="Summarization of episode note"/>
  <title/>
  <effectiveTime/>
  <confidentialityCode/>
  <languageCode/>
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.1.1"
 assigningAuthorityName="CCD Advance Directives Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.34"
 assigningAuthorityName="IHE Advance Directives Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.35"
 assigningAuthorityName="IHE Coded Advance Directives Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.116"
 assigningAuthorityName="HITSP Advance Directives Section"/>
          <code code="42348-3" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="Advance directives"/>
          <title>Advance directives</title>
        </section>
      </component>
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.1.2"
 assigningAuthorityName="CCD Alerts Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.13"
 assigningAuthorityName="IHE Allergies Reactions Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.102"
 assigningAuthorityName="HITSP Allergies Reactions Section"/>
          <code code="48765-2" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="Allergies, adverse reactions, alerts"/>
          <title>Allergies, adverse reactions, alerts</title>
        </section>
      </component>
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.1.11"
 assigningAuthorityName="CCD Problem Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.6"
 assigningAuthorityName="IHE Active Problems Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.103"
 assigningAuthorityName="HITSP Problem List Section"/>
```

```
          <code code="11450-4" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC" displayName="Problem list"/>
          <title>Problem list</title>
        </section>
      </component>
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.1.3"
assigningAuthorityName="CCD Encounters Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.1.5.3.3"
assigningAuthorityName="IHE Encounter History Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.127"
assigningAuthorityName="HITSP Encounters Section"/>
          <code code="46240-8" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC" displayName="History of encounters"/>
          <title>History of encounters</title>
        </section>
      </component>
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.1.6"
assigningAuthorityName="CCD Immunizations Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.23"
assigningAuthorityName="IHE Immunizations Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.117"
assigningAuthorityName="HITSP Immunizations Section"/>
          <code code="11369-6" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC" displayName="History of immunizations"/>
          <title>History of immunizations</title>
        </section>
      </component>
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.1.9"
assigningAuthorityName="CCD Payers Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.1.5.3.7"
assigningAuthorityName="IHE Payers Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.101"
assigningAuthorityName="HITSP Payers Section"/>
          <code code="48768-6" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC" displayName="Payment sources"/>
          <title>Payment sources</title>
        </section>
      </component>
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.1.8"
assigningAuthorityName="CCD Medications Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.19"
assigningAuthorityName="IHE Medications Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.112"
assigningAuthorityName="HITSP Medications Section"/>
          <code code="10160-0" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC" displayName="History of medication use"/>
          <title>History of medication use</title>
        </section>
      </component>
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.1.12"
assigningAuthorityName="CCD Procedures Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.11"
assigningAuthorityName="IHE Surgeries Section"/>
```

```
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.12"
 assigningAuthorityName="IHE Coded Surgeries Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.108"
 assigningAuthorityName="HITSP Surgeries Section"/>
          <code code="47519-4" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="History of procedures"/>
          <title>History of procedures</title>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 5: Patient Summary example

Chapter 3

SECTION TEMPLATES

Topics:

Admission Medication History Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.113`]

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

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *IHE Admission Medication History Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.20`)
5. [IHE] **SHALL** contain [1..1] `code/@code` = "42346-7" *MEDICATIONS ON ADMISSION* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.20"
 assigningAuthorityName="IHE Admission Medication History Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.113"
 assigningAuthorityName="HITSP Admission Medication History Section"/>
          <code code="42346-7" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="MEDICATIONS ON ADMISSION"/>
          <title>MEDICATIONS ON ADMISSION</title>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 6: Admission Medication History Section example

Advance Directives Section

[Section: templateId `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.

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *CCD Advance Directives Section* template (templateId: `2.16.840.1.113883.10.20.1.1`)
5. Conforms to *IHE Advance Directives Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.34`)
6. Conforms to *IHE Coded Advance Directives Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.35`)
7. [CCD] **SHALL** contain [1..1] `code/@code` = "42348-3" *Advance directives* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)
8. [CCD] **SHALL** contain [1..1] `title`
9. [CCD] **SHALL** contain [1..*] `entry`, such that it
   a. contains *CCD Advance Directive Observation* (templateId: `2.16.840.1.113883.10.20.1.17`)

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
```

```
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.1.1"
 assigningAuthorityName="CCD Advance Directives Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.34"
 assigningAuthorityName="IHE Advance Directives Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.35"
 assigningAuthorityName="IHE Coded Advance Directives Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.116"
 assigningAuthorityName="HITSP Advance Directives Section"/>
          <code code="42348-3" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="Advance directives"/>
          <title>Advance directives</title>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 7: Advance Directives Section example

Allergies Reactions Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.102`]

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.

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *CCD Alerts Section* template (templateId: `2.16.840.1.113883.10.20.1.2`)
5. Conforms to *IHE Allergies Reactions Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.13`)
6. [CCD] **SHALL** contain [1..1] `code/@code` = "48765-2" *Allergies, adverse reactions, alerts* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)
7. [CCD] **SHALL** contain [1..1] `title`
8. [CCD] **SHALL** contain [1..1] `text`
9. [CCD] **SHOULD** contain [1..*] `entry`, such that it
   a. contains *CCD Problem Act* (templateId: `2.16.840.1.113883.10.20.1.27`)
10. [CCD] **SHOULD** satisfy: Contains a case-insensitive language-insensitive string containing "alert" and/or "allergies and adverse reactions".
11. [CCD] **SHALL** satisfy: The absence of known allergies, adverse reactions or alerts SHALL be explicitly asserted.

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.1.2"
 assigningAuthorityName="CCD Alerts Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.13"
 assigningAuthorityName="IHE Allergies Reactions Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.102"
 assigningAuthorityName="HITSP Allergies Reactions Section"/>
          <code code="48765-2" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="Allergies, adverse reactions, alerts"/>
```

```
          <title>Allergies, adverse reactions, alerts</title>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 8: Allergies Reactions Section example

Assessment And Plan Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.123`]

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.

NOTE : 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.

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *IHE Assessment And Plan Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.1.13.2.5`)
5. [IHE] **SHALL** contain [1..1] `code/@code` = "51847-2" *ASSESSMENT AND PLAN* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.1.13.2.5"
 assigningAuthorityName="IHE Assessment And Plan Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.123"
 assigningAuthorityName="HITSP Assessment And Plan Section"/>
          <code code="51847-2" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="ASSESSMENT AND PLAN"/>
          <title>ASSESSMENT AND PLAN</title>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 9: Assessment And Plan Section example

Chief Complaint Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.105`]

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

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *IHE Chief Complaint Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1`)
5. [IHE] **SHALL** contain [1..1] `code/@code` = "10154-3" *CHIEF COMPLAINT* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1"
 assigningAuthorityName="IHE Chief Complaint Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.105"
 assigningAuthorityName="HITSP Chief Complaint Section"/>
          <code code="10154-3" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="CHIEF COMPLAINT"/>
          <title>CHIEF COMPLAINT</title>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 10: Chief Complaint Section example

Diagnostic Results Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.122`]

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

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *IHE Coded Results Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.28`)
5. [IHE] **SHALL** contain [1..1] `code/@code` = "30954-2" *STUDIES SUMMARY* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.28"
 assigningAuthorityName="IHE Coded Results Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.122"
 assigningAuthorityName="HITSP Diagnostic Results Section"/>
          <code code="30954-2" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="STUDIES SUMMARY"/>
          <title>STUDIES SUMMARY</title>
        </section>
      </component>
    </structuredBody>
  </component>
```

```
</ClinicalDocument>
```

Figure 11: Diagnostic Results Section example

Discharge Diagnosis Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.111`]

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.

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *IHE Discharge Diagnosis Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.7`)
5. [IHE] **SHALL** contain [1..1] `code/@code` = "11535-2" *HOSPITAL DISCHARGE DX* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.7"
 assigningAuthorityName="IHE Discharge Diagnosis Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.111"
 assigningAuthorityName="HITSP Discharge Diagnosis Section"/>
          <code code="11535-2" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="HOSPITAL DISCHARGE DX"/>
          <title>HOSPITAL DISCHARGE DX</title>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 12: Discharge Diagnosis Section example

Encounters Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.127`]

The Encounter 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.

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *CCD Encounters Section* template (templateId: `2.16.840.1.113883.10.20.1.3`)
5. Conforms to *IHE Encounter History Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.1.5.3.3`)
6. [CCD] **SHALL** contain [1..1] `code/@code` = "46240-8" *History of encounters* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)
7. [CCD] **SHALL** contain [1..1] `title`
8. [HITSP] **SHALL** contain [1..*] `entry`, such that it
   a. contains *Encounter* (templateId: `2.16.840.1.113883.3.88.11.83.16`)

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.1.3"
 assigningAuthorityName="CCD Encounters Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.1.5.3.3"
 assigningAuthorityName="IHE Encounter History Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.127"
 assigningAuthorityName="HITSP Encounters Section"/>
          <code code="46240-8" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="History of encounters"/>
          <title>History of encounters</title>
          <entry>
            <encounter classCode="ENC" moodCode="EVN">
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.14"/>
              <templateId root="2.16.840.1.113883.10.20.1.21"
 assigningAuthorityName="CCD Encounters Activity"/>
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.14"/>
              <templateId root="2.16.840.1.113883.3.88.11.83.16"
 assigningAuthorityName="HITSP Encounter"/>
              <id root="56cf1ff0-92d0-43f6-bd36-c8efc33866ed"/>
              <code codeSystem="2.16.840.1.113883.6.12"
 codeSystemName="CPT-4"/>
              <text/>
              <effectiveTime>
                <low value="1972"/>
                <high value="2008"/>
              </effectiveTime>
              <priorityCode/>
            </encounter>
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 13: Encounters Section example

Family History Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.125`]

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.

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *CCD Family History Section* template (templateId: `2.16.840.1.113883.10.20.1.4`)
5. Conforms to *IHE Family Medical History Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.14`)
6. [CCD] **SHALL** contain [1..1] `code/@code` = "10157-6" *History of family member diseases* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)
7. [CCD] **SHALL** contain [1..1] `title`

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
```

```
    <structuredBody>
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.1.4"
 assigningAuthorityName="CCD Family History Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.14"
 assigningAuthorityName="IHE Family Medical History Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.125"
 assigningAuthorityName="HITSP Family History Section"/>
          <code code="10157-6" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="History of family member diseases"/>
          <title>History of family member diseases</title>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 14: Family History Section example

Functional Status Section

[Section: templateId `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.

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *CCD Functional Status Section* template (templateId: `2.16.840.1.113883.10.20.1.5`)
5. [CCD] **SHALL** contain [1..1] `code/@code` = "47420-5" *Functional status assessment* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)
6. [CCD] **SHALL** contain [1..1] `title`
7. [CCD] **CONF-123: SHOULD** satisfy: Contains one or more Problem Act and/or Result Organizer

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.1.5"
 assigningAuthorityName="CCD Functional Status Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.109"
 assigningAuthorityName="HITSP Functional Status Section"/>
          <code code="47420-5" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="Functional status assessment"/>
          <title>Functional status assessment</title>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 15: Functional Status Section example

History Of Past Illness Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.104`]

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

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *IHE History Of Past Illness Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.8`)
5. [IHE] **SHALL** contain [1..1] `code/@code` = "11348-0" *HISTORY OF PAST ILLNESS* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.8"
 assigningAuthorityName="IHE History Of Past Illness Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.104"
 assigningAuthorityName="HITSP History Of Past Illness Section"/>
          <code code="11348-0" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="HISTORY OF PAST ILLNESS"/>
          <title>HISTORY OF PAST ILLNESS</title>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 16: History Of Past Illness Section example

History Of Present Illness

[Section: templateId `2.16.840.1.113883.3.88.11.83.107`]

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

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *IHE History Of Present Illness* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.4`)
5. [IHE] **SHALL** contain [1..1] `code/@code` = "10164-2" *HISTORY OF PRESENT ILLNESS* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.4"
 assigningAuthorityName="CDT History Of Present Illness"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.107"
 assigningAuthorityName="HITSP History Of Present Illness"/>
          <code code="10164-2" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="HISTORY OF PRESENT ILLNESS"/>
          <title>HISTORY OF PRESENT ILLNESS</title>
        </section>
      </component>
    </structuredBody>
  </component>
```

```
</ClinicalDocument>
```

Figure 17: History Of Present Illness example

Hospital Admission Diagnosis Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.110`]

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

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *IHE Hospital Admission Diagnosis Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.3`)
5. [IHE] **SHALL** contain [1..1] `code/@code` = "46241-6" *HOSPITAL ADMISSION DX* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.3"
 assigningAuthorityName="IHE Hospital Admission Diagnosis Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.110"
 assigningAuthorityName="HITSP Hospital Admission Diagnosis Section"/>
          <code code="46241-6" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="HOSPITAL ADMISSION DX"/>
          <title>HOSPITAL ADMISSION DX</title>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 18: Hospital Admission Diagnosis Section example

Hospital Course Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.121`]

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

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *IHE Hospital Course Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.5`)
5. [IHE] **SHALL** contain [1..1] `code/@code` = "8648-8" *HOSPITAL COURSE* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
```

```
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.5"
 assigningAuthorityName="IHE Hospital Course Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.121"
 assigningAuthorityName="HITSP Hospital Course Section"/>
          <code code="8648-8" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="HOSPITAL COURSE"/>
          <title>HOSPITAL COURSE</title>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 19: Hospital Course Section example

Hospital Discharge Medications Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.114`]

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.

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *IHE Hospital Discharge Medications Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.22`)
5. [IHE] **SHALL** contain [1..1] `code/@code` = "10183-2" *HOSPITAL DISCHARGE MEDICATIONS* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.22"
 assigningAuthorityName="IHE Hospital Discharge Medications Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.114"
 assigningAuthorityName="HITSP Hospital Discharge Medications Section"/>
          <code code="10183-2" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="HOSPITAL DISCHARGE MEDICATIONS"/>
          <title>HOSPITAL DISCHARGE MEDICATIONS</title>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 20: Hospital Discharge Medications Section example

Immunizations Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.117`]

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

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*

4. Conforms to *CCD Immunizations Section* template (templateId: `2.16.840.1.113883.10.20.1.6`)
5. Conforms to *IHE Immunizations Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.23`)
6. [CCD] **SHALL** contain [1..1] `code/@code` = "11369-6" *History of immunizations* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)
7. [CCD] **SHALL** contain [1..1] `title`
8. [CCD] **SHALL** contain [1..1] `text`
9. [HITSP] **SHALL** contain [1..*] `entry`, such that it
    a. contains *Immunization* (templateId: `2.16.840.1.113883.3.88.11.83.13`)
10. [CCD] **SHOULD** satisfy: Contains a case-insensitive language-insensitive string containing 'immunization'.
11. [CCD] **CONF-376: SHOULD** satisfy: Contains one or more Medication Activity and/or Supply Activity

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.1.6"
 assigningAuthorityName="CCD Immunizations Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.23"
 assigningAuthorityName="IHE Immunizations Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.117"
 assigningAuthorityName="HITSP Immunizations Section"/>
          <code code="11369-6" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="History of immunizations"/>
          <title>History of immunizations</title>
          <entry>
            <substanceAdministration classCode="SBADM">
              <templateId root="2.16.840.1.113883.10.20.1.24"
 assigningAuthorityName="CCD Medication Activity"/>
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.12"
 assigningAuthorityName="IHE Immunization"/>
              <templateId root="2.16.840.1.113883.3.88.11.83.13"
 assigningAuthorityName="HITSP Immunization"/>
              <id root="d8115124-d099-4572-9103-b4c657e95449"/>
              <statusCode/>
            </substanceAdministration>
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 21: Immunizations Section example

Medical Equipment Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.128`]

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.

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *CCD Medical Equipment Section* template (templateId: `2.16.840.1.113883.10.20.1.7`)
5. Conforms to *IHE Medical Devices Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.1.5.3.5`)

6. [CCD] **SHALL** contain [1..1] `code/@code` = "46264-8" *History of medical device use* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)
7. [CCD] **SHALL** contain [1..1] `title`

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.1.7"
 assigningAuthorityName="CCD Medical Equipment Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.1.5.3.5"
 assigningAuthorityName="IHE Medical Devices Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.128"
 assigningAuthorityName="HITSP Medical Equipment Section"/>
          <code code="46264-8" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="History of medical device use"/>
          <title>History of medical device use</title>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 22: Medical Equipment Section example

Medications Administered Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.115`]

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

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *IHE Medications Administered Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.21`)
5. [IHE] **SHALL** contain [1..1] `code/@code` = "18610-6" *MEDICATION ADMINISTERED* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.21"
 assigningAuthorityName="IHE Medications Administered Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.115"
 assigningAuthorityName="HITSP Medications Administered Section"/>
          <code code="18610-6" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="MEDICATION ADMINISTERED"/>
          <title>MEDICATION ADMINISTERED</title>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 23: Medications Administered Section example

Medications Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.112`]

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

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *CCD Medications Section* template (templateId: `2.16.840.1.113883.10.20.1.8`)
5. Conforms to *IHE Medications Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.19`)
6. [CCD] **SHALL** contain [1..1] `code/@code` = "10160-0" *History of medication use* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)
7. [CCD] **SHALL** contain [1..1] `title`

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.1.8"
 assigningAuthorityName="CCD Medications Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.19"
 assigningAuthorityName="IHE Medications Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.112"
 assigningAuthorityName="HITSP Medications Section"/>
          <code code="10160-0" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="History of medication use"/>
          <title>History of medication use</title>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 24: Medications Section example

Payers Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.101`]

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, et cetera).

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *CCD Payers Section* template (templateId: `2.16.840.1.113883.10.20.1.9`)
5. Conforms to *IHE Payers Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.1.5.3.7`)
6. [CCD] **CONF-31, CONF-32: SHALL** contain [1..1] `code/@code` = "48768-6" *Payment sources* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)
7. [CCD] **CONF-33: SHALL** contain [1..1] `title`
8. [CCD] **CONF-30: SHOULD** contain [1..*] `entry`, such that it

   a. contains *CCD Coverage Activity* (templateId: `2.16.840.1.113883.10.20.1.20`)
9. [CCD] **CONF-30: SHALL** contain [1..1] `text`
10. [IHE] **SHOULD** contain [1..*] `entry`, such that it
   a. contains *IHE Coverage Entry* (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.17`)
11. [CCD] **CONF-34: SHOULD** satisfy: Contains a case-insensitive language-insensitive string containing 'insurance' or 'payers'.

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.1.9"
 assigningAuthorityName="CCD Payers Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.1.5.3.7"
 assigningAuthorityName="IHE Payers Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.101"
 assigningAuthorityName="HITSP Payers Section"/>
          <code code="48768-6" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="Payment sources"/>
          <title>Payment sources</title>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 25: Payers Section example

Physical Exam Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.118`]

The Physical Examination Section contains information describing the physical findings.

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *IHE Physical Exam Narrative Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.24`)
5. Conforms to *IHE Physical Exam Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.1.9.15`)
6. [IHE] **SHALL** contain [1..1] `code/@code` = "29545-1" *PHYSICAL EXAMINATION* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.24"
 assigningAuthorityName="IHE Physical Exam Narrative Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.1.9.15"
 assigningAuthorityName="IHE Physical Exam Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.118"
 assigningAuthorityName="HITSP Physical Exam Section"/>
          <code code="29545-1" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="PHYSICAL EXAMINATION"/>
```

```
          <title>PHYSICAL EXAMINATION</title>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 26: Physical Exam Section example

Plan Of Care Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.124`]

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.

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *CCD Plan Of Care Section* template (templateId: `2.16.840.1.113883.10.20.1.10`)
5. Conforms to *IHE Care Plan Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.31`)
6. [CCD] **SHALL** contain [1..1] `code/@code` = "18776-5" *Treatment plan* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)
7. [CCD] **SHALL** contain [1..1] `title`
8. [CCD] **SHALL** contain [1..1] `text`
9. [CCD] **MAY** contain [0..1] `entry`, such that it
   a. contains *CCD Plan Of Care Activity Act* (templateId: `2.16.840.1.113883.10.20.1.25`)
10. [CCD] **MAY** contain [0..1] `entry`, such that it
    a. contains *CCD Plan Of Care Activity Encounter* (templateId: `2.16.840.1.113883.10.20.1.25`)
11. [CCD] **MAY** contain [0..1] `entry`, such that it
    a. contains *CCD Plan Of Care Activity Observation* (templateId: `2.16.840.1.113883.10.20.1.25`)
12. [CCD] **MAY** contain [0..1] `entry`, such that it
    a. contains *CCD Plan Of Care Activity Procedure* (templateId: `2.16.840.1.113883.10.20.1.25`)
13. [CCD] **MAY** contain [0..1] `entry`, such that it
    a. contains *CCD Plan Of Care Activity Substance Administration* (templateId: `2.16.840.1.113883.10.20.1.25`)
14. [CCD] **MAY** contain [0..1] `entry`, such that it
    a. contains *CCD Plan Of Care Activity Supply* (templateId: `2.16.840.1.113883.10.20.1.25`)
15. [CCD] **SHALL** contain [1..1] `planOfCareActivity`, such that it
    a. contains *CCD Plan Of Care Activity*

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.1.10"
 assigningAuthorityName="CCD Plan Of Care Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.31"
 assigningAuthorityName="IHE Care Plan Section"/>
```

```
          <templateId root="2.16.840.1.113883.3.88.11.83.124"
 assigningAuthorityName="HITSP Plan Of Care Section"/>
          <code code="18776-5" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="Treatment plan"/>
          <title>Treatment plan</title>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 27: Plan Of Care Section example

Problem List Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.103`]

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

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *CCD Problem Section* template (templateId: `2.16.840.1.113883.10.20.1.11`)
5. Conforms to *IHE Active Problems Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.6`)
6. [CCD] **SHALL** contain [1..1] `code/@code` = "11450-4" *Problem list* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)
7. [CCD] **SHALL** contain [1..1] `title`
8. [CCD] **SHOULD** contain [1..*] `entry`, such that it
   a. contains *CCD Problem Act* (templateId: `2.16.840.1.113883.10.20.1.27`)
9. [CCD] **SHALL** contain [1..1] `text`
10. [IHE] **SHALL** contain [1..*] `entry`, such that it
    a. contains *IHE Problem Concern Entry* (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.5.2`)
11. [HITSP] **SHALL** contain [1..*] `entry`, such that it
    a. contains *Condition* (templateId: `2.16.840.1.113883.3.88.11.83.7`)
12. [CCD] **SHOULD** satisfy: Contains a case-insensitive language-insensitive string containing 'problems'.

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.1.11"
 assigningAuthorityName="CCD Problem Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.6"
 assigningAuthorityName="IHE Active Problems Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.103"
 assigningAuthorityName="HITSP Problem List Section"/>
          <code code="11450-4" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="Problem list"/>
          <title>Problem list</title>
          <entry>
            <act classCode="ACT" moodCode="EVN">
              <templateId root="2.16.840.1.113883.10.20.1.27"
 assigningAuthorityName="CCD Problem Act"/>
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.5.1"
 assigningAuthorityName="IHE Concern Entry"/>
```

```
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.5.2"
 assigningAuthorityName="IHE Problem Concern Entry"/>
              <templateId root="2.16.840.1.113883.3.88.11.83.7"
 assigningAuthorityName="HITSP Condition"/>
              <id root="7bdac01f-cd8b-45d2-a3e4-aa7feb553927"/>
              <code nullFlavor="NA"/>
              <effectiveTime>
                <low value="1972"/>
                <high value="2008"/>
              </effectiveTime>
            </act>
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 28: Problem List Section example

Reason For Referral Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.106`]

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

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *IHE Reason For Referral Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.1`)
5. [IHE] **SHALL** contain [1..1] `code/@code` = "42349-1" *REASON FOR REFERRAL* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.1"
 assigningAuthorityName="IHE Reason For Referral Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.106"
 assigningAuthorityName="HITSP Reason For Referral Section"/>
          <code code="42349-1" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="REASON FOR REFERRAL"/>
          <title>REASON FOR REFERRAL</title>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 29: Reason For Referral Section example

Review Of Systems Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.120`]

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

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *IHE Review Of Systems Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.18`)
5. [IHE] **SHALL** contain [1..1] `code/@code` = "10187-3" *REVIEW OF SYSTEMS* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.18"
 assigningAuthorityName="CDT Review Of Systems Section IHE"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.120"
 assigningAuthorityName="HITSP Review Of Systems Section"/>
          <code code="10187-3" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="REVIEW OF SYSTEMS"/>
          <title>REVIEW OF SYSTEMS</title>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 30: Review Of Systems Section example

Social History Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.126`]

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

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *CCD Social History Section* template (templateId: `2.16.840.1.113883.10.20.1.15`)
5. Conforms to *IHE Social History Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.16`)
6. [CCD] **SHALL** contain [1..1] `code/@code` = "29762-2" *Social history* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)
7. [CCD] **SHOULD** contain [1..1] `title`

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.1.15"
 assigningAuthorityName="CCD Social History Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.16"
 assigningAuthorityName="IHE Social History Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.126"
 assigningAuthorityName="HITSP Social History Section"/>
          <code code="29762-2" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="Social history"/>
          <title>Social history</title>
        </section>
```

```
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 31: Social History Section example

Surgeries Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.108`]

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *CCD Procedures Section* template (templateId: `2.16.840.1.113883.10.20.1.12`)
5. Conforms to *IHE Surgeries Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.11`)
6. Conforms to *IHE Coded Surgeries Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.12`)
7. [CCD] **SHALL** contain [1..1] `code/@code` = "47519-4" *History of procedures* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)
8. [CCD] **SHALL** contain [1..1] `title`
9. [CCD] **SHOULD** contain [1..*] `procedureActivity`, such that it
   a. contains *CCD Procedure Activity*
10. [HITSP] **SHALL** contain [1..*] `procedure`, such that it
    a. contains *Procedure* (templateId: `2.16.840.1.113883.3.88.11.83.17`)

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.1.12"
 assigningAuthorityName="CCD Procedures Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.11"
 assigningAuthorityName="IHE Surgeries Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.12"
 assigningAuthorityName="IHE Coded Surgeries Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.108"
 assigningAuthorityName="HITSP Surgeries Section"/>
          <code code="47519-4" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="History of procedures"/>
          <title>History of procedures</title>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 32: Surgeries Section example

Vital Signs Section

[Section: templateId `2.16.840.1.113883.3.88.11.83.119`]

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

1. Conforms to *RIM Infrastructure Root*

2. Conforms to *RIM Act*
3. Conforms to *CDA Section*
4. Conforms to *CCD Vital Signs Section* template (templateId: `2.16.840.1.113883.10.20.1.16`)
5. Conforms to *IHE Vital Signs Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.3.25`)
6. Conforms to *IHE Coded Vital Signs Section* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.1.5.3.2`)
7. [CCD] **SHALL** contain [1..1] `code/@code` = "8716-3" *Vital signs* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)
8. [CCD] **SHALL** contain [1..1] `title`
9. [IHE] **SHALL** contain [1..*] `entry`, such that it
    a. contains *IHE Vital Signs Organizer* (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.13.1`)
10. [CCD] **SHALL** contain [1..1] `text`
11. [CCD] **SHOULD** satisfy: Contains a case-insensitive language-insensitive string containing 'vital signs'.
12. [HITSP] **SHALL** satisfy: Contains entries conforming to the Vital Sign module.

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <templateId root="2.16.840.1.113883.10.20.1.16"
 assigningAuthorityName="CCD Vital Signs Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.25"
 assigningAuthorityName="IHE Vital Signs Section"/>
          <templateId root="1.3.6.1.4.1.19376.1.5.3.1.1.5.3.2"
 assigningAuthorityName="IHE Coded Vital Signs Section"/>
          <templateId root="2.16.840.1.113883.3.88.11.83.119"
 assigningAuthorityName="HITSP Vital Signs Section"/>
          <code code="8716-3" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="Vital signs"/>
          <title>Vital signs</title>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 33: Vital Signs Section example

Chapter 4

CLINICAL STATEMENT TEMPLATES

Topics:

This section of the Implementation Guide details the clinical statement entries referenced in the document section templates. The clinical statement entry templates are arranged alphabetically.

Allergy Drug Sensitivity

[Act: templateId `2.16.840.1.113883.3.88.11.83.6`]

This module contains the allergy or intolerance conditions and the associated adverse reactions suffered by the patient. See the HL7 Continuity of Care Document Section 3.8 for constraints applicable to this module.

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Clinical Statement*
4. Conforms to *CDA Act*
5. Conforms to *CCD Problem Act* template (templateId: `2.16.840.1.113883.10.20.1.27`)
6. Conforms to *IHE Concern Entry* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.5.1`)
7. Conforms to *IHE Allergy Intolerance Concern* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.5.3`)
8. [CCD] **SHALL** contain [1..1] `@classCode` = "ACT"
9. [CCD] **SHALL** contain [1..1] `@moodCode` = "EVN"
10. [CCD] **SHALL** contain [1..*] `id`
11. [CCD] **SHALL** contain [1..1] `code/@nullFlavor` = "NA" *NA (not applicable)*
12. [IHE] **SHALL** contain [1..1] `effectiveTime`
13. [CCD] **MAY** contain [0..1] `entryRelationship`, such that it
    a. contains *CCD Episode Observation* (templateId: `2.16.840.1.113883.10.20.1.41`)
14. [CCD] **SHALL** satisfy: Contains one or more entryRelationship
15. [CCD] **CONF-152: MAY** satisfy: A problem act MAY reference a problem observation, alert observation (see section Alerts) or other clinical statement that is the subject of concern, by setting the value for "Act / entryRelationship / @typeCode" to be "SUBJ" 2.16.840.1.113883.5.1002 ActRelationshipType STATIC.
16. [CCD] **CONF-153: SHOULD** satisfy: The target of a problem act with Act / entryRelationship / @typeCode="SUBJ" SHOULD be a problem observation (in the Problem section) or alert observation (in the Alert section), but MAY be some other clinical statement.
17. [CCD] **SHOULD** satisfy: In Problem Section, a Problem Act SHOULD contain a Problem Observation.
18. [CCD] **SHOULD** satisfy: In Alert Section, a ProblemAct SHOULD contain an Alert Observation.
19. [CCD] **MAY** satisfy: Contains exactly one Patient Awareness

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <entry>
            <act classCode="ACT" moodCode="EVN">
              <templateId root="2.16.840.1.113883.10.20.1.27"
assigningAuthorityName="CCD Problem Act"/>
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.5.1"
assigningAuthorityName="IHE Concern Entry"/>
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.5.3"
assigningAuthorityName="IHE Allergy Intolerance Concern"/>
              <templateId root="2.16.840.1.113883.3.88.11.83.6"
assigningAuthorityName="HITSP Allergy Drug Sensitivity"/>
              <id root="da29f952-235d-41b6-a902-98c88d299892"/>
              <code nullFlavor="NA"/>
              <effectiveTime>
                <low value="1972"/>
                <high value="2008"/>
              </effectiveTime>
            </act>
```

```
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 34: Allergy Drug Sensitivity example

Comment

[Act: templateId `2.16.840.1.113883.3.88.11.83.11`]

This module contains a comment to be supplied for any other entry Content Modules.

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Clinical Statement*
4. Conforms to *CDA Act*
5. Conforms to *IHE Comment* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.2`)
6. [IHE] **SHALL** contain [1..1] `@classCode` = "ACT"
7. [IHE] **SHALL** contain [1..1] `@moodCode` = "EVN"
8. [IHE] **SHALL** contain [1..1] `code/@code` = "48767-8" *Annotation Comment* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)
9. [IHE] **SHALL** contain [0..1] `statusCode/@code` = "completed" (CodeSystem: 2.16.840.1.113883.5.14 ActStatus STATIC V3NE08)
10. [IHE] **SHALL** contain [0..1] `text`
11. [HITSP] **C83-[DE-10-CDA-4]: SHALL** contain [1..1] `author`, such that it
    a. contains *CDA Author*

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <entry>
            <act classCode="ACT" moodCode="EVN">
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.2"
 assigningAuthorityName="IHE Comment"/>
              <templateId root="2.16.840.1.113883.3.88.11.83.11"
 assigningAuthorityName="HITSP Comment"/>
              <code code="48767-8" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="Annotation Comment"/>
              <text/>
              <statusCode code="completed"/>
            </act>
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 35: Comment example

Condition

[Act: templateId `2.16.840.1.113883.3.88.11.83.7`]

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Clinical Statement*
4. Conforms to *CDA Act*
5. Conforms to *CCD Problem Act* template (templateId: `2.16.840.1.113883.10.20.1.27`)
6. Conforms to *IHE Concern Entry* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.5.1`)
7. Conforms to *IHE Problem Concern Entry* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.5.2`)
8. [CCD] **SHALL** contain [1..1] `@classCode` = "ACT"
9. [CCD] **SHALL** contain [1..1] `@moodCode` = "EVN"
10. [CCD] **SHALL** contain [1..*] `id`
11. [CCD] **SHALL** contain [1..1] `code/@nullFlavor` = "NA" *NA (not applicable)*
12. [IHE] **SHALL** contain [1..1] `effectiveTime`
13. [CCD] **MAY** contain [0..1] `entryRelationship`, such that it
    a. contains *CCD Episode Observation* (templateId: `2.16.840.1.113883.10.20.1.41`)
14. [IHE] **SHALL** contain [1..*] `entryRelationship`, such that it
    a. contains *IHE Problem Entry* (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.5`)
15. [HITSP] **SHALL** contain [1..*] `entryRelationship`, such that it
    a. has @typeCode="SUBJ" *SUBJ (has subject)*
    b. contains *Condition Entry*
16. [CCD] **SHALL** satisfy: Contains one or more entryRelationship
17. [CCD] **CONF-152: MAY** satisfy: A problem act MAY reference a problem observation, alert observation (see section Alerts) or other clinical statement that is the subject of concern, by setting the value for "Act / entryRelationship / @typeCode" to be "SUBJ" 2.16.840.1.113883.5.1002 ActRelationshipType STATIC.
18. [CCD] **CONF-153: SHOULD** satisfy: The target of a problem act with Act / entryRelationship / @typeCode="SUBJ" SHOULD be a problem observation (in the Problem section) or alert observation (in the Alert section), but MAY be some other clinical statement.
19. [CCD] **SHOULD** satisfy: In Problem Section, a Problem Act SHOULD contain a Problem Observation.
20. [CCD] **SHOULD** satisfy: In Alert Section, a ProblemAct SHOULD contain an Alert Observation.
21. [CCD] **MAY** satisfy: Contains exactly one Patient Awareness

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <entry>
            <act classCode="ACT" moodCode="EVN">
              <templateId root="2.16.840.1.113883.10.20.1.27"
 assigningAuthorityName="CCD Problem Act"/>
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.5.1"
 assigningAuthorityName="IHE Concern Entry"/>
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.5.2"
 assigningAuthorityName="IHE Problem Concern Entry"/>
              <templateId root="2.16.840.1.113883.3.88.11.83.7"
 assigningAuthorityName="HITSP Condition"/>
              <id root="8dc2ae40-c08c-4f7e-aef1-7c52523cc33e"/>
              <code nullFlavor="NA"/>
              <effectiveTime>
                <low value="1972"/>
                <high value="2008"/>
              </effectiveTime>
              <entryRelationship>
                <observation classCode="OBS" moodCode="EVN">
```

```
                  <templateId root="2.16.840.1.113883.10.20.1.28"
assigningAuthorityName="CCD Problem Observation"/>
                  <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.5"
assigningAuthorityName="IHE Problem Entry"/>
                  <templateId assigningAuthorityName="HITSP Condition Entry"/>
                  <code/>
                  <text/>
                  <statusCode code="completed"/>
                  <effectiveTime>
                    <low value="1972"/>
                    <high value="2008"/>
                  </effectiveTime>
                  <value xsi:type="CD"/>
                </observation>
              </entryRelationship>
            </act>
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 36: Condition example

Condition Entry

[Observation: templateId `null`]

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Clinical Statement*
4. Conforms to *CDA Observation*
5. Conforms to *CCD Problem Observation* template (templateId: `2.16.840.1.113883.10.20.1.28`)
6. Conforms to *IHE Problem Entry* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.5`)
7. [CCD] Contains [1..1] `@classCode` = "OBS"
8. [CCD] **SHALL** contain [1..1] `@moodCode` = "EVN"
9. [CCD] **SHALL** contain [1..1] `statusCode/@code` = "completed" (CodeSystem: 2.16.840.1.113883.5.14 ActStatus STATIC V3NE08)
10. [HITSP] **SHOULD** contain [1..1] `effectiveTime`
    - The problem date constraints include the onset and resolution dates for the problem. The onset date shall be recorded in the <low> element of the <effectiveTime> element when known. The resolution data shall be recorded in the <high> element of the <effectiveTime> element when known. These dates represent the clinically effective time span over which the problem existed. 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.
11. [HITSP] **SHALL** contain [1..1] `code`, which **SHALL** be selected from ValueSet 2.16.840.1.113883.3.88.12.3221.7.2 Problem Type Value Set STATIC
12. [CCD] **MAY** contain [0..1] `entryRelationship`, such that it
    a. has @typeCode="REFR" *REFR (refers to)*
    b. contains *CCD Problem Status Observation* (templateId: `2.16.840.1.113883.10.20.1.50`)
13. [CCD] **MAY** contain [0..1] `entryRelationship`, such that it
    a. has @typeCode="REFR" *REFR (refers to)*
    b. contains *CCD Problem Health Status Observation* (templateId: `2.16.840.1.113883.10.20.1.51`)

14. [CCD] **MAY** contain [0..1] `entryRelationship`, such that it
    a. has @typeCode="SUBJ" *SUBJ (has subject)*
    b. contains *CCD Age Observation* (templateId: `2.16.840.1.113883.10.20.1.38`)
15. [HITSP] **SHALL** contain [1..1] `text`
16. [HITSP] **SHALL** contain [1..1] `value`, which **SHALL** be selected from ValueSet 2.16.840.1.113883.3.88.12.3221.7.4 Problem Value Set STATIC
17. [CCD] **SHALL** satisfy: Contains one or more sources of information.
18. [CCD] **MAY** satisfy: Contains exactly one Patient Awareness

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <entry>
            <observation classCode="OBS" moodCode="EVN">
              <templateId root="2.16.840.1.113883.10.20.1.28"
 assigningAuthorityName="CCD Problem Observation"/>
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.5"
 assigningAuthorityName="IHE Problem Entry"/>
              <templateId assigningAuthorityName="HITSP Condition Entry"/>
              <code/>
              <text/>
              <statusCode code="completed"/>
              <effectiveTime>
                <low value="1972"/>
                <high value="2008"/>
              </effectiveTime>
              <value xsi:type="CD"/>
            </observation>
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 37: Condition Entry example

Encounter

[Encounter: templateId `2.16.840.1.113883.3.88.11.83.16`]

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.

1. Conforms to *IHE Encounter Entry* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.14`)
2. Conforms to *RIM Infrastructure Root*
3. Conforms to *RIM Act*
4. Conforms to *CDA Clinical Statement*
5. Conforms to *CDA Encounter*
6. Conforms to *CCD Encounters Activity* template (templateId: `2.16.840.1.113883.10.20.1.21`)
7. Conforms to *IHE Encounter Activity* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.14`)
8. [CCD] **SHALL** contain [1..1] `@classCode` = "ENC"
9. [CCD] **SHALL** contain [1..1] `@moodCode` = "EVN"
10. [HITSP] **C83-[DE-16.02-1]: SHOULD** contain [1..1] `code`, which **SHOULD** be selected from ValueSet 2.16.840.1.113883.3.88.12.80.32 EncounterType DYNAMIC 20081218

11. [CCD] **SHALL** contain [1..*] `id`
12. [IHE] **SHALL** contain [1..1] `text`
13. [CCD] **MAY** contain [0..1] `effectiveTime`
14. [HITSP] **C154-[DE-16.07-1]: MAY** contain [0..1] `priorityCode`, which **MAY** be selected from ValueSet 2.16.840.1.113883.3.88.12.80.33 Admission Type (NUBC) STATIC

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <entry>
            <encounter classCode="ENC" moodCode="EVN">
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.14"/>
              <templateId root="2.16.840.1.113883.10.20.1.21"
 assigningAuthorityName="CCD Encounters Activity"/>
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.14"/>
              <templateId root="2.16.840.1.113883.3.88.11.83.16"
 assigningAuthorityName="HITSP Encounter"/>
              <id root="de0a0aa3-4e24-4057-966b-07b0c1a336ee"/>
              <code codeSystem="2.16.840.1.113883.6.12"
 codeSystemName="CPT-4"/>
              <text/>
              <effectiveTime>
                <low value="1972"/>
                <high value="2008"/>
              </effectiveTime>
              <priorityCode/>
            </encounter>
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 38: Encounter example

Immunization

[SubstanceAdministration: templateId `2.16.840.1.113883.3.88.11.83.13`]

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Clinical Statement*
4. Conforms to *CDA Substance Administration*
5. Conforms to *CCD Medication Activity* template (templateId: `2.16.840.1.113883.10.20.1.24`)
6. Conforms to *IHE Immunization* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.12`)
7. [CCD] **SHALL** contain [1..*] `id`
8. [CCD] **SHOULD** contain [0..1] `statusCode`
9. [CCD] **MAY** contain [0..1] `entryRelationship`, such that it
   a. contains *CCD Medication Series Number Observation* (templateId: `2.16.840.1.113883.10.20.1.46`)
10. [CCD] **MAY** contain [0..1] `entryRelationship`, such that it
    a. contains *CCD Medication Status Observation* (templateId: `2.16.840.1.113883.10.20.1.47`)
11. [CCD] **MAY** contain [0..*] `entryRelationship`, such that it
    a. has @typeCode="SUBJ" *SUBJ (has subject)*

   b. contains *CCD Patient Instruction* (templateId: `2.16.840.1.113883.10.20.1.49`)

12. [CCD] **SHALL** satisfy:

```
self.moodCode=vocab::x_DocumentSubstanceMood::EVN or
 self.moodCode=vocab::x_DocumentSubstanceMood::INT
```

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <entry>
            <substanceAdministration classCode="SBADM">
              <templateId root="2.16.840.1.113883.10.20.1.24"
 assigningAuthorityName="CCD Medication Activity"/>
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.12"
 assigningAuthorityName="IHE Immunization"/>
              <templateId root="2.16.840.1.113883.3.88.11.83.13"
 assigningAuthorityName="HITSP Immunization"/>
              <id root="5884acb9-38a6-4eb1-90f5-83043c8158f9"/>
              <statusCode/>
            </substanceAdministration>
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 39: Immunization example

Insurance Provider

[Act: templateId `2.16.840.1.113883.3.88.11.83.5`]

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Clinical Statement*
4. Conforms to *CDA Act*
5. Conforms to *CCD Coverage Activity* template (templateId: `2.16.840.1.113883.10.20.1.20`)
6. Conforms to *IHE Coverage Entry* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.17`)
7. [CCD] **CONF-36: SHALL** contain [1..1] `@classCode` = "ACT"
8. [CCD] **CONF-37: SHALL** contain [1..1] `@moodCode` = "DEF"
9. [CCD] **CONF-38: SHALL** contain [1..*] `id`
10. [CCD] **CONF-39, CONF-40: SHALL** contain [1..1] `statusCode/@code` = "completed" (CodeSystem: 2.16.840.1.113883.5.14 ActStatus STATIC V3NE08)
11. [CCD] **CONF-41, CONF-42: SHALL** contain [1..1] `code/@code` = "48768-6" *Payment sources* (CodeSystem: 2.16.840.1.113883.6.1 LOINC STATIC 2.26)
12. [CCD] **CONF-43, CONF-45, CONF-46: SHALL** contain [1..*] `entryRelationship`, such that it
    a. has @typeCode="COMP" *COMP (has component)*
    b. contains *CCD Policy Activity* (templateId: `2.16.840.1.113883.10.20.1.26`)
13. [CCD] **CONF-47: SHALL** satisfy: An alert observation contains one or more sources of information.
14. [CCD] **CONF-44: MAY** satisfy: entryRelationship contains sequenceNumber, which serves to prioritize the payment sources.

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <entry>
            <act classCode="ACT" moodCode="DEF">
              <templateId root="2.16.840.1.113883.10.20.1.20"
 assigningAuthorityName="CCD Coverage Activity"/>
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.17"
 assigningAuthorityName="IHE Coverage Entry"/>
              <templateId root="2.16.840.1.113883.3.88.11.83.5"
 assigningAuthorityName="HITSP Insurance Provider"/>
              <id root="ed5d0957-2cfa-418e-8104-43be7f33a407"/>
              <code code="48768-6" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC" displayName="Payment sources"/>
              <statusCode code="completed"/>
            </act>
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 40: Insurance Provider example

Medication

[SubstanceAdministration: templateId `2.16.840.1.113883.3.88.11.83.8`]

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Act*
3. Conforms to *CDA Clinical Statement*
4. Conforms to *CDA Substance Administration*
5. Conforms to *CCD Medication Activity* template (templateId: `2.16.840.1.113883.10.20.1.24`)
6. Conforms to *IHE Medication* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.7`)
7. [CCD] **SHALL** contain [1..*] `id`
8. [CCD] **SHOULD** contain [0..1] `statusCode`
9. [CCD] **MAY** contain [0..1] `entryRelationship`, such that it
   a. contains *CCD Medication Series Number Observation* (templateId: `2.16.840.1.113883.10.20.1.46`)
10. [CCD] **MAY** contain [0..1] `entryRelationship`, such that it
    a. contains *CCD Medication Status Observation* (templateId: `2.16.840.1.113883.10.20.1.47`)
11. [CCD] **MAY** contain [0..*] `entryRelationship`, such that it
    a. has @typeCode="SUBJ" *SUBJ (has subject)*
    b. contains *CCD Patient Instruction* (templateId: `2.16.840.1.113883.10.20.1.49`)
12. [CCD] **SHALL** satisfy:

```
self.moodCode=vocab::x_DocumentSubstanceMood::EVN or
 self.moodCode=vocab::x_DocumentSubstanceMood::INT
```

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
```

```
        <section>
          <entry>
            <substanceAdministration classCode="SBADM">
              <templateId root="2.16.840.1.113883.10.20.1.24"
 assigningAuthorityName="CCD Medication Activity"/>
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.7"
 assigningAuthorityName="IHE Medication"/>
              <templateId root="2.16.840.1.113883.3.88.11.83.8"/>
              <id root="d74c32ed-69e7-43d3-ac85-512c4c2b361d"/>
              <statusCode/>
            </substanceAdministration>
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 41: Medication example

Medication Combination Medication

[SubstanceAdministration: templateId `null`]

1. Conforms to *IHE Combination Medication* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.11`)
2. Conforms to *RIM Infrastructure Root*
3. Conforms to *RIM Act*
4. Conforms to *CDA Clinical Statement*
5. Conforms to *CDA Substance Administration*
6. Conforms to *CCD Medication Activity* template (templateId: `2.16.840.1.113883.10.20.1.24`)
7. Conforms to *IHE Medication* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.7`)
8. Conforms to *Medication* template (templateId: `2.16.840.1.113883.3.88.11.83.8`)
9. [CCD] **SHALL** contain [1..*] `id`
10. [CCD] **SHOULD** contain [0..1] `statusCode`
11. [CCD] **MAY** contain [0..1] `entryRelationship`, such that it
    a. contains *CCD Medication Series Number Observation* (templateId: `2.16.840.1.113883.10.20.1.46`)
12. [CCD] **MAY** contain [0..1] `entryRelationship`, such that it
    a. contains *CCD Medication Status Observation* (templateId: `2.16.840.1.113883.10.20.1.47`)
13. [CCD] **MAY** contain [0..*] `entryRelationship`, such that it
    a. has @typeCode="SUBJ" *SUBJ (has subject)*
    b. contains *CCD Patient Instruction* (templateId: `2.16.840.1.113883.10.20.1.49`)
14. [CCD] **SHALL** satisfy:

```
self.moodCode=vocab::x_DocumentSubstanceMood::EVN or
 self.moodCode=vocab::x_DocumentSubstanceMood::INT
```

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <entry>
            <substanceAdministration classCode="SBADM">
              <templateId root="2.16.840.1.113883.10.20.1.24"
 assigningAuthorityName="CCD Medication Activity"/>
```

```
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.7"
 assigningAuthorityName="IHE Medication"/>
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.11"
 assigningAuthorityName="IHE Combination Medication"/>
              <templateId root="2.16.840.1.113883.3.88.11.83.8"/>
              <templateId assigningAuthorityName="HITSP Medication Combination
 Medication"/>
              <id root="bfca596b-4d2a-440b-92e5-344a5f3f3375"/>
              <statusCode/>
            </substanceAdministration>
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 42: Medication Combination Medication example

Medication Conditional Dose

[SubstanceAdministration: templateId `null`]

1. Conforms to *IHE Conditional Dose* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.10`)
2. Conforms to *RIM Infrastructure Root*
3. Conforms to *RIM Act*
4. Conforms to *CDA Clinical Statement*
5. Conforms to *CDA Substance Administration*
6. Conforms to *CCD Medication Activity* template (templateId: `2.16.840.1.113883.10.20.1.24`)
7. Conforms to *IHE Medication* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.7`)
8. Conforms to *Medication* template (templateId: `2.16.840.1.113883.3.88.11.83.8`)
9. [CCD] **SHALL** contain [1..*] `id`
10. [CCD] **SHOULD** contain [0..1] `statusCode`
11. [CCD] **MAY** contain [0..1] `entryRelationship`, such that it
    a. contains *CCD Medication Series Number Observation* (templateId: `2.16.840.1.113883.10.20.1.46`)
12. [CCD] **MAY** contain [0..1] `entryRelationship`, such that it
    a. contains *CCD Medication Status Observation* (templateId: `2.16.840.1.113883.10.20.1.47`)
13. [CCD] **MAY** contain [0..*] `entryRelationship`, such that it
    a. has @typeCode="SUBJ" *SUBJ (has subject)*
    b. contains *CCD Patient Instruction* (templateId: `2.16.840.1.113883.10.20.1.49`)
14. [CCD] **SHALL** satisfy:

```
self.moodCode=vocab::x_DocumentSubstanceMood::EVN or
 self.moodCode=vocab::x_DocumentSubstanceMood::INT
```

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <entry>
            <substanceAdministration classCode="SBADM">
              <templateId root="2.16.840.1.113883.10.20.1.24"
 assigningAuthorityName="CCD Medication Activity"/>
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.7"
 assigningAuthorityName="IHE Medication"/>
```

```
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.10"
 assigningAuthorityName="IHE Conditional Dose"/>
              <templateId root="2.16.840.1.113883.3.88.11.83.8"/>
              <templateId assigningAuthorityName="HITSP Medication Conditional
 Dose"/>
              <id root="6fb0d657-c4fb-4ba2-8eaf-9cb72b3a50bb"/>
              <statusCode/>
            </substanceAdministration>
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 43: Medication Conditional Dose example

Medication Normal Dose

[SubstanceAdministration: templateId `null`]

1. Conforms to *IHE Normal Dose* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.7.1`)
2. Conforms to *RIM Infrastructure Root*
3. Conforms to *RIM Act*
4. Conforms to *CDA Clinical Statement*
5. Conforms to *CDA Substance Administration*
6. Conforms to *CCD Medication Activity* template (templateId: `2.16.840.1.113883.10.20.1.24`)
7. Conforms to *IHE Medication* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.7`)
8. Conforms to *Medication* template (templateId: `2.16.840.1.113883.3.88.11.83.8`)
9. [CCD] **SHALL** contain [1..*] `id`
10. [CCD] **SHOULD** contain [0..1] `statusCode`
11. [CCD] **MAY** contain [0..1] `entryRelationship`, such that it
    a. contains *CCD Medication Series Number Observation* (templateId: `2.16.840.1.113883.10.20.1.46`)
12. [CCD] **MAY** contain [0..1] `entryRelationship`, such that it
    a. contains *CCD Medication Status Observation* (templateId: `2.16.840.1.113883.10.20.1.47`)
13. [CCD] **MAY** contain [0..*] `entryRelationship`, such that it
    a. has @typeCode="SUBJ" *SUBJ (has subject)*
    b. contains *CCD Patient Instruction* (templateId: `2.16.840.1.113883.10.20.1.49`)
14. [CCD] **SHALL** satisfy:

```
self.moodCode=vocab::x_DocumentSubstanceMood::EVN or
 self.moodCode=vocab::x_DocumentSubstanceMood::INT
```

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <entry>
            <substanceAdministration classCode="SBADM">
              <templateId root="2.16.840.1.113883.10.20.1.24"
 assigningAuthorityName="CCD Medication Activity"/>
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.7"
 assigningAuthorityName="IHE Medication"/>
              <templateId root="2.16.840.1.113883.3.88.11.83.8"/>
```

```
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.7.1"
assigningAuthorityName="IHE Normal Dose"/>
              <templateId assigningAuthorityName="HITSP Medication Normal
Dose"/>
              <id root="cf35643d-614b-458c-bca8-94213cfce1a4"/>
              <statusCode/>
            </substanceAdministration>
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 44: Medication Normal Dose example

Medication Split Dose

[SubstanceAdministration: templateId `null`]

1. Conforms to *IHE Split Dose* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.9`)
2. Conforms to *RIM Infrastructure Root*
3. Conforms to *RIM Act*
4. Conforms to *CDA Clinical Statement*
5. Conforms to *CDA Substance Administration*
6. Conforms to *CCD Medication Activity* template (templateId: `2.16.840.1.113883.10.20.1.24`)
7. Conforms to *IHE Medication* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.7`)
8. Conforms to *Medication* template (templateId: `2.16.840.1.113883.3.88.11.83.8`)
9. [CCD] **SHALL** contain [1..*] `id`
10. [CCD] **SHOULD** contain [0..1] `statusCode`
11. [CCD] **MAY** contain [0..1] `entryRelationship`, such that it
    a. contains *CCD Medication Series Number Observation* (templateId: `2.16.840.1.113883.10.20.1.46`)
12. [CCD] **MAY** contain [0..1] `entryRelationship`, such that it
    a. contains *CCD Medication Status Observation* (templateId: `2.16.840.1.113883.10.20.1.47`)
13. [CCD] **MAY** contain [0..*] `entryRelationship`, such that it
    a. has @typeCode="SUBJ" *SUBJ (has subject)*
    b. contains *CCD Patient Instruction* (templateId: `2.16.840.1.113883.10.20.1.49`)
14. [CCD] **SHALL** satisfy:

```
self.moodCode=vocab::x_DocumentSubstanceMood::EVN or
 self.moodCode=vocab::x_DocumentSubstanceMood::INT
```

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <entry>
            <substanceAdministration classCode="SBADM">
              <templateId root="2.16.840.1.113883.10.20.1.24"
assigningAuthorityName="CCD Medication Activity"/>
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.7"
assigningAuthorityName="IHE Medication"/>
              <templateId root="2.16.840.1.113883.3.88.11.83.8"/>
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.9"
assigningAuthorityName="IHE Split Dose"/>
```

```
              <templateId assigningAuthorityName="HITSP Medication Split
Dose"/>
              <id root="4a5e48c5-8b57-412b-aaf9-b33b80421cdf"/>
              <statusCode/>
            </substanceAdministration>
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 45: Medication Split Dose example

Medication Tapered Dose

[SubstanceAdministration: templateId `null`]

1. Conforms to *IHE Tapered Dose* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.8`)
2. Conforms to *RIM Infrastructure Root*
3. Conforms to *RIM Act*
4. Conforms to *CDA Clinical Statement*
5. Conforms to *CDA Substance Administration*
6. Conforms to *CCD Medication Activity* template (templateId: `2.16.840.1.113883.10.20.1.24`)
7. Conforms to *IHE Medication* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.7`)
8. Conforms to *Medication* template (templateId: `2.16.840.1.113883.3.88.11.83.8`)
9. [CCD] **SHALL** contain [1..*] `id`
10. [CCD] **SHOULD** contain [0..1] `statusCode`
11. [CCD] **MAY** contain [0..1] `entryRelationship`, such that it
    a. contains *CCD Medication Series Number Observation* (templateId: `2.16.840.1.113883.10.20.1.46`)
12. [CCD] **MAY** contain [0..1] `entryRelationship`, such that it
    a. contains *CCD Medication Status Observation* (templateId: `2.16.840.1.113883.10.20.1.47`)
13. [CCD] **MAY** contain [0..*] `entryRelationship`, such that it
    a. has @typeCode="SUBJ" *SUBJ (has subject)*
    b. contains *CCD Patient Instruction* (templateId: `2.16.840.1.113883.10.20.1.49`)
14. [CCD] **SHALL** satisfy:

```
self.moodCode=vocab::x_DocumentSubstanceMood::EVN or
 self.moodCode=vocab::x_DocumentSubstanceMood::INT
```

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <entry>
            <substanceAdministration classCode="SBADM">
              <templateId root="2.16.840.1.113883.10.20.1.24"
 assigningAuthorityName="CCD Medication Activity"/>
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.7"
 assigningAuthorityName="IHE Medication"/>
              <templateId root="2.16.840.1.113883.3.88.11.83.8"/>
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.8"
 assigningAuthorityName="IHE Tapered Dose"/>
              <templateId root="null" assigningAuthorityName="HITSP Medication
 Tapered Dose"/>
```

```
              <templateId assigningAuthorityName="HITSP Medication Tapered
Dose"/>
              <id root="ccd4a1a1-b7df-42d5-b98a-b3b374ba2bb1"/>
              <statusCode/>
            </substanceAdministration>
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 46: Medication Tapered Dose example

Result

[Observation: templateId `2.16.840.1.113883.3.88.11.83.15`]

1. Conforms to *IHE Simple Observation* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.13`)
2. Conforms to *RIM Infrastructure Root*
3. Conforms to *RIM Act*
4. Conforms to *CDA Clinical Statement*
5. Conforms to *CDA Observation*
6. Conforms to *CCD Result Observation* template (templateId: `2.16.840.1.113883.10.20.1.31`)
7. [CCD] **SHALL** contain [1..1] `@moodCode` = "EVN"
8. [CCD] **SHALL** contain [1..*] `id`
9. [CCD] **SHALL** contain [1..1] `statusCode`
10. [HITSP] **SHALL** contain [1..1] `effectiveTime`
11. [HITSP] **SHALL** contain [1..1] `code`
12. [CCD] **MAY** contain [0..1] `methodCode`
    - Included if the method isn't inherent in code or if there is a need to further specialize the method in code.
13. [CCD] **SHOULD** contain [0..*] `interpretationCode`
    - Can be used to provide a rough qualitative interpretation of the observation, such as 'N' (normal), 'L' (low), 'S' (susceptible), etc. Interpretation is generally provided for numeric results where an interpretation range has been defined, or for antimicrobial susceptibility test interpretation.
14. [CCD] **SHALL** contain [1..1] `value`
15. [CCD] **SHOULD** satisfy: The value for 'code' SHOULD be selected from LOINC (codeSystem 2.16.840.1.113883.6.1) or SNOMED CT (codeSystem 2.16.840.1.113883.6.96), and MAY be selected from CPT-4 (codeSystem 2.16.840.1.113883.6.12).
16. [CCD] **SHALL** satisfy: The methodCode SHALL NOT conflict with the method inherent in code
17. [CCD] **SHALL** satisfy: Where value is a physical quantity, the unit of measure SHALL be expressed using a valid Unified Code for Units of Measure (UCUM) expression.
18. [CCD] **SHOULD** satisfy: Contain one or more referenceRange to show the normal range of values for the observation result
19. [CCD] **SHALL** satisfy: SHALL NOT contain referenceRange / observationRange / code, as this attribute is not used by the HL7 Clinical Statement or Lab Committee models.
20. [CCD] **SHALL** satisfy: Contains one or more sources of information.

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <entry>
```

```
            <observation classCode="OBS" moodCode="EVN">
              <templateId root="2.16.840.1.113883.10.20.1.31"
assigningAuthorityName="CCD Result Observation"/>
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.13"
assigningAuthorityName="IHE Simple Observation"/>
              <templateId root="2.16.840.1.113883.3.88.11.83.15"
assigningAuthorityName="HITSP Result"/>
              <id root="6ede46ea-67b7-43ae-9ccc-ce379158ac1e"/>
              <code/>
              <statusCode code="completed"/>
              <effectiveTime>
                <low value="1972"/>
                <high value="2008"/>
              </effectiveTime>
              <interpretationCode/>
              <methodCode/>
            </observation>
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 47: Result example

Vital Sign

[Observation: templateId `2.16.840.1.113883.3.88.11.83.14`]

1. Conforms to *IHE Simple Observation* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.13`)
2. Conforms to *RIM Infrastructure Root*
3. Conforms to *RIM Act*
4. Conforms to *CDA Clinical Statement*
5. Conforms to *CDA Observation*
6. Conforms to *CCD Result Observation* template (templateId: `2.16.840.1.113883.10.20.1.31`)
7. Conforms to *IHE Vital Sign Observation* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.4.13.2`)
8. [CCD] **SHALL** contain [1..1] `@moodCode` = "EVN"
9. [CCD] **SHALL** contain [1..*] `id`
10. [CCD] **SHALL** contain [1..1] `statusCode`
11. [CCD] **SHOULD** contain [1..1] `effectiveTime`
    - Represents the biologically relevant time (e.g. time the specimen was obtained from the patient).
12. [HITSP] **SHALL** contain [1..1] `code`, which **SHALL** be selected from ValueSet 2.16.840.1.113883.3.88.12.80.62 Vital Sign Result Value Set STATIC 1
13. [IHE] **MAY** contain [0..*] `methodCode`
14. [IHE] **MAY** contain [0..*] `interpretationCode`
15. [IHE] **SHALL** contain [1..1] `value`, where its data type is PQ
16. [IHE] **MAY** contain [0..*] `targetSiteCode`
17. [CCD] **SHOULD** satisfy: The value for 'code' SHOULD be selected from LOINC (codeSystem 2.16.840.1.113883.6.1) or SNOMED CT (codeSystem 2.16.840.1.113883.6.96), and MAY be selected from CPT-4 (codeSystem 2.16.840.1.113883.6.12).
18. [CCD] **SHALL** satisfy: The methodCode SHALL NOT conflict with the method inherent in code
19. [CCD] **SHALL** satisfy: Where value is a physical quantity, the unit of measure SHALL be expressed using a valid Unified Code for Units of Measure (UCUM) expression.
20. [CCD] **SHOULD** satisfy: Contain one or more referenceRange to show the normal range of values for the observation result

21. [CCD] **SHALL** satisfy: SHALL NOT contain referenceRange / observationRange / code, as this attribute is not used by the HL7 Clinical Statement or Lab Committee models.

22. [CCD] **SHALL** satisfy: Contains one or more sources of information.

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <component>
    <structuredBody>
      <component>
        <section>
          <entry>
            <observation classCode="OBS" moodCode="EVN">
              <templateId root="2.16.840.1.113883.10.20.1.31"
 assigningAuthorityName="CCD Result Observation"/>
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.13"
 assigningAuthorityName="IHE Simple Observation"/>
              <templateId root="1.3.6.1.4.1.19376.1.5.3.1.4.13.2"
 assigningAuthorityName="IHE Vital Sign Observation"/>
              <templateId root="2.16.840.1.113883.3.88.11.83.14"
 assigningAuthorityName="HITSP Vital Sign"/>
              <id root="4954bfa6-7c76-4cdb-88ba-f14aff6262fb"/>
              <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/
>
              <statusCode code="completed"/>
              <effectiveTime>
                <low value="1972"/>
                <high value="2008"/>
              </effectiveTime>
              <value xsi:type="PQ"/>
              <interpretationCode/>
              <methodCode/>
              <targetSiteCode/>
            </observation>
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Figure 48: Vital Sign example

Chapter 5

OTHER CLASSES

Topics:

This section of the Implementation Guide describes other classes that are not CDA Clinical Documents, Sections, or Clinical Statements.

Healthcare Provider

[Performer1: templateId `2.16.840.1.113883.3.88.11.83.4`]

1. Conforms to *RIM Infrastructure Root*
2. Conforms to *RIM Participation*
3. Conforms to *CDA Performer1*
4. Conforms to *IHE Healthcare Providers Pharmacies* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.2.3`)
5.

Figure 49: Healthcare Provider example

Language Spoken

[LanguageCommunication: templateId `2.16.840.1.113883.3.88.11.83.2`]

1. Conforms to *CDA Language Communication*
2. Conforms to *IHE Language Communication* template (templateId: `1.3.6.1.4.1.19376.1.5.3.1.2.1`)
3. [HITSP] **C154-[DE-2.01-1]: SHALL** contain [1..1] `languageCode`, which **SHALL** be selected from ValueSet 2.16.840.1.113883.1.11.11526 Language DYNAMIC 200609
4. [HITSP] **C83-[DE-2.01-CDA-4]: SHALL** contain [0..1] `modeCode`, which **SHALL** be selected from ValueSet 2.16.840.1.113883.1.11.12249 LanguageAbilityMode Value Set STATIC 1
   - 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. On the other hand, American Sign Language would be represented using the code sign-US, and would only use mode codes for signed communication.
5. [HITSP] **SHOULD** contain [0..0] `proficiencyLevelCode`
6. [HITSP] **C83-[DE-2.01-CDA-1]: SHALL** satisfy: 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.
7. [HITSP] **C154-[DE-2.01-2]: SHALL** satisfy: Sign language is treated as a separate language.

Figure 50: Language Spoken example

Procedure

1. Conforms to *IHE Procedure Entry*
2. [HITSP] **C83-[DE-17-CDA-3]: SHOULD** contain [1..1] `targetSiteCode`, which **SHOULD** be selected from ValueSet 2.16.840.1.113883.3.88.12.3221.8.9 Body Site Value Set STATIC 2
3. [HITSP] **SHOULD** satisfy: Contains the procedure provider in performer / assignedEntity.

Figure 51: Procedure example

Chapter 6

VALUE SETS

The following tables summarize the value sets used in this Implementation Guide.

REFERENCES

- HL7 Implementation Guide: CDA Release 2 – Continuity of Care Document (CCD) A CDA implementation of ASTM E2369-05 Standard Specification for Continuity of Care Record© (CCR) April 01, 2007 available through *HL7* .
- HL7 Implementation Guide for CDA Release 2 Quality Reporting Document Architecture (QRDA) Draft Standard for Trial Use March 2009. Available at: *Quality Reporting Document Architecture (QRDA)*
- HL7 Implementation Guide for CDA Release 2 CDA for Public Health Case Reports (PHCR) Informative Standard October 2009. Available through *HL7* .
- HL7 Implementation Guide for CDA Release 2: NHSN Healthcare Associated Infection (HAI) Reports, Release 2 Draft Standard for Trial Use January 2009 Available at: *NHSN Healthcare Associated Infection (HAI) Reports*
- Dolin RH, Alschuler L, Boyer S, Beebe C, Behlen FM, Biron PV, Shabo A, (Editors). HL7 Clinical Document Architecture, Release 2.0. ANSI-approved HL7 Standard; May 2005. Ann Arbor, Mich.: Health Level Seven, Inc. Available through *HL7* or if an HL7 member with the following link: *CDA Release 2 Normative Web Edition.*
- *LOINC®* : Logical Observation Identifiers Names and Codes, Regenstrief Institute.
- *SNOMED CT®* : SNOMED Clinical Terms SNOMED International Organization.
- Extensible Markup Language, *www.w3.org/XML* .
- Dolin RH, Alschuler L, Boyer S, Beebe C, Behlen FM, Biron PV, Shabo A., HL7 Clinical Document Architecture, Release 2. J Am Med Inform Assoc. 2006;13:30-39. Available at: *http://www.jamia.org/cgi/reprint/13/1/30* .
- Using SNOMED CT in HL7 Version 3; Implementation Guide, Release 1.5. Available through *HL7* or if an HL7 member with the following link: *Using SNOMED CT in HL7 Version 3*