



**HL7 CDA® Release 2 Implementation Guide:  
Additional CDA R2 Templates --  
Clinical Documents for Payers – Set 1,  
Release 1 – US Realm**

**HL7 Draft Standard for Trial Use**

August 2015

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# 1 INTRODUCTION

## 1.1 Note to Readers

This guide contains material by inclusion from the *HL7 Implementation Guide for CDA® Release 2: Consolidated CDA Templates for Clinical Notes (US Realm) Draft Standard for Trial Use Release 2, Volume 1* and *Volume 2* specification [referred to as C-CDA R2 V1 for Volume 1 and C-CDA R2 V2 for Volume 2 or collectively as C-CDA R2 through-out this guide]. Additional constraints on templates defined in that guide are within the scope of review and balloting, however referenced content or citations are not. Reviewers are encouraged to provide feedback on the C-CDA R2.

## 1.2 Purpose

This guide is the result of a joint effort of the HL7 Attachments Work Group, the HL7 Structured Documents Work Group, the Centers for Medicare & Medicaid Services (CMS), and the Office of the National Coordinator (ONC) Standards and Interoperability (S&I) Framework Electronic Submission of Medical Documentation (esMD) Initiative.

The purpose of this implementation guide (IG) is to provide guidance on a standardized, implementable, interoperable electronic solution to reduce the time and expense related to the exchange of clinical and administrative information between and among providers and payers. This guide describes structured documentation templates that meet requirements for documentation of medical necessity and appropriateness of services to be delivered or that have been delivered in the course of patient care.

These document templates are designed for use when the provider needs to exchange more clinical information than is required by the C-CDA R2 document-level templates and/or must indicate why information for specific section-level or entry-level templates is not included. For example, payer policy may allow providers to submit any information they feel substantiates that a service is medically necessary and appropriate under the applicable coverage determination rules. The ability to submit any supporting documentation is a provider's right under these rules as is the ability to declare that specific information is not available or not applicable.

To address concerns with the size of the resulting documents we evaluated both this guide (CDP1) and C-CDA R2 document templates requirements. Calculations of increase in size of a document due to the additional "required" templates relieved by the use of nullFlavors (see 3.4.1) indicates that typical CDP1 documents are a **maximum** of one to five percent larger than typical C-CDA R2 documents with the same information.

While the goal of the templates defined in this guide is to enable providers to submit structured medical documentation when required for prior-authorization, pre-payment review or post payment audit, providers and payers may use these templates for any administrative or clinical purpose.

**Notes:**

**Use of these document templates may be inappropriate for clinical or administrative purposes where the provider's intent is to exchange only limited information about the patient encounter.**

**The new and additionally constrained templates defined in this guide are not intended to replace any of the current templates in the C-CDA R2 or its predecessor implementation guides.**

### 1.3 Audience

The audiences for this implementation guide include business analysts, policy managers, and the architects and developers of healthcare information technology (HIT) systems in the US Realm that exchange electronic medical data (documentation) between and among providers and payers.

### 1.4 Prerequisite Information

The reader of this IG must have an understanding of the following standards and related materials. While some background information may be provided, this guide is not intended to be a tutorial on these topics. At a minimum, access to the C-CDA R2 is required to properly understand and apply the templates in this guide.

- 1) Clinical Document Architecture (CDA) Release 2, Normative Edition 2005
- 2) HL7 Implementation Guide for CDA® Release 2: Consolidated CDA Templates for Clinical Notes (US Realm) Draft Standard for Trial Use Release 2, Volume 1 and Volume 2
- 3) HL7 Implementation Guide for CDA® Release 2: Digital Signatures and Delegation of Rights, Draft Standard for Trial Use, Release 1
- 4) HL7 Attachment Specification: Supplement to Consolidated CDA Templated Guide, Informative Document, Release 1
- 5) SNOMED ([www. http://www.ihtsdo.org/snomed-ct](http://www.ihtsdo.org/snomed-ct))
- 6) LOINC (<http://loinc.org>)
- 7) UCUM (<http://unitsofmeasure.org>)
- 8) OIDS (<http://www.hl7.org/oid>)
- 9) ANSI/HL7 EHR-System Records Management and Evidentiary Support (RM-ES) Functional Profile, Release 1
- 10) ANSI/HL7 EHR-System Functional Model Release 1.1

### 1.5 Organization of the Guide

This guide loosely follows the basic structure and flow of the C-CDA R2 while combining the type of information found in both Volumes 1 and 2 into this single guide. Note that the flow of topics will largely remain the same, but section numbering is not congruent between the IGs.

## 1.6 Contents of the Publication

The following files comprise the publication package:

**Table 1: Contents of the Publication Package**

<b>Filename</b>	<b>Description</b>	<b>Standards Applicability</b>
CDAR2_IG_CDP1_R1_D1_2014NOV	Implementation Guide	Normative
CDP1_Enhanced_Encounter_Document.xml	Enhanced Encounter Document Example	Informative
CDP1_Enhanced_Discharge_Document.xml	Enhanced Discharge Document Example	Informative
CDP1_Enhanced_Operative_Note_Document.xml	Enhanced Operative Note Document Example	Informative
CDP1_Enhanced_Procedure_Document.xml	Enhanced Procedure Document Example	Informative
CDP1_Interval_Document.xml	Interval Document Example	Informative
CDP1.xsl	Stylesheet for rendering	Informative



## 2 CDA R2 BACKGROUND

### 2.1 Templated CDA

This guide adheres to the principles and concepts expressed in the C-CDA R2 V1, Section 2.1 Templated CDA.

This guide focuses on the following types of templates:

- **Document-level templates:** These templates constrain fields in the CDA header, and define highly constrained relationships to CDA sections. For example, an Enhanced Encounter Document template might require that the patient's name be present, and that the document contain a Physical Exam section.
- **Section-level templates:** These templates constrain fields in the CDA section, and define specific containment relationships to CDA entries. For example, a Physical-exam section-level template might require that the section/code be fixed to a particular LOINC code, and that the section contain a Systolic Blood Pressure observation. Where possible, this guide incorporates section-level templates from the C-CDA R2 by reference and without change.
- **Entry-level templates:** These templates constrain the CDA clinical statement model in accordance with real world observations and acts. For example, a Systolic-blood-pressure entry-level template defines how the CDA Observation class is constrained (how to populate observation/code, how to populate observation/value, etc.) to represent the notion of a systolic blood pressure. C-CDA R2 section-level templates included in this guide by reference also include the entry-level templates they contain as defined in the C-CDA R2. New sections and additionally constrained C-CDA R2 sections in this guide include C-CDA R2 entry-level templates by reference as well as those defined in this guide.
- **Participation and other templates:** These templates group a common set of constraints for reuse in CDA documents. For example, the US Realm Date and Time (DT.US.FIELDED) template includes a set of common constraints for recording time. This template is referenced several times throughout the IG in place of repeating constraints.

A CDA implementation guide (such as this one) includes references to those templates that are applicable. On the implementation side, a CDA instance populates the template identifier (`templateId`) field where it wants to assert conformance to a given template. On the receiving side, the recipient can then not only test the instance for conformance against the CDA Extensible Markup Language (XML) schema, but also test the instance for conformance against asserted templates.

## 3 DESIGN CONSIDERATIONS

This guide adheres to the principles and concepts expressed in the C-CDA R2, Section 3 *Design Considerations*.

----- *begin citation* -----

Design considerations describe overarching principles that have been developed and applied across the CDA templates in this guide. Material in this section can be thought of as “heuristics”, as opposed to the formal and testable constraints...

----- *end citation* -----

### 3.1 CDA Participations

This guide makes no changes to the CDA participations as defined in the C-CDA R2 V1, Section 3.1 *CDA Participations*.

### 3.2 Determining a Clinical Statement’s Status

This guide adheres to the concepts as expressed in the C-CDA R2 V1, Section 3.2 *Determining a Clinical Statement’s Status*.

### 3.3 Rendering Header Information for Human Presentation

This guide adheres to the concepts as expressed in the C-CDA R2 V1, Section 3.3 *Rendering Header Information for Human Presentation*.

### 3.4 Unknown and No Known Information

This guide adheres to the concepts as expressed in the C-CDA R2 V1, Section 3.4 *Unknown and No Known Information*.

----- *begin citation* -----

Information technology solutions store and manage data, but sometimes data are not available. An item may be unknown, not relevant, or not computable or measureable, such as where a patient arrives at an Emergency Department unconscious and with no identification.

In many cases, the C-CDA standard will stipulate that a piece of information is required (e.g., via a SHALL conformance verb). However, in most of these cases, the standard provides an “out”, allowing the sender to indicate that the information isn’t known.

----- *end citation* -----

### 3.4.1 Use of nullFlavors for Section and Entry Templates Conformance Statements

This guide makes liberal use of the SHALL conformance verb. In general, all new document-level templates and new or additionally constrained section-level templates constrain the use of their respective section and entry level templates to SHALL. The purpose is to ensure support for these subsidiary templates in conformant implementations.

The developers of this guide suggest that implementers automatically use the nullFlavor NI for any condition where the respective information is not available (e.g. not supported by the EHR record, not asked, not answered, or not applicable for the current implementation). Likewise, the implementers should allow configuration of document sections and templates to use the nullFlavor NA where the provider is excluding existing documentation because it is not applicable to the purpose for which the document is generated, withheld due to “minimum necessary” considerations or to meet security and privacy concerns.

The nullFlavor NI may be used to indicate that coded information is not available for a required entry level template and still include textual information at the section level.

The use of these templates enables the resulting document to contain all of the relevant clinical record information associated with the patient encounter.

#### **Notes:**

- 1) Providers do not need to have information available for each of the “required” section and entry level templates defined or constrained in this guide. In the event information is not available at the time of document creation or is not applicable for the intended purpose of the information exchange , an appropriate nullFlavor may be used to indicate why the information is not provided.**
- 2) Some encounters may require the use of multiple document-level templates, including those defined in the C-CDA R2 to describe all relevant clinical activities (see Appendix D).**
- 3) Providers should only include information in the templates that they deem appropriate to meet the clinical or administrative use for which the resulting document is intended.**

### 3.4.2 Use of nullFlavors for Section and Entry Templates Required in this Guide

The following nullFlavors (from the HL7NullFlavor, “2.16.840.1.113883.5.1008”) are specified as the value set for use at the section and entry level in this guide when no information is available or it is not applicable.

**Table 2: nullFlavorCDP1**

Value Set: nullFlavorCDP1 2.16.840.1.113883.10.20.35.6.4 Contains the allowed nullFlavors used for the constrained section and entry templates defined in this guide			
Concept Code	Concept Name	Code System OID	Print Name
NI	No Information	2.16.840.1.113883.5.1008	No Information
NA	Not Applicable	2.16.840.1.113883.5.1008	Not Applicable

The use of OTH for the code in an entry level template is suggested as best practice (e.g. <code nullFlavor="OTH">); see Figure 2. Recommended (non-normative) display text for constrained entry templates is included in Appendix F.

**Figure 1: Example use of Section-Level nullFlavor**

#### Example Document-Level conformance statement

- i. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:XXXX) such that it
  - ii. **SHALL** contain exactly one [1..1] General Status Section (identifier: urn:oid:2.16.840.1.113883.10.20.2.5) (CONF:XXXX).

Provider declares that the General Status section is not applicable for this document or for this patient

#### Example XML

```
<component>
  <!-- nullFlavor of NA indicates Not Applicable.-->
  <section nullFlavor="NA">
    <!-- conforms to General Status Section -->
    <templateId root="2.16.840.1.113883.10.20.2.5"/>
    <code code="10210-3" codeSystem="2.16.840.1.113883.6.1"
      codeSystemName="LOINC"
      displayName="General Status"/>
    <title>General Status</title>
    <text>Not Applicable</text>
  </section>
</component>
```

**Figure 2: Example use of Entry-Level nullFlavor**

Example Section-Level conformance statement

1. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3310) such that it
  - a. **SHALL** contain exactly one [1..1] Planned Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.44:2014-06-09) (CONF:CDP1-3320).

No planned observation information is available in the medical record

Example XML

<!-- This is an example of where a nullFlavor of OTH is used to represent the negation of any planned procedure -->

```
<section>
  <templateId root="2.16.840.1.113883.10.20.22.2.10.1.2"
    extension="2014-06-09"/>
  <code code="18776-5" codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC" displayName="Treatment Plan"/>
  <title>Plan of Treatment</title>
  <text>
    <table>
      <thead>
        <tr>
          <th>Description</th>
          <th>Date and Time (Range)</th>
          <th>Status</th>
        </tr>
      </thead>
      <tbody>
        <tr>
          <td id="ProcedureDesc1">No Planned Test</td>
        </tr>
      </tbody>
    </table>
  </text>
  <entry typeCode="DRIV">
    <observation classCode="OBS" moodCode="INT" negationInd="true">
      <templateId root="2.16.840.1.113883.10.20.22.4.44" extension="2014-06-09"/>
      <id root="c03e5445-af1b-4911-a419-e2782f21448c"/>
      <code nullFlavor="OTH">
        <originalText>
          <reference value="#ProcedureDesc1"/>
        </originalText>
      </code>
      <statusCode code="completed"/>
      <effectiveTime nullFlavor="NI"/>
      <!-- nullFlavor of NI used since no information is available.-->
      <value nullFlavor="NI" />
    </observation>
  </entry>
</section>
```

## 4 USING THIS IMPLEMENTATION GUIDE

This guide follows the conventions and practices as defined in the C-CDA R2 V2, Section 4 *Using this Implementation Guide*.

----- begin citation -----

This chapter describes the rules and formalisms used to constrain the CDA R2 standard. It describes the formal representation of CDA templates, the mechanism by which templates are bound to vocabulary, and additional information necessary to understand and correctly implement the normative content found in Volume 2 of this guide.

----- end citation -----

### 4.1 Levels of Constraint

The CDA standard describes conformance requirements in terms of three general levels corresponding to three different, incremental types of conformance statements; see the C-CDA R2 V1, Section 4.1 *Level of Constraint*. This guide is considered to be a level-3 (coded/constrained entries) Implementation Guide.

### 4.2 Conformance Conventions Used in This Guide

This guide follows the conventions and practices as defined in the C-CDA R2 V1, Section 4.2 *Conformance Conventions Used in This Guide*. Additional considerations are noted by section.

#### 4.2.1 Templates and Conformance Statements

Conformance statements within this implementation guide are consistent with the format and syntax of conformance statements declared in the C-CDA R2. Each constraint is uniquely identified by an identifier at or near the end of the constraint (e.g., CONF:CDP1-3101). These identifiers are persistent but not sequential. Where templates are adopted by reference to the C-CDA R2, conformance statements in the C-CDA R2 will apply. Where templates are indicated as conformant to templates in the C-CDA R2 or other implementation guides, new conformance statements are included in this guide.

#### 4.2.2 Template Versioning

This guide follows the conventions and practices defined in the C-CDA R2 V1, Section 4.2.2 *Template Versioning*.

#### 4.2.3 Open and Closed Templates

This guide follows the conventions and practices defined in the C-CDA R2 V1, Section 4.2.3 *Open and Closed Templates*.

#### 4.2.4 Conformance Verbs (Keywords)

The keywords **SHALL**, **SHOULD**, **MAY**, **NEED NOT**, **SHOULD NOT**, and **SHALL NOT** in this document are to be interpreted as described in the HL7 Version 3 Publishing Facilitator's Guide.<sup>1</sup>

- **SHALL**: an absolute requirement
- **SHALL NOT**: an absolute prohibition against inclusion
- **SHOULD/SHOULD NOT**: best practice or recommendation. There may be valid reasons to ignore an item, but the full implications must be understood and carefully weighed before choosing a different course
- **MAY/NEED NOT**: truly optional; can be included or omitted as the author decides with no implications

The keyword "**SHALL**" allows the use of `nullFlavor` unless the requirement is on an attribute or the use of `nullFlavor` is explicitly precluded. For specific use of `nullFlavor` with document, section and entry level templates defined or constrained in this guide, see 3.4.1.

See C-CDA R2 V1, Section 4.2.5 *Conformance Verbs* for examples of nested conformance statements.

#### 4.2.5 Cardinality

This guide follows the conventions and practices defined in the C-CDA R2 V1, Section 4.2.5 *Cardinality*.

#### 4.2.6 Optional and Required with Cardinality

This guide follows the conventions and practices defined in the C-CDA R2 V1, Section 4.2.6 *Optional and Required Cardinality*.

#### 4.2.7 Vocabulary Conformance

This guide follows the conventions and practices defined in the C-CDA R2 V1, Section 4.2.7 *Vocabulary Conformance*.

#### 4.2.8 Data Types

This guide follows the conventions and practices defined in the C-CDA R2 V1, Section 4.2.8 *Data Types*.

#### 4.2.9 Document-Level Templates 'Properties' Heading

This guide follows the conventions and practices defined in the C-CDA R2 V1, Section 4.2.9 *Document-Level Templates 'Properties' Heading*.

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<sup>1</sup> HL7, Version 3 Publishing Facilitator's Guide. <http://www.hl7.org/v3ballot/html/help/pfg/pfg.htm>

### **4.3 XML Conventions Used in This Guide**

This guide follows the conventions set forth in C-CDA R2 V1, Section 4.3 *XML Conventions Used in This Guide*.



## 5 DOCUMENT-LEVEL TEMPLATES

Document-level templates describe the purpose and rules for constructing a conforming CDA document. Document templates include constraints on the CDA header and indicate contained section-level templates. The document-level templates listed in Table 3 below are new CDA documents defined in this implementation guide.

Each document-level template contains the following information:

- Scope and intended use of the document type
- Description and explanatory narrative
- Template metadata (e.g., templateId, etc.)
- Header constraints (e.g., document type, template id, participants)
- Required and optional section-level templates

Note: Reader should be familiar with the use of these document templates (see 1.2 Purpose) and the use of nullFlavors for missing or withheld information (see 3.4.1 and 3.4.1).

**Table 3: Document-Level Templates**

Document Template	OID	LOINC
<a href="#">Enhanced Discharge Document (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.1.2	18852-5
<a href="#">Enhanced Encounter Document (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.1.1	77601-3
<a href="#">Enhanced Operative Note Document (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.1.3	11504-8
<a href="#">Enhanced Procedure Document (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.1.4	28570-0
<a href="#">Interval Document (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.1.5	77600-5

## 5.1 Enhanced Discharge Document (CDP1)

[ClinicalDocument: identifier urn:oid:2.16.840.1.113883.10.20.35.1.2  
(open)]

**Table 4: Enhanced Discharge Document (CDP1) Contexts**

Contained By:	Contains:
	<a href="#">Additional Documentation Section (CDP1)</a> <a href="#">Admission Diagnosis Section (V2)</a> <a href="#">Admission Medications Section (entries optional) (V2)</a> <a href="#">Allergies and Intolerances Section (entries required) (V2)</a> <a href="#">Assessment Section</a> <a href="#">Chief Complaint and Reason for Visit Section</a> <a href="#">Chief Complaint Section</a> <a href="#">Discharge Diagnosis Section</a> <a href="#">Discharge Medications Section (entries required) (V2)</a> <a href="#">Externally Defined CDE Section (CDP1)</a> <a href="#">Family History Section (V2)</a> <a href="#">Functional Status Section (CDP1)</a> <a href="#">General Status Section</a> <a href="#">Goals Section</a> <a href="#">Health Concerns Section</a> <a href="#">Health Status Evaluation/Outcomes Section</a> <a href="#">History of Past Illness Section (V2)</a> <a href="#">History of Present Illness Section</a> <a href="#">Hospital Consultations Section</a> <a href="#">Hospital Course Section</a> <a href="#">Hospital Discharge Instructions Section</a> <a href="#">Hospital Discharge Physical Section</a> <a href="#">Hospital Discharge Studies Summary Section</a> <a href="#">Immunizations Section (entries required) (V2)</a> <a href="#">Instructions Section (V2)</a> <a href="#">Medical Equipment Section (V2)</a> <a href="#">Medical (General) History Section</a> <a href="#">Medications Section (entries required) (V2)</a> <a href="#">Mental Status Section</a> <a href="#">Nutrition Section</a> <a href="#">Orders Placed Section (CDP1)</a> <a href="#">Payers Section (V2)</a> <a href="#">Physical Exam Section (V2)</a> <a href="#">Plan of Treatment Section (CDP1)</a> <a href="#">Problem Section (entries required) (V2)</a> <a href="#">Procedures Section (entries required) (V2)</a> <a href="#">Reason for Visit Section</a> <a href="#">Results Section (entries required) (V2)</a> <a href="#">Review of Systems Section</a> <a href="#">Social History Section (CDP1)</a> <a href="#">Transportation Section (CDP1)</a> <a href="#">Vital Signs Section (entries required) (V2)</a>

**Note: Hyperlinks for sections defined in this guide go to the section template. Hyperlinks for sections included by reference from C-CDA R2 go to Table 24 which lists all of the section level templates included in the documents in this guide.**

The Enhanced Discharge Document synthesizes a patient's admission to a hospital, LTPAC provider, or other setting. It provides information for the continuation of care following discharge. The Joint Commission requires the following information to be included in the Discharge Summary which is contained in this enhanced document template (<http://www.jointcommission.org/>)::

- The reason for hospitalization (the admission)
- Significant Findings
- The procedures performed and treatment provided
- The patient's condition and disposition at discharge
- Information provided to the patient and family
- Provisions for follow-up care
- Attending physician's signature

The best practice for an Enhanced Discharge Document is to include the discharge disposition in the display of the header.

A comprehensive record of the patient's hospitalization may include a combination of the Enhanced Discharge Document, Enhanced Operative Notes Document(s), Enhanced Procedure Document(s), and Interval Documents. (see [Appendix D](#))

Relative to the Discharge Summary in the C-CDA R2, the Enhanced Discharge Document requires support by the EHR for a broader range of templates related to a patient admit/discharge for the administrative or clinical exchange with a third party. Any section for which data is not available (not collected, not relevant, not supported by the EHR technology, etc.) SHALL have the appropriate nullFlavor, from the [nullFlavorCDP1](#) valueset, specified to indicate that the information was not available (NI) at time of document creation or is being withheld (NA) (see section 3.4 regarding the use of nullFlavors).

The Discharge Summary defined in the C-CDA R2 should be used when a summary record is appropriate or when it is specifically requested.

The Enhanced Discharge Document (CDP1) template conforms to the C-CDA R2 Discharge Summary (V2) template  
(`identifier:urn:hl7ii:2.16.840.1.113883.10.20.22.1.8:2014-06-09`) with the following changes and additions:

- 1) Replaced verb MAY with SHALL for:
  - [Admission Diagnosis Section \(V2\)](#)
  - [Admission Medications Section \(entries optional\) \(V2\)](#)
  - [Family History Section \(V2\)](#)
  - [History of Past Illness Section \(V2\)](#)
  - [History of Present Illness Section](#)
  - [Hospital Consultations Section](#)
  - [Hospital Discharge Instructions Section](#)
  - [Hospital Discharge Physical Section](#)

- [Hospital Discharge Studies Summary Section](#)
  - [Nutrition Section](#)
  - [Review of Systems Section](#)
- 2) Replaced (entries optional) section with (entries required) section and changed verb MAY with SHALL for:
- [Discharge Medications Section \(entries required\) \(V2\)](#)
  - [Immunizations Section \(entries required\) \(V2\)](#)
  - [Problem Section \(entries required\) \(V2\)](#)
  - [Procedures Section \(entries required\) \(V2\)](#)
  - [Vital Signs Section \(entries required\) \(V2\)](#)
- 3) Replaced (entries optional) section with (entries required) for:
- [Allergies and Intolerances Section \(entries required\) \(V2\)](#)
- 4) Added additional sections from C-CDA R2 by reference:
- [Assessment Section](#)
  - [General Status Section](#)
  - [Goals Section](#)
  - [Health Concerns Section](#)
  - [Health Status Evaluation/Outcomes Section](#)
  - [Instructions Section \(V2\)](#)
  - [Medical Equipment Section \(V2\)](#)
  - [Medical \(General\) History Section](#)
  - [Medications Section \(entries required\) \(V2\)](#)
  - [Mental Status Section](#)
  - [Payers Section \(V2\)](#)
  - [Physical Exam Section \(V2\)](#)
  - [Problem Section \(V2\)](#)
  - [Results Section \(entries required\) \(V2\)](#)
- 5) Replaced C-CDA R2 sections with CDP1 additionally constrained sections and changed verb MAY with SHALL for::
- [Functional Status Section \(CDP1\)](#)
  - [Social History Section \(CDP1\)](#)
- 6) Replaced C-CDA R2 section with CDP1 additionally constrained section:
- [Plan of Treatment Section \(CDP1\)](#)
- 7) Added CDP1 only sections (verb SHALL):
- [Additional Documentation Section \(CDP1\)](#)
  - [Externally Defined CDE Section \(CDP1\)](#)
  - [Orders Placed Section \(CDP1\)](#)
  - [Transportation Section \(CDP1\)](#)
- 8) Removed redundant and DEPRECATED sections:
- [Discharge Diet Section \(DEPRECATED\)](#)
  - [Discharge Medications Section \(entries optional\) \(V2\)](#)
- 9) Added conformance language for use of:
- [Chief Complaint and Reason for Visit Section](#)
  - [Chief Complaint Section](#)
  - [Reason for Visit Section](#)



**Table 5: Enhanced Discharge Document (CDP1) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
ClinicalDocument (identifier: urn:oid:2.16.840.1.113883.10.20.35.1.2)					
templateId	1..1	SHALL		<a href="#">CDP1-1501</a>	
@root	1..1	SHALL		<a href="#">CDP1-1502</a>	2.16.840.1.113883.10.20.35.1.2
code	1..1	SHALL		<a href="#">CDP1-1503</a>	
@code	1..1	SHALL		<a href="#">CDP1-1504</a>	2.16.840.1.113883.11.20.4.1 (DischargeSummaryDocumentTypeCode)
participant	0..*	MAY		<a href="#">CDP1-1505</a>	
componentOf	1..1	SHALL		<a href="#">CDP1-1507</a>	
encompassingEncounter	1..1	SHALL		<a href="#">CDP1-1508</a>	
effectiveTime	1..1	SHALL		<a href="#">CDP1-1509</a>	
low	1..1	SHALL		<a href="#">CDP1-1510</a>	
high	1..1	SHALL		<a href="#">CDP1-1511</a>	
dischargeDispositionCode	1..1	SHALL		<a href="#">CDP1-1512</a>	2.16.840.1.113883.3.88.12.80.3 3 (NUBC UB-04 FL17 Patient Status)
responsibleParty	0..1	MAY		<a href="#">CDP1-1513</a>	
assignedEntity	1..1	SHALL		<a href="#">CDP1-1514</a>	
assignedPerson	0..1	SHOULD		<a href="#">CDP1-1515</a>	
representedOrganization	0..1	SHOULD		<a href="#">CDP1-1516</a>	
encounterParticipant	0..*	MAY		<a href="#">CDP1-1517</a>	
assignedEntity	1..1	SHALL		<a href="#">CDP1-1518</a>	
assignedPerson	0..1	SHOULD		<a href="#">CDP1-1519</a>	
representedOrganization	0..1	SHOULD		<a href="#">CDP1-1520</a>	
component	1..1	SHALL		<a href="#">CDP1-1601</a>	
structuredBody	1..1	SHALL		<a href="#">CDP1-1602</a>	
component	1..1	SHALL		<a href="#">CDP1-1603</a>	
section	1..1	SHALL		<a href="#">CDP1-1604</a>	<a href="#">Additional Documentation Section (CDP1)</a> (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.1)
component	1..1	SHALL		<a href="#">CDP1-1605</a>	
section	1..1	SHALL		<a href="#">CDP1-1606</a>	<a href="#">Allergies and Intolerances Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6.1:2014-06-09)
component	1..1	SHALL		<a href="#">CDP1-1607</a>	
section	1..1	SHALL		<a href="#">CDP1-1608</a>	<a href="#">Assessment Section</a> (identifier:

XPath	Card.	Verb	Data Type	CONF#	Value
					urn:oid:2.16.840.1.113883.10.20.22.2.8
component	0..1	MAY		<a href="#">CDP1-1609</a>	
section	1..1	SHALL		<a href="#">CDP1-1610</a>	<a href="#">Chief Complaint and Reason for Visit Section</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.13
component	0..1	MAY		<a href="#">CDP1-1611</a>	
section	1..1	SHALL		<a href="#">CDP1-1612</a>	<a href="#">Chief Complaint Section</a> (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1
component	1..1	SHALL		<a href="#">CDP1-1613</a>	
section	1..1	SHALL		<a href="#">CDP1-1614</a>	<a href="#">Externally Defined CDE Section (CDP1)</a> (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.2
component	1..1	SHALL		<a href="#">CDP1-1615</a>	
section	1..1	SHALL		<a href="#">CDP1-1616</a>	<a href="#">Family History Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2014-06-09
component	1..1	SHALL		<a href="#">CDP1-1617</a>	
section	1..1	SHALL		<a href="#">CDP1-1618</a>	<a href="#">Functional Status Section (CDP1)</a> (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.5
component	1..1	SHALL		<a href="#">CDP1-1619</a>	
section	1..1	SHALL		<a href="#">CDP1-1620</a>	<a href="#">General Status Section</a> (identifier: urn:oid:2.16.840.1.113883.10.20.2.5
component	1..1	SHALL		<a href="#">CDP1-1621</a>	
section	1..1	SHALL		<a href="#">CDP1-1622</a>	<a href="#">Goals Section</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.60
component	1..1	SHALL		<a href="#">CDP1-1623</a>	
section	1..1	SHALL		<a href="#">CDP1-1624</a>	<a href="#">Health Concerns Section</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.58
component	1..1	SHALL		<a href="#">CDP1-1625</a>	
section	1..1	SHALL		<a href="#">CDP1-1626</a>	<a href="#">Health Status Evaluations and Outcomes</a>

XPath	Card.	Verb	Data Type	CONF#	Value
					<a href="#"><u>Section</u></a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.61)
component	1..1	SHALL		<a href="#"><u>CDP1-1627</u></a>	
section	1..1	SHALL		<a href="#"><u>CDP1-1628</u></a>	<a href="#"><u>History of Past Illness Section (V2)</u></a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.20:2014-06-09)
component	1..1	SHALL		<a href="#"><u>CDP1-1629</u></a>	
section	1..1	SHALL		<a href="#"><u>CDP1-1630</u></a>	<a href="#"><u>History of Present Illness Section</u></a> (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.4)
component	1..1	SHALL		<a href="#"><u>CDP1-1631</u></a>	
section	1..1	SHALL		<a href="#"><u>CDP1-1632</u></a>	<a href="#"><u>Admission Diagnosis Section (V2)</u></a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.43:2014-06-09)
component	1..1	SHALL		<a href="#"><u>CDP1-1633</u></a>	
section	1..1	SHALL		<a href="#"><u>CDP1-1634</u></a>	<a href="#"><u>Admission Medications Section (entries optional) (V2)</u></a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.44:2014-06-09)
component	1..1	SHALL		<a href="#"><u>CDP1-1635</u></a>	
section	1..1	SHALL		<a href="#"><u>CDP1-1636</u></a>	<a href="#"><u>Hospital Consultations Section</u></a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.42)
component	1..1	SHALL		<a href="#"><u>CDP1-1637</u></a>	
section	1..1	SHALL		<a href="#"><u>CDP1-1638</u></a>	<a href="#"><u>Hospital Course Section</u></a> (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.5)
component	1..1	SHALL		<a href="#"><u>CDP1-1639</u></a>	
section	1..1	SHALL		<a href="#"><u>CDP1-1640</u></a>	<a href="#"><u>Discharge Diagnosis Section (V2)</u></a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.24:2014-06-09)
component	1..1	SHALL		<a href="#"><u>CDP1-1641</u></a>	
section	1..1	SHALL		<a href="#"><u>CDP1-1642</u></a>	<a href="#"><u>Hospital Discharge Instructions Section</u></a>



XPath	Card.	Verb	Data Type	CONF#	Value
					(identifier: urn:oid:2.16.840.1.11388 3.10.20.22.2.41
component	1..1	SHALL		<a href="#">CDP1-1643</a>	
section	1..1	SHALL		<a href="#">CDP1-1644</a>	<a href="#">Discharge Medications Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.22.2.11.1:2014- 06-09
component	1..1	SHALL		<a href="#">CDP1-1645</a>	
section	1..1	SHALL		<a href="#">CDP1-1646</a>	<a href="#">Hospital Discharge Physical Section</a> (identifier: urn:oid:1.3.6.1.4.1.1937 6.1.5.3.1.26
component	1..1	SHALL		<a href="#">CDP1-1647</a>	
section	1..1	SHALL		<a href="#">CDP1-1648</a>	<a href="#">Hospital Discharge Studies Summary Section</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.22.2.16
component	1..1	SHALL		<a href="#">CDP1-1649</a>	
section	1..1	SHALL		<a href="#">CDP1-1650</a>	<a href="#">Immunizations Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.22.2.2.1:2014- 06-09
component	1..1	SHALL		<a href="#">CDP1-1651</a>	
section	1..1	SHALL		<a href="#">CDP1-1652</a>	<a href="#">Instructions Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.22.2.45:2014- 06-09
component	1..1	SHALL		<a href="#">CDP1-1653</a>	
section	1..1	SHALL		<a href="#">CDP1-1654</a>	<a href="#">Medical Equipment Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.22.2.23:2014- 06-09
component	1..1	SHALL		<a href="#">CDP1-1655</a>	
section	1..1	SHALL		<a href="#">CDP1-1656</a>	<a href="#">Medical (General) History Section</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.22.2.39
component	1..1	SHALL		<a href="#">CDP1-1657</a>	

XPath	Card.	Verb	Data Type	CONF#	Value
section	1..1	SHALL		<a href="#">CDP1-1658</a>	<a href="#">Medications Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1.1:2014-06-09
component	1..1	SHALL		<a href="#">CDP1-1659</a>	
section	1..1	SHALL		<a href="#">CDP1-1660</a>	<a href="#">Mental Status Section</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.56
component	1..1	SHALL		<a href="#">CDP1-1661</a>	
section	1..1	SHALL		<a href="#">CDP1-1662</a>	<a href="#">Nutrition Section</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.57
component	1..1	SHALL		<a href="#">CDP1-1663</a>	
section	1..1	SHALL		<a href="#">CDP1-1664</a>	<a href="#">Orders Placed Section (CDP1)</a> (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.3
component	1..1	SHALL		<a href="#">CDP1-1665</a>	
section	1..1	SHALL		<a href="#">CDP1-1666</a>	<a href="#">Payers Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2014-06-09
component	1..1	SHALL		<a href="#">CDP1-1667</a>	
section	1..1	SHALL		<a href="#">CDP1-1668</a>	<a href="#">Physical Exam Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.2.10:2014-06-09
component	1..1	SHALL		<a href="#">CDP1-1669</a>	
section	1..1	SHALL		<a href="#">CDP1-1670</a>	<a href="#">Plan of Treatment Section (CDP1)</a> (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.6
component	1..1	SHALL		<a href="#">CDP1-1671</a>	
section	1..1	SHALL		<a href="#">CDP1-1672</a>	<a href="#">Problem Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.5.1:2014-06-09
component	1..1	SHALL		<a href="#">CDP1-1673</a>	
section	1..1	SHALL		<a href="#">CDP1-1674</a>	<a href="#">Procedures Section (entries required) (V2)</a>

XPath	Card.	Verb	Data Type	CONF#	Value
					(identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.7.1:2014-06-09
component	0..1	MAY		<a href="#">CDP1-1675</a>	
section	1..1	SHALL		<a href="#">CDP1-1676</a>	<a href="#">Reason for Visit Section</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.12
component	1..1	SHALL		<a href="#">CDP1-1677</a>	
section	1..1	SHALL		<a href="#">CDP1-1678</a>	<a href="#">Results Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3.1:2014-06-09
component	1..1	SHALL		<a href="#">CDP1-1679</a>	
section	1..1	SHALL		<a href="#">CDP1-1680</a>	<a href="#">Review of Systems Section</a> (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.18
component	1..1	SHALL		<a href="#">CDP1-1681</a>	
section	1..1	SHALL		<a href="#">CDP1-1682</a>	<a href="#">Social History Section (CDP1)</a> (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.7
component	1..1	SHALL		<a href="#">CDP1-1683</a>	
section	1..1	SHALL		<a href="#">CDP1-1684</a>	<a href="#">Transportation Section (CDP1)</a> (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.4
component	1..1	SHALL		<a href="#">CDP1-1685</a>	
section	1..1	SHALL		<a href="#">CDP1-1686</a>	<a href="#">Vital Signs Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2014-06-09

### 5.1.1 Properties

1. Conforms to [Discharge Summary \(V2\)](#) template (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.22.1.8:2014-06-09).
2. Conforms to [US Realm Header \(V2\)](#) template (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2014-06-09).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:CDP1-1501) such that it
  - a. **SHALL** contain exactly one [1..1]  
**@root**="2.16.840.1.113883.10.20.35.1.2" (CONF:CDP1-1502).

The Enhanced Discharge Document recommends use of a single document type code, 18852-5 “Discharge summary”, with further specification provided by author or performer, setting, or specialty. When pre-coordinated codes are used, any coded values describing the author or performer of the service act or the practice setting must be consistent with the LOINC document type.

4. **SHALL** contain exactly one [1..1] **code** (CONF:CDP1-1503).
  - a. This code **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [DischargeSummaryDocumentTypeCode](#) 2.16.840.1.113883.11.20.4.1 **DYNAMIC** (CONF:CDP1-1504).

#### 5.1.1.1 participant

The participant element in the Enhanced Discharge Document header follows the General Header Constraints for participants. The Enhanced Discharge Document does not specify any use for functionCode for participants. Local policies will determine how this element should be used in implementations.

5. **MAY** contain zero or more [0..\*] **participant** (CONF:CDP1-1505).
  - a. When participant/@typeCode is IND, associatedEntity/@classCode **SHALL** be selected from ValueSet 2.16.840.1.113883.11.20.9.33 [INDRoleclassCodes](#) STATIC 2011-09-30 (CONF:CDP1-1506).

#### 5.1.1.2 componentOf

The Enhanced Discharge Document is always associated with an Admission using the encompassingEncounter element in the header.

6. **SHALL** contain exactly one [1..1] **componentOf** (CONF:CDP1-1507).
  - a. This componentOf **SHALL** contain exactly one [1..1] **encompassingEncounter** (CONF:CDP1-1508)
    - i. This **encompassingEncounter** **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:CDP1-1509).

The admission date is recorded in the componentOf/encompassingEncounter/effectiveTime/low.

1. This encompassingEncounter **SHALL** contain exactly one [1..1] **effectiveTime/low** (CONF:CDP1-1510).

The discharge date is recorded in the componentOf/encompassingEncounter/effectiveTime/high.

2. This encompassingEncounter **SHALL** contain exactly one [1..1] **effectiveTime/high** (CONF:CDP1-1511).

The dischargeDispositionCode records the disposition of the patient at time of discharge. Access to the National Uniform Billing Committee (NUBC) code system requires a membership. The following conformance statement aligns with HITSP C80 requirements.

The dischargeDispositionCode, @displayName, or NUBC UB-04 Print Name, must be displayed when the document is rendered.

- ii. This encompassingEncounter **SHALL** contain exactly one [1..1] **dischargeDispositionCode**, which **SHOULD** be selected from

ValueSet [NUBC UB-04 FL17 Patient Status](#)

2.16.840.1.113883.3.88.12.80.33 **DYNAMIC** (CONF:CDP1-1512).

The responsibleParty element represents only the party responsible for the encounter, not necessarily the entire episode of care.

- iii. This encompassingEncounter **MAY** contain zero or one [0..1] **responsibleParty** (CONF:CDP1-1513).

If present, the responsibleParty/assignedEntity element **SHALL** have at least one assignedPerson or representedOrganization element present

- 1. The responsibleParty, if present, **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:CDP1-1514).
  - a. This assignedEntity **SHOULD** contain zero or one [0..1] **assignedPerson** (CONF:CDP1-1515).
  - b. This assignedEntity **SHOULD** contain zero or one [0..1] **representedOrganization** (CONF:CDP1-1516).

The encounterParticipant elements represent only those participants in the encounter, not necessarily the entire episode of care.

- iv. This encompassingEncounter **MAY** contain zero or more [0..\*] **encounterParticipant** (CONF:CDP1-1517).

If present, the encounterParticipant/assignedEntity element **SHALL** have at least one assignedPerson or representedOrganization element present.

- 1. The encounterParticipant, if present, **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:CDP1-1518).
  - a. This assignedEntity **SHOULD** contain zero or one [0..1] **assignedPerson** (CONF:CDP1-1519).
  - b. This assignedEntity **SHOULD** contain zero or one [0..1] **representedOrganization** (CONF:CDP1-1520).

**Figure 3: Enhanced Discharge Document (CDP1) Encompassing Encounter Example**

```
<componentOf>
  <encompassingEncounter>
    <id extension="9937012" root="2.16.840.1.113883.19" />
    <code codeSystem="2.16.840.1.113883.6.12" codeSystemName="CPT-4" code="99213"
displayName="Evaluation and Management" />
    <effectiveTime>
      <low value="20090227130000+0500" />
      <high value="20090227130000+0500" />
    </effectiveTime>
    <dischargeDispositionCode code="01" codeSystem="2.16.840.1.113883.12.112"
displayName="Routine Discharge" codeSystemName="HL7 Discharge Disposition" />
    <location>
      <healthCareFacility>
        <id root="2.16.540.1.113883.19.2" />
      </healthCareFacility>
    </location>
  </encompassingEncounter>
</componentOf>
```

### 5.1.2 component

7. **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1601).

a. This component **SHALL** contain exactly one [1..1] **structuredBody** (CONF:CDP1-1602).

i. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1603) such that it

1. **SHALL** contain exactly one [1..1] [Additional Documentation Section \(CDP1\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.1) (CONF:CDP1-1604).

ii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1605) such that it

1. **SHALL** contain exactly one [1..1] [Allergies and Intolerances Section \(entries required\) \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6.1:2014-06-09) (CONF:CDP1-1606).

iii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1607) such that it

1. **SHALL** contain exactly one [1..1] [Assessment Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.8) (CONF:CDP1-1608).

iv. This structuredBody **MAY** contain zero or one [0..1] **component** (CONF:CDP1-1609) such that it

1. **SHALL** contain exactly one [1..1] [Chief Complaint and Reason for Visit Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.13) (CONF:CDP1-16010).

v. This structuredBody **MAY** contain zero or one [0..1] **component** (CONF:CDP1-1611) such that it

1. **SHALL** contain exactly one [1..1] [Chief Complaint Section](#) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1) (CONF:CDP1-1612).
- vi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1613) such that it
  1. **SHALL** contain exactly one [1..1] [Externally Defined CDE Section \(CDP1\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.2) (CONF:CDP1-1614).
- vii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1615) such that it
  1. **SHALL** contain exactly one [1..1] [Family History Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2014-06-09) (CONF:CDP1-1616).
- viii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1617) such that it
  1. **SHALL** contain exactly one [1..1] [Functional Status Section \(CDP1\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.5) (CONF:CDP1-1618).
- ix. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1619) such that it
  1. **SHALL** contain exactly one [1..1] [General Status Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.2.5) (CONF:CDP1-1620).
- x. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1621) such that it
  1. **SHALL** contain exactly one [1..1] [Goals Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.60) (CONF:CDP1-1622).
- xi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1623) such that it
  1. **SHALL** contain exactly one [1..1] [Health Concerns Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.58) (CONF:CDP1-1624).
- xii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1625) such that it
  1. **SHALL** contain exactly one [1..1] [Health Status Evaluations and Outcomes Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.61) (CONF:CDP1-1626).
- xiii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1627) such that it

1. **SHALL** contain exactly one [1..1] [History of Past Illness Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.20:2014-06-09) (CONF:CDP1-1628).
- xiv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1629) such that it
  1. **SHALL** contain exactly one [1..1] [History of Present Illness Section](#) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.4) (CONF:CDP1-1630).
- xv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1631) such that it
  1. **SHALL** contain exactly one [1..1] [Admission Diagnosis Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.43:2014-06-09) (CONF:CDP1-1632).
- xvi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1633) such that it
  1. **SHALL** contain exactly one [1..1] [Admission Medications Section \(entries optional\) \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.44:2014-06-09) (CONF:CDP1-1634).
- xvii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1635) such that it
  1. **SHALL** contain exactly one [1..1] [Hospital Consultations Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.42) (CONF:CDP1-1636).
- xviii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1637) such that it
  1. **SHALL** contain exactly one [1..1] [Hospital Course Section](#) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.5) (CONF:CDP1-1638).
- xix. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1639) such that it
  1. **SHALL** contain exactly one [1..1] [Discharge Diagnosis Section](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.24:2014-06-09) (CONF:CDP1-1640).
- xx. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1641) such that it
  1. **SHALL** contain exactly one [1..1] [Hospital Discharge Instructions Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.41) (CONF:CDP1-1642).
- xxi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1643) such that it



1. **SHALL** contain exactly one [1..1] [Discharge Medications Section \(entries required\) \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.11.1:2014-06-09) (CONF:CDP1-1644).
- xxii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1645) such that it
1. **SHALL** contain exactly one [1..1] [Hospital Discharge Physical Section](#) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.26) (CONF:CDP1-1646).
- xxiii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1647) such that it
1. **SHALL** contain exactly one [1..1] [Hospital Discharge Studies Summary Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.16) (CONF:CDP1-1648).
- xxiv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1649) such that it
1. **SHALL** contain exactly one [1..1] [Immunizations Section \(entries required\) \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.2.1:2014-06-09) (CONF:CDP1-1650).
- xxv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1651) such that it
1. **SHALL** contain exactly one [1..1] [Instructions Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.45:2014-06-09) (CONF:CDP1-1652).
- xxvi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1653) such that it
1. **SHALL** contain exactly one [1..1] [Medical Equipment Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.23:2014-06-09) (CONF:CDP1-1654).
- xxvii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1655) such that it
1. **SHALL** contain exactly one [1..1] [Medical \(General\) History Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.39) (CONF:CDP1-1656).
- xxviii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1657) such that it
1. **SHALL** contain exactly one [1..1] [Medications Section \(entries required\) \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1.1:2014-06-09) (CONF:CDP1-1658).

- xxix. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1659) such that it
1. **SHALL** contain exactly one [1..1] [Mental Status Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.56) (CONF:CDP1-1660).
- xxx. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1661) such that it
1. **SHALL** contain exactly one [1..1] [Nutrition Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.57) (CONF:CDP1-1662).
- xxxi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1663) such that it
1. **SHALL** contain exactly one [1..1] [Orders Placed Section \(CDP1\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.3) (CONF:CDP1-1664).
- xxxii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1665) such that it
1. **SHALL** contain exactly one [1..1] [Payers Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2014-06-09) (CONF:CDP1-1666).
- xxxiii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1667) such that it
1. **SHALL** contain exactly one [1..1] [Physical Exam Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.2.10:2014-06-09) (CONF:CDP1-1668).
- xxxiv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1669) such that it
1. **SHALL** contain exactly one [1..1] [Plan of Treatment Section \(CDP1\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.6) (CONF:CDP1-1670).
- xxxv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1671) such that it
1. **SHALL** contain exactly one [1..1] [Problem Section \(entries required\) \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.5.1:2014-06-09) (CONF:CDP1-1672).
- xxxvi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1673) such that it
1. **SHALL** contain exactly one [1..1] [Procedures Section \(entries required\) \(V2\)](#) (identifier:

urn:hl7ii:2.16.840.1.113883.10.20.22.2.7.1:2014-06-09) (CONF:CDP1-1674).

xxxvii. This structuredBody **MAY** contain zero or one [0..1] **component** (CONF:CDP1-1675) such that it

1. **SHALL** contain exactly one [1..1] [Reason for Visit Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.12) (CONF:CDP1-1676).

xxxviii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1677) such that it

1. **SHALL** contain exactly one [1..1] [Results Section \(entries required\) \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3.1:2014-06-09) (CONF:CDP1-1678).

xxxix. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1679) such that it

1. **SHALL** contain exactly one [1..1] [Review of Systems Section](#) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.18) (CONF:CDP1-1680).

xl. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1681) such that it

1. **SHALL** contain exactly one [1..1] [Social History Section \(CDP1\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.7) (CONF:CDP1-1682).

xli. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1683) such that it

1. **SHALL** contain exactly one [1..1] [Transportation Section \(CDP1\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.4) (CONF:CDP1-1684).

xlii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1685) such that it

1. **SHALL** contain exactly one [1..1] [Vital Signs Section \(entries required\) \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2014-06-09) (CONF:CDP1-1686).

xliii. **SHALL** include a [Chief Complaint and Reason for Visit Section](#) (identifier: urn:urn:oid:2.16.840.1.113883.10.20.22.2.13) or both a [Chief Complaint Section](#) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1) and a [Reason for Visit Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.12) (CONF:CDP1-1687).

xliv. **SHALL NOT** include a [Chief Complaint and Reason for Visit Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.13) when both a [Chief](#)

Complaint Section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1) and a Reason for Visit Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.12) are present (CONF:CDP1-1686).

**Table 6: DischargeSummaryDocumentTypeCode**

Value Set: DischargeSummaryDocumentTypeCode 2.16.840.1.113883.11.20.4.1 A value set of LOINC document codes for discharge summaries.			
Specific URL Pending Valueset Source: <a href="http://www.loinc.org/">http://www.loinc.org/</a>			
Code	Code System	Code System OID	Print Name
18842-5	LOINC	2.16.840.1.113883.6.1	Discharge summarization note
11490-0	LOINC	2.16.840.1.113883.6.1	Physician
28655-9	LOINC	2.16.840.1.113883.6.1	Attending physician
29761-4	LOINC	2.16.840.1.113883.6.1	Dentistry
34745-0	LOINC	2.16.840.1.113883.6.1	Nursing
34105-7	LOINC	2.16.840.1.113883.6.1	Hospital Discharge summary
34106-5	LOINC	2.16.840.1.113883.6.1	Physician
...			

**Table 7: INDRoleclass**

Value Set: INDRoleclassCodes 2.16.840.1.113883.11.20.9.33 Value Set Source: <a href="http://www.hl7.org">http://www.hl7.org</a>			
Code	Code System	Code System OID	Print Name
PRS	RoleClass	2.16.840.1.113883.5.110	personal relationship
NOK	RoleClass	2.16.840.1.113883.5.110	next of kin
CAREGIVER	RoleClass	2.16.840.1.113883.5.110	caregiver
AGNT	RoleClass	2.16.840.1.113883.5.110	agent
GUAR	RoleClass	2.16.840.1.113883.5.110	guarantor
ECON	RoleClass	2.16.840.1.113883.5.110	emergency contact

**Table 8: NUBC UB-04 FL17 Patient Status**

Value Set: NUBC UB-04 FL17 Patient Status 2.16.840.1.113883.3.88.12.80.33			
National Uniform Billing Committee (NUBC) code system.			
Value Set Source: <a href="http://www.nubc.org">http://www.nubc.org</a>			
Code	Code System	Code System OID	Print Name
01	nubc-UB-04-Manual-code set	2.16.840.1.113883.6.301	Discharged to Home or Self Care (Routine Discharge)
01	nubc-UB-04-Manual-code set	2.16.840.1.113883.6.301	Discharged/transferred to a Short-Term General Hospital for Inpatient Care
03	nubc-UB-04-Manual-code set	2.16.840.1.113883.6.301	Discharged/transferred to Skilled Nursing Facility (SNF) with Medicare Certification in Anticipation of Skilled Care
04	nubc-UB-04-Manual-code set	2.16.840.1.113883.6.301	Discharged/transferred to a Facility that Provides Custodial or Supportive Care
05	nubc-UB-04-Manual-code set	2.16.840.1.113883.6.301	Discharged/transferred to a Designated Cancer Center or Children's Hospital
05	nubc-UB-04-Manual-code set	2.16.840.1.113883.6.301	Discharged/transferred to Home Under Care of an Organized Home Health Service Organization in Anticipation of Covered Skilled Care
06	nubc-UB-04-Manual-code set	2.16.840.1.113883.6.301	Discharged/transferred to Home Under Care of an Organized Home Health Service Organization in Anticipation of Covered Skilled Care
07	nubc-UB-04-Manual-code set	2.16.840.1.113883.6.301	Left Against Medical Advice or Discontinued Care
08	nubc-UB-04-Manual-code set	2.16.840.1.113883.6.301	Reserved for Assignment by the NUBC
09	nubc-UB-04-Manual-code set	2.16.840.1.113883.6.301	Admitted as an Inpatient to this Hospital
...			

## 5.2 Enhanced Encounter Document (CDP1)

[ClinicalDocument: identifier urn:oid:2.16.840.1.113883.10.20.35.1.1  
(open)]

**Table 9: Enhanced Encounter Document (CDP1) Contexts**

Contained By:	Contains:
	<a href="#">Additional Documentation Section (CDP1)</a> <a href="#">Advance Directives Section (entries required) (V2)</a> <a href="#">Allergies and Intolerances Section (entries required) (V2)</a> <a href="#">Assessment and Plan Section (V2)</a> <a href="#">Assessment Section</a> <a href="#">Chief Complaint and Reason for Visit Section</a> <a href="#">Chief Complaint Section</a> <a href="#">Encounters Section (entries required) (V2)</a> <a href="#">Externally Defined CDE Section (CDP1)</a> <a href="#">Family History Section (V2)</a> <a href="#">Functional Status Section (CDP1)</a> <a href="#">General Status Section</a> <a href="#">Goals Section</a> <a href="#">Health Concerns Section</a> <a href="#">Health Status Evaluation/Outcomes Section</a> <a href="#">History of Past Illness Section (V2)</a> <a href="#">History of Present Illness Section</a> <a href="#">Immunizations Section (entries required) (V2)</a> <a href="#">Instructions Section (V2)</a> <a href="#">Interventions Section (V2)</a> <a href="#">Medical Equipment Section (V2)</a> <a href="#">Medications Section (entries required) (V2)</a> <a href="#">Mental Status Section</a> <a href="#">Nutrition Section</a> <a href="#">Objective Section</a> <a href="#">Orders Placed Section (CDP1)</a> <a href="#">Payers Section (V2)</a> <a href="#">Physical Exam Section (V2)</a> <a href="#">Plan of Treatment Section (CDP1)</a> <a href="#">Problem Section (entries required) (V2)</a> <a href="#">Procedures Section (entries required) (V2)</a> <a href="#">Reason for Referral Section (V2)</a> <a href="#">Reason for Visit Section</a> <a href="#">Results Section (entries required) (V2)</a> <a href="#">Review of Systems Section</a> <a href="#">Social History Section (CDP1)</a> <a href="#">Subjective Section</a> <a href="#">Transportation Section (CDP1)</a> <a href="#">Vital Signs Section (entries required) (V2)</a>

**Note: Hyperlinks for sections defined in this guide go to the section template. Hyperlinks for sections included by reference from C-CDA R2 go to Table 24 which lists all of the section level templates included in the documents in this guide.**

A Enhanced Encounter Document includes all sections relevant to a single Office, Consult, or Home Health visit, except for details concerning procedures, operations or imaging performed during the encounter, which are included in different document types. Enhanced encounters may involve face-to-face time with the patient or may fall under the auspices of tele-medicine visits.

Any section for which data is not available (not collected, not relevant, not supported by the EHR technology, etc.) SHALL have the appropriate nullFlavor, from the [nullFlavorCDP1](#) valueset, specified to indicate that the information was not available (NI) at time of document creation or is being withheld (NA) (see section 3.4 regarding the use of nullFlavors).

Enhanced Encounter Document requires support by the EHR for a broader range of templates related to a patient visit for the administrative or clinical exchange with a third party.

The Consult Note, History and Physical and/or Progress Note defined in the C-CDA R2 should be used when a summary record is appropriate or when it is specifically requested.

**Table 10: Enhanced Encounter Document (CDP1) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
ClinicalDocument (identifier urn:oid:2.16.840.1.113883.10.20.35.1.1)					
templateId	1..1	SHALL		<a href="#">CDP1-1201</a>	
@root	1..1	SHALL		<a href="#">CDP1-1202</a>	2.16.840.1.113883.10.20.35.1.1
code	1..1	SHALL		<a href="#">CDP1-1203</a>	
@code	1..1	SHALL		<a href="#">CDP1-1204</a>	2.16.840.1.113883.1.11.20.2.2 <a href="#">HPDocumentType</a> or 2.16.840.1.113883.11.20.8.1 <a href="#">ProgressNoteDocumentTypeCode</a> or 2.16.840.1.113883.11.20.9.3.1 <a href="#">ConsultDocumentType</a> or "77601-3" Enhanced Note (CodeSystem: LOINC 2.16.840.1.113883.6.1
documentationOf	1..1	SHALL		<a href="#">CDP1-1205</a>	
serviceEvent	1..1	SHALL		<a href="#">CDP1-1206</a>	
@classCode	1..1	SHALL		<a href="#">CDP1-1207</a>	2.16.840.1.113883.5.6 (HL7ActClass) = PCPR
templateID	1..1	SHALL		<a href="#">CDP1-1208</a>	
@root	1..1	SHALL		<a href="#">CDP1-1209</a>	2.16.840.1.113883.10.20.21.3.1
effectiveTime	1..1	SHALL		<a href="#">CDP1-1210</a>	<a href="#">US Realm Date and Time (DT.US.FIELDED)</a> (identifier: <a href="#">urn:oid:2.16.840.1.113883.10.20.22.5.3</a>
low	1..1	SHALL		<a href="#">CDP1-1211</a>	
high	1..1	SHALL		<a href="#">CDP1-1212</a>	
inFulfillmentOf	0..*	MAY		<a href="#">CDP1-1213</a>	
order	1..1	SHALL		<a href="#">CDP1-1214</a>	
id	1..*	SHALL		<a href="#">CDP1-1215</a>	
componentOf	1..1	SHALL		<a href="#">CDP1-1216</a>	
encompassingEncounter	1..1	SHALL		<a href="#">CDP1-1217</a>	
id	1..*	SHALL		<a href="#">CDP1-1218</a>	
effectiveTime	1..1	SHALL		<a href="#">CDP1-1219</a>	<a href="#">US Realm Date and Time (DT.US.FIELDED)</a> (identifier: <a href="#">urn:oid:2.16.840.1.113883.10.20.22.5.3</a>
low	1..1	SHALL		<a href="#">CDP1-1220</a>	
location	1..1	SHALL		<a href="#">CDP1-1221</a>	
healthCareFacility	1..1	SHALL		<a href="#">CDP1-1222</a>	
id	1..*	SHALL		<a href="#">CDP1-1223</a>	
responsibleParty	1..1	SHALL		<a href="#">CDP1-1224</a>	
encounterParticipant	0..*	MAY		<a href="#">CDP1-1225</a>	
component	1..1	SHALL		<a href="#">CDP1-1301</a>	



XPath	Card.	Verb	Data Type	CONF#	Value
structuredBody	1..1	SHALL		<a href="#">CDP1-1302</a>	
component	1..1	SHALL		<a href="#">CDP1-1303</a>	
section	1..1	SHALL		<a href="#">CDP1-1304</a>	<a href="#">Additional Documentation Section (CDP1)</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.35.2.1
component	0..1	MAY		<a href="#">CDP1-1305</a>	
section	1..1	SHALL		<a href="#">CDP1-1306</a>	<a href="#">Advance Directives Section (entries required) (V2)</a> (templateId: identifier: urn:hl7ii:2.16.840.1.113 883.10.20.2.21.1:2014- 06-09
component	1..1	SHALL		<a href="#">CDP1-1307</a>	
section	1..1	SHALL		<a href="#">CDP1-1308</a>	<a href="#">Allergies and Intolerances Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.22.2.6.1:2014- 06-09
component	0..1	MAY		<a href="#">CDP1-1309</a>	
section	1..1	SHALL		<a href="#">CDP1-1310</a>	<a href="#">Assessment and Plan Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10. 20.22.2.9:2014-06-09
component	0..1	MAY		<a href="#">CDP1-1311</a>	
section	1..1	SHALL		<a href="#">CDP1-1312</a>	<a href="#">Assessment Section</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.22.2.8
component	0..1	MAY		<a href="#">CDP1-1313</a>	
section	1..1	SHALL		<a href="#">CDP1-1314</a>	<a href="#">Chief Complaint and Reason for Visit Section</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.22.2.13
component	0..1	MAY		<a href="#">CDP1-1315</a>	
section	1..1	SHALL		<a href="#">CDP1-1316</a>	<a href="#">Chief Complaint Section</a> (identifier: urn:oid:1.3.6.1.4.1.1937 6.1.5.3.1.1.13.2.1
component	1..1	SHALL		<a href="#">CDP1-1317</a>	
section	1..1	SHALL		<a href="#">CDP1-1318</a>	<a href="#">Encounters Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113

XPath	Card.	Verb	Data Type	CONF#	Value
					883.10.20.22.2.22.1:2014-06-09
component	1..1	SHALL		<a href="#">CDP1-1319</a>	
section	1..1	SHALL		<a href="#">CDP1-1320</a>	<a href="#">Externally Defined CDE Section (CDP1)</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.35.2.2
component	1..1	SHALL		<a href="#">CDP1-1321</a>	
section	1..1	SHALL		<a href="#">CDP1-1322</a>	<a href="#">Family History Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.22.2.15:2014- 06-09
component	1..1	SHALL		<a href="#">CDP1-1323</a>	
section	1..1	SHALL		<a href="#">CDP1-1324</a>	<a href="#">Functional Status Section (CDP1)</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.35.2.5
component	1..1	SHALL		<a href="#">CDP1-1325</a>	
section	1..1	SHALL		<a href="#">CDP1-1326</a>	<a href="#">General Status Section</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.2.5
component	1..1	SHALL		<a href="#">CDP1-1327</a>	
section	1..1	SHALL		<a href="#">CDP1-1328</a>	<a href="#">Goals Section</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.22.2.60
component	1..1	SHALL		<a href="#">CDP1-1329</a>	
section	1..1	SHALL		<a href="#">CDP1-1330</a>	<a href="#">Health Concerns Section</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.22.2.58
component	1..1	SHALL		<a href="#">CDP1-1331</a>	
section	1..1	SHALL		<a href="#">CDP1-1332</a>	<a href="#">Health Status Evaluations and Outcomes Section</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.22.2.61
component	1..1	SHALL		<a href="#">CDP1-1333</a>	
section	1..1	SHALL		<a href="#">CDP1-1334</a>	<a href="#">History of Past Illness Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.22.2.20:2014- 06-09
component	1..1	SHALL		<a href="#">CDP1-1335</a>	

XPath	Card.	Verb	Data Type	CONF#	Value
section	1..1	SHALL		<a href="#">CDP1-1336</a>	<a href="#">History of Present Illness Section</a> (identifier: urn:oid:1.3.6.1.4.1.1937 6.1.5.3.1.3.4
component	1..1	SHALL		<a href="#">CDP1-1337</a>	
section	1..1	SHALL		<a href="#">CDP1-1338</a>	<a href="#">Immunizations Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.22.2.2.1:2014- 06-09
component	1..1	SHALL		<a href="#">CDP1-1339</a>	
section	1..1	SHALL		<a href="#">CDP1-1340</a>	<a href="#">Instructions Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.22.2.45:2014- 06-09
component	1..1	SHALL		<a href="#">CDP1-1341</a>	
section	1..1	SHALL		<a href="#">CDP1-1342</a>	<a href="#">Interventions Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.21.2.3:2014- 06-09
component	1..1	SHALL		<a href="#">CDP1-1343</a>	
section	1..1	SHALL		<a href="#">CDP1-1344</a>	<a href="#">Medical Equipment Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.22.2.23:2014- 06-09
section	1..1	SHALL		<a href="#">CDP1-1345</a>	
component	1..1	SHALL		<a href="#">CDP1-1346</a>	<a href="#">Medications Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.22.2.1.1:2014- 06-09
section	1..1	SHALL		<a href="#">CDP1-1347</a>	
component	1..1	SHALL		<a href="#">CDP1-1348</a>	<a href="#">Mental Status Section</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.22.2.56
section	1..1	SHALL		<a href="#">CDP1-1349</a>	
component	1..1	SHALL		<a href="#">CDP1-1350</a>	<a href="#">Nutrition Section</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.22.2.57
section	1..1	SHALL		<a href="#">CDP1-1351</a>	

XPath	Card.	Verb	Data Type	CONF#	Value
component	1..1	SHALL		<a href="#">CDP1-1352</a>	<a href="#">Objective Section</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.21.2.1
section	1..1	SHALL		<a href="#">CDP1-1353</a>	
component	1..1	SHALL		<a href="#">CDP1-1354</a>	<a href="#">Orders Placed Section (CDP1)</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.35.2.3
section	1..1	SHALL		<a href="#">CDP1-1355</a>	
component	1..1	SHALL		<a href="#">CDP1-1356</a>	<a href="#">Payers Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.22.2.18:2014- 06-09
section	1..1	SHALL		<a href="#">CDP1-1357</a>	
section	1..1	SHALL		<a href="#">CDP1-1358</a>	<a href="#">Physical Exam Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.2.10:2014-06- 09
component	0..1	MAY		<a href="#">CDP1-1359</a>	
section	1..1	SHALL		<a href="#">CDP1-1360</a>	<a href="#">Plan of Treatment Section (CDP1)</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.35.2.6
component	1..1	SHALL		<a href="#">CDP1-1361</a>	
section	1..1	SHALL		<a href="#">CDP1-1362</a>	<a href="#">Problem Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.22.2.5.1:2014- 06-09
component	1..1	SHALL		<a href="#">CDP1-1363</a>	
section	1..1	SHALL		<a href="#">CDP1-1364</a>	<a href="#">Procedures Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.22.2.7.1:2014- 06-09
component	1..1	SHALL		<a href="#">CDP1-1365</a>	
section	1..1	SHALL		<a href="#">CDP1-1366</a>	<a href="#">Reason for Referral Section (V2)</a> (identifier: urn:hl7ii:1.3.6.1.4.1.19 376.1.5.3.1.3.1:2014-06- 09
component	0..1	MAY		<a href="#">CDP1-1367</a>	

XPath	Card.	Verb	Data Type	CONF#	Value
section	1..1	SHALL		<a href="#">CDP1-1368</a>	<a href="#">Reason for Visit Section</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.22.2.12
component	1..1	SHALL		<a href="#">CDP1-1369</a>	
section	1..1	SHALL		<a href="#">CDP1-1370</a>	<a href="#">Results Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.22.2.3.1:2014- 06-09
component	1..1	SHALL		<a href="#">CDP1-1371</a>	
section	1..1	SHALL		<a href="#">CDP1-1372</a>	<a href="#">Review of Systems Section</a> (identifier: urn:oid:1.3.6.1.4.1.1937 6.1.5.3.1.3.18
component	1..1	SHALL		<a href="#">CDP1-1373</a>	
section	1..1	SHALL		<a href="#">CDP1-1374</a>	<a href="#">Social History Section (CDP1)</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.35.2.7
component	1..1	SHALL		<a href="#">CDP1-1375</a>	
section	1..1	SHALL		<a href="#">CDP1-1376</a>	<a href="#">Subjective Section</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.22.2.2
component	1..1	SHALL		<a href="#">CDP1-1377</a>	
section	1..1	SHALL		<a href="#">CDP1-1378</a>	<a href="#">Transportation Section (CDP1)</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.35.2.4
component	1..1	SHALL		<a href="#">CDP1-1379</a>	
section	1..1	SHALL		<a href="#">CDP1-1380</a>	<a href="#">Vital Signs Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.22.2.4.1:2014- 06-09

### 5.2.1 Properties

2. Conforms to [US Realm Header \(V2\)](#) template (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.22.1.1.2:2014-06-09).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:CDP1-1201) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.35.1.1" (CONF:CDP1-1202).

The Enhanced Encounter Document recommends use of a single document type code, 77601-3 “Enhanced Encounter Note” or, depending on the purpose of the visit, one of the

following LOINC codes from the C-CDA R2, with further specification provided by author or performer, setting, or specialty:

- 1) ConsultDocumentType 2.16.840.1.113883.11.20.9.31, or
- 2) HPDocumentType 2.16.840.1.113883.1.11.20.22, or
- 3) ProgressNoteDocumentTypeCode 2.16.840.1.113883.11.20.8.1

with further specification provided by author or performer, setting, or specialty. When pre-coordinated codes are used, any coded values describing the author or performer of the service act or the practice setting must be consistent with the LOINC document type.

4. **SHALL** contain exactly one [1..1] **code**, (CONF:CDP1-1203)
  - a. This code **SHALL** contain exactly one [1..] **@code**, which **SHALL** be selected from ValueSet [HPDocumentType](#) 2.16.840.1.113883.1.11.20.22 **DYNAMIC** or [ProgressNoteDocumentTypeCode](#) 2.16.840.1.113883.11.20.8.1 **DYNAMIC** or [ConsultDocumentType](#) 2.16.840.1.113883.11.20.9.31 **DYNAMIC** or "77601-3" Enhanced Encounter Note (CodeSystem: LOINC 2.16.840.1.113883.6.1) **STATIC** (CONF:CDP1-1204).

#### 5.2.1.1 documentationOf

A documentationOf must contain a serviceEvent to further specialize the act inherent in the ClinicalDocument/code.

The main activity described by an Enhanced Encounter is the provision of healthcare at a specific time or over a period of time. This is shown by setting the value of the serviceEvent/@classCode to "PCPR" (care provision) and indicating the duration over which care was provided. In the serviceEvent/effectiveTime. When the provision of care is only for the duration of the visit, then the effectiveTime SHALL be the same as the visit. When the Enhanced Encounter is used to document a progress note, the serviceEvent/effectiveTime is the time period the note documents.

5. **SHALL** contain exactly one [1..1] **documentationOf** (CONF:CDP1-1205).
  - a. The documentationOf **SHALL** contain exactly one [1..1] **serviceEvent** (CONF:CDP1-1206).
    - i. This serviceEvent **SHALL** contain exactly one [1..1] **@classCode="PCPR"** Care Provision (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF:CDP1-1207).
    - ii. This serviceEvent **SHALL** contain exactly one [1..1] **templateId** (CONF:CDP1-1208) such that it
      1. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.21.3.1"** (CONF:CDP1-1209).
    - iii. This serviceEvent **SHALL** contain exactly one [1..1] [US Realm Date and Time \(DT.US.FIELDDED\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3) (CONF:CDP1-1210).
      1. The serviceEvent/effectiveTime element **SHALL** be present with effectiveTime/low element (CONF:CDP1-1211).
      2. If a width element is not present, the serviceEvent **SHALL** include effectiveTime/high (CONF:CDP1-1212).

**Figure 4: Enhanced Encounter Document (CDP1) serviceEvent Example**

```
<documentationOf>
  <serviceEvent classCode="PCPR">
    <templateId root="2.16.840.1.113883.10.20.21.3.1" />
    <effectiveTime>
      <low value="200503291200" />
      <high value="200503291400" />
    </effectiveTime>
    ...
  </serviceEvent>
</documentationOf>
```

#### 5.2.1.2 inFulfillmentOf

The inFulfillmentOf element describes prior orders that are fulfilled (in whole or part) by the service events described in the Enhanced Encounter. For example, a prior order might be a referral and the Enhanced Encounter may be partial or complete fulfillment of that referral.

6. **MAY** contain zero or more [0..\*] **inFulfillmentOf** (CONF:CDP1-1213).
  - a. Such inFulfillmentOfs **SHALL** contain exactly one [1..1] **order** (CONF:CDP1-1214).
    - i. This order **SHALL** contain at least one [1..\*] **id** (CONF:CDP1-1215).

**Figure 5: InFulfillmentOf Example**

```
<inFulfillmentOf typeCode="FLFS">
  <order classCode="ACT" moodCode="RQO">
    <id root="2.16.840.1.113883.6.96" extension="1298989898" />
    <code code="388975008" displayName="Weight Reduction Consultation"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT" />
  </order>
</inFulfillmentOf>
```

#### 5.2.1.3 encompassingEncounter

An Enhanced Encounter Document is always associated with an encounter; the id element of the encompassingEncounter is required to be present and represents the identifier for the encounter.

7. **SHALL** contain exactly one [1..1] **componentOf** (CONF:CDP1-1216).
  - a. This componentOf **SHALL** contain exactly one [1..1] **encompassingEncounter** (CONF:CDP1-1217).
    - i. This encompassingEncounter **SHALL** contain at least one [1..\*] **id** (CONF:CDP1-1218).
    - ii. This encompassingEncounter **SHALL** contain exactly one [1..1] **US Realm Date and Time (DT.US.FIELDED)** (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3) (CONF:CDP1-1219).
      1. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:CDP1-1220).
    - iii. This encompassingEncounter **SHALL** contain exactly one [1..1] **location** (CONF:CDP1-1221).

1. This location **SHALL** contain exactly one [1..1] **healthCareFacility** (CONF:CDP1-1222).
  - a. This healthCareFacility **SHALL** contain at least one [1..\*] **id** (CONF:CDP1-1223).

The responsibleParty element records only the party responsible for the encounter, not necessarily the entire episode of care

2. The responsibleParty element, **SHALL** contain an assignedEntity element which **SHALL** contain an assignedPerson element, a representedOrganization element, or both (CONF:CDP1-1224).

The encounterParticipant element represents persons who participated in the encounter and not necessarily the entire episode of care.

- iv. This encompassingEncounter **MAY** contain zero or more [0..\*] **encounterParticipant** (CONF:CDP1-1225).

Note: If present, **SHALL** contain an assignedEntity element which **SHALL** contain an assignedPerson element, a representedOrganization element, or both.

## 5.2.2 component

8. **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1301).
  - a. This component **SHALL** contain exactly one [1..1] **structuredBody** (CONF:CDP1-1302).
    - i. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1303) such that it
      1. **SHALL** contain exactly one [1..1] [Additional Documentation Section \(CDP1\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.1) (CONF:CDP1-1304).
    - ii. This structuredBody **MAY** contain zero or one [0..1] **component** (CONF:CDP1-1305) such that it
      1. **SHALL** contain exactly one [1..1] [Advance Directives Section \(entries required\) \(V2\)](#) (templateId: identifier: urn:hl7ii:2.16.840.1.113883.10.20.2.21.1:2014-06-09) (CONF:CDP1-1306).
    - iii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1307) such that it
      1. **SHALL** contain exactly one [1..1] [Allergies and Intolerances Section \(entries required\) \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6.1:2014-06-09) (CONF:CDP1-1308).
    - iv. This structuredBody **MAY** contain zero or one [0..1] **component** (CONF:CDP1-1309) such that it
      1. **SHALL** contain exactly one [1..1] [Assessment and Plan Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09) (CONF:CDP1-1310).



- v. This structuredBody **MAY** contain zero or one [0..1] **component** (CONF:CDP1- 1311) such that it
  - 1. **SHALL** contain exactly one [1..1] [Assessment Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.8) (CONF:CDP1-1312 ).
- vi. This structuredBody **MAY** contain zero or one [0..1] **component** (CONF:CDP1- 1313) such that it
  - 1. **SHALL** contain exactly one [1..1] [Chief Complaint and Reason for Visit Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.13) (CONF:CDP1-1314).
- vii. This structuredBody **MAY** contain zero or one [0..1] **component** (CONF:CDP1-1315) such that it
  - 1. **SHALL** contain exactly one [1..1] [Chief Complaint Section](#) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1) (CONF:CDP1-1316).
- viii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1317) such that it
  - 1. **SHALL** contain exactly one [1..1] [Encounters Section \(entries required\) \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.22.1:2014-06-09) (CONF:CDP1-1318).
- ix. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1319) such that it
  - 1. **SHALL** contain exactly one [1..1] [Externally Defined CDE Section \(CDP1\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.2) (CONF:CDP1-1320).
- x. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1321) such that it
  - 1. **SHALL** contain exactly one [1..1] [Family History Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2014-06-09) (CONF:CDP1-1322).
- xi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1323) such that it
  - 1. **SHALL** contain exactly one [1..1] [Functional Status Section \(CDP1\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.5) (CONF:CDP1-1324).
- xii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1325) such that it
  - 1. **SHALL** contain exactly one [1..1] [General Status Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.2.5) (CONF:CDP1-1326).

- xiii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1327) such that it
1. **SHALL** contain exactly one [1..1] Goals Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.60) (CONF:CDP1-1328).
- xiv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1329) such that it
1. **SHALL** contain exactly one [1..1] Health Concerns Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.58) (CONF:CDP1-1330).
- xv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1331) such that it
1. **SHALL** contain exactly one [1..1] Health Status Evaluations and Outcomes Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.61) (CONF:CDP1-1332).
- xvi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1333) such that it
1. **SHALL** contain exactly one [1..1] History of Past Illness Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.20:2014-06-09) (CONF:CDP1-1334).
- xvii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1335) such that it
1. **SHALL** contain exactly one [1..1] History of Present Illness Section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.4) (CONF:CDP1-1336).
- xviii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1337) such that it
1. **SHALL** contain exactly one [1..1] Immunizations Section (entries required) (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.2.1:2014-06-09) (CONF:CDP1-1338).
- xix. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1339) such that it
1. **SHALL** contain exactly one [1..1] Instructions Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.45:2014-06-09) (CONF:CDP1-1340).
- xx. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1341) such that it
1. **SHALL** contain exactly one [1..1] Interventions Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.21.2.3:2014-06-09) (CONF:CDP1-1342).

- xxi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1343) such that it
1. **SHALL** contain exactly one [1..1] [Medical Equipment Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.23:2014-06-09) (CONF:CDP1-1344).
- xxii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1345) such that it
1. **SHALL** contain exactly one [1..1] [Medications Section \(entries required\) \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1.1:2014-06-09) (CONF:CDP1-1346).
- xxiii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1347) such that it
1. **SHALL** contain exactly one [1..1] [Mental Status Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.56) (CONF:CDP1-1348).
- xxiv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1349) such that it
1. **SHALL** contain exactly one [1..1] [Nutrition Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.57) (CONF:CDP1-1350).
- xxv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1351) such that it
1. **SHALL** contain exactly one [1..1] [Objective Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.21.2.1) (CONF:CDP1-1352).
- xxvi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1353) such that it
1. **SHALL** contain exactly one [1..1] [Orders Placed Section \(CDP1\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.3) (CONF:CDP1-1354).
- xxvii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1355) such that it
1. **SHALL** contain exactly one [1..1] [Payers Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2014-06-09) (CONF:CDP1-1356).
- xxviii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1357) such that it
1. **SHALL** contain exactly one [1..1] [Physical Exam Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.2.10:2014-06-09) (CONF:CDP1-1358).

- xxix. This structuredBody **MAY** contain zero or one [0..1] **component** (CONF:CDP1-1359) such that it
1. **SHALL** contain exactly one [1..1] [Plan of Treatment Section \(CDP1\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.6) (CONF:CDP1-1360).
- xxx. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1361) such that it
1. **SHALL** contain exactly one [1..1] [Problem Section \(entries required\) \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.5.1:2014-06-09) (CONF:CDP1-1362).
- xxxi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1363) such that it
1. **SHALL** contain exactly one [1..1] [Procedures Section \(entries required\) \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.7.1:2014-06-09) (CONF:CDP1-1364).
- xxxii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1365) such that it
1. **SHALL** contain exactly one [1..1] [Reason for Referral Section \(V2\)](#) (identifier: urn:hl7ii:1.3.6.1.4.1.19376.1.5.3.1.3.1:2014-06-09) (CONF:CDP1-1366).
- xxxiii. This structuredBody **MAY** contain zero or one [0..1] **component** (CONF:CDP1-1367) such that it
1. **SHALL** contain exactly one [1..1] [Reason for Visit Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.12) (CONF:CDP1-1368).
- xxxiv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1369) such that it
1. **SHALL** contain exactly one [1..1] [Results Section \(entries required\) \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3.1:2014-06-09) (CONF:CDP1-1370).
- xxxv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1371) such that it
1. **SHALL** contain exactly one [1..1] [Review of Systems Section](#) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.18) (CONF:CDP1-1372).
- xxxvi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1373) such that it
1. **SHALL** contain exactly one [1..1] [Social History Section \(CDP1\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.7) (CONF:CDP1-1374).

- xxxvii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1375) such that it
1. **SHALL** contain exactly one [1..1] Subjective Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.2) (CONF:CDP1-1376).
- xxxviii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1377) such that it
1. **SHALL** contain exactly one [1..1] Transportation Section (CDP1) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.4) (CONF:CDP1-1378)
- xxxix. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1379) such that it
1. **SHALL** contain exactly one [1..1] Vital Signs Section (entries required) (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2014-06-09) (CONF:CDP1-1380).
- xl. **SHALL** include a Chief Complaint and Reason for Visit Section (identifier: urn: urn:oid:2.16.840.1.113883.10.20.22.2.13) or both a Chief Complaint Section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1) and a Reason for Visit Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.12) (CONF:CDP1-1381).
- xli. **SHALL NOT** include a Chief Complaint and Reason for Visit Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.13) when both a Chief Complaint Section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1) and a Reason for Visit Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.12) are present (CONF:CDP1-1382).
- xlii. **SHALL** include an Assessment and Plan Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09) or both an Assessment Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.8) and a Plan of Treatment Section (CDP1) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.6) (CONF:CDP1-1383).
- xliii. **SHALL NOT** include an Assessment and Plan Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09) when both an Assessment Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.8) and a Plan of Treatment Section (CDP1) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.6) are present (CONF:CDP1-1384).

**Table 11: ConsultDocumentType**

Value Set: ConsultDocumentType 2.16.840.1.113883.11.20.9.31			
Specific URL Pending			
Value Set Source: <a href="http://www.loinc.org/">http://www.loinc.org/</a>			
Code	Code System	Code System OID	Print Name
11488-4	LOINC	2.16.840.1.113883.6.1	Consult note
34099-2	LOINC	2.16.840.1.113883.6.1	Cardiology Consult note
34756-7	LOINC	2.16.840.1.113883.6.1	Dentistry Consult note
34758-3	LOINC	2.16.840.1.113883.6.1	Dermatology Consult note
34760-9	LOINC	2.16.840.1.113883.6.1	Diabetology Consult note
34879-7	LOINC	2.16.840.1.113883.6.1	Endocrinology Consult note
34761-7	LOINC	2.16.840.1.113883.6.1	Gastroenterology Consult note
34764-1	LOINC	2.16.840.1.113883.6.1	General medicine Consult note
34776-5	LOINC	2.16.840.1.113883.6.1	Gerontology Consult note
34779-9	LOINC	2.16.840.1.113883.6.1	Hematology + Medical Oncology Consult note
...			

**Table 12: HPDocumentType**

Value Set: HPDocumentType 2.16.840.1.113883.1.11.20.22			
Specific URL Pending			
Value Set Source: <a href="http://www.loinc.org/">http://www.loinc.org/</a>			
Code	Code System	Code System OID	Print Name
34117-2	LOINC	2.16.840.1.113883.6.1	History and physical note
11492-6	LOINC	2.16.840.1.113883.6.1	Provider-unspecified, History and physical note
28626-0	LOINC	2.16.840.1.113883.6.1	Physician History and physical note
34774-0	LOINC	2.16.840.1.113883.6.1	Surgery History and physical note
34115-6	LOINC	2.16.840.1.113883.6.1	Medical student Hospital History and physical note
34116-4	LOINC	2.16.840.1.113883.6.1	Physician Nursing facility History and physical note
34095-0	LOINC	2.16.840.1.113883.6.1	Comprehensive history and physical note
34096-8	LOINC	2.16.840.1.113883.6.1	Nursing facility Comprehensive history and physical note
51849-8	LOINC	2.16.840.1.113883.6.1	Admission history and physical note
47039-3	LOINC	2.16.840.1.113883.6.1	Hospital Admission history and physical note
...			

**Table 13: ProgressNoteDocumentTypeCode**

Value Set: ProgressNoteDocumentTypeCode 2.16.840.1.113883.11.20.8.1			
Specific URL Pending			
Value Set Source: <a href="http://www.loinc.org/">http://www.loinc.org/</a>			
Code	Code System	Code System OID	Print Name
11506-3	LOINC	2.16.840.1.113883.6.1	Provider-unspecified Progress note
18733-6	LOINC	2.16.840.1.113883.6.1	Physician attending Progress note
28569-2	LOINC	2.16.840.1.113883.6.1	Physician consulting Progress note
28617-9	LOINC	2.16.840.1.113883.6.1	Dentistry Progress note
34900-1	LOINC	2.16.840.1.113883.6.1	General medicine Progress note
34904-3	LOINC	2.16.840.1.113883.6.1	Mental health Progress note
28623-7	LOINC	2.16.840.1.113883.6.1	Nurse Progress note
11507-1	LOINC	2.16.840.1.113883.6.1	Occupational therapy Progress note
11508-9	LOINC	2.16.840.1.113883.6.1	Physical therapy Progress note
11509-7	LOINC	2.16.840.1.113883.6.1	Podiatry Progress note
...			



**Figure 6: Enhanced Encounter Document (CDP1) StructuredBody Sample**

```
<component>
  <structuredBody>
    <component>
      <section>
        <templateId root="2.16.840.1.113883.10.20.35.2.1"/>
        <!-- Additional Documentation Section (CDP1) template -->
        <code code="77599-9" displayName="Additional Documentation"
          codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Additional Documentation</title>
        ...
      </section>
    </component>
    <component>
      <section>
        <templateId root="2.16.840.1.113883.10.20.22.2.6.1" extension="2014-06-09" />
        <!-- Allergies and Intolerances Section (entries required) (V2) template -->
        <code code="48765-2" displayName="Allergies, adverse reactions, alerts"
          codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Allergies, adverse reactions, alerts</title>
        ...
      </section>
    </component>
    <component>
      <section>
        <templateId root="2.16.840.1.113883.10.20.22.2.8"/>
        <!-- Assessment Section template -->
        <code code="51848-0" displayName="Assessments"
          codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Assessments</title>
        ...
      </section>
    </component>
    <component>
      <section>
        <templateId root="1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1"/>
        <!-- Chief Complaint Section template -->
        <code code="10154-3" displayName="Chief Complaint"
          codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Chief Complaint</title>
        ...
      </section>
    </component>
    <component>
      <section>
        <templateId root="2.16.840.1.113883.10.20.22.2.22.1" extension="2014-06-09" />
        <!-- Encounters Section (entries required) (V2) template -->
        <code code="46240-8" displayName="Encounters"
          codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Encounters</title>
        ...
      </section>
    </component>
    <component>
      <section>
        <templateId root="2.16.840.1.113883.10.20.35.2.2"/>
        <!-- Externally Defined CDE Section (CDP1) template -->
        <code code="77598-1" displayName="Externally Defined Clinical Data Elements"
```

```

        codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
<title>Externally Defined Clinical Data Elements</title>
...
</section>
</component>
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.22.2.15" extension="2014-06-09" />
    <!-- Family History Section (V2) template -->
    <code code="10157-6" displayName="Family History"
      codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
    <title>Family History</title>
    ...
  </section>
</component>
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.35.2.5"/>
    <!-- Functional Status Section (CDP1) template -->
    <code code="47420.5" displayName="Functional Status"
      codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
    <title>Functional Status</title>
    ...
  </section>
</component>
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.2.5"/>
    <!-- General Status Section template -->
    <code code="10210-3" displayName="General Status"
      codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
    <title>General Status</title>
    ...
  </section>
</component>
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.22.2.60"/>
    <!-- Goals Section template -->
    <code code="61146-7" displayName="Goals"
      codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
    <title>Goals</title>
    ...
  </section>
</component>
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.22.2.58"/>
    <!-- Health Concerns Section template -->
    <code code="75310-3" displayName="Health Concerns"
      codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
    <title>Health Concerns</title>
    ...
  </section>
</component>
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.22.2.61"/>
    <!-- Health Status Evaluations and Outcomes Section template -->

```

```

        <code code="11383-7" displayName="Patient Problem Outcome"
            codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Patient Problem Outcome</title>
        ...
    </section>
</component>
<component>
    <section>
        <templateId root="2.16.840.1.113883.10.20.22.2.20" extension="2014-06-09" />
        <!-- History of Past Illness Section (V2)template -->
        <code code="11348-0" displayName="History of Past Illness"
            codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>History of Past Illness</title>
        ...
    </section>
</component>
<component>
    <section>
        <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.4"/>
        <!-- History of Present Illness Section template -->
        <code code="10164-2" displayName="History of Present Illness"
            codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>History of Present Illness</title>
        ...
    </section>
</component>
<component>
    <section>
        <templateId root="2.16.840.1.113883.10.20.22.2.2.1" extension="2014-06-09" />
        <!-- Immunizations Section (entries required) (V2) template -->
        <code code="11369-6" displayName="Immunizations"
            codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Immunizations</title>
        ...
    </section>
</component>
<component>
    <section>
        <templateId root="2.16.840.1.113883.10.20.22.2.45" extension="2014-06-09" />
        <!-- Instructions Section (V2)template -->
        <code code="69730-0" displayName="Instructions"
            codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Instructions</title>
        ...
    </section>
</component>
<component>
    <section>
        <templateId root="2.16.840.1.113883.10.20.21.2.3" extension="2014-06-09" />
        <!-- Interventions Section (V2) template -->
        <code code="62387-6" displayName="Interventions Provided"
            codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Interventions Provided</title>
        ...
    </section>
</component>
<component>
    <section>
        <templateId root="2.16.840.1.113883.10.20.22.2.23" extension="2014-06-09" />

```

```

    <!-- Medical Equipment Section (V2) template -->
    <code code="46264-8" displayName="Medical Equipment"
      codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
    <title>Medical Equipment</title>
    ...
  </section>
</component>
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.22.2.1.1" extension="2014-06-09" />
    <!-- Medications Section (entries required) (V2) template -->
    <code code="10160.0" displayName="History of medication"
      codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
    <title>History of medication</title>
    ...
  </section>
</component>
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.22.2.56"/>
    <!-- Mental Status Section template -->
    <code code="10190.7" displayName="Mental Status"
      codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
    <title>Mental Status</title>
    ...
  </section>
</component>
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.22.2.57"/>
    <!-- Nutrition Section template -->
    <code code="61144-2" displayName="Diet and nutrition"
      codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
    <title>Diet and nutrition</title>
    ...
  </section>
</component>
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.21.2.1"/>
    <!-- Objective Section template -->
    <code code="61149-1" displayName="Objective"
      codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
    <title>Objective</title>
    ...
  </section>
</component>
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.35.2.3"/>
    <!-- Orders Placed Section (CDP1) template -->
    <code code="77597-3" displayName="Orders Placed"
      codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
    <title>Orders Placed</title>
    ...
  </section>
</component>
<component>
  <section>

```

```

        <templateId root="2.16.840.1.113883.10.20.22.2.18" extension="2014-06-09" />
        <!-- Payers Section (V2) template -->
        <code code="48768-6" displayName="Payers"
            codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Payers</title>
        ...
    </section>
</component>
<component>
    <section>
        <templateId root="2.16.840.1.113883.10.20.22.2.10" extension="2014-06-09" />
        <!-- Physical Exam Section (V2) template -->
        <code code="29545-1" displayName="Physical Findings"
            codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Physical Findings</title>
        ...
    </section>
</component>
<component>
    <section>
        <templateId root="2.16.840.1.113883.10.20.35.2.6"/>
        <!-- Plan of Treatment Section (CDP1) template -->
        <code code="18776-5" displayName="Plan of Treatment"
            codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Plan of Treatment</title>
        ...
    </section>
</component>
<component>
    <section>
        <templateId root="2.16.840.1.113883.10.20.22.2.5.1" extension="2014-06-09" />
        <!-- Problem Section (entries required) (V2) template -->
        <code code="11450-4" displayName="Problem List"
            codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Problem List</title>
        ...
    </section>
</component>
<component>
    <section>
        <templateId root="2.16.840.1.113883.10.20.22.2.7.1" extension="2014-06-09" />
        <!-- Procedures Section (entries required) (V2) template -->
        <code code="47519-4" displayName="History of Procedures"
            codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>History of Procedures</title>
        ...
    </section>
</component>
<component>
    <section>
        <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.1" extension="2014-06-09" />
        <!-- Reason for Referral Section (V2) template -->
        <code code="42349-1" displayName="Reason for Referral"
            codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Reason for Referral</title>
        ...
    </section>
</component>
</component>

```

```

    <section>
      <templateId root="2.16.840.1.113883.10.20.22.2.12"/>
      <!-- Reason for Visit Section template -->
      <code code="29299-5" displayName="Reason for Visit"
        codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
      <title>Reason for Visit</title>
      ...
    </section>
  </component>
  <component>
    <section>
      <templateId root="2.16.840.1.113883.10.20.22.2.3.1" extension="2014-06-09" />
      <!-- Results Section (entries required) (V2) template -->
      <code code="30954-2" displayName="Relevant diagnostic tests and/or laboratory
        data" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
      <title>Relevant diagnostic tests and/or laboratory data</title>
      ...
    </section>
  </component>
  <component>
    <section>
      <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.18"/>
      <!-- Review of Systems Section template -->
      <code code="10187-3" displayName="Review of Systems"
        codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
      <title>Review of Systems</title>
      ...
    </section>
  </component>
  <component>
    <section>
      <templateId root="2.16.840.1.113883.10.20.35.2.7"/>
      <!-- Social History Section (CDP1) template -->
      <code code="29762-2" displayName="Social History"
        codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
      <title>Social History</title>
      ...
    </section>
  </component>
  <component>
    <section>
      <templateId root="2.16.840.1.113883.10.20.22.2.2"/>
      <!-- Subjective Section template -->
      <code code="61150-9" displayName="Subjective"
        codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
      <title>Subjective</title>
      ...
    </section>
  </component>
  <component>
    <section>
      <templateId root="2.16.840.1.113883.10.20.35.2.4"/>
      <!-- Transportation Section (CDP1) template -->
      <code code="77596-5" displayName="Transportation Summary"
        codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
      <title>Transportation Summary</title>
      ...
    </section>
  </component>

```

```
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.22.2.4.1" extension="2014-06-09" />
    <!-- Vital Signs Section (entries required) (V2) template -->
    <code code="8716-3" displayName="Vital Signs"
      codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
    <title>Vital Signs</title>
    ...
  </section>
</component>
</structuredBody>
</component>
```

## 5.3 Enhanced Operative Note Document (CDP1)

[ClinicalDocument: identifier urn:oid:2.16.840.1.113883.10.20.35.1.3  
(open)]

**Table 14: Enhanced Operative Note Document (CDP1) Contexts**

Contained By:	Contains:
	<a href="#">Additional Documentation Section (CDP1)</a> <a href="#">Anesthesia Section (V2)</a> <a href="#">Complications Section (V2)</a> <a href="#">Externally Defined CDE Section (CDP1)</a> <a href="#">Medical Equipment Section (V2)</a> <a href="#">Operative Note Fluid Section</a> <a href="#">Operative Note Surgical Procedure Section</a> <a href="#">Orders Placed Section (CDP1)</a> <a href="#">Payers Section (V2)</a> <a href="#">Plan of Treatment Section (CDP1)</a> <a href="#">Planned Procedure Section (V2)</a> <a href="#">Postoperative Diagnosis Section</a> <a href="#">Preoperative Diagnosis Section (V2)</a> <a href="#">Procedure Description Section</a> <a href="#">Procedure Disposition Section</a> <a href="#">Procedure Estimated Blood Loss Section</a> <a href="#">Procedure Findings Section (V2)</a> <a href="#">Procedure Implants Section</a> <a href="#">Procedure Indications Section (V2)</a> <a href="#">Procedure Specimens Taken Section</a> <a href="#">Surgical Drains Section</a> <a href="#">US Realm Date and Time (DT.US.FIELDDED)</a>

**Note: Hyperlinks for sections defined in this guide go to the section template. Hyperlinks for sections included by reference from C-CDA R2 go to Table 24 which lists all of the section level templates included in the documents in this guide.**

The Enhanced Operative Note Document is a frequently used type of procedure note with specific requirements set forth by regulatory agencies.

The Enhanced Operative Note Document is created immediately following a surgical or other high-risk procedure. It records the pre- and post-surgical diagnosis, pertinent events of the procedure, as well as the condition of the patient following the procedure. The report should be sufficiently detailed to support the diagnoses, justify the treatment, document the course of the procedure, and provide for continuity of care.

An Enhanced Operative Note Document includes all sections relevant to the operative procedure. Any section for which data is not available (not collected, not relevant, not supported by the EHR technology, etc.) SHALL have the appropriate nullFlavor, from the [nullFlavorCDP1](#) valueset, specified to indicate that the information was not available (NI) at time of document creation or is being withheld (NA) (see section 3.4 regarding the use of nullFlavors).



Relative to the Operative Note in the C-CDA R2, the Enhanced Operative Note Document requires support by the EHR for a broader range of templates related to an operative procedure on a patient for the administrative or clinical exchange with a third party. Any section for which data is not available (not collected, not relevant, not supported by the EHR technology, etc.) SHALL have the appropriate nullFlavor specified to indicate that the information was not available (NI) at time of document creation or is being withheld (NA) (see section 3.4 regarding the use of nullFlavors).

The Operative Note Document defined in the C-CDA R2 should be used when a summary record is appropriate or when it is specifically requested.

The Enhanced Operative Note Document (CDP1) template conforms to the C-CDA R2 Operative Note (V2) template  
(identifier:urn:hl7ii:2.16.840.1.113883.10.20.22.1.7:2014-06-09) with the following changes and additions:

- 1) Replaced verb MAY with SHALL for:
  - [Operative Note Fluid Section](#)
  - [Operative Note Surgical Procedure Section](#)
  - [Planned Procedure Section \(V2\)](#)
  - [Procedure Disposition Section](#)
  - [Procedure Implants Section](#)
  - [Procedure Indications Section \(V2\)](#)
  - [Surgical Drains Section](#)
- 2) Added additional sections from C-CDA R2 by reference :
  - [Medical Equipment Section \(V2\)](#)
  - [Payers Section \(V2\)](#)
- 3) Replaced C-CDA R2 sections with CDP1 additionally constrained sections:
  - [Plan of Treatment Section \(CDP1\)](#)
- 4) Added CDP1 only sections:
  - [Additional Documentation Section \(CDP1\)](#)
  - [Externally Defined CDE Section \(CDP1\)](#)
  - [Orders Placed Section \(CDP1\)](#)

**Table 15: Enhanced Operative Note Document (CDP1) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
ClinicalDocument (identifier:urn:oid:2.16.840.1.113883.10.20.35.1.3)					
templateId	1..1	SHALL		<a href="#">CDP1-1801</a>	
@root	1..1	SHALL		<a href="#">CDP1-1802</a>	2.16.840.1.113883.10.20.35.1.3
code	1..1	SHALL		<a href="#">CDP1-1803</a>	
@code	1..1	SHALL		<a href="#">CDP1-1804</a>	2.16.840.1.113883.11.20.1.1 (SurgicalOperationNoteDocumentTypeCode)
documentationOf	1..*	SHALL		<a href="#">CDP1-1805</a>	
serviceEvent	1..1	SHALL		<a href="#">CDP1-1806</a>	
effectiveTime	1..1	SHALL		<a href="#">CDP1-1807</a>	<a href="#">US Realm Date and Time (DT.US.FIELDED)</a> (identifier: <a href="#">urn:oid:2.16.840.1.113883.10.20.22.5.3</a> )
performer	1..*	SHALL		<a href="#">CDP1-1811</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-1812</a>	2.16.840.1.113883.5.90 (HL7ParticipationType) = PPRF
assignedEntity	1..1	SHALL		<a href="#">CDP1-1813</a>	
code	1..1	SHALL		<a href="#">CDP1-1814</a>	2.16.840.1.113883.3.88.12.3221.4.2 (Provider Role)
performer	0..*	MAY		<a href="#">CDP1-1815</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-1816</a>	2.16.840.1.113883.5.90 (HL7ParticipationType) = SPRF
assignedEntity	1..1	SHALL		<a href="#">CDP1-1817</a>	
code	1..1	SHALL		<a href="#">CDP1-1818</a>	2.16.840.1.113883.3.88.12.3221.4.2 (Provider Role)
authorization	0..1	MAY		<a href="#">CDP1-1820</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-1821</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = AUTH
consent	1..1	SHALL		<a href="#">CDP1-1822</a>	
@classCode	1..1	SHALL		<a href="#">CDP1-1823</a>	2.16.840.1.113883.5.6 (HL7ActClass) = CONS
@moodCode	1..1	SHALL		<a href="#">CDP1-1824</a>	2.16.840.1.113883.5.1001 (ActMood) = EVN
statusCode	1..1	SHALL		<a href="#">CDP1-1825</a>	
component	1..1	SHALL		<a href="#">CDP1-1901</a>	
structuredBody	1..1	SHALL		<a href="#">CDP1-1902</a>	
component	1..1	SHALL		<a href="#">CDP1-1903</a>	
section	1..1	SHALL		<a href="#">CDP1-1904</a>	<a href="#">Additional Documentation Section (CDP1)</a> (identifier: urn:oid: 2.16.840.1.113883.10.20.35.2.1)
component	1..1	SHALL		<a href="#">CDP1-1905</a>	
section	1..1	SHALL		<a href="#">CDP1-1906</a>	<a href="#">Anesthesia Section (V2)</a> (identifier:urn:hl7ii:2.16.840.1.113883.10.20.22.2.25:2014-06-09)
component	1..1	SHALL		<a href="#">CDP1-1907</a>	
section	1..1	SHALL		<a href="#">CDP1-1908</a>	<a href="#">Complications Section (V2)</a>

XPath	Card.	Verb	Data Type	CONF#	Value
					(identifier:urn:hl7ii:2.16.840.1.113883.10.20.22.2.37:2014-06-09)
component	1..1	SHALL		<a href="#">CDP1-1909</a>	
section	1..1	SHALL		<a href="#">CDP1-1910</a>	<a href="#">Externally Defined CDE Section (CDP1)</a> (identifier:urn:oid:2.16.840.1.113883.10.20.35.2.2)
component	1..1	SHALL		<a href="#">CDP1-1911</a>	
section	1..1	SHALL		<a href="#">CDP1-1912</a>	<a href="#">Medical Equipment Section (V2)</a> (identifier:urn:hl7ii:2.16.840.1.113883.10.20.22.2.23:2014-06-09)
component	1..1	SHALL		<a href="#">CDP1-1913</a>	
section	1..1	SHALL		<a href="#">CDP1-1914</a>	<a href="#">Operative Note Fluids Section</a> (identifier:urn:oid:2.16.840.1.113883.10.20.7.12)
component	1..1	SHALL		<a href="#">CDP1-1915</a>	
section	1..1	SHALL		<a href="#">CDP1-1916</a>	<a href="#">Operative Note Surgical Procedure Section</a> (identifier:urn:oid:2.16.840.1.113883.10.20.7.14)
component	1..1	SHALL		<a href="#">CDP1-1917</a>	
section	1..1	SHALL		<a href="#">CDP1-1918</a>	<a href="#">Orders Placed Section (CDP1)</a> (identifier:urn:oid:2.16.840.1.113883.10.20.35.2.3)
component	1..1	SHALL		<a href="#">CDP1-1919</a>	
section	1..1	SHALL		<a href="#">CDP1-1920</a>	<a href="#">Payers Section (V2)</a> (identifier:urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2014-06-09)
component	1..1	SHALL		<a href="#">CDP1-1921</a>	
section	1..1	SHALL		<a href="#">CDP1-1922</a>	<a href="#">Plan of Treatment Section (CDP1)</a> (identifier:urn:oid:2.16.840.1.113883.10.20.35.2.6)
component	1..1	SHALL		<a href="#">CDP1-1923</a>	
section	1..1	SHALL		<a href="#">CDP1-1924</a>	<a href="#">Planned Procedure Section (V2)</a> (identifier:urn:hl7ii:2.16.840.1.113883.10.20.22.2.30:2014-06-09)
component	1..1	SHALL		<a href="#">CDP1-1925</a>	
section	1..1	SHALL		<a href="#">CDP1-1926</a>	<a href="#">Postoperative Diagnosis Section</a> (identifier:urn:oid:2.16.840.1.113883.10.20.22.2.35)
component	1..1	SHALL		<a href="#">CDP1-1927</a>	
section	1..1	SHALL		<a href="#">CDP1-1928</a>	<a href="#">Preoperative Diagnosis Section (V2)</a> (identifier:urn:hl7ii:2.16.840.1.113883.10.20.22.2.34:2014-06-09)
component	1..1	SHALL		<a href="#">CDP1-1929</a>	
section	1..1	SHALL		<a href="#">CDP1-1930</a>	<a href="#">Procedure Description Section</a> (identifier:urn:oid:2.16.840.1.113883.10.20.22.2.27)

XPath	Card.	Verb	Data Type	CONF#	Value
component	1..1	SHALL		<a href="#">CDP1-1931</a>	
section	1..1	SHALL		<a href="#">CDP1-1932</a>	<a href="#">Procedure Disposition Section</a> (identifier:urn:oid:2.16.840.1.113883.10.20.18.2.12)
component	1..1	SHALL		<a href="#">CDP1-1933</a>	
section	1..1	SHALL		<a href="#">CDP1-1934</a>	<a href="#">Procedure Estimated Blood Loss Section</a> (identifier:urn:oid:2.16.840.1.113883.10.20.18.2.9)
component	1..1	SHALL		<a href="#">CDP1-1935</a>	
section	1..1	SHALL		<a href="#">CDP1-1936</a>	<a href="#">Procedure Findings Section (V2)</a> (identifier:urn:hl7ii:2.16.840.1.113883.10.20.22.2.28:2014-06-09)
component	1..1	SHALL		<a href="#">CDP1-1937</a>	
section	1..1	SHALL		<a href="#">CDP1-1938</a>	<a href="#">Procedure Implants Section</a> (identifier:urn:oid:2.16.840.1.113883.10.20.22.2.40)
component	1..1	SHALL		<a href="#">CDP1-1939</a>	
section	1..1	SHALL		<a href="#">CDP1-1940</a>	<a href="#">Procedure Indications Section (V2)</a> (identifier:urn:hl7ii:2.16.840.1.113883.10.20.22.2.29:2014-06-09)
component	1..1	SHALL		<a href="#">CDP1-1941</a>	
section	1..1	SHALL		<a href="#">CDP1-1942</a>	<a href="#">Procedure Specimens Taken Section</a> (identifier:urn:oid:2.16.840.1.113883.10.20.22.2.31)
component	1..1	SHALL		<a href="#">CDP1-1943</a>	
section	1..1	SHALL		<a href="#">CDP1-1944</a>	<a href="#">Surgical Drains Section</a> (identifier:urn:oid:2.16.840.1.113883.10.20.7.13)

### 5.3.1 Properties

1. Conforms to [Operative Note \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.7:2014-06-09) .
2. Conforms to [US Realm Header \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2014-06-09).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:CDP1-1801) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.35.1.3" (CONF:CDP1-1802).

The Enhanced Operative Note recommends use of a single document type code, 11504-8 "Provider-unspecified Operation Note", with further specification provided by author or performer, setting, or specialty data in the CDA header. Some of the LOINC codes in the Surgical Operation Note Document Type Code table are pre-coordinated with the practice setting or the training or professional level of the author. Use of pre-coordinated codes is not recommended because of potential conflict with other information in the header. When these codes are used, any coded values describing the author or performer of the service act or the practice setting must be consistent with the LOINC document type.

4. **SHALL** contain exactly one [1..1] **code** (CONF:CDP1-1803).
  - a. This code **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [SurgicalOperationNoteDocumentTypeCode](#) 2.16.840.1.113883.11.20.1.1 **DYNAMIC** (CONF:CDP1-1804).

#### 5.3.1.1 documentationOf

A serviceEvent represents the main act, such as a colonoscopy or an appendectomy, being documented. A serviceEvent can further specialize the act inherent in the ClinicalDocument/code, such as where the ClinicalDocument/code is simply "Surgical Operation Note" and the procedure is "Appendectomy." serviceEvent is required in the Operative Note and it must be equivalent to or further specialize the value inherent in the ClinicalDocument/code; it shall not conflict with the value inherent in the ClinicalDocument/code, as such a conflict would create ambiguity. serviceEvent/effectiveTime can be used to indicate the time the actual event (as opposed to the encounter surrounding the event) took place.

If the date and the duration of the procedure are known, serviceEvent/effectiveTime/low is used with a width element that describes the duration; no high element is used. However, if only the date is known, the date is placed in both the low and high elements.

5. **SHALL** contain at least one [1..\*] **documentationOf** (CONF:CDP1-1805).
  - a. Such documentationOfs **SHALL** contain exactly one [1..1] **serviceEvent** (CONF:CDP1-1806).
    - i. This serviceEvent **SHALL** contain exactly one [1..1] [US Realm Date and Time \(DTM.US.FIELDDED\)](#) (identifier:urn:oid:2.16.840.1.113883.10.20.22.5.3) (CONF:CDP1-1807).
      1. The serviceEvent/effectiveTime **SHALL** be present with effectiveTime/low (CONF:CDP1-1808).
      2. If a width is not present, the serviceEvent/effectiveTime **SHALL** include effectiveTime/high (CONF:CDP1-1809).
      3. When only the date and the length of the procedure are known, a width element **SHALL** be present and the serviceEvent/effectiveTime/high **SHALL NOT** be present (CONF:CDP1-1810).

#### 5.3.1.2 performer

The performer represents clinicians who actually and principally carry out the serviceEvent. Typically, these are clinicians who have surgical privileges in their institutions such as Surgeons, Obstetrician/Gynecologists, and Family Practice Physicians. The performer may also be non-physician providers (NPP) who have surgical privileges. There may be more than one primary performer in the case of complicated surgeries. There are occasionally co-surgeons. Usually they will be billing separately and will each dictate their own notes. An example may be spinal surgery, where a general surgeon and an orthopedic surgeon both are present and billing off the same Current Procedural Terminology (CPT) codes. Typically two Operative Notes are generated; however, each will list the other as a co-surgeon.

- ii. This serviceEvent **SHALL** contain at least one [1..1] **performer** (CONF:CDP1-1811) such that it
  - 1. **SHALL** contain exactly one [1..1] @typeCode="PPRF" Primary performer (CodeSystem: HL7ParticipationType 2.16.840.1.113883.5.90 **STATIC**) (CONF:CDP1-1812).
  - 2. **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:CDP1-1813).
    - a. This assignedEntity **SHALL** contain exactly one [1..1] **code** which **SHALL** be selected from ValueSet [Provider Role](#) 2.16.840.1.113883.3.88.12.3221.4.2 **DYNAMIC** (CONF:CDP1-1814).

### 5.3.1.3 performer

This performer represents any assistants.

- iii. This serviceEvent **MAY** contain zero or more [0..\*] **performer** (CONF:CDP1-1815) such that it
  - 1. **SHALL** contain exactly one [1..1] @typeCode="SPRF" Secondary performer (CodeSystem: HL7ParticipationType 2.16.840.1.113883.5.90) (CONF:CDP1-1816).
  - 2. **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:CDP1-1817).
    - a. This assignedEntity **SHALL** contain exactly one [1..1] **code**, which **SHALL** be selected from ValueSet [Provider Role](#) 2.16.840.1.113883.3.88.12.3221.4.2 **DYNAMIC** (CONF:CDP1-1818).
- iv. The value of serviceEvent/code **SHALL** be from ICD9 CM Procedures (CodeSystem 2.16.840.1.113883.6.104), CPT-4 (CodeSystem 2.16.840.1.113883.6.12), or values descending from 71388002 (Procedure) from the SNOMED CT (CodeSystem 2.16.840.1.113883.6.96) ValueSet Procedure 2.16.840.1.113883.3.88.12.80.28 **DYNAMIC** (CONF:CDP1-1819).

**Figure 7: Enhanced Operative Note Document (CDP1) Performer Example**

```
<performer typeCode="PPRF">
  <assignedEntity>
    <id extension="1" root="2.16.840.1.113883.19" />
    <code code="2086S0120X" codeSystem="2.16.840.1.113883.6.101" codeSystemName="NUCC"
displayName="Pediatric Surgeon" />
    <addr>
      <streetAddressLine>1013 Healthcare Drive</streetAddressLine>
      <city>Ann Arbor</city>
      <state>MI</state>
      <postalCode>99999</postalCode>
      <country>US</country>
    </addr>
    <telecom value="tel:(555)555-1013" />
    <assignedPerson>
      <name>
        <prefix>Dr.</prefix>
        <given>Carl</given>
        <family>Cutter</family>
      </name>
    </assignedPerson>
  </assignedEntity>
</performer>
```

**Figure 8: Enhanced Operative Note Document (CDP1) serviceEvent Example**

```
<serviceEvent classCode="PROC">
  <code code="801460020" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED
CT" displayName="Laparoscopic Appendectomy" />
  <effectiveTime>
    <low value="201003292240" />
    <width value="15" unit="m" />
  </effectiveTime>
  ...
</serviceEvent>
```

Authorization represents consent. Consent, if present, shall be represented by authorization/consent.

6. **MAY** contain zero or one [0..1] **authorization** (CONF:CDP1-1820).

- a. The authorization, if present, **SHALL** contain exactly one [1..1] **@typeCode="AUTH"** authorized by (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-1821).
- b. The authorization, if present, **SHALL** contain exactly one [1..1] **consent** (CONF:CDP1-1822).
  - i. This consent **SHALL** contain exactly one [1..1] **@classCode="CONS"** consent (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6) (CONF:CDP1-1823).
  - ii. This consent **SHALL** contain exactly one [1..1] **@moodCode="EVN"** event (CodeSystem: ActMood 2.16.840.1.113883.5.1001) (CONF:CDP1-1824).
  - iii. This consent **SHALL** contain exactly one [1..1] **statusCode** (CONF:CDP1-1825).

### 5.3.2 component

7. **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1901).
  - a. This component **SHALL** contain exactly one [1..1] **structuredBody** (CONF:CDP1-1902).
    - i. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1903) such that it
      1. **SHALL** contain exactly one [1..1] [Additional Documentation Section \(CDP1\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.1) (CONF:CDP1-1904).
    - ii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1905) such that it
      1. **SHALL** contain exactly one [1..1] [Anesthesia Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.25:2014-06-09) (CONF:CDP1-1906).
    - iii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1907) such that it
      1. **SHALL** contain exactly one [1..1] [Complications Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.37:2014-06-09) (CONF:CDP1-1908).
    - iv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1909) such that it
      1. **SHALL** contain exactly one [1..1] [Externally Defined CDE Section \(CDP1\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.2) (CONF:CDP1-1910).
    - v. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1911) such that it
      1. **SHALL** contain exactly one [1..1] [Medical Equipment Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.23:2014-06-09) (CONF:CDP1-1912).
    - vi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1913) such that it
      1. **SHALL** contain exactly one [1..1] [Operative Note Fluids Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.7.12) (CONF:CDP1-1914).
    - vii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1915) such that it
      1. **SHALL** contain exactly one [1..1] [Operative Note Surgical Procedure Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.7.14) (CONF:CDP1-1916).
    - viii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1917) such that it



1. **SHALL** contain exactly one [1..1] [Orders Placed Section \(CDP1\)](#) (identifier:  
urn:oid:2.16.840.1.113883.10.20.35.2.3) (CONF:CDP1-1918).
- ix. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1919) such that it
  1. **SHALL** contain exactly one [1..1] [Payers Section \(V2\)](#) (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2014-06-09) (CONF:CDP1-1920).
- x. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1921) such that it
  1. **SHALL** contain exactly one [1..1] [Plan of Treatment Section \(CDP1\)](#) (identifier:  
urn:oid:2.16.840.1.113883.10.20.35.2.6) (CONF:CDP1-1922).
- xi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1923) such that it
  1. **SHALL** contain exactly one [1..1] [Planned Procedure Section \(V2\)](#) (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.22.2.30:2014-06-09) (CONF:CDP1-1924).
- xii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1925) such that it
  1. **SHALL** contain exactly one [1..1] [Postoperative Diagnosis Section](#) (identifier:  
urn:oid:2.16.840.1.113883.10.20.22.2.35) (CONF:CDP1-1926).
- xiii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1927) such that it
  1. **SHALL** contain exactly one [1..1] [Preoperative Diagnosis Section \(V2\)](#) (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.22.2.34:2014-06-09) (CONF:CDP1-1928).
- xiv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1929) such that it
  1. **SHALL** contain exactly one [1..1] [Procedure Description Section](#) (identifier:  
urn:oid:2.16.840.1.113883.10.20.22.2.27) (CONF:CDP1-1930).
- xv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1931) such that it
  1. **SHALL** contain exactly one [1..1] [Procedure Disposition Section](#) (identifier:  
urn:oid:2.16.840.1.113883.10.20.18.2.12) (CONF:CDP1-1932).

- xvi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1933) such that it
1. **SHALL** contain exactly one [1..1] [Procedure Estimated Blood Loss Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.18.2.9) (CONF:CDP1-1934).
- xvii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1935) such that it
1. **SHALL** contain exactly one [1..1] [Procedure Findings Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.28:2014-06-09) (CONF:CDP1-1936).
- xviii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1937) such that it
1. **SHALL** contain exactly one [1..1] [Procedure Implants Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.40) (CONF:CDP1-1938).
- xix. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1939) such that it
1. **SHALL** contain exactly one [1..1] [Procedure Indications Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.29:2014-06-09) (CONF:CDP1-1940).
- xx. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1941) such that it
1. **SHALL** contain exactly one [1..1] [Procedure Specimens Taken Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.31) (CONF:CDP1-1942).
- xxi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-1943) such that it
1. **SHALL** contain exactly one [1..1] [Surgical Drains Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.7.13) (CONF:CDP1-1944).

**Table 16: SurgicalOperationNoteDocumentTypeCode**

Value Set: SurgicalOperationNoteDocumentTypeCode 2.16.840.1.113883.11.20.1.1 Specific URL Pending Valueset Source: <a href="http://www.loinc.org/">http://www.loinc.org/</a>			
Code	Code System	Code System OID	Print Name
11504-8	LOINC	2.16.840.1.113883.6.1	{Provider}
34137-0	LOINC	2.16.840.1.113883.6.1	{Provider}
28583-3	LOINC	2.16.840.1.113883.6.1	Dentistry
28624-5	LOINC	2.16.840.1.113883.6.1	Podiatry
28573-4	LOINC	2.16.840.1.113883.6.1	Physician
34877-1	LOINC	2.16.840.1.113883.6.1	Urology
34874-8	LOINC	2.16.840.1.113883.6.1	Surgery
34870-6	LOINC	2.16.840.1.113883.6.1	Plastic surgery
34868-0	LOINC	2.16.840.1.113883.6.1	Orthopedics
34818-5	LOINC	2.16.840.1.113883.6.1	Otorhinolaryngology

**Table 17: Provider Role**

Value Set: Provider Role 2.16.840.1.113883.3.88.12.3221.4.2 The Provider type vocabulary classifies providers according to the type of license or accreditation they hold or the service they provide.  Value Set Source: <a href="http://www.nucc.org/index.php?option=com_content&amp;view=article&amp;id=14&amp;Itemid=125">http://www.nucc.org/index.php?option=com_content&amp;view=article&amp;id=14&amp;Itemid=125</a>			
Code	Code System	Code System OID	Print Name
CP	Provider Role (HL7)	2.16.840.1.113883.3.88.12.3221.4	Consulting Provider
PP	Provider Role (HL7)	2.16.840.1.113883.3.88.12.3221.4	Primary Care Provider
RP	Provider Role (HL7)	2.16.840.1.113883.3.88.12.3221.4	Referring Provider

## 5.4 Enhanced Procedure Document (CDP1)

[ClinicalDocument: identifier urn:oid:2.16.840.1.113883.10.20.35.1.4  
(open)]

**Table 18: Enhanced Procedure Document (CDP1) Contexts**

Contained By:	Contains:
	<a href="#">Additional Documentation Section (CDP1)</a> <a href="#">Allergies and Intolerances Section (entries required) (V2)</a> <a href="#">Anesthesia Section (V2)</a> <a href="#">Assessment and Plan Section (V2)</a> <a href="#">Assessment Section</a> <a href="#">Chief Complaint and Reason for Visit Section</a> <a href="#">Chief Complaint Section</a> <a href="#">Complications Section(V2)</a> <a href="#">Externally Defined CDE Section (CDP1)</a> <a href="#">Family History Section (V2)</a> <a href="#">History of Past Illness Section (V2)</a> <a href="#">History of Present Illness Section</a> <a href="#">Medical Equipment Section (V2)</a> <a href="#">Medical (General) History Section</a> <a href="#">Medications Administered Section (V2)</a> <a href="#">Medications Section (entries required) (V2)</a> <a href="#">Orders Placed Section (CDP1)</a> <a href="#">Payers Section (V2)</a> <a href="#">Physical Exam Section (V2)</a> <a href="#">Plan of Treatment Section (CDP1)</a> <a href="#">Planned Procedure Section (V2)</a> <a href="#">Postprocedure Diagnosis Section (V2)</a> <a href="#">Procedure Description Section</a> <a href="#">Procedure Disposition Section</a> <a href="#">Procedure Estimated Blood Loss Section</a> <a href="#">Procedure Findings Section (V2)</a> <a href="#">Procedure Implants Section</a> <a href="#">Procedure Indications Section (V2)</a> <a href="#">Procedure Specimens Taken Section</a> <a href="#">Procedures Section (entries required) (V2)</a> <a href="#">Reason for Visit Section</a> <a href="#">Review of Systems Section</a> <a href="#">Social History Section (CDP1)</a> <a href="#">US Realm Date and Time (DT.US.FIELDDED)</a>

**Note: Hyperlinks for sections defined in this guide go to the section template. Hyperlinks for sections included by reference from C-CDA R2 go to Table 24 which lists all of the section level templates included in the documents in this guide.**

Enhanced Procedure Document encompasses many types of non-operative procedures including interventional cardiology, gastrointestinal endoscopy, osteopathic manipulation, and many other specialty fields. Enhanced Procedure Documents are differentiated from

Enhanced Operative Note Documents because they do not involve incision or excision as the primary act.

The Enhanced Procedure Document is created immediately following a non-operative procedure. It records the indications for the procedure and, when applicable, post-procedure diagnosis, pertinent events of the procedure, and the patient's tolerance for the procedure. It should be detailed enough to justify the procedure, describe the course of the procedure, and provide continuity of care.

Relative to the Procedure Note in the C-CDA R2, the Enhanced Procedure Document requires support by the EHR for a broader range of templates related to a procedure on a patient for the administrative or clinical exchange with a third party. Any section for which data is not available (not collected, not relevant, not supported by the EHR technology, etc.) SHALL have the appropriate nullFlavor, from the [nullFlavorCDP1](#) valueset, specified to indicate that the information was not available (NI) at time of document creation or is being withheld (NA) (see section 3.4 regarding the use of nullFlavors).

The Procedure Note defined in the C-CDA R2 should be used when a summary record is appropriate or when it is specifically requested.

The Enhanced Procedure Document (CDP1) template conforms to the C-CDA R2 Procedure Note (V2) template

(identifier:urn:hl7ii:2.16.840.1.113883.10.20.22.1.6:2014-06-09) with the following changes and additions:

- 1) Replaced verb MAY with SHALL for:
  - [Anesthesia Section \(V2\)](#)
  - [Family History Section \(V2\)](#)
  - [History of Past Illness Section \(V2\)](#)
  - [History of Present Illness Section](#)
  - [Medical Equipment Section \(V2\)](#)
  - [Medical \(General\) History Section](#)
  - [Medications Administered Section \(V2\)](#)
  - [Physical Exam Section \(V2\)](#)
  - [Planned Procedure Section \(V2\)](#)
  - [Procedure Disposition Section](#)
  - [Procedure Estimated Blood Loss Section](#)
  - [Procedure Findings Section \(V2\)](#)
  - [Procedure Implants Section](#)
  - [Procedure Specimens Taken Section](#)
  - [Review of Systems Section](#)
- 2) Replaced (entries optional) section with (entries required) section and changed verb MAY with SHALL for:
  - [Allergies and Intolerances Section \(entries required\) \(V2\)](#)
  - [Medications Section \(entries required\) \(V2\)](#)
  - [Procedures Section \(entries required\) \(V2\)](#)
- 3) Added additional sections from C-CDA R2 by reference (verb SHALL)
  - [Payers Section \(V2\)](#)
- 4) Replaced C-CDA R2 sections with CDP1 additionally constrained sections (verb SHALL):

- [Plan of Treatment Section \(CDP1\)](#)
  - [Social History Section \(CDP1\)](#)
- 5) Added CDP1 only sections (verb SHALL):
- [Additional Documentation Section \(CDP1\)](#)
  - [Externally Defined CDE Section \(CDP1\)](#)
  - [Orders Placed Section \(CDP1\)](#)
- 6) Changed conformance language for use of redundant sections:
- [Assessment and Plan Section \(V2\)](#)
  - [Assessment Section](#)
  - [Plan of Treatment Section \(CDP1\)](#)
  - [Chief Complaint and Reason for Visit Section](#)
  - [Chief Complaint Section](#)
  - [Reason for Visit Section](#)

**Table 19: Enhanced Procedure Document (CDP1) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
ClinicalDocument (identifier: urn:oid:2.16.840.1.113883.10.20.35.1.4)					
templateId	1..1	SHALL		<a href="#">CDP1-2101</a>	
@root	1..1	SHALL		<a href="#">CDP1-2102</a>	2.16.840.1.113883.10.20.35.1.4
code	1..1	SHALL		<a href="#">CDP1-2103</a>	
@code	1..1	SHALL		<a href="#">CDP1-2104</a>	2.16.840.1.113883.11.20.6.1 (ProcedureNoteDocumentTypeCodes)
participant	0..*	MAY		<a href="#">CDP1-2105</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-2106</a>	2.16.840.1.113883.5.88 (participationFunction) = IND
functionCode	1..1	SHALL		<a href="#">CDP1-2107</a>	2.16.840.1.113883.5.88 (participationFunction) = PCP
associatedEntity/@classCode	1..1	SHALL		<a href="#">CDP1-2108</a>	2.16.840.1.113883.5.90 (HL7ParticipationType) = PROV
associatedPerson	1..1	SHALL		<a href="#">CDP1-2109</a>	
documentationOf	1..*	SHALL		<a href="#">CDP1-2110</a>	
serviceEvent	1..1	SHALL		<a href="#">CDP1-2111</a>	
effectiveTime	1..1	SHALL		<a href="#">CDP1-2112</a>	<a href="#">US Realm Date and Time (DT.US.FIELDDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3)</a>
low	1..1	SHALL		<a href="#">CDP1-2113</a>	
performer	1..*	SHALL		<a href="#">CDP1-2117</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-2118</a>	2.16.840.1.113883.5.90 (HL7ParticipationType) = PPRF
assignedEntity	1..1	SHALL		<a href="#">CDP1-2119</a>	
code	0..1	SHOULD		<a href="#">CDP1-2120</a>	2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy (HIPAA))
performer	0..*	MAY		<a href="#">CDP1-2121</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-2122</a>	2.16.840.1.113883.5.90 (HL7ParticipationType) = SPRF
assignedEntity	1..1	SHALL		<a href="#">CDP1-2123</a>	
code	0..1	SHOULD		<a href="#">CDP1-2124</a>	2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy (HIPAA))
authorization	0..1	MAY		<a href="#">CDP1-2126</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-2127</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = AUTH
consent	1..1	SHALL		<a href="#">CDP1-2128</a>	
@classCode	1..1	SHALL		<a href="#">CDP1-2129</a>	2.16.840.1.113883.5.6 (HL7ActClass) = CONS

XPath	Card.	Verb	Data Type	CONF#	Value
@moodCode	1..1	SHALL		<a href="#">CDP1-2130</a>	2.16.840.1.113883.5.1001 (ActMood) = EVN
statusCode	1..1	SHALL		<a href="#">CDP1-2131</a>	
componentOf	0..1	SHOULD		<a href="#">CDP1-2132</a>	
encompassingEncounter	1..1	SHALL		<a href="#">CDP1-2133</a>	
id	0..*	SHOULD		<a href="#">CDP1-2134</a>	
code	1..1	SHALL		<a href="#">CDP1-2135</a>	
encounterParticipant	0..1	MAY		<a href="#">CDP1-2136</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-2137</a>	REF
location	1..*	SHALL		<a href="#">CDP1-2138</a>	
healthCareFacility	1..1	SHALL		<a href="#">CDP1-2139</a>	
id	1..*	SHALL		<a href="#">CDP1-2140</a>	
component	1..1	SHALL		<a href="#">CDP1-2201</a>	
structuredBody	1..1	SHALL		<a href="#">CDP1-2202</a>	
component	1..1	SHALL		<a href="#">CDP1-2203</a>	
section	1..1	SHALL		<a href="#">CDP1-2204</a>	<a href="#">Additional Documentation Section (CDP1)</a> (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.1
component	1..1	SHALL		<a href="#">CDP1-2205</a>	
section	1..1	SHALL		<a href="#">CDP1-2206</a>	<a href="#">Allergies and Intolerances Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6.1:2014-06-09
component	1..1	SHALL		<a href="#">CDP1-2207</a>	
section	1..1	SHALL		<a href="#">CDP1-2208</a>	<a href="#">Anesthesia Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.25:2014-06-09
component	0..1	MAY		<a href="#">CDP1-2209</a>	
section	1..1	SHALL		<a href="#">CDP1-2210</a>	<a href="#">Assessment and Plan Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09
component	0..1	MAY		<a href="#">CDP1-2211</a>	
section	1..1	SHALL		<a href="#">CDP1-2212</a>	<a href="#">Assessment Section</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.8
component	0..1	MAY		<a href="#">CDP1-2213</a>	
section	1..1	SHALL		<a href="#">CDP1-2214</a>	<a href="#">Chief Complaint and Reason for Visit Section</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.13
component	0..1	MAY		<a href="#">CDP1-2215</a>	
section	1..1	SHALL		<a href="#">CDP1-2216</a>	<a href="#">Chief Complaint Section</a>



XPath	Card.	Verb	Data Type	CONF#	Value
					(identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1 .1.13.2.1
component	1..1	SHALL		<a href="#">CDP1-2217</a>	
section	1..1	SHALL		<a href="#">CDP1-2218</a>	<a href="#">Complications Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.2 0.22.2.37:2014-06-09
component	1..1	SHALL		<a href="#">CDP1-2219</a>	
section	1..1	SHALL		<a href="#">CDP1-2220</a>	<a href="#">Externally Defined CDE Section (CDP1)</a> (identifier: urn:oid:2.16.840.1.113883.10.20. 35.2.2
component	1..1	SHALL		<a href="#">CDP1-2221</a>	
section	1..1	SHALL		<a href="#">CDP1-2222</a>	<a href="#">Family History Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.2 0.22.2.15:2014-06-09
component	1..1	SHALL		<a href="#">CDP1-2223</a>	
section	1..1	SHALL		<a href="#">CDP1-2224</a>	<a href="#">History of Past Illness Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.2 0.22.2.20:2014-06-09
component	1..1	SHALL		<a href="#">CDP1-2225</a>	
section	1..1	SHALL		<a href="#">CDP1-2226</a>	<a href="#">History of Present Illness Section</a> (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1 .3.4
component	1..1	SHALL		<a href="#">CDP1-2227</a>	
section	1..1	SHALL		<a href="#">CDP1-2228</a>	<a href="#">Medical Equipment Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.2 0.22.2.23:2014-06-09
component	1..1	SHALL		<a href="#">CDP1-2229</a>	
section	1..1	SHALL		<a href="#">CDP1-2230</a>	<a href="#">Medical (General) History Section</a> (identifier: urn:oid:2.16.840.1.113883.10.20. 22.2.39
component	1..1	SHALL		<a href="#">CDP1-2231</a>	
section	1..1	SHALL		<a href="#">CDP1-2232</a>	<a href="#">Medications Administered Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.2 0.22.2.38:2014-06-09
component	1..1	SHALL		<a href="#">CDP1-2233</a>	
section	1..1	SHALL		<a href="#">CDP1-2234</a>	<a href="#">Medications Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.2 0.22.2.1.1:2014-06-09

XPath	Card.	Verb	Data Type	CONF#	Value
component	1..1	SHALL		<a href="#">CDP1-2235</a>	
section	1..1	SHALL		<a href="#">CDP1-2236</a>	<a href="#">Orders Placed Section (CDP1)</a> (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.3)
component	1..1	SHALL		<a href="#">CDP1-2237</a>	
section	1..1	SHALL		<a href="#">CDP1-2238</a>	<a href="#">Payers Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2014-06-09)
component	1..1	SHALL		<a href="#">CDP1-2239</a>	
section	1..1	SHALL		<a href="#">CDP1-2240</a>	<a href="#">Physical Exam Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.2.10:2014-06-09)
component	0..1	MAY		<a href="#">CDP1-2241</a>	
section	1..1	SHALL		<a href="#">CDP1-2242</a>	<a href="#">Plan of Treatment Section (CDP1)</a> (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.6)
component	1..1	SHALL		<a href="#">CDP1-2243</a>	
section	1..1	SHALL		<a href="#">CDP1-2244</a>	<a href="#">Planned Procedure Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.30:2014-06-09)
component	1..1	SHALL		<a href="#">CDP1-2245</a>	
section	1..1	SHALL		<a href="#">CDP1-2246</a>	<a href="#">Postprocedure Diagnosis Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.36:2014-06-09)
component	1..1	SHALL		<a href="#">CDP1-2247</a>	
section	1..1	SHALL		<a href="#">CDP1-2248</a>	<a href="#">Procedure Description Section</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.27)
component	1..1	SHALL		<a href="#">CDP1-2249</a>	
section	1..1	SHALL		<a href="#">CDP1-2250</a>	<a href="#">Procedure Disposition Section</a> (identifier: urn:oid:2.16.840.1.113883.10.20.18.2.12)
component	1..1	SHALL		<a href="#">CDP1-2251</a>	
section	1..1	SHALL		<a href="#">CDP1-2252</a>	<a href="#">Procedure Estimated Blood Loss Section</a> (identifier: urn:oid:2.16.840.1.113883.10.20.18.2.9)
component	1..1	SHALL		<a href="#">CDP1-2253</a>	
section	1..1	SHALL		<a href="#">CDP1-2254</a>	<a href="#">Procedure Findings Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.2

XPath	Card.	Verb	Data Type	CONF#	Value
					0.22.2.28:2014-06-09
component	1..1	SHALL		<a href="#">CDP1-2255</a>	
section	1..1	SHALL		<a href="#">CDP1-2256</a>	<a href="#">Procedure Implants Section</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.40)
component	1..1	SHALL		<a href="#">CDP1-2257</a>	
section	1..1	SHALL		<a href="#">CDP1-2258</a>	<a href="#">Procedure Indications Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.29:2014-06-09)
component	1..1	SHALL		<a href="#">CDP1-2259</a>	
section	1..1	SHALL		<a href="#">CDP1-2260</a>	<a href="#">Procedure Specimens Taken Section</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.31)
component	1..1	SHALL		<a href="#">CDP1-2261</a>	
section	1..1	SHALL		<a href="#">CDP1-2262</a>	<a href="#">Procedures Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.7.1:2014-06-09)
component	0..1	MAY		<a href="#">CDP1-2263</a>	
section	1..1	SHALL		<a href="#">CDP1-2264</a>	<a href="#">Reason for Visit Section</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.12)
component	1..1	SHALL		<a href="#">CDP1-2265</a>	
section	1..1	SHALL		<a href="#">CDP1-2266</a>	<a href="#">Review of Systems Section</a> (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.18)
component	1..1	SHALL		<a href="#">CDP1-2267</a>	
section	1..1	SHALL		<a href="#">CDP1-2268</a>	<a href="#">Social History Section (CDP1)</a> (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.7)

#### 5.4.1 Properties

1. Conforms to [Procedure Note \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.6:2014-06-09).
2. Conforms to [US Realm Header \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2014-06-09).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:CDP1-2101) such that it
  - a. **SHALL** contain exactly one [1..1]
 

**@root**="2.16.840.1.113883.10.20.35.1.4" (CONF:CDP1-2102).

The Enhanced Procedure Document recommends use of a single document type code, 28570-0, "Procedure Note" with further specification provided by author or performer, setting, or specialty. When pre-coordinated codes are used, any coded values describing the author or performer of the service act or the practice setting must be consistent with the LOINC document type.

4. **SHALL** contain exactly one [1..1] **code** (CONF:CDP1-2103).
  - a. This code **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [ProcedureNoteDocumentTypeCodes](#) 2.16.840.1.113883.11.20.6.1 **DYNAMIC** (CONF:CDP1-2104).

#### 5.4.1.1 participant

The participant element in the Enhanced Procedure Document header follows the General Header Constraints for participants.

5. **MAY** contain zero or more [0..\*] **participant** (CONF:CDP1-2105) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="IND"** Individual (CodeSystem: participationFunction 2.16.840.1.113883.5.88 **STATIC**) (CONF:CDP1-2106).
  - b. **SHALL** contain exactly one [1..1] **functionCode="PCP"** Primary Care Physician (CodeSystem: participationFunction 2.16.840.1.113883.5.88 **STATIC**) (CONF:CDP1-2107).
  - c. **SHALL** contain exactly one [1..1] **associatedEntity/@classCode="PROV"** Provider (CodeSystem: HL7ParticipationType 2.16.840.1.113883.5.90 **STATIC**) (CONF:CDP1-2108).
    - i. This associatedEntity/@classCode **SHALL** contain exactly one [1..1] **associatedPerson** (CONF:CDP1-2109).

#### 5.4.1.2 documentationOf

A serviceEvent is required in the Enhanced Procedure Document to represent the main act, such as a colonoscopy or a cardiac stress study, being documented. It must be equivalent to or further specialize the value inherent in the ClinicalDocument/@code (such as where the ClinicalDocument/@code is simply "Procedure Note" and the procedure is "colonoscopy"), and it shall not conflict with the value inherent in the ClinicalDocument/@code, as such a conflict would create ambiguity. A serviceEvent/effectiveTime element indicates the time the actual event (as opposed to the encounter surrounding the event) took place.

serviceEvent/effectiveTime may be represented two different ways in the Enhanced Procedure Document. For accuracy to the second, the best method is effectiveTime/low together with effectiveTime/high. If a more general time, such as minutes or hours, is acceptable OR if the duration is unknown, an effectiveTime/low with a width element may be used. If the duration is unknown, the appropriate HL7 null value such as "NI" or "NA" must be used for the width element.

6. **SHALL** contain at least one [1..\*] **documentationOf** (CONF:CDP1-2110) such that it
  - a. **SHALL** contain exactly one [1..1] **serviceEvent** (CONF:CDP1-2111).
    - i. This serviceEvent **SHALL** contain exactly one [1..1] [US Realm Date and Time \(DTM.US.FIELDDED\)](#)

(identifier:urn:oid:2.16.840.1.113883.10.20.22.5.3)  
(CONF:CDP1-2112).

1. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:CDP1-2113).
2. The serviceEvent/effectiveTime **SHALL** be present with effectiveTime/low (CONF:CDP1-2114).
3. If a width is not present, the serviceEvent/effectiveTime **SHALL** include effectiveTime/high (CONF:CDP1-2115).
4. When only the date and the length of the procedure are known a width element **SHALL** be present and the serviceEvent/effectiveTime/high **SHALL NOT** be present (CONF:CDP1-2116).

#### 5.4.1.3 performer

The performer participant represents clinicians who actually and principally carry out the serviceEvent. Typically, these are clinicians who have the appropriate privileges in their institutions such as gastroenterologists, interventional radiologists, and family practice physicians. Performers may also be non-physician providers (NPPs) who have other significant roles in the procedure such as a radiology technician, dental assistant, or nurse.

- ii. This serviceEvent **SHALL** contain at least one [1..\*] **performer** (CONF:CDP1-2117) such that it
  1. **SHALL** contain exactly one [1..1] **@typeCode="PPRF"** Primary Performer (CodeSystem: HL7ParticipationType 2.16.840.1.113883.5.90 **STATIC**) (CONF:CDP1-2118).
  2. **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:CDP1-2119).
    - a. This assignedEntity **SHOULD** contain zero or one [0..1] **code** which **SHALL** be selected from ValueSet [Healthcare Provider Taxonomy \(HIPAA\)](#) 2.16.840.1.114222.4.11.1066 **DYNAMIC** (CONF:CDP-2120).

**Figure 9: Enhanced Procedure Document (CDP1) Performer Example**

```
<performer typeCode="PPRF">
  <assignedEntity>
    <id extension="IO00017" root="2.16.840.1.113883.19.5" />
    <code code="207RG0100X" codeSystem="2.16.840.1.113883.6.96"
codeSystemName="NUCC" displayName="Gastroenterologist" />
    <addr>
      <streetAddressLine>1001 Hospital Lane</streetAddressLine>
      <city>Ann Arbor</city>
      <state>MI</state>
      <postalCode>99999</postalCode>
      <country>US</country>
    </addr>
    <telecom value="tel:(999)555-1212" />
    <assignedPerson>
      <name>
        <prefix>Dr.</prefix>
        <given>Tony</given>
        <family>Tum</family>
      </name>
    </assignedEntity>
  </performer>
```

#### 5.4.1.4 performer

This performer identifies any assistants.

- iii. This serviceEvent **MAY** contain zero or more [0..\*] **performer** (CONF:CDP1-2121) such that it
  1. **SHALL** contain exactly one [1..1] @typeCode="SPRF" Secondary Performer (CodeSystem: HL7ParticipationType 2.16.840.1.113883.5.90) (CONF:CDP1-2122).
  2. **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:CDP1-2123).
    - a. This assignedEntity **SHOULD** contain zero or one [0..1] **code**, which **SHALL** be selected from ValueSet [Healthcare Provider Taxonomy \(HIPAA\)](#) 2.16.840.1.114222.4.11.1066 **DYNAMIC** (CONF:CDP1-2124).
- iv. The value of Clinical Document /documentationOf/serviceEvent/code **SHALL** be from ICD9 CM Procedures (codeSystem 2.16.840.1.113883.6.104), CPT-4 (codeSystem 2.16.840.1.113883.6.12), or values descending from 71388002 (Procedure) from the SNOMED CT (codeSystem 2.16.840.1.113883.6.96) ValueSet 2.16.840.1.113883.3.88.12.80.28 Procedure **DYNAMIC** (CONF:CDP1-2125).

**Figure 10: Enhanced Procedure Document (CDP1) serviceEvent Example**

```
<documentationOf>
  <serviceEvent classCode="PROC">
    <code code="118155006" codeSystem="2.16.840.1.113883.6.96"
      codeSystemName="SNOMED CT" displayName="Gastrointestinal tract endoscopy"
    />
    <effectiveTime>
      <low value="201003292240" />
      <width value="15" unit="m" />
    </effectiveTime>
    ...
  </serviceEvent>
</documentationOf>
```

Authorization represents consent. Consent, if present, shall be represented by authorization/consent.

7. **MAY** contain zero or one [0..1] **authorization** (CONF:CDP1-2126).
  - a. The authorization, if present, **SHALL** contain exactly one [1..1] **@typeCode="AUTH"** authorized by (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-2127).
  - b. The authorization, if present, **SHALL** contain exactly one [1..1] **consent** (CONF:CDP1-2128).
    - i. This consent **SHALL** contain exactly one [1..1] **@classCode="CONS"** consent (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6) (CONF:CDP1-2129).
    - ii. This consent **SHALL** contain exactly one [1..1] **@moodCode="EVN"** event (CodeSystem: ActMood 2.16.840.1.113883.5.1001) (CONF:CDP1-2130).
    - iii. This consent **SHALL** contain exactly one [1..1] **statusCode** (CONF:CDP1-2131).

#### 5.4.1.5 componentOf

8. **SHOULD** contain zero or one [0..1] **componentOf** (CONF:CDP1-2132).
  - a. The componentOf, if present, **SHALL** contain exactly one [1..1] **encompassingEncounter** (CONF:CDP1-2133).
    - i. This encompassingEncounter **SHOULD** contain zero or more [0..\*] **id** (CONF:CDP1-2134).
    - ii. This encompassingEncounter **SHALL** contain exactly one [1..1] **code** (CONF:CDP1-2135).
    - iii. This encompassingEncounter **MAY** contain zero or one [0..1] **encounterParticipant** (CONF:CDP1-2136) such that it
      1. **SHALL** contain exactly one [1..1] **@typeCode="REF"** Referrer (CONF:CDP1-2137).
    - iv. This encompassingEncounter **SHALL** contain at least one [1..\*] **location** (CONF:CDP1-2138).
      1. Such locations **SHALL** contain exactly one [1..1] **healthCareFacility** (CONF:CDP1-2139).

- a. This healthCareFacility **SHALL** contain at least one [1..\*] **id** (CONF:CDP1-2140).

#### 5.4.2 component

- 9. **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2201).

- a. This component **SHALL** contain exactly one [1..1] **structuredBody** (CONF:CDP1-2202).

- i. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2203) such that it

- 1. **SHALL** contain exactly one [1..1] [Additional Documentation Section \(CDP1\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.1) (CONF:CDP1-2204).

- ii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2205) such that it

- 1. **SHALL** contain exactly one [1..1] [Allergies and Intolerances Section \(entries required\) \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6.1:2014-06-09) (CONF:CDP1-2206).

- iii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2207) such that it

- 1. **SHALL** contain exactly one [1..1] [Anesthesia Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.25:2014-06-09) (CONF:CDP1-2208).

- iv. This structuredBody **MAY** contain zero or one [0..1] **component** (CONF:CDP1-2209) such that it

- 1. **SHALL** contain exactly one [1..1] [Assessment and Plan Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09) (CONF:CDP1-2210).

- v. This structuredBody **MAY** contain zero or one [0..1] **component** (CONF:CDP1-2211) such that it

- 1. **SHALL** contain exactly one [1..1] [Assessment Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.8) (CONF:CDP1-2212).

- vi. This structuredBody **MAY** contain zero or one [0..1] **component** (CONF:CDP1-2213) such that it

- 1. **SHALL** contain exactly one [1..1] [Chief Complaint and Reason for Visit Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.13) (CONF:CDP1-2214).

- vii. This structuredBody **MAY** contain zero or one [0..1] **component** (CONF:CDP1-2215) such that it

- 1. **SHALL** contain exactly one [1..1] [Chief Complaint Section](#) (identifier:



urn:oid:1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1)  
(CONF:CDP1-2216).

viii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2217) such that it

1. **SHALL** contain exactly one [1..1] [Complications Section \(V2\)](#) (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.22.2.37:2014-06-09) (CONF:CDP1-2218).

ix. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2219) such that it

1. **SHALL** contain exactly one [1..1] [Externally Defined CDE Section \(CDP1\)](#) (identifier:  
urn:oid:2.16.840.1.113883.10.20.35.2.2) (CONF:CDP1-2220).

x. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2221) such that it

1. **SHALL** contain exactly one [1..1] [Family History Section \(V2\)](#) (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2014-06-09) (CONF:CDP1-2222).

xi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2223) such that it

1. **SHALL** contain exactly one [1..1] [History of Past Illness Section \(V2\)](#) (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.22.2.20:2014-06-09) (CONF:CDP1-2224).

xii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2225) such that it

1. **SHALL** contain exactly one [1..1] [History of Present Illness Section](#) (identifier:  
urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.4) (CONF:CDP1-2226).

xiii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2227) such that it

1. **SHALL** contain exactly one [1..1] [Medical Equipment Section \(V2\)](#) (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.22.2.23:2014-06-09) (CONF:CDP1-2228).

xiv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2229) such that it

1. **SHALL** contain exactly one [1..1] [Medical \(General\) History Section](#) (identifier:  
urn:oid:2.16.840.1.113883.10.20.22.2.39) (CONF:CDP1-2230).

xv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2231) such that it

1. **SHALL** contain exactly one [1..1] [Medications Administered Section \(V2\)](#) (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.22.2.38:2014-06-09) (CONF:CDP1-2232).
- xvi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2233) such that it
  1. **SHALL** contain exactly one [1..1] [Medications Section \(entries required\) \(V2\)](#) (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.22.2.1.1:2014-06-09) (CONF:CDP1-2234).
- xvii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2235) such that it
  1. **SHALL** contain exactly one [1..1] [Orders Placed Section \(CDP1\)](#) (identifier:  
urn:oid:2.16.840.1.113883.10.20.35.2.3) (CONF:CDP1-2236).
- xviii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2237) such that it
  1. **SHALL** contain exactly one [1..1] [Payers Section \(V2\)](#) (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2014-06-09) (CONF:CDP1-2238).
- xix. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2239) such that it
  1. **SHALL** contain exactly one [1..1] [Physical Exam Section \(V2\)](#) (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.2.10:2014-06-09) (CONF:CDP1-2240).
- xx. This structuredBody **MAY** contain zero or one [0..1] **component** (CONF:CDP1-2241) such that it
  1. **SHALL** contain exactly one [1..1] [Plan of Treatment Section \(CDP1\)](#) (identifier:  
urn:oid:2.16.840.1.113883.10.20.35.2.6) (CONF:CDP1-2242).
- xxi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2243) such that it
  1. **SHALL** contain exactly one [1..1] [Planned Procedure Section \(V2\)](#) (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.22.2.30:2014-06-09) (CONF:CDP1-2244).
- xxii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2245) such that it
  1. **SHALL** contain exactly one [1..1] [Postprocedure Diagnosis Section \(V2\)](#) (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.22.2.36:2014-06-09) (CONF:CDP1-2246).

- xxiii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2247) such that it
1. **SHALL** contain exactly one [1..1] [Procedure Description Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.27) (CONF:CDP1-2248).
- xxiv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2249) such that it
1. **SHALL** contain exactly one [1..1] [Procedure Disposition Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.18.2.12) (CONF:CDP1-2250).
- xxv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2251) such that it
1. **SHALL** contain exactly one [1..1] [Procedure Estimated Blood Loss Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.18.2.9) (CONF:CDP1-2252).
- xxvi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2253) such that it
1. **SHALL** contain exactly one [1..1] [Procedure Findings Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.28:2014-06-09) (CONF:CDP1-2254).
- xxvii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2255) such that it
1. **SHALL** contain exactly one [1..1] [Procedure Implants Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.40) (CONF:CDP1-2256).
- xxviii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2257) such that it
1. **SHALL** contain exactly one [1..1] [Procedure Indications Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.29:2014-06-09) (CONF:CDP1-2258).
- xxix. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2259) such that it
1. **SHALL** contain exactly one [1..1] [Procedure Specimens Taken Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.31) (CONF:CDP1-2260).
- xxx. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2261) such that it
1. **SHALL** contain exactly one [1..1] [Procedures Section \(entries required\) \(V2\)](#) (identifier:

urn:hl7ii:2.16.840.1.113883.10.20.22.2.7.1:2014-06-09) (CONF:CDP1-2262).

xxxi. This structuredBody **MAY** contain zero or one [0..1] **component** (CONF:CDP1-2263) such that it

1. **SHALL** contain exactly one [1..1] [Reason for Visit Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.12) (CONF:CDP1-2264).

xxxii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2265) such that it

1. **SHALL** contain exactly one [1..1] [Review of Systems Section](#) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.18) (CONF:CDP1-2266).

xxxiii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2267) such that it

1. **SHALL** contain exactly one [1..1] [Social History Section \(CDP1\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.7) (CONF:CDP1-2268).

xxxiv. **SHALL** include a [Chief Complaint and Reason for Visit Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.13) or both a [Chief Complaint Section](#) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1) and a [Reason for Visit Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.12) (CONF:CDP1-2269).

xxxv. **SHALL NOT** include a [Chief Complaint and Reason for Visit Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.13) when both a [Chief Complaint Section](#) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1) and a [Reason for Visit Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.12) are present (CONF:CDP1-2270).

xxxvi. **SHALL** include an [Assessment and Plan Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09) or both an [Assessment Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.8) and a [Plan of Treatment Section \(CDP1\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.6) (CONF:CDP1-2271).

xxxvii. **SHALL NOT** include an [Assessment and Plan Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09) when both an [Assessment Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.8) and a [Plan of Treatment Section \(CDP1\)](#) (identifier:

urn:oid:2.16.840.1.113883.10.20.35.2.6) are present  
(CONF:CDP1-2272).

**Table 20: ProcedureNoteDocumentTypeCodes**

Value Set: ProcedureNoteDocumentTypeCodes 2.16.840.1.113883.11.20.6.1 A value set of LOINC document codes for Procedure Notes.			
Specific URL Pending			
Valueset Source: <a href="http://search.loinc.org">http://search.loinc.org</a>			
Code	Code System	Code System OID	Print Name
28570-0	LOINC	2.16.840.1.113883.6.1	Provider-unspecified Procedure note
34137-0	LOINC	2.16.840.1.113883.6.1	Physician procedure note
28583-3	LOINC	2.16.840.1.113883.6.1	Bronchoscopy study
28624-5	LOINC	2.16.840.1.113883.6.1	Cardiac catheterization study
28573-4	LOINC	2.16.840.1.113883.6.1	Colonoscopy study
34877-1	LOINC	2.16.840.1.113883.6.1	Endoscopy study
34874-8	LOINC	2.16.840.1.113883.6.1	Flexible sigmoidoscopy study
34870-6	LOINC	2.16.840.1.113883.6.1	Cardiac stress study Procedure
34868-0	LOINC	2.16.840.1.113883.6.1	Dentist procedure note
34818-5	LOINC	2.16.840.1.113883.6.1	Podiatry procedure note
...			

**Table 21: Healthcare Provider Taxonomy (HIPAA)**

Value Set: Healthcare Provider Taxonomy (HIPAA) 2.16.840.1.114222.4.11.1066

The Health Care Provider Taxonomy value set is a collection of unique alphanumeric codes, ten characters in length. The code set is structured into three distinct Levels including Provider Type, Classification, and Area of Specialization. The Health Care Provider Taxonomy code set allows a single provider (individual, group, or institution) to identify their specialty category. Providers may have one or more than one value associated to them. When determining what value or values to associate with a provider, the user needs to review the requirements of the trading partner with which the value(s) are being used.

Value Set Source:

[http://www.nucc.org/index.php?option=com\\_content&view=article&id=14&Itemid=125](http://www.nucc.org/index.php?option=com_content&view=article&id=14&Itemid=125)

Code	Code System	Code System OID	Print Name
171100000X	Healthcare Provider Taxonomy (HIPAA)	2.16.840.1.113883.6.101	Acupuncturist
363LA2100X	Healthcare Provider Taxonomy (HIPAA)	2.16.840.1.113883.6.101	Nurse Practitioner - Acute Care
364SA2100X	Healthcare Provider Taxonomy (HIPAA)	2.16.840.1.113883.6.101	Clinical Nurse Specialist - Acute Care
101YA0400X	Healthcare Provider Taxonomy (HIPAA)	2.16.840.1.113883.6.101	Counselor - Addiction (Substance Use Disorder)
103TA0400X	Healthcare Provider Taxonomy (HIPAA)	2.16.840.1.113883.6.101	Psychologist - Addiction (Substance Use Disorder)
163WA0400X	Healthcare Provider Taxonomy (HIPAA)	2.16.840.1.113883.6.101	Registered Nurse - Addiction (Substance Use Disorder)
207LA0401X	Healthcare Provider Taxonomy (HIPAA)	2.16.840.1.113883.6.101	Anesthesiology - Addiction Medicine
207QA0401X	Healthcare Provider Taxonomy (HIPAA)	2.16.840.1.113883.6.101	Family Medicine - Addiction Medicine
207RA0401X	Healthcare Provider Taxonomy (HIPAA)	2.16.840.1.113883.6.101	Internal Medicine - Addiction Medicine
2084A0401X	Healthcare Provider Taxonomy (HIPAA)	2.16.840.1.113883.6.101	Psychiatry & Neurology - Addiction Medicine
...			

## 5.5 Interval Document (CDP1)

[ClinicalDocument: identifier urn:oid:2.16.840.1.113883.10.20.35.1.5  
(open)]

**Table 22: Interval Document (CDP1) Document Contexts**

Contained By:	Contains:
	<a href="#">Additional Documentation Section (CDP1)</a> <a href="#">Allergies and Intolerances Section (entries required) (V2)</a> <a href="#">Assessment and Plan Section (V2)</a> <a href="#">Assessment Section</a> <a href="#">Encounters Section (entries required) (V2)</a> <a href="#">Externally Defined CDE Section (CDP1)</a> <a href="#">Functional Status Section (CDP1)</a> <a href="#">General Status Section</a> <a href="#">Goals Section</a> <a href="#">Health Concerns Section</a> <a href="#">Health Status Evaluation/Outcomes Section</a> <a href="#">Hospital Consultations Section</a> <a href="#">Hospital Course Section</a> <a href="#">Immunizations Section (entries required) (V2)</a> <a href="#">Instructions Section (V2)</a> <a href="#">Interventions Section (V2)</a> <a href="#">Medical Equipment Section (V2)</a> <a href="#">Medications Section (entries required) (V2)</a> <a href="#">Mental Status Section</a> <a href="#">Nutrition Section</a> <a href="#">Objective Section</a> <a href="#">Orders Placed Section (CDP1)</a> <a href="#">Payers Section (V2)</a> <a href="#">Physical Exam Section (V2)</a> <a href="#">Plan of Treatment Section (CDP1)</a> <a href="#">Problem Section (V2)</a> <a href="#">Procedures Section (entries required) (V2)</a> <a href="#">Results Section (entries required) (V2)</a> <a href="#">Review of Systems Section</a> <a href="#">Subjective Section</a> <a href="#">Vital Signs Section (entries required) (V2)</a>

**Note: Hyperlinks for sections defined in this guide go to the section template. Hyperlinks for sections included by reference from C-CDA R2 go to Table 24 which lists all of the section level templates included in the documents in this guide.**

The Interval Document is generated by a provider at the end of a fixed period of time (shift, day, etc.) either:

- 1) within the context of a single encounter with a patient (e.g. Hospitalization) or
- 2) spanning multiple encounters (e.g. a home health skilled service that is provided over several visits).

The serviceEvent time shall specify the start (effectiveTime/low element) and end (effectiveTime/high element) of the period covered by the Interval Document. If the Interval Document is used to describe activity within an **encompassingEncounter**, then the start and end date/time shall be contained within the date/time range of the **encompassingEncounter** unless the **encompassingEncounter** is not completed; in which case, the start time for the Interval shall be equal to or greater than the start of the encounter. If the Interval Document spans multiple encounters (e.g. for specific home health services), then there shall be no **encompassingEncounter** and the contributing encounter(s) shall be listed in the Encounters Section. The effectiveTime for all encounters should be within the low/high time for the Interval Document.

Note: Multiple documents may be required to fully describe the delivery of health care services. For example, the record of the patient's Hospital stay may include a combination of the Enhanced Discharge Document, Enhanced Operative Notes Document(s), Enhanced Procedure Document(s), and Interval Documents. (see [Appendix D](#)). The description of home health services may include multiple Enhanced Encounters and Interval Documents to describe services delivered at each visit and those that are provided over multiple visits.

The Interval Document is intended to capture the activity for the period covered. It may exclude specific items that are reported in one of the other document templates (e.g. Enhanced Procedure Document).

The Interval Document may be provided to the intended recipient when it is appropriate to describe events for a portion of an encounter (e.g. a shift or day) or when the service(s) span multiple encounters. When requesting an Interval Document, the request should include the LOINC code for the Interval Document and the either an appropriate date/time range or a specific service that the Interval Document describes in whole or in part.

An Interval Document includes all sections relevant to the interval covered (except those covered by other document types such as the Enhanced Procedure Document). Any section for which data is not available (not collected, not relevant, not supported by the EHR technology, etc.) SHALL have the appropriate nullFlavor, from the [nullFlavorCDP1](#) valueset, specified to indicate that the information was not available (NI) at time of document creation or is being withheld (NA) (see section 3.4 regarding the use of nullFlavors).



**Table 23: Interval Document (CDP1) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
ClinicalDocument (identifier urn:oid:2.16.840.1.113883.10.20.35.1.5)					
templateId	1..1	SHALL		<a href="#">CDP1-2401</a>	
@root	1..1	SHALL		<a href="#">CDP1-2402</a>	2.16.840.1.113883.10.20.35.1.5
code	1..1	SHALL		<a href="#">CDP1-2403</a>	
@code	1..1	SHALL		<a href="#">CDP1-2404</a>	77600-5
@codeSystem	1..1	SHALL		<a href="#">CDP1-2430</a>	2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
documentationOf	1..1	SHALL		<a href="#">CDP1-2405</a>	
serviceEvent	1..1	SHALL		<a href="#">CDP1-2406</a>	
@classCode	1..1	SHALL		<a href="#">CDP1-2407</a>	2.16.840.1.113883.5.6 (HL7ActClass) = PCPR
templateId	1..1	SHALL		<a href="#">CDP1-2408</a>	
@root	1..1	SHALL		<a href="#">CDP1-2409</a>	2.16.840.1.113883.10.20.21.3.1
effectiveTime	1..1	SHALL		<a href="#">CDP1-2410</a>	<a href="#">US Realm Date and Time (DT.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3)</a>
low	1..1	SHALL		<a href="#">CDP1-2411</a>	
high	1..1	SHALL		<a href="#">CDP1-2412</a>	
participant	0..*	SHOULD		<a href="#">CDP1-2413</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-2414</a>	2.16.840.1.113883.5.90 (HL7ParticipationType) = CALLBCK
associatedEntity	1..1	SHALL		<a href="#">CDP1-2415</a>	
@classCode	1..1	SHALL		<a href="#">CDP1-2416</a>	2.16.840.1.113883.5.110 (RoleClass) = ASSIGNED
id	1..*	SHALL		<a href="#">CDP1-2417</a>	
addr	0..*	SHOULD		<a href="#">CDP1-2418</a>	
telecom	1..*	SHALL		<a href="#">CDP1-2419</a>	
associatedPerson	1..1	SHALL		<a href="#">CDP1-2420</a>	
name	1..*	SHALL		<a href="#">CDP1-2421</a>	
scopingOrganization	0..1	MAY		<a href="#">CDP1-2422</a>	
componentOf	0..1	SHOULD		<a href="#">CDP1-2423</a>	
encompassingEncounter	1..1	SHALL		<a href="#">CDP1-2424</a>	
id	1..*	SHALL		<a href="#">CDP1-2425</a>	
effectiveTime	1..1	SHALL		<a href="#">CDP1-2426</a>	<a href="#">US Realm Date and Time (DT.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3)</a>
responsibleParty	1..1	SHALL		<a href="#">CDP1-2427</a>	
encounterParticipant	0..*	MAY		<a href="#">CDP1-2429</a>	
component	1..1	SHALL		<a href="#">CDP1-2501</a>	

XPath	Card.	Verb	Data Type	CONF#	Value
structuredBody	1..1	SHALL		<a href="#">CDP1-2502</a>	
component	1..1	SHALL		<a href="#">CDP1-2503</a>	
section	1..1	SHALL		<a href="#">CDP1-2504</a>	<a href="#">Additional Documentation Section (CDP1)</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.35.2.1
component	1..1	SHALL		<a href="#">CDP1-2505</a>	
section	1..1	SHALL		<a href="#">CDP1-2506</a>	<a href="#">Allergies and Intolerances Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.22.2.6.1:2014- 06-09
component	0..1	MAY		<a href="#">CDP1-2507</a>	
section	1..1	SHALL		<a href="#">CDP1-2508</a>	<a href="#">Assessment and Plan Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10. 20.22.2.9:2014-06-09
component	0..1	MAY		<a href="#">CDP1-2509</a>	
section	1..1	SHALL		<a href="#">CDP1-2510</a>	<a href="#">Assessment Section</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.22.2.8
component	1..1	SHALL		<a href="#">CDP1-2601</a>	
section	1..1	SHALL		<a href="#">CDP1-2602</a>	<a href="#">Encounters Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.22.2.22.1:2014 -06-09
component	1..1	SHALL		<a href="#">CDP1-2511</a>	
section	1..1	SHALL		<a href="#">CDP1-2512</a>	<a href="#">Externally Defined CDE Section (CDP1)</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.35.2.2
component	1..1	SHALL		<a href="#">CDP1-2513</a>	
section	1..1	SHALL		<a href="#">CDP1-2514</a>	<a href="#">Functional Status Section (CDP1)</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.35.2.5
component	1..1	SHALL		<a href="#">CDP1-2515</a>	
section	1..1	SHALL		<a href="#">CDP1-2516</a>	<a href="#">General Status Section</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.2.5

XPath	Card.	Verb	Data Type	CONF#	Value
component	1..1	SHALL		<a href="#">CDP1-2517</a>	
section	1..1	SHALL		<a href="#">CDP1-2518</a>	<a href="#">Goals Section</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.22.2.60
component	1..1	SHALL		<a href="#">CDP1-2519</a>	
section	1..1	SHALL		<a href="#">CDP1-2520</a>	<a href="#">Health Concerns Section</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.22.2.58
component	1..1	SHALL		<a href="#">CDP1-2521</a>	
section	1..1	SHALL		<a href="#">CDP1-2522</a>	<a href="#">Health Status Evaluations and Outcomes Section</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.22.2.61
component	1..1	SHALL		<a href="#">CDP1-2523</a>	
section	1..1	SHALL		<a href="#">CDP1-2524</a>	<a href="#">Hospital Consultations Section</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.22.2.42
component	1..1	SHALL		<a href="#">CDP1-2525</a>	
section	1..1	SHALL		<a href="#">CDP1-2526</a>	<a href="#">Hospital Course Section</a> (identifier: urn:oid:1.3.6.1.4.1.1937 6.1.5.3.1.3.5
component	1..1	SHALL		<a href="#">CDP1-2527</a>	
section	1..1	SHALL		<a href="#">CDP1-2528</a>	<a href="#">Immunizations Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.22.2.2.1:2014- 06-09
component	1..1	SHALL		<a href="#">CDP1-2529</a>	
section	1..1	SHALL		<a href="#">CDP1-2530</a>	<a href="#">Instructions Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.22.2.45:2014- 06-09
component	1..1	SHALL		<a href="#">CDP1-2531</a>	
section	1..1	SHALL		<a href="#">CDP1-2532</a>	<a href="#">Interventions Section (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.21.2.3:2014- 06-09
component	1..1	SHALL		<a href="#">CDP1-2533</a>	
section	1..1	SHALL		<a href="#">CDP1-2534</a>	<a href="#">Medical Equipment Section (V2)</a> (identifier:

XPath	Card.	Verb	Data Type	CONF#	Value
					urn:hl7ii:2.16.840.1.113883.10.20.22.2.23:2014-06-09
section	1..1	SHALL		<a href="#">CDP1-2535</a>	
component	1..1	SHALL		<a href="#">CDP1-2536</a>	<u>Medications Section (entries required) (V2)</u> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1.1:2014-06-09
section	1..1	SHALL		<a href="#">CDP1-2537</a>	
component	1..1	SHALL		<a href="#">CDP1-2538</a>	<u>Mental Status Section</u> (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.56
section	1..1	SHALL		<a href="#">CDP1-2539</a>	
component	1..1	SHALL		<a href="#">CDP1-2540</a>	<u>Nutrition Section</u> (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.57
section	1..1	SHALL		<a href="#">CDP1-2541</a>	
component	1..1	SHALL		<a href="#">CDP1-2542</a>	<u>Objective Section</u> (identifier: urn:oid:2.16.840.1.113883.10.20.21.2.1
section	1..1	SHALL		<a href="#">CDP1-2543</a>	
component	1..1	SHALL		<a href="#">CDP1-2544</a>	<u>Orders Placed Section (CDP1)</u> (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.3
section	1..1	SHALL		<a href="#">CDP1-2545</a>	
component	1..1	SHALL		<a href="#">CDP1-2546</a>	<u>Payers Section (V2)</u> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2014-06-09
section	1..1	SHALL		<a href="#">CDP1-2547</a>	
section	1..1	SHALL		<a href="#">CDP1-2548</a>	<u>Physical Exam Section (V2)</u> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.2.10:2014-06-09
component	0..1	MAY		<a href="#">CDP1-2549</a>	
section	1..1	SHALL		<a href="#">CDP1-2550</a>	<u>Plan of Treatment Section (CDP1)</u> (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.6
component	1..1	SHALL		<a href="#">CDP1-2551</a>	

XPath	Card.	Verb	Data Type	CONF#	Value
section	1..1	SHALL		<a href="#">CDP1-2552</a>	<a href="#">Problem Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.22.2.5.1:2014- 06-09
component	1..1	SHALL		<a href="#">CDP1-2553</a>	
section	1..1	SHALL		<a href="#">CDP1-2554</a>	<a href="#">Procedures Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.22.2.7.1:2014- 06-09
component	1..1	SHALL		<a href="#">CDP1-2555</a>	
section	1..1	SHALL		<a href="#">CDP1-2556</a>	<a href="#">Results Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.22.2.3.1:2014- 06-09
component	1..1	SHALL		<a href="#">CDP1-2557</a>	
section	1..1	SHALL		<a href="#">CDP1-2558</a>	<a href="#">Subjective Section</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.22.2.2
component	1..1	SHALL		<a href="#">CDP1-2559</a>	
section	1..1	SHALL		<a href="#">CDP1-2560</a>	<a href="#">Surgical Drains Section</a> (identifier: urn:oid:2.16.840.1.11388 3.10.20.7.13
component	1..1	SHALL		<a href="#">CDP1-2561</a>	
section	1..1	SHALL		<a href="#">CDP1-2562</a>	<a href="#">Vital Signs Section (entries required) (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113 883.10.20.22.2.4.1:2014- 06-09

### 5.5.1 Properties

1. Conforms to [US Realm Header \(V2\)](#) template (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.22.1.1.2:2014-06-09).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:CDP1-2401) such that it
  - a. **SHALL** contain exactly one [1..1]  
**@root**="2.16.840.1.113883.10.20.35.1.5" (CONF:CDP1-2402).

The Interval Document requires the use of the document type code 77600-5, "Interval Note".

3. **SHALL** contain exactly one [1..1] **code**, (CONF:CDP1-2403)
  - a. This code **SHALL** contain exactly one [1..1] **@code="77600-5" Interval Note** (CONF:CDP1-2404).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem="2.16.840.1.113883.6.1" (CodeSystem: LOINC 2.16.840.1.113883.6.1) (CONF:CDP1-2430).**

#### 5.5.1.1 DocumentationOf

A documentationOf must contain a serviceEvent to further specialize the act inherent in the IntervalDocumentType.

4. **SHALL** contain exactly one [1..1] **documentationOf** (CONF:CDP1-2405).
  - a. The documentationOf **SHALL** contain exactly one [1..1] **serviceEvent** (CONF:CDP1-2406).
    - i. This serviceEvent **SHALL** contain exactly one [1..1] **@classCode="PCPR" Care Provision (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 STATIC) (CONF:CDP1-2407).**
    - ii. This serviceEvent **SHALL** contain exactly one [1..1] **templateId** (CONF:CDP1-2408) such that it
      1. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.21.3.1" (CONF:CDP1-2409).**
    - iii. This serviceEvent **SHALL** contain exactly one [1..1] **US Realm Date and Time (DT.US.FIELDED)** (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3) (CONF:CDP1-2410).
      1. The serviceEvent/effectiveTime element **SHALL** be present with effectiveTime/low element (CONF:CDP1-2411).
      2. If a width element is not present, the serviceEvent **SHALL** include effectiveTime/high (CONF:CDP1-2412).

**Figure 11: Interval Document (CDP1) serviceEvent Example**

```
<documentationOf>
  <serviceEvent classCode="PCPR">
    <templateId root="2.16.840.1.113883.10.20.21.3.1" />
    <effectiveTime>
      <low value="200503291200" />
      <high value="200503291400" />
    </effectiveTime>
    ...
  </serviceEvent>
</documentationOf>
```

#### 5.5.1.2 participant

This participant represents the person to contact for questions about the Interval Document. This call back contact individual may be a different person than the individual(s) identified in the author or legalAuthenticator participant.

5. **SHOULD** contain zero or more [0..\*] **participant** (CONF:CDP1-2413) such that it

- a. **SHALL** contain exactly one [1..1] **@typeCode="CALLBCK"** call back contact (CodeSystem: HL7ParticipationType 2.16.840.1.113883.5.90 **DYNAMIC**) (CONF:CDP1-2414).
- b. **SHALL** contain exactly one [1..1] **associatedEntity** (CONF:CDP1-2415).
  - i. This associatedEntity **SHALL** contain exactly one [1..1] **@classCode="ASSIGNED"** assigned entity (CodeSystem: RoleClass 2.16.840.1.113883.5.110 **DYNAMIC**) (CONF:CDP1-2416).
  - ii. This associatedEntity **SHALL** contain at least one [1..\*] **id** (CONF:CDP1-2417).
  - iii. This associatedEntity **SHOULD** contain zero or more [0..\*] **addr** (CONF:CDP1-2418).
  - iv. This associatedEntity **SHALL** contain at least one [1..\*] **telecom** (CONF:CDP1-2419).
  - v. This associatedEntity **SHALL** contain exactly one [1..1] **associatedPerson** (CONF:CDP1-2420).
    1. This associatedPerson **SHALL** contain at least one [1..\*] **name** (CONF:CDP1-2421).
  - vi. This associatedEntity **MAY** contain zero or one [0..1] **scopingOrganization** (CONF:CDP1-2422).

**Figure 12: Callback Participant Example**

```
<participant typeCode="CALLBCK">
  <time value="20050329224411+0500" />
  <associatedEntity classCode="ASSIGNED">
    <id extension="99999999" root="2.16.840.1.113883.4.6" />
    <code code="200000000X" codeSystem="2.16.840.1.113883.6.101"
displayName="Allopathic & Osteopathic Physicians" />
    <addr>
      <streetAddressLine>1002 Healthcare Drive </streetAddressLine>
      <city>Ann Arbor</city>
      <state>MI</state>
      <postalCode>97857</postalCode>
      <country>US</country>
    </addr>
    <telecom use="WP" value="tel:555-555-1002" />
    <associatedPerson>
      <name>
        <given>Henry</given>
        <family>Seven</family>
        <suffix>DO</suffix>
      </name>
    </associatedPerson>
  </associatedEntity>
</participant>
```

### 5.5.1.3 componentOF

An Interval Document is usually associated with an encounter; the id element of the encompassingEncounter is required to be present and represents the identifier for the encounter. When the Interval Document spans more than one encounter, it may be associated with an appropriate encounter and the encounters that contribute to the Interval Document should be defined in the Encounter Section.

6. **SHOULD** contain zero or one [0..1] **componentOf** (CONF:CDP1-2423).
  - a. This componentOf **SHALL** contain exactly one [1..1] **encompassingEncounter** (CONF:CDP1-2424).
    - i. This encompassingEncounter **SHALL** contain at least one[1..\*] **id** (CONF:CDP1-2425).
    - ii. This encompassingEncounter **SHALL** contain exactly one [1..1] ] **US Realm Date and Time (DT.US.FIELDDED)** (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3) (CONF:CDP1-2426).
    - iii. This encompassingEncounter **SHALL** contain exactly one [1..1] **responsibleParty** (CONF:CDP1-2427).

The responsibleParty element records only the party responsible for the encounter, not necessarily the entire episode of care

1. The responsibleParty element, **SHALL** contain an assignedEntity element which **SHALL** contain an assignedPerson element, a representedOrganization element, or both (CONF:CDP1-2428).

The encounterParticipant element represents persons who participated in the encounter and not necessarily the entire episode of care.

- iv. This encompassingEncounter **MAY** contain zero or more [0..\*] **encounterParticipant** (CONF:CDP1-2429).

Note: If present , **SHALL** contain an assignedEntity element which **SHALL** contain an assignedPerson element, a representedOrganization element, or both.

## 5.5.2 component

7. **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2501).
  - a. This component **SHALL** contain exactly one [1..1] **structuredBody** (CONF:CDP1-2502).
    - i. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2503) such that it
      1. **SHALL** contain exactly one [1..1] **Additional Documentation Section (CDP1)** (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.1) (CONF:CDP1-2504).
    - ii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2505) such that it
      1. **SHALL** contain exactly one [1..1] **Allergies and Intolerances Section (entries required) (V2)** (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6.1:2014-06-09) (CONF:CDP1-2506).
    - iii. This structuredBody **MAY** contain zero or one [1..1] **component** (CONF:CDP1-2507) such that it
      1. **SHALL** contain exactly one [1..1] **Assessment and Plan Section (V2)** (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09) (CONF:CDP1-2508).



- iv. This structuredBody **MAY** contain zero or one [1..1] **component** (CONF:CDP1-2509) such that it
  - 1. **SHALL** contain exactly one [1..1] [Assessment Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.8) (CONF:CDP1-2510 ).
- v. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2601) such that it
  - 1. **SHALL** contain exactly one [1..1] [Encounters Section \(entries required\) \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.22.1:2014-06-09) (CONF:CDP1-2602).
- vi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2511) such that it
  - 1. **SHALL** contain exactly one [1..1] [Externally Defined CDE Section \(CDP1\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.2) (CONF:CDP1-2512).
- vii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2513) such that it
  - 1. **SHALL** contain exactly one [1..1] [Functional Status Section \(CDP1\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.5) (CONF:CDP1-2514).
- viii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2515) such that it
  - 1. **SHALL** contain exactly one [1..1] [General Status Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.2.5) (CONF:CDP1-2516).
- ix. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2517) such that it
  - 1. **SHALL** contain exactly one [1..1] [Goals Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.60) (CONF:CDP1-2518).
- x. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2519) such that it
  - 1. **SHALL** contain exactly one [1..1] [Health Concerns Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.58) (CONF:CDP1-2520).
- xi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2521) such that it
  - 1. **SHALL** contain exactly one [1..1] [Health Status Evaluations and Outcomes Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.61) (CONF:CDP1-2522).
- xii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2523) such that it

1. **SHALL** contain exactly one [1..1] [Hospital Consultations Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.42) (CONF:CDP1-2524).
- xiii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2525) such that it
  1. **SHALL** contain exactly one [1..1] [Hospital Course Section](#) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.5) (CONF:CDP1-2526).
- xiv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2527) such that it
  1. **SHALL** contain exactly one [1..1] [Immunizations Section \(entries required\) \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.2.1:2014-06-09) (CONF:CDP1-2528).
- xv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2529) such that it
  1. **SHALL** contain exactly one [1..1] [Instructions Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.45:2014-06-09) (CONF:CDP1-2530).
- xvi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2531) such that it
  1. **SHALL** contain exactly one [1..1] [Interventions Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.21.2.3:2014-06-09) (CONF:CDP1-2532).
- xvii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2533) such that it
  1. **SHALL** contain exactly one [1..1] [Medical Equipment Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.23:2014-06-09) (CONF:CDP1-2534).
- xviii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2535) such that it
  1. **SHALL** contain exactly one [1..1] [Medications Section \(entries required\) \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1.1:2014-06-09) (CONF:CDP1-2536).
- xix. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2537) such that it
  1. **SHALL** contain exactly one [1..1] [Mental Status Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.56) (CONF:CDP1-2538).
- xx. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2539) such that it

1. **SHALL** contain exactly one [1..1] [Nutrition Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.57) (CONF:CDP1-2540).
- xxi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2541) such that it
  1. **SHALL** contain exactly one [1..1] [Objective Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.21.2.1) (CONF:CDP1-2542).
- xxii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2543) such that it
  1. **SHALL** contain exactly one [1..1] [Orders Placed Section \(CDP1\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.3) (CONF:CDP1-2544).
- xxiii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2545) such that it
  1. **SHALL** contain exactly one [1..1] [Payers Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2014-06-09) (CONF:CDP1-2546).
- xxiv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2547) such that it
  1. **SHALL** contain exactly one [1..1] [Physical Exam Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.2.10:2014-06-09) (CONF:CDP1-2548).
- xxv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2549) such that it
  1. **SHALL** contain exactly one [1..1] [Plan of Treatment Section \(CDP1\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.6) (CONF:CDP1-2550).
- xxvi. This structuredBody **MAY** contain zero or one [1..1] **component** (CONF:CDP1-2551) such that it
  1. **SHALL** contain exactly one [1..1] [Problem Section \(entries required\) \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.5.1:2014-06-09) (CONF:CDP1-2552).
- xxvii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2553) such that it
  1. **SHALL** contain exactly one [1..1] [Procedures Section \(entries required\) \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.7.1:2014-06-09) (CONF:CDP1-2554).
- xxviii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2555) such that it

1. **SHALL** contain exactly one [1..1] [Results Section \(entries required\) \(V2\)](#) (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.22.2.3.1:2014-06-09) (CONF:CDP1-2556).
- xxix. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2557) such that it
1. **SHALL** contain exactly one [1..1] [Subjective Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.2) (CONF:CDP1-2558).
- xxx. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2559) such that it
1. **SHALL** contain exactly one [1..1] [Surgical Drains Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.7.13) (CONF:CDP1-2560).
- xxxi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:CDP1-2561) such that it
1. **SHALL** contain exactly one [1..1] [Vital Signs Section \(entries required\) \(V2\)](#) (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2014-06-09) (CONF:CDP1-2562).
- xxxii. **SHALL** include an [Assessment and Plan Section \(V2\)](#) (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09) or both an [Assessment Section](#) (identifier:  
urn:oid:2.16.840.1.113883.10.20.22.2.8) and a [Plan of Treatment Section \(CDP1\)](#) (identifier:  
urn:oid:2.16.840.1.113883.10.20.35.2.6) (CONF:CDP1-2563).
- xxxiii. **SHALL NOT** include an [Assessment and Plan Section \(V2\)](#) (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09) when both an [Assessment Section](#) (identifier:  
urn:oid:2.16.840.1.113883.10.20.22.2.8) and a [Plan of Treatment Section \(CDP1\)](#) (identifier:  
urn:oid:2.16.840.1.113883.10.20.35.2.6) are present (CONF:CDP1-2564).

**Figure 13: Interval Document (CDP1) StructuredBody Example**

```
<component>
  <structuredBody>
    <component>
      <section>
        <templateId root="2.16.840.1.113883.10.20.35.2.1"/>
        <!-- Additional Documentation Section (CDP1) template -->
        <code code="77599-9" displayName="Additional Documentation"
          codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Additional Documentation</title>
        ...
      </section>
    </component>
    <component>
      <section>
        <templateId root="2.16.840.1.113883.10.20.22.2.6.1" extension="2014-06-09" />
        <!-- Allergies and Intolerances Section (entries required) (V2) template -->
        <code code="48765-2" displayName="Allergies, adverse reactions, alerts"
          codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Allergies, adverse reactions, alerts</title>
        ...
      </section>
    </component>
    <component>
      <section>
        <templateId root="2.16.840.1.113883.10.20.22.2.8"/>
        <!-- Assessment Section template -->
        <code code="51848-0" displayName="Assessments"
          codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Assessments</title>
        ...
      </section>
    </component>
    <component>
      <section>
        <templateId root="2.16.840.1.113883.10.20.22.2.22.1" extension="2014-06-09" />
        <!-- Encounters Section (entries required) (V2) template -->
        <code code="46240-8" displayName="Encounters"
          codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Encounters</title>
        ...
      </section>
    </component>
    <component>
      <section>
        <templateId root="2.16.840.1.113883.10.20.35.2.2"/>
        <!-- Externally Defined CDE Section (CDP1) template -->
        <code code="77598-1" displayName="Externally Defined Clinical Data Elements"
          codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Externally Defined Clinical Data Elements</title>
        ...
      </section>
    </component>
    <component>
      <section>
        <templateId root="2.16.840.1.113883.10.20.35.2.5"/>
        <!-- Functional Status Section (CDP1) template -->
        <code code="47420-5" displayName="Functional Status"
          codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Functional Status</title>
        ...
      </section>
    </component>
  </structuredBody>
</component>
```

```

        codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
</title>Functional Status</title>
...
</section>
</component>
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.2.5"/>
    <!-- General Status Section template -->
    <code code="10210-3" displayName="General Status"
      codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
    <title>General Status</title>
    ...
  </section>
</component>
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.22.2.60"/>
    <!-- Goals Section template -->
    <code code="61146-7" displayName="Goals"
      codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
    <title>Goals</title>
    ...
  </section>
</component>
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.22.2.58"/>
    <!-- Health Concerns Section template -->
    <code code="75310-3" displayName="Health Concerns"
      codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
    <title>Health Concerns</title>
    ...
  </section>
</component>
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.22.2.61"/>
    <!-- Health Status Evaluations and Outcomes Section template -->
    <code code="11383-7" displayName="Patient Problem Outcome"
      codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
    <title>Patient Problem Outcome</title>
    ...
  </section>
</component>
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.22.2.42"/>
    <!-- Hospital Consultations Section template -->
    <code code="18841-7" displayName="Hospital Consultations"
      codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
    <title>Hospital Consultations</title>
    ...
  </section>
</component>
<component>
  <section>
    <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.5"/>
    <!-- Hospital Course Section template -->

```

```

        <code code="8648-8" displayName="Hospital Course"
          codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Hospital Course</title>
        ...
      </section>
    </component>
  <component>
    <section>
      <templateId root="2.16.840.1.113883.10.20.22.2.1" extension="2014-06-09" />
      <!-- Immunizations Section (entries required) (V2) template -->
      <code code="11369-6" displayName="Immunizations"
        codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
      <title>Immunizations</title>
      ...
    </section>
  </component>
  <component>
    <section>
      <templateId root="2.16.840.1.113883.10.20.22.2.45" extension="2014-06-09" />
      <!-- Instructions Section (V2) template -->
      <code code="69730-0" displayName="Instructions"
        codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
      <title>Instructions</title>
      ...
    </section>
  </component>
  <component>
    <section>
      <templateId root="2.16.840.1.113883.10.20.21.2.3" extension="2014-06-09" />
      <!-- Interventions Section (V2) template -->
      <code code="62387-6" displayName="Interventions Provided"
        codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
      <title>Interventions Provided</title>
      ...
    </section>
  </component>
  <component>
    <section>
      <templateId root="2.16.840.1.113883.10.20.22.2.23" extension="2014-06-09" />
      <!-- Medical Equipment Section (V2) template -->
      <code code="46264-8" displayName="Medical Equipment"
        codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
      <title>Medical Equipment</title>
      ...
    </section>
  </component>
  <component>
    <section>
      <templateId root="2.16.840.1.113883.10.20.22.2.1.1" extension="2014-06-09" />
      <!-- Medications Section (entries required) (V2) template -->
      <code code="10160.0" displayName="History of medication"
        codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
      <title>History of medication</title>
      ...
    </section>
  </component>
  <component>
    <section>
      <templateId root="2.16.840.1.113883.10.20.22.2.56"/>

```

```

    <!-- Mental Status Section template -->
    <code code="10190.7" displayName="Mental Status"
      codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
    <title>Mental Status</title>
    ...
  </section>
</component>
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.22.2.57"/>
    <!-- Nutrition Section template -->
    <code code="61144-2" displayName="Diet and nutrition"
      codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
    <title>Diet and nutrition</title>
    ...
  </section>
</component>
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.21.2.1"/>
    <!-- Objective Section template -->
    <code code="61149-1" displayName="Objective"
      codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
    <title>Objective</title>
    ...
  </section>
</component>
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.35.2.3"/>
    <!-- Orders Placed Section (CDP1) template -->
    <code code="77597-3" displayName="Orders Placed"
      codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
    <title>Orders Placed</title>
    ...
  </section>
</component>
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.22.2.18" extension="2014-06-09" />
    <!-- Payers Section (V2) template -->
    <code code="48768-6" displayName="Payers"
      codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
    <title>Payers</title>
    ...
  </section>
</component>
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.22.2.10" extension="2014-06-09" />
    <!-- Physical Exam Section (V2) template -->
    <code code="29545-1" displayName="Physical Findings"
      codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
    <title>Physical Findings</title>
    ...
  </section>
</component>
<component>
  <section>

```



```

        <templateId root="2.16.840.1.113883.10.20.35.2.6"/>
        <!-- Plan of Treatment Section (CDPl)template -->
        <code code="18776-5" displayName="Plan of Treatment"
            codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Plan of Treatment</title>
        ...
    </section>
</component>
<component>
    <section>
        <templateId root="2.16.840.1.113883.10.20.22.2.5.1" extension="2014-06-09" />
        <!-- Problem Section (entries required) (V2) template -->
        <code code="11450-4" displayName="Problem List"
            codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Problem List</title>
        ...
    </section>
</component>
<component>
    <section>
        <templateId root="2.16.840.1.113883.10.20.22.2.7.1" extension="2014-06-09" />
        <!-- Procedures Section (entries required) (V2) template -->
        <code code="47519-4" displayName="History of Procedures"
            codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>History of Procedures</title>
        ...
    </section>
</component>
<component>
    <section>
        <templateId root="2.16.840.1.113883.10.20.22.2.3.1" extension="2014-06-09" />
        <!-- Results Section (entries required) (V2) template -->
        <code code="30954-2" displayName="Relevant diagnostic tests and/or laboratory
            data" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Relevant diagnostic tests and/or laboratory data</title>
        ...
    </section>
</component>
<component>
    <section>
        <templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.18"/>
        <!-- Review of Systems Section template -->
        <code code="10187-3" displayName="Review of Systems"
            codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Review of Systems</title>
        ...
    </section>
</component>
<component>
    <section>
        <templateId root="2.16.840.1.113883.10.20.22.2.2"/>
        <!-- Subjective Section template -->
        <code code="61150-9" displayName="Subjective"
            codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
        <title>Subjective</title>
        ...
    </section>
</component>
</component>

```

```
<section>
  <templateId root="2.16.840.1.113883.10.20.22.2.4.1" extension="2014-06-09" />
  <!-- Vital Signs Section (entries required) (V2) template -->
  <code code="8716-3" displayName="Vital Signs"
        codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
  <title>Vital Signs</title>
  ...
</section>
</component>
</structuredBody>
</component>
```

## 6 SECTION-LEVEL TEMPLATES

The following information is taken directly from the C-CDA R2 Implementation Guide.

“This chapter contains the section-level templates referenced by one or more of the document types of this consolidated guide. These templates describe the purpose of each section and the section-level constraints.

Section-level templates are always included in a document. One and only one of each section type is allowed in a given document instance. Please see the document context tables to determine the sections that are contained in a given document type. Please see the conformance verb in the conformance statements to determine if it is required (SHALL), strongly recommended (SHOULD), or optional (MAY).

Each section-level template contains the following:

- Template metadata (e.g., templateId, etc.)
- Description and explanatory narrative
- LOINC section code
- Section title
- Requirements for a text element
- Entry-level template names and ids for referenced templates (required and optional)

### Narrative Text

The text element within the section stores the narrative to be rendered, as described in the CDA R2 specification, and is referred to as the CDA narrative block.

The content model of the CDA narrative block schema is handcrafted to meet requirements of human readability and rendering. The schema is registered as a MIME type (text/x-hl7-text+xml), which is the fixed media type for the text element.

As noted in the CDA R2 specification, the document originator is responsible for ensuring that the narrative block contains the complete, human readable, attested content of the section. Structured entries support computer processing and computation and are not a replacement for the attestable, human-readable content of the CDA narrative block. The special case of structured entries with an entry relationship of "DRIV" (is derived from) indicates to the receiving application that the source of the narrative block is the structured entries, and that the contents of the two are clinically equivalent.

As for all CDA documents—even when a report consisting entirely of structured entries is transformed into CDA—the encoding application must ensure that the authenticated content (narrative plus multimedia) is a faithful and complete rendering of the clinical content of the structured source data. As a general guideline, a generated narrative block should include the same human readable content that would be available to users viewing that content in the originating system. Although content formatting in the narrative block need not be identical to that in the originating system, the narrative block should use elements from the CDA narrative block schema to provide sufficient formatting to support human readability when rendered according to the rules defined in Section Narrative Block (§ 4.3.5 ) of the CDA R2 specification.

By definition, a receiving application cannot assume that all clinical content in a section (i.e., in the narrative block and multimedia) is contained in the structured entries unless the entries in the section have an entry relationship of "DRIV".

Additional specification information for the CDA narrative block can be found in the CDA R2 specification in sections 1.2.1, 1.2.3, 1.3, 1.3.1, 1.3.2, 4.3.4.2, and 6."

All section-level templates referenced by this guide are listed in Table 24. This table includes the Template Name, TemplateId, LOINC code, and a reference to each document-level template in this guide that references the section-level template (R for Required or O for Optional). Most section-level templates are adopted "as is" from the HL7 Implementation Guide for CDA® Release 2:Consolidated CDA Templates for Clinical Notes (US Realm) Draft Standard for Trial Use Release 2 (C-CDA R2).

**All section-level templates that are explicitly adopted by referenced from the C-CDA R2 and are not further defined in this guide**

**Table 24: Section-Level Templates**

Section-Level Templates	templateID	LOINC Code 2.16.840.1.113883.6.1	Enhanced Encounter	Enhanced Discharge	Enhanced Op Note	Enhanced Procedure	Interval
<b>Section level templates defined in this guide</b>							
<a href="#">Additional Documentation Section (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.2.1	77599-9	R	R	R	R	R
<a href="#">Externally Defined CDE Section (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.2.2	77598-1	R	R	R	R	R
<a href="#">Functional Status Section (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.2.5	47420-5	R	R			R
<a href="#">Orders Placed Section (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.2.3	77597-3	R	R	R	R	R
<a href="#">Plan of Treatment Section (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.2.6	18776-5	R	R	R	R	R
<a href="#">Social History Section (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.2.7	29762-2	R	R		R	
<a href="#">Transportation Section (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.2.4	77596-5	R	R			
<b>Section level templates adopted by reference from C-CDA R2 (see C-CDA R2 for template definition)</b>							
Admission Diagnosis Section (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.43:2014-06-09	46241-6		R			
Admission Medications Section (entries optional) (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.44:2014-06-09	42346-7		R			
Advance Directives Section (entries required) (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.21.1:2014-06-09	42348-3	O				
Allergies and Intolerances Section (entries required) (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.6.1:2014-06-09	48765-2	R	R		R	R
Anesthesia Section (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.25:2014-06-09	59774-0			R	R	
Assessment and Plan Section (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09	51847-2	R	R		R	R
Assessment Section	urn:oid:2.16.840.1.113883.10.20.22.2.8	51848-0	R	R		R	R
Chief Complaint and Reason for Visit Section	urn:oid:2.16.840.1.113883.10.20.22.2.13	46239-0	R	R		R	
Chief Complaint Section	urn:oid:1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1	10154-3	R	R		R	
Complications Section (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.37:2014-06-09	55109-3			R	R	
Discharge Diagnosis Section (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.24:2014-06-09	11535-2		R			

Section-Level Templates	templateID	LOINC Code 2.16.840.1.113883.6.1	Enhanced Encounter	Enhanced Discharge	Enhanced Op Note	Enhanced Procedure	Interval
Discharge Diet Section (DEPRECATED)	urn:hl7ii:1.3.6.1.4.1.19376.1.5.3.1.3.33:2014-06-09	42344-2					
Discharge Medications Section (entries optional) (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.11:2014-06-09	75311-1					
Discharge Medications Section(entries required) (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.11.1:2014-06-09	10183.2		R			
Encounters Section (entries required) (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.22.1:2014-06-09	46240-8	R				
Family History Section (V2)	urn:hl7ii:2.16.840.1.133883.10.20.22.2.15:2014-06-09	10157-6	R	R		R	
General Status Section	urn:oid:2.16.840.1.113883.10.20.2.5	10210-3	R	R			R
Goals Section	urn:oid:2.16.840.1.113883.10.20.22.2.60	61146-7	R	R			R
Health Concerns Section	urn:oid:2.16.840.1.113883.10.20.22.2.58	75310-3	R	R			R
Health Status Evaluations and Outcomes Section	urn:oid:2.16.840.1.113883.10.20.22.2.61	11383-7	R	R			R
History of Past Illness Section (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.20:2014-06-09	11348-0	R	R		R	
History of Present Illness Section	urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.4	10164-2	R	R		R	
Hospital Consultations Section	urn:oid:2.16.840.1.113883.10.20.22.2.42	18841-7		R			R
Hospital Course Section	urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.5	8648-8		R			R
Hospital Discharge Instructions Section	urn:oid:2.16.840.1.113883.10.20.22.2.41	8653-8		R			
Hospital Discharge Physical Section	urn:oid:1.3.6.1.4.1.19376.1.5.3.1.26	10184-0		R			
Hospital Discharge Studies Summary Section	urn:oid:2.16.840.1.113883.10.20.22.2.16	11493-4		R			
Immunizations Section (entries required) (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.2.1:2014-06-09	11369-6	R	R			R
Instructions Section (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.45:2014-06-09	69730-0	R	R			R
Interventions Section (V2)	urn:hl7ii:2.16.840.1.113883.10.20.21.2.3:2014-06-09	62387-6	R				R
Medical (General) History Section	urn:oid:2.16.840.1.113883.10.20.22.2.39	11329-0		R		R	

Section-Level Templates	templateID	LOINC Code 2.16.840.1.113883.6.1	Enhanced Encounter	Enhanced Discharge	Enhanced Op Note	Enhanced Procedure	Interval
Medical Equipment Section (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.23:2014-06-09	46264-8	R	R	R	R	R
Medications Administered Section (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.38:2014-06-09	29549-3				R	
Medications Section (entries required) (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.1.1:2014-06-09	10160-0	R	R		R	R
Mental Status Section	urn:oid:2.16.840.1.113883.10.20.22.2.56	10190-7	R	R			R
Nutrition Section	urn:oid:2.16.840.1.113883.10.20.22.2.57	61144-2	R	R			R
Objective Section	urn:oid:2.16.840.1.113883.10.20.21.2.1	61149-1	R				R
Operative Note Fluid Section	urn:oid:2.16.840.1.113883.10.20.7.12	10216-0			R		
Operative Note Surgical Procedure Section	urn:oid:2.16.840.1.113883.10.20.7.14	10223-6			R		
Payers Section (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2014-06-09	48768-6	R	R	R	R	R
Physical Exam Section (V2)	urn:hl7ii:2.16.840.1.113883.10.20.2.10:2014-06-09	29545-1	R	R		R	R
Planned Procedure Section (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.30:2014-06-09	59772-4			R	R	
Postoperative Diagnosis Section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.35	10218-6			R		
Postprocedure Diagnosis Section (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.36:2014-06-09	59769-0				R	
Preoperative Diagnosis Section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.34:2014-06-09	10219-4			R		
Problem Section (entries required) (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.5.1:2014-06-09	11450-4	R	R			R
Procedure Description Section	urn:oid:2.16.840.1.113883.10.20.22.2.27	29554-3			R	R	
Procedure Disposition Section	urn:oid:2.16.840.1.113883.10.20.18.2.12	59775-7			R	R	
Procedure Estimated Blood Loss Section	urn:oid:2.16.840.1.113883.10.20.18.2.9	59770-8			R	R	
Procedure Findings Section (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.28:2014-06-09	59776-5			R	R	
Procedure Implants Section	urn:oid:2.16.840.1.113883.10.20.22.2.40	59771-6			R	R	
Procedure Indications Section (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.29:2014-06-09	59768-2			R	R	
Procedure Specimens Taken	urn:oid:2.16.840.1.113883.10.20.22.2.31	59773-2			R	R	

Section-Level Templates	templateID	LOINC Code 2.16.840.1.113883.6.1	Enhanced Encounter	Enhanced Discharge	Enhanced Op Note	Enhanced Procedure	Interval
Section							
Procedures Section (entries required) (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.7.1:2014-06-09	47519-4	R	R		R	R
Reason for Referral Section (V2)	urn:hl7ii:1.3.6.1.4.1.19376.1.5.3.1.3.1:2014-06-09	42349-1	R				
Reason for Visit Section	urn:oid:2.16.840.1.113883.10.20.22.2.12	29299-5	R	R		R	
Results Section (entries required) (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.3.1:2014-06-09	30954-2	R	R			R
Review of Systems Section	urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.18	10187-3	R	R		R	
Subjective Section	urn:oid:2.16.840.1.113883.10.20.22.2.2	61150-9	R				R
Surgical Drains Section	urn:oid:2.16.840.1.113883.10.20.7.13	11537-8			R		R
Vital Signs Section (entries required) (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2014-06-09	8716-3	R	R			R



## 6.1 Additional Documentation Section (CDP1)

[section: identifier urn:oid:2.16.840.1.113883.10.20.35.2.1 (open)]

**Table 25: Additional Documentation Section (CDP1) Contexts**

Contained By:	Contains:
<a href="#">Enhanced Discharge Document (CDP1)</a> (required) <a href="#">Enhanced Encounter Document (CDP1)</a> (required) <a href="#">Enhanced Operative Note Document (CDP1)</a> (required) <a href="#">Enhanced Procedure Document (CDP1)</a> (required) <a href="#">Interval Document (CDP1)</a> (required)	<a href="#">Additional Documentation Organizer (CDP1)</a> <a href="#">Additional Documentation Activity (CDP1)</a>

This section contains additional documentation captured by the provider related to administrative requirements or care provided/planned for the patient, **that is not supported in any other section of the document**. (example: statement of no financial relationship with a service supplier)

**Table 26: Additional Documentation Section (CDP1) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.1)					
templateId	1..1	SHALL		<a href="#">CDP1-2701</a>	
@root	1..1	SHALL		<a href="#">CDP1-2702</a>	2.16.840.1.113883.10.20.35.2.1
code	1..1	SHALL		<a href="#">CDP1-2703</a>	
@code	1..1	SHALL		<a href="#">CDP1-2704</a>	77599-9
@codeSystem	1..1	SHALL		<a href="#">CDP1-2705</a>	2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
title	1..1	SHALL		<a href="#">CDP1-2706</a>	
text	1..1	SHALL		<a href="#">CDP1-2707</a>	
entry	0..*	MAY		<a href="#">CDP1-2708</a>	
act	1..1	SHALL		<a href="#">CDP1-2709</a>	<a href="#">Additional Documentation Activity (CDP1)</a> (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.11)
entry	0..*	MAY		<a href="#">CDP1-2710</a>	
act	1..1	SHALL		<a href="#">CDP1-2711</a>	<a href="#">Additional Documentation Organizer (CDP1)</a> (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.12)

1. **SHALL** contain exactly one [1..1] **templateId** (CONF:CDP1-2701) such that it
  - a. **SHALL** contain exactly one [1..1]
**@root="2.16.840.1.113883.10.20.35.2.1"** (CONF:CDP1-2702).

2. **SHALL** contain exactly one [1..1] **code** (CONF:CDP1-2703).
  - a. This code **SHALL** contain exactly one [1..1] **@code="77599-9"** Additional Documentation (CONF:CDP1-2704).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem="2.16.840.1.113883.6.1"** (CodeSystem: LOINC 2.16.840.1.113883.6.1) (CONF:CDP1-2705).
3. **SHALL** contain exactly one [1..1] **title** (CONF:CDP1-2706).
4. **SHALL** contain exactly one [1..1] **text** (CONF:CDP1-2707).
5. **MAY** contain zero or more [0..\*] **entry** (CONF:CDP1-2708) such that it
  - a. **SHALL** contain exactly one [1..1] Additional Documentation Activity (CDP1) (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.11) (CONF:CDP1-2709).
6. **MAY** contain zero or more [0..\*] **entry** (CONF:CDP1-2710) such that it
  - a. **SHALL** contain exactly one [1..1] Additional Documentation Organizer (CDP1) (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.12) (CONF:CDP1-2711).
7. **SHALL** include an Additional Documentation Activity (CDP1) (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.11) or an Additional Documentation Organizer (CDP1) (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.12) (CONF:CDP1-2712).

**Figure 14: Additional Documentation Section (CDP1) Example**

```

<component>
  <section>
    <templateId root=""/>
    <!-- **** Additional Documentation Section (CDP1) template **** -->
    <code code="77599-9" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC"
      displayName="Additional Documentation"/>
    <title>Additional Documentation</title>
    <text>
      ...
    </text>
    <!-- **** Additional Documentation Activity (CDP1) template **** -->
    <entry>

      ...

    </entry>
    <!-- **** Additional Documentation Organizer (CDP1) template **** -->
    <entry>

      ...

    </entry>
  </section>
</component>

```

## 6.2 Externally Defined CDE Section (CDP1)

[section: identifier urn:oid:2.16.840.1.113883.10.20.35.2.2 (open)]

**Table 27: Externally Defined CDE Section (CDP1) Contexts**

Contained By:	Contains:
<a href="#">Enhanced Discharge Document (CDP1)</a> (required) <a href="#">Enhanced Encounter Document (CDP1)</a> (required) <a href="#">Enhanced Operative Note Document (CDP1)</a> (required) <a href="#">Enhanced Procedure Document (CDP1)</a> (required) <a href="#">Interval Document (CDP1)</a> (required)	<a href="#">Externally Defined CDE Organizer (CDP1)</a>

This section contains externally defined Clinical Data Elements (CDEs) that have been created through the interaction of the provider with externally defined templates (or questionnaires) that define name-value pairs and a reference to the externally defined information/content model. The Externally Defined CDE Organizer is used to group CDE information based on related templates. The externalDocument information in the Externally Defined CDE Observation template is used to reference each template and its content model and the specific name-value pairs are reported by using the Externally Defined CDE template. HL7 Structured Data Capture templates (or questionnaires) are examples of externally defined templates that collect information in name-value pairs based on an externally defined content model.

**Table 28: Externally Defined CDE Section (CDP1) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.2)					
templateId	1..1	SHALL		<a href="#">CDP1-2801</a>	
@root	1..1	SHALL		<a href="#">CDP1-2802</a>	2.16.840.1.113883.10.20.35.2.2
code	1..1	SHALL		<a href="#">CDP1-2803</a>	
@code	1..1	SHALL		<a href="#">CDP1-2804</a>	77598-1
@codeSystem	1..1	SHALL		<a href="#">CDP1-2805</a>	2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
title	1..1	SHALL		<a href="#">CDP1-2806</a>	
text	1..1	SHALL		<a href="#">CDP1-2807</a>	
entry	1..*	SHALL		<a href="#">CDP1-2808</a>	
act	1..1	SHALL		<a href="#">CDP1-2809</a>	<a href="#">Externally Defined CDE Organizer (CDP1)</a> templateId:2.16.840.1.113883.10.20.35.4.1

1. **SHALL** contain exactly one [1..1] **templateId** (CONF:CDP1-2801) such that it
  - a. **SHALL** contain exactly one [1..1]  
 @root="2.16.840.1.113883.10.20.35.2.2" (CONF:CDP1-2802).
2. **SHALL** contain exactly one [1..1] **code** (CONF:CDP1-2803).
  - a. This code **SHALL** contain exactly one [1..1] @code="77598-1" Externally Defined Clinical Data Elements (CONF:CDP1-2804).

- b. This code **SHALL** contain exactly one [1..1]
   
     @codeSystem="2.16.840.1.113883.6.1" (CodeSystem: LOINC
   
     2.16.840.1.113883.6.1 **STATIC**) (CONF:CDP1-2805).
3. **SHALL** contain exactly one [1..1] **title** (CONF:CDP1-2806).
4. **SHALL** contain exactly one [1..1] **text** (CONF:CDP1-2807).
5. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-2808).
  - a. The entry **SHALL** contain exactly one [1..1] [Externally Defined CDE Organizer \(CDP1\)](#) templateId:2.16.840.1.113883.10.20.35.4.1) (CONF:CDP1-2809).

**Figure 15: Externally Defined CDE Section (CDP1) Example**

```

<section>
  <templateId root="2.16.840.1.113883.10.20.22.35.2.2"/>
  <code code="77598-1" codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC"
    displayName="Externally Defined Clinical Data Elements"/>
  <title>Externally Defined Clinical Data Elements</title>
  <text>External CDEs</text>
  <entry>
    <act classCode="CLUSTER" moodCode="EVN">
      <!--Externally Defined CDE Organizer (CDP1) Template -->
      ...
    </entry>
  </section>

```

## 6.3 Functional Status Section (CDP1)

[section: identifier urn:oid:2.16.840.1.113883.10.20.35.2.5 (open)]

**Table 29: Functional Status Section (CDP1) Contexts**

Contained By:	Contains:
<a href="#">Enhanced Discharge Document (CDP1)</a> (required) <a href="#">Enhanced Encounter Document (CDP1)</a> (required) <a href="#">Interval Document (CDP1)</a> (required)	<a href="#">Assessment Scale Observation</a> <a href="#">Caregiver Characteristics</a> <a href="#">Functional Status Observation (V2)</a> <a href="#">Functional Status Organizer (V2)</a> <a href="#">Non-Medicinal Supply Activity (V2)</a> <a href="#">Self-Care Activities (ADL and IADL)</a> <a href="#">Sensory Status</a>

From C-CDA R2

----- begin citation -----

The Functional Status Section contains observations and assessments of a patient's physical abilities. A patient's functional status may include information regarding the patient's ability to perform Activities of Daily Living (ADLs) in areas such as Mobility (e.g., ambulation), Self-Care (e.g., bathing, dressing, feeding, grooming) or Instrumental Activities of Daily Living (IADLs) (e.g., shopping, using a telephone, balancing a check book). Problems that impact function (e.g., dyspnea, dysphagia) can be contained in the section.

----- *end citation* -----

A Functional Status Section (CDP1) requires a response for all entry templates. Any entry template for which data is not available (not collected, not relevant, not supported by the EHR technology, etc.) SHALL have the appropriate nullFlavor, from the [nullFlavorCDP1](#) valueset, specified to indicate that the information was not available (NI) at time of document creation or is being withheld (NA) (see section 3.4 regarding the use of nullFlavors).

The Functional Status Section (CDP1) template conforms to the C-CDA R2 Functional Status (V2) template

([identifier:urn:hl7ii:2.16.840.1.113883.10.20.22.2.14:2014-06-09](#)) with the following changes:

1) Replaced verb MAY with SHALL for:

- [Assessment Scale Observation](#)
- [Caregiver Characteristics](#)
- [Functional Status Observation \(V2\)](#)
- [Functional Status Organizer \(V2\)](#)
- [Non-Medicinal Supply Activity \(V2\)](#)
- [Self-Care Activities \(ADL and IADL\)](#)
- [Sensory Status](#)

2) Did not continue support for Deprecated Sections:

- [Cognitive Status Problem Observation \(DEPRECATED\)](#)
- [Functional Status Problem Observation \(DEPRECATED\)](#)
- [Pressure Ulcer Observation \(DEPRECATED\)](#)

**Table 30: Functional Status Section (CDP1) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.5)					
templateId	1..1	SHALL		<a href="#">CDP1-3101</a>	
@root	1..1	SHALL		<a href="#">CDP1-3102</a>	2.16.840.1.113883.10.20.35.2.5
code	1..1	SHALL		<a href="#">CDP1-3103</a>	
@code	1..1	SHALL		<a href="#">CDP1-3104</a>	47420-5
@codeSystem	1..1	SHALL		<a href="#">CDP1-3105</a>	2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
title	1..1	SHALL		<a href="#">CDP1-3106</a>	
text	1..1	SHALL		<a href="#">CDP1-3107</a>	
entry	1..*	SHALL		<a href="#">CDP1-3108</a>	
organizer	1..1	SHALL		<a href="#">CDP1-3109</a>	<a href="#">Functional Status Organizer (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.6 6:2014-06-09
entry	1..*	SHALL		<a href="#">CDP1-3110</a>	
observation	1..1	SHALL		<a href="#">CDP1-3111</a>	<a href="#">Functional Status Observation (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.6 7:2014-06-09
entry	1..*	SHALL		<a href="#">CDP1-3112</a>	
observation	1..1	SHALL		<a href="#">CDP1-3113</a>	<a href="#">Caregiver Characteristics</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.72
entry	1..*	SHALL		<a href="#">CDP1-3114</a>	
observation	1..1	SHALL		<a href="#">CDP1-3115</a>	<a href="#">Assessment Scale Observation</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69
entry	1..*	SHALL		<a href="#">CDP1-3116</a>	
supply	1..1	SHALL		<a href="#">CDP1-3117</a>	<a href="#">Non-Medicinal Supply Activity (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.5 0:2014-06-09
entry	1..*	SHALL		<a href="#">CDP1-3118</a>	
observation	1..1	SHALL		<a href="#">CDP1-3119</a>	<a href="#">Self-Care Activities (ADL and IADL)</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.128
entry	1..*	SHALL		<a href="#">CDP1-3120</a>	
observation	1..1	SHALL		<a href="#">CDP1-3121</a>	<a href="#">Sensory Status</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.127

1. Conforms to Functional Status Section (V2) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.14:2014-06-09).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:CDP1-3101) such that it

- a. **SHALL** contain exactly one [1..1]  
`@root="2.16.840.1.113883.10.20.35.2.5"` (CONF:CDP1-3102).
3. **SHALL** contain exactly one [1..1] **code** (CONF:CDP1-3103).
  - a. This code **SHALL** contain exactly one [1..1] `@code="47420-5"` Functional Status (CONF:CDP1-3104).
  - b. This code **SHALL** contain exactly one [1..1]  
`@codeSystem="2.16.840.1.113883.6.1"` (CodeSystem: LOINC  
 2.16.840.1.113883.6.1 **STATIC**) (CONF:CDP1-3105).
4. **SHALL** contain exactly one [1..1] **title** (CONF:CDP1-3106).
5. **SHALL** contain exactly one [1..1] **text** (CONF:CDP1-3107).
6. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3108) such that it
  - a. **SHALL** contain exactly one [1..1] Functional Status Organizer (V2)  
 (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.66:2014-06-09) (CONF:CDP1-3109).
7. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3110) such that it
  - a. **SHALL** contain exactly one [1..1] Functional Status Observation (V2)  
 (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.67:2014-06-09) (CONF:CDP1-3111).
8. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3112) such that it
  - a. **SHALL** contain exactly one [1..1] Caregiver Characteristics  
 (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.72) (CONF:CDP1-3113).
9. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3114) such that it
  - a. **SHALL** contain exactly one [1..1] Assessment Scale Observation  
 (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69) (CONF:CDP1-3115).
10. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3116) such that it
  - a. **SHALL** contain exactly one [1..1] Non-Medicinal Supply Activity (V2) (identifier:  
 urn:hl7ii:2.16.840.1.113883.10.20.22.4.50:2014-06-09) (CONF:CDP1-3117).
11. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3118) such that it
  - a. **SHALL** contain exactly one [1..1] Self-Care Activities (ADL and IADL)  
 (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.128) (CONF:CDP1-3119).
12. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3120) such that it
  - a. **SHALL** contain exactly one [1..1] Sensory Status (identifier:  
 urn:oid:2.16.840.1.113883.10.20.22.4.127) (CONF:CDP1-3121).

**Figure 16: Functional Status Section (CDP1) Example**

```
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.35.2.5" />
    <!-- Functional Status Section (CDP1) template -->
    <code code="47420-5" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC" displayName="Functional Status" />
    <title>Functional Status</title>
    <text>
      ...
    </text>
    <entry>
      <organizer classCode="CLUSTER" moodCode="EVN">
        <templateId root="2.16.840.1.113883.10.20.22.4.66" extension="2014-
06-09"/>
        <!-- Functional Status Organizer (V2) template -->
        ....
      </organizer>
    </entry>
    <entry>
      <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.10.20.22.4.67" extension="2014-
06-09"/>
        <!-- Functional Status Observation (V2) template -->
        ...
      </observation>
    </entry>
    <entry>
      <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.10.20.22.4.72" />
        <!-- Caregiver characteristics template -->
        ...
      </observation>
    </entry>
    <entry>
      <observation classCode="OBS" moodCode="EVN">
        <templateId root:="2.16.840.1.113883.10.20.22.4.69" />
        <!-- Assessment Scale Observation template -->
        ...
      </observation>
    </entry>
    <entry>
      <supply classCode="OBS" moodCode="EVN">
        <templateId root:="2.16.840.1.113883.10.20.22.4.50"
extension="2014-06-09"/>
        <!-- Non-Medicinal Supply Activity (V2) template -->
        ...
      </supply>
    </entry>
    <entry>
      <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.10.20.22.4.128" />
        <!-- Self Care Activities (ADL and IADL) template -->
        ...
      </observation>
    </entry>
    <entry>
      <observation classCode="OBS" moodCode="EVN">
```



```

        <!-- Sensory Status -->
        <templateId root="2.16.840.1.113883.10.20.22.4.127" />
        ...
    </observation>
</entry>
<section>
<component>

```

## 6.4 Orders Placed Section (CDP1)

[section: identifier urn:oid:2.16.840.1.113883.10.20.35.2.3 (open)]

**Table 31: Orders Placed Section (CDP1) Contexts**

Contained By:	Contains:
<a href="#">Enhanced Discharge Document (CDP1)</a> (required) <a href="#">Enhanced Encounter Documentation (CDP1)</a> (required) <a href="#">Enhanced Operative Note Document (CDP1)</a> (required) <a href="#">Enhanced Procedure Document (CDP1)</a> (required) <a href="#">Interval Document (CDP1)</a> (required)	<a href="#">Act Order (CDP1)</a> <a href="#">Encounter Order (CDP1)</a> <a href="#">Immunization Activity Order (CDP1)</a> <a href="#">Medication Activity Order (CDP1)</a> <a href="#">Observation Order (CDP1)</a> <a href="#">Procedure Order (CDP1)</a> <a href="#">Supply Order (CDP1)</a>

This section contains active and completed (not planned) orders for observations, interventions, encounters, services, and procedures for the patient. These are indicated by the @moodCode RQO and statusCode completed or active for the entries within this section. The entries in this section represent the details of the orders and not the acts involved in the processing and fulfillment of the order. The process of and fulfillment of the order is represented by other entries. This section provides order information to validate that clinical activities performed by other providers and suppliers are authorized by the responsible provider.

Planned order activity should be included in the Plan of Treatment Section and not in the Orders Placed Section. When it is appropriate to include orders in both the Plan of Treatment Section and the Orders Placed Section (e.g. when the moodCode is RQO and the statusCode is “active”) then at least one id for both entries must be identical.

Entry-level templates for which the conformance statement is SHALL and for which data is not available (regardless of the reason) or intentionally withheld must have the appropriate nullFlavor (NI or NA) specified (see section 3.4 regarding the use of nullFlavors for sections and entries constrained by this guide).

**Table 32: Orders Placed Section (CDP1) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.3)					
templateId	1..1	SHALL		<a href="#">CDP1-2901</a>	
@root	1..1	SHALL		<a href="#">CDP1-2902</a>	2.16.840.1.113883.10.20.35.2.3
code	1..1	SHALL		<a href="#">CDP1-2903</a>	
@code	1..1	SHALL		<a href="#">CDP1-2904</a>	77597-3
@codeSystem	1..1	SHALL		<a href="#">CDP1-2905</a>	2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
title	1..1	SHALL		<a href="#">CDP1-2906</a>	
text	1..1	SHALL		<a href="#">CDP1-2907</a>	
entry	1..*	SHALL		<a href="#">CDP1-2908</a>	
act	1..1	SHALL		<a href="#">CDP1-2909</a>	<a href="#">Act Order (CDP1)</a> (identifier: urn:oid:2.16.840.1.113883.10.20 .35.4.1
entry	1..*	SHALL		<a href="#">CDP1-2910</a>	
encounter	1..1	SHALL		<a href="#">CDP1-2911</a>	<a href="#">Encounter Order (CDP1)</a> (identifier: urn:oid:2.16.840.1.113883.10.20 .35.4.2
entry	1..*	SHALL		<a href="#">CDP1-2920</a>	
substanceAdministration	1..1	SHALL		<a href="#">CDP1-2921</a>	<a href="#">Immunization Activity Order (CDP1)</a> (identifier: urn:oid:2.16.840.1.113883.10.20 .35.4.9
entry	1..*	SHALL		<a href="#">CDP1-2912</a>	
substanceAdministration	1..1	SHALL		<a href="#">CDP1-2913</a>	<a href="#">Medication Activity Order (CDP1)</a> (identifier: urn:oid:2.16.840.1.113883.10.20 .35.4.5
entry	1..*	SHALL		<a href="#">CDP1-2914</a>	
observation	1..1	SHALL		<a href="#">CDP1-2915</a>	<a href="#">Observation Order (CDP1)</a> (identifier: urn:oid:2.16.840.1.113883.10.20 .35.4.6
entry	1..*	SHALL		<a href="#">CDP1-2916</a>	
procedure	1..1	SHALL		<a href="#">CDP1-2917</a>	<a href="#">Procedure Order (CDP1)</a> (identifier: urn:oid:2.16.840.1.113883.10.20 .35.4.7
entry	1..*	SHALL		<a href="#">CDP1-2918</a>	
supply	1..1	SHALL		<a href="#">CDP1-2919</a>	<a href="#">Supply Order (CDP1)</a> (identifier: urn:oid:2.16.840.1.113883.10.20 .35.4.8

1. **SHALL** contain exactly one [1..1] **templateId** (CONF:CDP1-2901) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.35.2.3" (CONF:CDP1-2902).
2. **SHALL** contain exactly one [1..1] **code** (CONF:CDP1-2903).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="77597-3" Orders Placed (CONF:CDP1-2904).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC 2.16.840.1.113883.6.1) (CONF:CDP1-2905).
3. **SHALL** contain exactly one [1..1] **title** (CONF:CDP1-2906).
4. **SHALL** contain exactly one [1..1] **text** (CONF:CDP1-2907).
5. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-2908) such that it
  - a. **SHALL** contain exactly one [1..1] Act Order (CDP1) (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.1) (CONF:CDP1-2909).
6. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-2910) such that it
  - a. **SHALL** contain exactly one [1..1] Encounter Order (CDP1) (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.2) (CONF:CDP1-2911).
7. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-2920) such that it
  - a. **SHALL** contain exactly one [1..1] Immunization Activity Order (CDP1) (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.9) (CONF:CDP1-2921).
8. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-2912) such that it
  - a. **SHALL** contain exactly one [1..1] Medication Activity Order (CDP1) (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.5) (CONF:CDP1-2913).
9. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-2914) such that it
  - a. **SHALL** contain exactly one [1..1] Observation Order (CDP1) (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.6) (CONF:CDP1-2915).
10. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-2916) such that it
  - a. **SHALL** contain exactly one [1..1] Procedure Order (CDP1) (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.7) (CONF:CDP1-2917).
11. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-2918) such that it
  - a. **SHALL** contain exactly one [1..1] Supply Order (CDP1) (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.8) (CONF:CDP1-2919).

**Figure 17: Orders Placed Section (CDP1) Example**

```
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.35.2.3"/>
    <!-- **** Orders Placed Section (CDP1) template **** -->
    <code code="77597-3" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC"
      displayName=" Orders Placed"/>
    <title> Orders Placed</title>
    <text>
      ...
    </text>
  </section>
  <entry>
    <act classCode="ACT" moodCode="RQO">
      <templateId root="2.16.840.1.113883.10.20.35.4.1"/>
      <!-- Act Order (CDP1) template -->
      ...
    </act>
  </entry>
  <entry>
    <encounter classCode="ENC" moodCode="RQO">
      <templateId root="2.16.840.1.113883.10.20.35.4.2"/>
      <!-- Encounter Order (CDP1) template -->
      ...
    </encounter>
  </entry>
  <entry>
    <substanceAdministration classCode="SBADM" moodCode="RQO">
      <templateId root="2.16.840.1.113883.10.20.35.4.9"/>
      <!-- Immunization Order (CDP1) template -->
      ...
    </substanceAdministration>
  </entry>
  <entry>
    <substanceAdministration classCode="SBADM" moodCode="RQO">
      <templateId root="2.16.840.1.113883.10.20.35.4.5"/>
      <!-- Medication Order (CDP1) template -->
      ...
    </substanceAdministration>
  </entry>
  <entry>
    <observation classCode="OBS" moodCode="RQO">
      <templateId root="2.16.840.1.113883.10.20.35.4.6">
      <!-- Observation Order (CDP1) template -->
      ...
    </observation>
  </entry>
  <entry>
    <procedure classCode="ENC" moodCode="RQO">
      <templateId root="2.16.840.1.113883.10.20.35.4.7"/>
      <!-- Procedure Order (CDP1) template -->
      ...
    </procedure>
  </entry>
```

```

        </procedure>
    </entry>
    <entry>
        <supply classCode="SPLY" moodCode="RQO">
            <templateId root="2.16.840.1.113883.10.20.35.4.8"/>
            <!-- Supply Order (CDP1) template -->
            ...
        </supply>
    </entry>
</section>
</component>

```

## 6.5 Plan of Treatment Section (CDP1)

[section: identifier urn:oid:2.16.840.1.113883.10.20.35.2.6 (open)]

**Table 33: Plan of Treatment Section (CDP1) Contexts:**

Contained By:	Contains:
<a href="#">Enhanced Discharge Document (CDP1)</a> (required) <a href="#">Enhanced Encounter Document (CDP1)</a> (required) <a href="#">Enhanced Operative Note Document (CDP1)</a> (required) <a href="#">Enhanced Procedure Document (CDP1)</a> (required) <a href="#">Interval Document (CDP1)</a> (required)	<a href="#">Goal Observation</a> <a href="#">Handoff Communication Participants</a> <a href="#">Instruction (V2)</a> <a href="#">Nutrition Recommendations</a> <a href="#">Planned Act (V2)</a> <a href="#">Planned Encounter (V2)</a> <a href="#">Planned Immunization Activity</a> <a href="#">Planned Medication Activity (V2)</a> <a href="#">Planned Observation (V2)</a> <a href="#">Planned Procedure (V2)</a> <a href="#">Planned Supply (V2)</a>

From C-CDA R2:

----- *begin citation* -----

This section, formerly known as "Plan of Care", contains data that define pending orders, interventions, encounters, services, and procedures for the patient. It is limited to prospective, unfulfilled, or incomplete orders and requests only. These are indicated by the @moodCode of the entries within this section. All active, incomplete, or pending orders, appointments, referrals, procedures, services, or any other pending event of clinical significance to the current care of the patient should be listed.

This section may also contain information about ongoing care of the patient, clinical reminders, patient's values, beliefs, preferences, care expectations, and overarching care goals.

Clinical reminders are placed here to provide prompts for disease prevention and management, patient safety, and healthcare quality improvements, including widely accepted performance measures.

Values may include the importance of quality of life over longevity. These values are taken into account when prioritizing all problems and their treatments.

Beliefs may include comfort with dying or the refusal of blood transfusions because of the patient's religious convictions.

Preferences may include liquid medicines over tablets, or treatment via secure email instead of in person.

Care expectations may range from being treated only by female clinicians, to expecting all calls to be returned within 24 hours.

Overarching goals described in this section are not tied to a specific condition, problem, health concern, or intervention. Examples of overarching goals could be to minimize pain or dependence on others, or to walk a daughter down the aisle for her marriage.

The plan may also indicate that patient education will be provided.

----- *end citation* -----

This Plan of Treatment Section (CDP1) requires a response for all entry templates. Any entry template for which data is not available (not collected, not relevant, not supported by the EHR technology, etc.) SHALL have the appropriate nullFlavor, from the [nullFlavorCDP1](#) valueset, specified to indicate that the information was not available (NI) at time of document creation or is being withheld (NA) (see section 3.4 regarding the use of nullFlavors).

The Plan of Treatment Section (CDP1) template conforms to the C-CDA R2 Plan of Treatment Section (V2) template

(identifier:urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09) with the following changes:

1) Replaced verb MAY with SHALL for:

- [Goal Observation](#)
- [Handoff Communication Participants](#)
- [Instruction \(V2\)](#)
- [Nutrition Recommendations](#)
- [Planned Act \(V2\)](#)
- [Planned Encounter \(V2\)](#)
- [Planned Immunization Activity](#)
- [Planned Medication Activity \(V2\)](#)
- [Planned Observation \(V2\)](#)
- [Planned Procedure \(V2\)](#)

**Table 34: Plan of Treatment Section (CDP1) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.6)					
templateId	1..1	SHALL		<a href="#">CDP1-3301</a>	
@root	1..1	SHALL		<a href="#">CDP1-3302</a>	2.16.840.1.113883.10.20.35.2.6
code	1..1	SHALL		<a href="#">CDP1-3303</a>	
@code	1..1	SHALL		<a href="#">CDP1-3304</a>	18776-5
@codeSystem	1..1	SHALL		<a href="#">CDP1-3305</a>	2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
title	1..1	SHALL		<a href="#">CDP1-3306</a>	
text	1..1	SHALL		<a href="#">CDP1-3307</a>	
entry	1..*	SHALL		<a href="#">CDP1-3308</a>	
observation	1..1	SHALL		<a href="#">CDP1-3309</a>	<a href="#">Planned Observation (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20 .22.4.44:2014-06-09
entry	1..*	SHALL		<a href="#">CDP1-3310</a>	
encounter	1..1	SHALL		<a href="#">CDP1-3311</a>	<a href="#">Planned Encounter (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20 .22.4.40:2014-06-09
entry	1..*	SHALL		<a href="#">CDP1-3312</a>	
act	1..1	SHALL		<a href="#">CDP1-3313</a>	<a href="#">Planned Act (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20 .22.4.39:2014-06-09
entry	1..*	SHALL		<a href="#">CDP1-3314</a>	
procedure	1..1	SHALL		<a href="#">CDP1-3315</a>	<a href="#">Planned Procedure (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20 .22.4.41:2014-06-09
entry	1..*	SHALL		<a href="#">CDP1-3316</a>	
substanceAdministration	1..1	SHALL		<a href="#">CDP1-3317</a>	<a href="#">Planned Medication Activity (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20 .22.4.42:2014-06-09
entry	1..*	SHALL		<a href="#">CDP1-3318</a>	
supply	1..1	SHALL		<a href="#">CDP1-3319</a>	<a href="#">Planned Supply (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20 .22.4.43:2014-06-09
entry	1..*	SHALL		<a href="#">CDP1-3320</a>	
act	1..1	SHALL		<a href="#">CDP1-3321</a>	<a href="#">Instruction (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20 .22.4.20:2014-06-09
entry	1..*	SHALL		<a href="#">CDP1-3322</a>	

XPath	Card.	Verb	Data Type	CONF#	Value
act	1..1	SHALL		<a href="#">CDP1-3323</a>	<a href="#">Handoff Communication Participants</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.141)
entry	1..*	SHALL		<a href="#">CDP1-3324</a>	
act	1..1	SHALL		<a href="#">CDP1-3325</a>	<a href="#">Nutrition Recommendations</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.130)
entry	1..*	SHALL		<a href="#">CDP1-3326</a>	
substanceAdministration	1..1	SHALL		<a href="#">CDP1-3327</a>	<a href="#">Planned Immunization Activity</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.120)
entry	1..*	SHALL		<a href="#">CDP1-3328</a>	
observation	1..1	SHALL		<a href="#">CDP1-3329</a>	<a href="#">Goal Observation</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.121)

1. Conforms to Plan of Treatment Section (V2) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:CDP1-3301) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.35.2.6" (CONF:CDP1-3302).
3. **SHALL** contain exactly one [1..1] **code** (CONF:CDP1-3303).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="18776-5" Plan of Treatment (CodeSystem: LOINC 2.16.840.1.113883.6.1 **STATIC**) (CONF:CDP1-3304).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC 2.16.840.1.113883.6.1) (CONF:CDP1-3305).
4. **SHALL** contain exactly one [1..1] **title** (CONF:CDP1-3306).
5. **SHALL** contain exactly one [1..1] **text** (CONF:CDP1-3307).
6. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3308) such that it
  - a. **SHALL** contain exactly one [1..1] [Planned Observation \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.44:2014-06-09) (CONF:CDP1-3309).
7. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3310) such that it
  - a. **SHALL** contain exactly one [1..1] [Planned Encounter \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.40:2014-06-09) (CONF:CDP1-3311).
8. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3312) such that it
  - a. **SHALL** contain exactly one [1..1] [Planned Act \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.39:2014-06-09) (CONF:CDP1-3313).



9. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3314) such that it
  - a. **SHALL** contain exactly one [1..1] [Planned Procedure \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2014-06-09) (CONF:CDP1-3315).
10. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3316) such that it
  - a. **SHALL** contain exactly one [1..1] [Planned Medication Activity \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09) (CONF:CDP1-3317).
11. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3318) such that it
  - a. **SHALL** contain exactly one [1..1] [Planned Supply \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.43:2014-06-09) (CONF:CDP1-3319).
12. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3320) such that it
  - a. **SHALL** contain exactly one [1..1] [Instruction \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:CDP1-3321).
13. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3322) such that it
  - a. **SHALL** contain exactly one [1..1] [Handoff Communication Participants](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.141) (CONF:CDP1-3323).
14. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3324) such that it
  - a. **SHALL** contain exactly one [1..1] [Nutrition Recommendations](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.130) (CONF:CDP1-3325).
15. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3326) such that it
  - a. **SHALL** contain exactly one [1..1] [Planned Immunization Activity](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.120) (CONF:CDP1-3327).
16. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3328) such that it
  - a. **SHALL** contain exactly one [1..1] [Goal Observation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.121) (CONF:CDP1-3329).

**Figure 18: Plan of Treatment Section (CDP1) Example**

```
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.35.2.6"/>
    <!-- **** Plan of Treatment Section (CDP1) template **** -->
    <code code="18776-5" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC"
      displayName="Treatment plan"/>
    <title>Treatment Plan</title>
    <text>
      ...
    </text>
    <entry>
      <observation classCode="OBS" moodCode="INT">
        <templateId root="2.16.840.1.113883.10.20.22.4.44" extension="2014-
06-09"/>
        <!-- Planned Observation (V2) template -->
        ...

      </observation>
    </entry>
    <entry>
      <encounter classCode="ENC" moodCode="INT">
        <templateId root="2.16.840.1.113883.10.20.22.4.40" extension="2014-
06-09"/>
        <!-- Planned Encounter (V2) template -->
        ...

      </encounter>
    </entry>
    <entry>
      <act classCode="ACT" moodCode="INT">
        <templateId root="2.16.840.1.113883.10.20.22.4.39" extension="2014-
06-09"/>
        <!-- Planned Act (V2) template -->
        ...

      </act>
    </entry>
    <entry>
      <procedure classCode="ENC" moodCode="INT">
        <templateId root="2.16.840.1.113883.10.20.22.4.41" extension="2014-
06-09"/>
        <!-- Planned Procedure (V2) template -->
        ...

      </procedure>
    </entry>
    <entry>
      <substanceAdministration classCode="SBADM" moodCode="INT">
        <templateId root="2.16.840.1.113883.10.20.22.4.42" extension="2014-
06-09"/>
        <!-- Planned Medication Activity (V2) template -->
        ...

      </substanceAdministration>
    </entry>
  </entry>
</component>
```

```

        <supply classCode="SPLY" moodCode="INT">
            <templateId root="2.16.840.1.113883.10.20.22.4.43" extension="2014-
06-09"/>
            <!-- Planed Supply (V2) template -->
            ...

        </supply>
    </entry>
    <entry>
        <act classCode="ACT" moodCode="INT">
            <templateId root="2.16.840.1.113883.10.20.22.4.20" extension="2014-
06-09"/>
            <!-- Instruction (V2) template -->
            ...

        </act>
    </entry>
    <entry>
        <act classCode="ACT" moodCode="EVN">
            <templateId root="2.16.840.1.113883.10.20.22.4.141"/>
            <!-- Handoff Communication Participants template -->

            ...

        </act>
    </entry>
    <entry>
        <act classCode="ACT" moodCode="EVN">
            <templateId root="2.16.840.1.113883.10.20.22.4.130"/>
            <!-- Nutrition Recommendation template -->

            ...

        </act>
    </entry>
    <entry>
        <substanceAdministration classCode="SBADM" moodCode="EVN">
            <templateId root="2.16.840.1.113883.10.20.22.4.120"/>
            <!-- Planned Immunization Activity template -->

            ...

        </substanceAdministration>
    </entry>
    <entry>
        <observaton classCode="OBS" moodCode="GOL">
            <templateId root="2.16.840.1.113883.10.20.22.4.121"/>
            <!-- Goal Observation template -->

            ...

        </observation>
    </entry>
</section>
</component>

```

## 6.6 Social History Section (CDP1)

[section: identifier urn:oid:2.16.840.1.113883.10.20.35.2.7 (open)]

**Table 35: Social History Section (CDP1) Contexts**

Contained By:	Contains:
<a href="#">Enhanced Discharge Document (CDP1)</a> (required) <a href="#">Enhanced Encounter Document (CDP1)</a> (required) <a href="#">Enhanced Procedure Document (CDP1)</a> (required)	<a href="#">Caregiver Characteristics</a> <a href="#">Characteristics of Home Environment</a> <a href="#">Cultural and Religious Observation</a> <a href="#">Pregnancy Observation</a> <a href="#">Smoking Status – Meaningful Use (V2)</a> <a href="#">Social History Observation (V2)</a> <a href="#">Tobacco Use (V2)</a>

From C-CDA R2:

----- *begin citation* -----

This section contains social history data that influences a patient’s physical, psychological or emotional health (e.g. smoking status, pregnancy). Demographic data, such as marital status, race, ethnicity, and religious affiliation, is captured in the header.

----- *end citation* -----

This Social History Section (CDP1) requires a response for all entry templates. Any entry template for which data is not available (not collected, not relevant, not supported by the EHR technology, etc.) SHALL have the appropriate nullFlavor, from the [nullFlavorCDP1](#) valueset, specified to indicate that the information was not available (NI) at time of document creation or is being withheld (NA) (see section 3.4 regarding the use of nullFlavors).

The Social History Section (CDP1) template conforms to the C-CDA R2 Social History Section (V2) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2014-06-09) with the following changes:

- 1) Replaced verb MAY with SHALL for:
  - [Caregiver Characteristics](#)
  - [Characteristics of Home Environment](#)
  - [Cultural and Religious Observation](#)
  - [Pregnancy Observation](#)
  - [Smoking Status – Meaningful Use \(V2\)](#)
  - [Social History Observation \(V2\)](#)
  - [Tobacco Use \(V2\)](#)

**Table 36: Social History Section (CDP1) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.7)					
templateId	1..1	SHALL		<a href="#">CDP1-3401</a>	
@root	1..1	SHALL		<a href="#">CDP1-3402</a>	2.16.840.1.113883.10.20.35.2.7
code	1..1	SHALL		<a href="#">CDP1-3403</a>	
@code	1..1	SHALL		<a href="#">CDP1-3404</a>	29762-2
@codeSystem	1..1	SHALL		<a href="#">CDP1-3405</a>	2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
title	1..1	SHALL		<a href="#">CDP1-3406</a>	
text	1..1	SHALL		<a href="#">CDP1-3407</a>	
entry	1..*	SHALL		<a href="#">CDP1-3408</a>	
observation	1..1	SHALL		<a href="#">CDP1-3409</a>	<a href="#">Social History Observation (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.38 :2014-06-09
entry	1..*	SHALL		<a href="#">CDP1-3410</a>	
observation	1..1	SHALL		<a href="#">CDP1-3411</a>	<a href="#">Pregnancy Observation</a> (identifier: urn:oid:2.16.840.1.113883.10.20.15.3.8
entry	1..*	SHALL		<a href="#">CDP1-3412</a>	
observation	1..1	SHALL		<a href="#">CDP1-3413</a>	<a href="#">Smoking Status - Meaningful Use (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.78 :2014-06-09
entry	1..*	SHALL		<a href="#">CDP1-3414</a>	
observation	1..1	SHALL		<a href="#">CDP1-3415</a>	<a href="#">Tobacco Use (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.85 :2014-06-09
entry	1..*	SHALL		<a href="#">CDP1-3416</a>	
observation	1..1	SHALL		<a href="#">CDP1-3417</a>	<a href="#">Caregiver Characteristics</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.72
entry	0..*	May		<a href="#">CDP1-3418</a>	
observation	1..1	SHALL		<a href="#">CDP1-3419</a>	<a href="#">Cultural and Religious Observation</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.111
entry	1..*	SHALL		<a href="#">CDP1-3420</a>	
observation	1..1	SHALL		<a href="#">CDP1-3421</a>	<a href="#">Characteristics of Home Environment</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.109

1. Conforms to Social History Section (V2) template (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2014-06-09).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:CDP1-3401) such that it

- a. **SHALL** contain exactly one [1..1]  
`@root="2.16.840.1.113883.10.20.35.2.7"` (CONF:CDP1-3402).
3. **SHALL** contain exactly one [1..1] **code** (CONF:CDP1-3403).
  - a. This code **SHALL** contain exactly one [1..1] `@code="29762-2"` Social History (CONF:CDP1-3404).
  - b. This code **SHALL** contain exactly one [1..1]  
`@codeSystem="2.16.840.1.113883.6.1"` (CodeSystem: LOINC  
 2.16.840.1.113883.6.1) (CONF:CDP1-3405).
4. **SHALL** contain exactly one [1..1] **title** (CONF:CDP1-3406).
5. **SHALL** contain exactly one [1..1] **text** (CONF:CDP1-3407).
6. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3408) such that it
  - a. **SHALL** contain exactly one [1..1] Social History Observation (V2)  
 (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2014-06-09) (CONF:CDP1-3409).
7. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3410) such that it
  - a. **SHALL** contain exactly one [1..1] Pregnancy Observation (identifier:  
 urn:oid:2.16.840.1.113883.10.20.15.3.8) (CONF:CDP1-3411).
8. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3412) such that it
  - a. **SHALL** contain exactly one [1..1] Smoking Status - Meaningful Use (V2)  
 (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09) (CONF:CDP1-3413).
9. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3414) such that it
  - a. **SHALL** contain exactly one [1..1] Tobacco Use (V2) (identifier:  
 urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09)  
 (CONF:CDP1-3415).
10. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3416) such that it
  - a. **SHALL** contain exactly one [1..1] Caregiver Characteristics  
 (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.72)  
 (CONF:CDP1-3417).
11. **MAY** contain zero or more [0..\*] **entry** (CONF:CDP1-3418) such that it
  - a. **SHALL** contain exactly one [1..1] Cultural and Religious Observation  
 (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.111)  
 (CONF:CDP1-3419).
12. **SHALL** contain one or more [1..\*] **entry** (CONF:CDP1-3420) such that it
  - a. **SHALL** contain exactly one [1..1] Characteristics of Home Environment  
 (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.109)  
 (CONF:CDP1-3421).

**Figure 19: Social History Section (CDP1) Example**

```
<component>
  <section>
    <templateId root="2.16.840.1.113883.10.20.35.2.7"/>
    <!-- **** Social History Section (CDP1) template **** -->
    <code code="29762-2" codeSystem="2.16.840.1.113883.6.1"
      displayName="Social History"/>
    <title>Social History</title>
    <text>
      . . .
    </text>
    <entry>
      <observation classCode="OBS" moodCode="EVN">
        <!-- Social history observation (V2) template -->
        <templateId root="2.16.840.1.113883.10.20.22.4.38" extension="2014-
06-09" />
        ...

      </observation>
    </entry>
    <entry>
      <observation classCode="OBS" moodCode="EVN">
        <!--Pregnancy Observation template-->
        <templateId root="2.16.840.1.113883.10.20.15.3.8"/>
        ...

      </observation>
    </entry>
    <entry>
      <observation classCode="OBS" moodCode="EVN">
        <!-- Smoking Status observation (V2) template -->
        <templateId root="2.16.840.1.113883.10.20.22.4.78" extension="2014-
06-09" />
        ...

      </observation>
    </entry>
    <entry>
      <observation classCode="OBS" moodCode="EVN">
        <!--Tobacco Use -->
        <templateId root="2.16.840.1.113883.10.20.22.4.85" extension="2014-
06-09" />
        ...

      </observation>
    </entry>
    <entry>
      <observation classCode="OBS" moodCode="EVN">
        <!-- Caregiver Characteristics template -->
        <templateId root="2.16.840.1.113883.10.20.22.4.72"/>
        ...

      </observation>
    </entry>
  </entry>
```

```

        <observation classCode="OBS" moodCode="EVN">
            <!-- Cultural and Religious Observations template-->
            <templateId root="2.16.840.1.113883.10.20.22.4.111"/>
        ...

    </observation>
</entry>
<entry>
    <observation classCode="OBS" moodCode="EVN">
        <!-- Characteristics of Care Environment template -->
        <templateId root="2.16.840.1.113883.10.20.22.4.109"/>
    ...

    </observation>
</entry>
</section>
</component>

```

### 6.7 Transportation Section (CDP1)

[section: identifier urn:oid:2.16.840.1.113883.10.20.35.2.4 (open)]

**Table 37: Transportation Section (CDP1) Contexts**

Contained By:	Contains:
<a href="#">Enhanced Discharge Document (CDP1)</a> (required) <a href="#">Enhanced Encounter Document (CDP1)</a> (required)	<a href="#">Transportion Activity (CDP1)</a>

The Transportation Section describes in a narrative format, with an optional coded entry, the transportation method (such as emergency transport), other than the patient’s or caregiver’s personal transportation, that was used to bring the patient to or take the patient from the location of the current encounter. This information is normally supplied to the provider as a summary by the entity that provides the transportation service. This section is not a replacement for the record keeping or reporting of emergency transportation information by the transportation service for clinical, administrative or billing purposes.



**Table 38: Transportation Section (CDP1) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:oid:2.16.840.1.113883.10.20.35.2.4)					
templateId	1..1	SHALL		<a href="#">CDP-3001</a>	
@root	1..1	SHALL		<a href="#">CDP-3002</a>	2.16.840.1.113883.10.20.35.2.4
code	1..1	SHALL		<a href="#">CDP-3003</a>	
@code	1..1	SHALL		<a href="#">CDP-3004</a>	77596-5
@codeSystem	1..1	SHALL		<a href="#">CDP-3005</a>	2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
title	1..1	SHALL		<a href="#">CDP-3006</a>	
text	1..1	SHALL		<a href="#">CDP-3007</a>	
entry	0..*	MAY		<a href="#">CDP-3008</a>	
act	1..1	SHALL		<a href="#">CDP-3009</a>	<a href="#">Transportation Activity (CDP1)</a> (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.10)

1. **SHALL** contain exactly one [1..1] **templateId** (CONF:CDP1-3001) such that it
  - a. **SHALL** contain exactly one [1..1]
   
@root="2.16.840.1.113883.10.20.35.2.4" (CONF:CDP1-3002).
2. **SHALL** contain exactly one [1..1] **code** (CONF:CDP1-3003).
  - a. This code **SHALL** contain exactly one [1..1] @code="77596-5"
   
Transportation Summary (CONF:CDP1-3004).
  - b. This code **SHALL** contain exactly one [1..1]
   
@codeSystem="2.16.840.1.113883.6.1" (CodeSystem: LOINC
   
2.16.840.1.113883.6.1) (CONF:CDP1-3005).
3. **SHALL** contain exactly one [1..1] **title** (CONF:CDP1-3006).
4. **SHALL** contain exactly one [1..1] **text** (CONF:CDP1-3007).
5. **MAY** contain zero or more [0..\*] **entry** (CONF:CDP1-3008) such that it
  - a. **SHALL** contain exactly one [1..1] [Transportation Activity \(CDP1\)](#)
  
(identifier: urn:oid:2.16.840.1.113883.10.20.35.4.10)
   
(CONF:CDP1-3009).

**Figure 20: Transportation Section (CDP1) Example**

```
<section>
  <templateId root="2.16.840.1.113883.10.20.35.2.4" />
  <code code="77596-5" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
displayName="Transportation Summary" />
  <title>Transportation Information</title>
  <text>
    <paragraph>
      The patient was transported by Emergency Medical Services from home which was
      12.5 miles from the Emergency Department ...
    </paragraph>
  </text>
  ...
</section>
```

## 7 ENTRY-LEVEL TEMPLATES

The following information is taken directly from the C-CDA R2 Implementation Guide.

“This chapter describes the clinical statement entry templates used within the sections of the document types of this consolidated guide. Entry templates contain constraints that are required for conformance.

Entry-level templates are always in sections.

Each entry-level template description contains the following information:

- Key template metadata (e.g., template identifier, etc.)
- Description and explanatory narrative.
- Required CDA acts, participants and vocabularies.
- Optional CDA acts, participants and vocabularies.

Several entry-level templates require an effectiveTime:

The effectiveTime of an observation is the time interval over which the observation is known to be true. The low and high values should be as precise as possible, but no more precise than known. While CDA has multiple mechanisms to record this time interval (e.g., by low and high values, low and width, high and width, or center point and width), this guide constrains most to use only the low/high form. The low value is the earliest point for which the condition is known to have existed. The high value, when present, indicates the time at which the observation was no longer known to be true. The full description of effectiveTime and time intervals is contained in the CDA R2 normative edition.”

In addition to the change in the Consolidated CDA (C-CDA), that added a “SHOULD” Author constraint on several entry-level templates, we have added a “**SHALL**” Author constraint on several entry-level templates. Authorship and Author timestamps must be explicitly asserted in these cases.

ID in entry templates:

Entry-level templates may also describe an id element, which is an identifier for that entry. This id may be referenced within the document, or by the system receiving the document. The id assigned must be globally unique. When the same information is included in multiple sections (e.g. Order Placed and Plan of Treatment) then one of the ids assigned to each duplicate entry must be identical.

For this guide, any entry level templates that are explicitly referenced by C-CDA R2 section-level templates incorporated by reference are defined only in the C-CDA R2. The only entry-level templates defined in this guide are those referenced by the section-level templates defined in this guide (CDP1).

All entry-level templates referenced directly by this guide (not by reference to sections contained in the C-CDA R2) are listed in Table 39. This table provides the Template Name and templateID. Most entry-level templates are adopted “as is” from the HL7 Implementation Guide for CDA® Release 2:Consolidated CDA Templates for Clinical Notes (US Realm) Draft Standard for Trial Use Release 2 (C-CDA R2).

**All entry-level templates adopted by reference from C-CDA R2 and unchanged in this guide are defined in the C-CDA R2**

**Table 39: Entry-Level Templates**

Entry-Level Templates	templateID
<b>Entry-level templates defined in this guide</b>	
<a href="#">Act Order (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.4.1
<a href="#">Additional Documentation Activity (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.4.11
<a href="#">Additional Documentation Organizer (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.4.12
<a href="#">Encounter Order (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.4.2
<a href="#">Externally Defined CDE Observation (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.4.3
<a href="#">Externally Defined CDE Organizer (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.4.4
<a href="#">Externally Defined CDE Supporting Observation (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.4.13
<a href="#">Immunization Activity Order (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.4.9
<a href="#">Medication Activity Order (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.4.5
<a href="#">Observation Order (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.4.6
<a href="#">Procedure Order (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.4.7
<a href="#">Supply Order (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.4.8
<a href="#">Transportation Activity (CDP1)</a>	urn:oid:2.16.840.1.113883.10.20.35.4.10
<b>Entry-Level templates incorporated by reference from C-CDA R2 (see C-CDA R2 for template definition)</b>	
Assessment Scale Observation	urn:oid:2.16.840.1.113883.10.20.22.4.69
Author Participation	urn:oid:2.16.840.1.113883.10.20.22.4.119
Caregiver Characteristics	urn:oid:2.16.840.1.113883.10.20.22.4.72
Characteristics of Home Environment	urn:oid:2.16.840.1.113883.10.20.22.4.109
Comment Activity	urn:oid:2.16.840.1.113883.10.20.22.4.64
Cultural and Religious Observation	urn:oid:2.16.840.1.113883.10.20.22.4.111
Functional Status Observation (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.67:2014-06-09
Functional Status Organizer (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.66:2014-06-09
Goal Observation	urn:oid:2.16.840.1.113883.10.20.22.4.121
Handoff Communication Participants	urn:oid:2.16.840.1.113883.10.20.22.4.141
Immunization Medication Information (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
Indication (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
Instruction (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
Medication Information (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09

Entry-Level Templates	templateID
Non-Medicinal Supply Activity (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.50:2014-06-09
Nutrition Recommendations	urn:oid:2.16.840.1.113883.10.20.22.4.130
Planned Act (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.39:2014-06-09
Planned Coverage	urn:oid:2.16.840.1.113883.10.20.22.4.129
Planned Immunization Activity	urn:oid:2.16.840.1.113883.10.20.22.4.120
Planned Observation (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.44:2014-06-09
Planned Procedure (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2014-06-09
Planned Supply (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.43:2014-06-09
Planned Medication Activity (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09
Planned Encounter (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.40:2014-06-09
Precondition for Substance Administration (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09
Pregnancy Observation	urn:oid:2.16.840.1.113883.10.20.15.3.8
Product Instance	urn:oid:2.16.840.1.113883.10.20.22.4.37
Priority Preference	urn:oid:2.16.840.1.113883.10.20.22.4.143
Self-Care Activities (ADL and IADL)	urn:oid:2.16.840.1.113883.10.20.22.4.128
Sensory Status	urn:oid:2.16.840.1.113883.10.20.22.4.127
Service Delivery Location	urn:oid:2.16.840.1.113883.10.20.22.4.32
Smoking Status – Meaningful Use (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09
Social History Observation (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2014-06-09
Tobacco Use (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09
US Realm Date and Time (DT.US.FIELDDED)	urn:oid:2.16.840.1.113883.10.20.22.5.3
<b>C-CDA R2 Deprecated Entry-Level templates (see C-CDA R2 for template definition)</b>	
Cognitive Status Problem Observation (DEPRECATED)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.73:2014-06-09
Functional Status Problem Observation (DEPRECATED)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.68:2014-06-09
Pressure Ulcer Observation (DEPRECATED)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.70:2014-06-09

## 7.1 Act Order (CDP1)

[act: identifier urn:oid:2.16.840.1.113883.10.20.35.4.1 (open)]

**Table 40: Act Order (CDP1) Contexts**

Contained By:	Contains:
<a href="#">Orders Placed Section (CDP1)</a> (required)	<a href="#">Author Participation</a> <a href="#">Indication (V2)</a> <a href="#">Instruction (V2)</a> <a href="#">Priority Preference</a>

This template represents ordering acts that are not classified as an observation or a procedure according to the HL7 RIM. Examples of these acts are a dressing change, the teaching or feeding of a patient or the providing of comfort measures.

The priority of the activity to the patient and provider is communicated through Priority Preference. The effectiveTime indicates the time when the activity did take place or is intended to take place.

Entries using the Act Order template must be placed orders (moodCode = RQO), with a status (statusCode) of “active” or “completed”.

Author Participation is required and indicates the provider who placed the order and the time when the order was placed

The Act Order (CDP1) template conforms to the C-CDA R2 Planned Act (V2) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.39:2014-06-09) with the following additional constraints:

- 1) moodCode = RQO.
- 2) statusCode = “active” or “completed”.
- 3) effectiveTime is the time when the activity did take place (statusCode “completed”) or is intended to take place (statusCode “active”).
- 4) Author Participation is required and defines author and time the order was placed.

**Table 41: Act Order (CDP1) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Fixed Value
act (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.1)					
@classCode	1..1	SHALL		<a href="#">CDP1-3501</a>	2.16.840.1.113883.5.6 (HL7ActClass) = ACT
@moodCode	1..1	SHALL		<a href="#">CDP1-3502</a>	2.16.840.1.113883.5.1001 (ActMood)= RQO
templateId	1..1	SHALL		<a href="#">CDP1-3503</a>	
@root	1..1	SHALL		<a href="#">CDP1-3504</a>	2.16.840.1.113883.10.20.35.4.1
id	1..*	SHALL		<a href="#">CDP1-3505</a>	
code	1..1	SHALL		<a href="#">CDP1-3506</a>	
statusCode	1..1	SHALL		<a href="#">CDP1-3508</a>	
@code	1..1	SHALL		<a href="#">CDP1-3509</a>	2.16.840.1.113883.10.20.35.6.1 (ActStatus2)
effectiveTime	0..1	SHOULD		<a href="#">CDP1-3510</a>	
performer	0..*	MAY		<a href="#">CDP1-3511</a>	
author	1..1	SHALL		<a href="#">CDP1-3514</a>	<a href="#">Author Participation</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)
entryRelationship	0..*	MAY		<a href="#">CDP1-3515</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-3516</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">CDP1-3517</a>	<a href="#">Priority Preference</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143)
entryRelationship	0..*	MAY		<a href="#">CDP1-3518</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-3519</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON
observation	1..1	SHALL		<a href="#">CDP1-3520</a>	<a href="#">Indication (V2)</a> (identifier:urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09)
entryRelationship	0..*	MAY		<a href="#">CDP1-3521</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-3522</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
act	1..1	SHALL		<a href="#">CDP1-3523</a>	<a href="#">Instruction (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09)

1. Conforms to [Planned Act \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.39:2014-06-06).
2. **SHALL** contain exactly one [1..1] @classCode="ACT" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF:CDP1-3501).
3. **SHALL** contain exactly one [1..1] @moodCode = "RQO" (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF:CDP1-3502).
4. **SHALL** contain exactly one [1..1] templateId (CONF:CDP1-3503) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.35.4.1" (CONF:CDP1-3504).
5. **SHALL** contain at least one [1..\*] id (CONF:CDP1-3505).
6. **SHALL** contain exactly one [1..1] code (CONF:CDP1-3506).

- a. This code in an Act Order **SHOULD** be selected from LOINC (CodeSystem: 2.16.840.1.113883.6.1) or SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) (CONF:CDP1-3507).
- 7. **SHALL** contain exactly one [1..1] **statusCode** (CONF:CDP1-3508).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [ActStatus2](#) 2.16.840.1.113883.10.20.35.6.1 **STATIC** (CONF:CDP1-3509).

The effectiveTime indicates the time when the act did or should occur.

- 8. **SHOULD** contain zero or one [0..1] **effectiveTime** (CONF:CDP1-3510).

The clinician who did or is expected to carry out the act could be identified using act/performer.

- 9. **MAY** contain zero or more [0..\*] **performer** (CONF:CDP1-3511).

The author in an ordered act represents the clinician who ordered the act and the time is the time the order was placed.

- 10. **SHALL** contain exactly one [1..1] [Author Participation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:CDP1-3514).

The following entryRelationship represents the priority that a patient or provider places on the activity.

- 11. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:CDP1-3515) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="REFR"** Refers to (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-3516).
  - b. **SHALL** contain exactly one [1..1] [Priority Preference](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:CDP1-3517).

The following entryRelationship represents the indication for the act.

- 12. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:CDP1-3518) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="RSON"** Has Reason (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-3519).
  - b. **SHALL** contain exactly one [1..1] [Indication \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09) (CONF:CDP1-3520).

The following entryRelationship captures any instructions associated with the act.

- 13. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:CDP1-3521) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="SUBJ"** Has subject (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-3522).
  - b. **SHALL** contain exactly one [1..1] [Instruction \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:CDP1-3523).



**Figure 21: Act Order (CDP1) Example**

```
<act classCode="ACT" moodCode="RQO">
  <templateId root="2.16.840.1.113883.10.20.35.4.1" />
  <!-- Act Order (CDP1) template -->
  <id root="7658963e-54da-496f-bf18-dea1dddaa3b0" />
  <code code="423171007" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED
CT" displayName="Elevate head of bed" />
  <statusCode code="completed" />
  <effectiveTime value="20130902" />
  <author typeCode="AUT">
    <!-- Author Participation -->
  </author>
  <entryRelationship typeCode="RSON">
    <!-- Patient/Provider Priority Preference -->
    ...

  </entryRelationship>
  <entryRelationship typeCode="RSON">
    <!-- Indication (V2) -->
    ...

  </entryRelationship>
  <entryRelationship typeCode="SUBJ">
    <!-- Instruction (V2) -->
    ...

  </entryRelationship>
</act>
```

## 7.2 Additional Documentation Activity (CDP1)

[act: identifier urn:oid:2.16.840.1.113883.10.20.35.4.11 (open)]

**Table 42: Additional Documentation Activity (CDP1) Contexts**

Contained By:	Contains:
<a href="#">Additional Documentation Organizer (CDP1)</a> (required) <a href="#">Additional Documentation Section (CDP1)</a> (optional)	

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

**Table 43: Additional Documentation Activity (CDP1) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
act (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.11)					
@classCode	1..1	SHALL		<a href="#">CDP1-4501</a>	2.16.840.1.113883.5.6 (HL7ActClass) = ACT
@moodCode	1..1	SHALL		<a href="#">CDP1-4502</a>	2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">CDP1-4503</a>	
@root	1..1	SHALL		<a href="#">CDP1-4504</a>	2.16.840.1.113883.10.20.35.4.11
code	1..1	SHALL		<a href="#">CDP1-4505</a>	
@code	1..1	SHALL		<a href="#">CDP1-4506</a>	
@codeSystem	1..1	SHALL		<a href="#">CDP1-4507</a>	LOINC (CodeSystem: 2.16.840.1.113883.6.1) or SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96)
text	1..1	SHALL		<a href="#">CDP1-4508</a>	
reference	1..1	SHALL		<a href="#">CDP1-4509</a>	
@value	1..1	SHALL		<a href="#">CDP1-4510</a>	
reference/@value	1..1	SHALL		<a href="#">CDP1-4512</a>	
author	0..1	MAY		<a href="#">CDP1-4513</a>	
time	1..1	SHALL		<a href="#">CDP1-4514</a>	
assignedAuthor	1..1	SHALL		<a href="#">CDP1-4515</a>	
id	1..1	SHALL		<a href="#">CDP1-4516</a>	
addr	1..1	SHALL		<a href="#">CDP1-4517</a>	

1. **SHALL** contain exactly one [1..1] **@classCode**="ACT" Act (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF:CDP1-4501).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF:CDP1-4502).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:CDP1-4503) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.35.4.11" (CONF:CDP1-4504).
4. **SHALL** contain exactly one [1..1] **code** (CONF:CDP1-4505).
  - a. This code **SHALL** contain exactly one [1..1] **@code** (CONF:CDP1-4506).
    - i. Such that the **@code** **SHALL** be from LOINC (CodeSystem: 2.16.840.1.113883.6.1) or SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) and represents the scope of the additional documentation comment (CONF:CDP1-4507).
5. **SHALL** contain exactly one [1..1] **text** (CONF:CDP1-4508).
  - a. This text **SHALL** contain exactly one [1..1] **reference** (CONF:CDP1-4509).
    - i. This reference **SHALL** contain exactly one [1..1] **@value** (CONF:CDP1-4510).

1. This reference/@value **SHALL** begin with '#' and **SHALL** point to its corresponding narrative (using the approach defined in CDA Release 2, section 4.3.5.1) (CONF:CDP1-4511).
- b. This text **SHALL** contain exactly one [1..1] **reference/@value** (CONF:CDP1-4512).
6. **MAY** contain zero or one [0..1] **author** (CONF:CDP1-4513).
  - a. The author, if present, **SHALL** contain exactly one [1..1] **time** (CONF:CDP1-4514).
  - b. The author, if present, **SHALL** contain exactly one [1..1] **assignedAuthor** (CONF:CDP1-4515).
    - i. This assignedAuthor **SHALL** contain exactly one [1..1] **id** (CONF:CDP1-4516).
    - ii. This assignedAuthor **SHALL** contain exactly one [1..1] **addr** (CONF:CDP1-4517).
      1. The content of addr **SHALL** be a conformant US Realm Address (AD.US.FIELDDED) (2.16.840.1.113883.10.20.22.5.2) (CONF:CDP1-4518).
    - iii. **SHALL** include assignedPerson/name or representedOrganization/name (CONF:CDP1-4519).
    - iv. An assignedPerson/name **SHALL** be a conformant US Realm Person Name (PN.US.FIELDDED) (2.16.840.1.113883.10.20.22.5.1.1) (CONF:CDP1-4520).
7. Data elements defined elsewhere in the specification **SHALL NOT** be recorded using the Additional Documentation Activity (CDP1) (CONF:CDP1-4521).

**Figure 22: Additional Documentation Activity (CDP1) Example**

```
<act classCode="ACT" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.35.4.11"/>
  <code code="64293-4" displayName="Procedure Consent"
    codeSystemName="LOINC"
    codeSystem="2.16.840.1.113883.6.1"/>
  <text>The patient has provided consent for the colonoscopy.
    <reference value="#PntrtoSectionText"/>
  </text>
  <author>
    <time value="20050329224411+0500"/>
    <assignedAuthor>
      <id extension="KP00017" root="2.16.840.1.113883.19.5"/>
      <addr>
        <streetAddressLine>21 North Ave.</streetAddressLine>
        <city>Burlington</city>
        <state>MA</state>
        <postalCode>02368</postalCode>
        <country>US</country>
      </addr>
      <telecom use="WP" value="tel:(555)555-1003"/>
      <assignedPerson>
        <name>
          <given>Henry</given>
          <family>Seven</family>
        </name>
      </assignedPerson>
    </assignedAuthor>
  </author>
</act>
```

### 7.3 Additional Documentation Organizer (CDP1)

[organizer: identifier urn:oid:2.16.840.1.113883.10.20.35.4.12 (open)]

**Table 44: Additional Documentation Organizer (CDP1) Contexts**

Contained By:	Contains:
<a href="#">Additional Documentation Section (CDP1)</a> (required)	<a href="#">Additional Documentation Activity (CDP1)</a>

This statement groups a set of Additional Documentation Activities into a related set of objects.

**Table 45 Additional Documentaion Organizer Constraints**

XPath	Card.	Verb	Data Type	CONF#	Value
organizer (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.12)					
@classCode	1..1	SHALL		<a href="#">CDP1-4601</a>	2.16.840.1.113883.5.6 (HL7ActClass) = CLUSTER
@moodCode	1..1	SHALL		<a href="#">CDP1-4602</a>	2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">CDP1-4603</a>	
@root	1..1	SHALL		<a href="#">CDP1-4604</a>	2.16.840.1.113883.10.20.35.4.12
id	1..*	SHALL		<a href="#">CDP1-4605</a>	
code	1..1	SHALL		<a href="#">CDP1-4606</a>	
@code	1..1	SHALL		<a href="#">CDP1-4607</a>	
@codeSystem	1..1	SHALL		<a href="#">CDP1-4608</a>	LOINC (CodeSystem: 2.16.840.1.113883.6.1) or SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96)
component	1..*	SHALL		<a href="#">CDP1-4609</a>	
observation	1..1	SHALL		<a href="#">CDP1-4610</a>	<a href="#">Additional Documentation Activity (CDP1)</a> (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.11)

1. **SHALL** contain exactly one [1..1] **@classCode**="CLUSTER" Cluster (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6) (CONF:CDP1-4601).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF:CDP1-4602).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:CDP1-4603) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.108" (CONF:CDP1-4604).
4. **SHALL** contain at least one [1..\*] **id** (CONF:CDP1-4605).
5. **SHALL** contain exactly one [1..1] **code** (CONF:CDP1-4606).
  - a. This code **SHALL** contain exactly one [1..1] **@code** (CONF:CDP1-4607).
    - i. Such that the **@code** **SHALL** be from LOINC (CodeSystem: 2.16.840.1.113883.6.1) or SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) and represents the scope of the related set of additional documentation (CONF:CDP1-4608).
6. **SHALL** contain at least one [1..\*] **component** (CONF:CDP1-4609) such that it
  - a. **SHALL** contain exactly one [1..1] [Additional Documentation Activity \(CDP1\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.11) (CONF:CDP1-4610).

**Figure 23: Additional Documentation Organizer (CDP1) Example**

```
<organizer classCode="CLUSTER" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.35.4.12" />
  <!-- Additional Documentation Organizer (CDP1) template -->
  <code code="59284-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
  displayName="Consent" />
  <statusCode code="completed" />

  <component>
    <act classCode="ACT" moodCode="EVN">
      <!--Additional Documentation Activity (CDP1) template -->
      <templateId root="2.16.840.1.113883.10.20.35.4.11"/>
      ...
    </act>
  </component>
</organizer>
```

## 7.4 Encounter Order (CDP1)

[act: identifier urn:oid:2.16.840.1.113883.10.20.35.4.2 (open)]

**Table 46: Encounter Order (CDP1) Contexts**

Contained By:	Contains:
<a href="#">Orders Placed Section (CDP1)</a> (required)	<a href="#">Author Participation</a> <a href="#">Indication (V2)</a> <a href="#">Priority Preference</a> <a href="#">Service Delivery Location</a>

This template represents an encounter order. The type of encounter (e.g. comprehensive outpatient visit) is represented. Clinicians participating in the encounter and the location of the ordered encounter may be captured.

The priority of the activity to the patient and provider is communicated through Priority Preference. The effectiveTime indicates the time when the encounter did take place or is intended to take place.

Entries using the Encounter Order template must be placed orders (moodCode = RQO), with a status (statusCode) of “active” or “completed”.

Author Participation is required and indicates the provider who placed the order and the time when the order was placed

The Encounter Order (CDP1) template conforms to the C-CDA R2 Planned Encounter (V2) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.40:2014-06-09) with the following additional constraints:

- 1) moodCode = RQO.
- 2) statusCode = “active” or “completed”.
- 3) effectiveTime is the time when the encounter did take place (statusCode “completed”) or is intended to take place (statusCode “active”).
- 4) Author Participation is required and defines author and time the order was placed.

**Table 47: Encounter Order (CDP1) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Fixed Value
encounter (identifier:urn:oid:2.16.840.1.113883.10.20.35.4.2)					
@classCode	1..1	SHALL		<a href="#">CDP1-3601</a>	2.16.840.1.113883.5.6 (HL7ActClass) = ENC
@moodCode	1..1	SHALL		<a href="#">CDP1-3602</a>	2.16.840.1.113883.5.1001 (ActMood)= RQO
templateId	1..1	SHALL		<a href="#">CDP1-3603</a>	
@root	1..1	SHALL		<a href="#">CDP1-3604</a>	2.16.840.1.113883.10.20.35.4.2
id	1..*	SHALL		<a href="#">CDP1-3605</a>	
code	1..1	SHALL		<a href="#">CDP1-3606</a>	
statusCode	1..1	SHALL		<a href="#">CDP1-3608</a>	
@code	1..1	SHALL		<a href="#">CDP1-3609</a>	2.16.840.1.113883.10.20.35.6.1 (ActStatus2)
effectiveTime	0..1	SHOULD		<a href="#">CDP1-3610</a>	
performer	0..*	MAY		<a href="#">CDP1-3611</a>	
assignedEntity	1..1	SHALL		<a href="#">CDP1-3612</a>	
author	1..1	SHALL		<a href="#">CDP1-3613</a>	<a href="#">Author Participation</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)
participant	0..*	MAY		<a href="#">CDP1-3614</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-3615</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = LOC
participantRole	1..1	SHALL		<a href="#">CDP1-3616</a>	<a href="#">Service Delivery Location</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32)
entryRelationship	0..*	MAY		<a href="#">CDP1-3619</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-3620</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">CDP1-3621</a>	<a href="#">Priority Preference</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143)
entryRelationship	0..*	MAY		<a href="#">CDP1-3622</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-3623</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON
observation	1..1	SHALL		<a href="#">CDP1-3624</a>	<a href="#">Indication (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09)

1. Conforms to [Planned Encounter \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.40:2014-06-06).
2. **SHALL** contain exactly one [1..1] @classCode="ENC" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF:CDP1-3601).
3. **SHALL** contain exactly one [1..1] @moodCode = "RQO" (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF:CDP1-3602).
4. **SHALL** contain exactly one [1..1] templateId (CONF:CDP1-3603) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.35.4.2" (CONF:CDP1-3604).
5. **SHALL** contain at least one [1..\*] id (CONF:CDP1-3605).

Records the type of encounter ordered.

6. **SHALL** contain exactly one [1..1] **code** (CONF:CDP1-3606)
  - a. which **SHOULD** be selected from ValueSet [Encounter Ordered](#) 2.16.840.1.113883.10.20.35.6.2 **DYNAMIC** (CONF:CDP1-3607).
7. **SHALL** contain exactly one [1..1] **statusCode** (CONF:CDP1-3608).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [ActStatus2](#) 2.16.840.1.113883.10.20.35.6.1 **STATIC** (CONF:CDP1-3609).

The effectiveTime indicates the time when the encounter did or should occur.

8. **SHOULD** contain zero or one [0..1] **effectiveTime** (CONF:CDP1-3610).

Performers represent clinicians who are responsible for assessing and treating the patient.

9. **MAY** contain zero or more [0..\*] **performer** (CONF:CDP1-3611) such that it
  - a. **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:CDP1-3612).

The author in an ordered encounter represents the clinician who ordered the encounter and the time is the time the order was placed.

10. **SHALL** contain exactly one [1..1] [Author Participation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:CDP1-3613).

The location participation captures where the ordered encounter may take place.

11. **MAY** contain zero or more [0..\*] **participant** (CONF:CDP1-3614) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="LOC"** Location (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-3615).
  - b. **SHALL** contain exactly one [1..1] [Service Delivery Location](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32) (CONF:CDP1-3616).

The entryRelationship represents the priority that a patient or provider places on the encounter.

12. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:CDP1-3619) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="REFR"** Refers to (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-3620).
  - b. **SHALL** contain exactly one [1..1] [Priority Preference](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:CDP1-3621).

The following entryRelationship captures the reason for the ordered encounter.

13. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:CDP1-3622) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="RSON"** Has Reason (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-3623).
  - b. **SHALL** contain exactly one [1..1] [Indication \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09) (CONF:CDP1-3624).



**Table 48: Encounter Ordered**

Value Set: Encounter Ordered 2.16.840.1.113883.10.20.35.6.2			
A value set of SNOMED-CT codes descending from "308335008" patient encounter procedure (procedure).			
Value Set Source:			
<a href="http://vts1.vetmed.vt.edu/TerminologyMgt/RF2Browser/ISA.cfm?SCT_ConceptID=30833500">http://vts1.vetmed.vt.edu/TerminologyMgt/RF2Browser/ISA.cfm?SCT_ConceptID=30833500</a>			
Code	Code System	Code System OID	Print Name
185349003	SNOMED CT	2.16.840.1.113883.6.96	encounter for "check-up" (procedure)
439740005	SNOMED CT	2.16.840.1.113883.6.96	postoperative follow-up visit (procedure)
439708006	SNOMED CT	2.16.840.1.113883.6.96	home visit (procedure)
438515009	SNOMED CT	2.16.840.1.113883.6.96	E-mail encounter from carer (procedure)
14736009	SNOMED CT	2.16.840.1.113883.6.96	patient evaluation and management
4525004	SNOMED CT	2.16.840.1.113883.6.96	emergency department patient visit
12586001	SNOMED CT	2.16.840.1.113883.6.96	physician direction of emergency medical systems
11429006	SNOMED CT	2.16.840.1.113883.6.96	consultation
680007	SNOMED CT	2.16.840.1.113883.6.96	radiation physics consultation
726007	SNOMED CT	2.16.840.1.113883.6.96	pathology consultation, comprehensive, records and specimen with report
...			

**Figure 24: Encounter Order (CDP1) Example**

```
<entry>
  <encounter moodCode="RQO" classCode="ENC">
    <templateId root="2.16.840.1.113883.10.20.35.4.2"/>
    <!-- Encounter Order (CDP1) template -->
    <id root="9a6d1bac-17d3-4195-89a4-1121bc809b4d"/>
    <code code="185349003"
      displayName="encounter for check-up (procedure)"
      codeSystemName="SNOMED CT" codeSystem="2.16.840.1.113883.6.96"> </code>
    <statusCode code="active"/>
    <effectiveTime value="20130615"/>
    <performer>
      <assignedEntity>
        ...
      </assignedEntity>
    </performer>
    <author typeCode="AUT">
      <!-- Author Participation -->
    </author>
    <entryRelationship typeCode="REFR">
      <observation classCode="OBS" moodCode="EVN">
        <!-- Patient Priority Preference-->
        <templateId root="2.16.840.1.113883.10.20.22.4.142"/>
        ...
      </observation>
    </entryRelationship>
    <entryRelationship typeCode="REFR">
      <observation classCode="OBS" moodCode="EVN">
        <!-- Provider Priority Preference-->
        ...
      </observation>
    </entryRelationship>
  </encounter>
</entry>
```

## 7.5 Externally Defined CDE Observation (CDP1)

[observation: identifier urn:oid:2.16.840.1.113883.10.20.35.4.3 (open)]

**Table 49: Externally Defined CDE Observation (CDP1) Contexts**

Contained By:	Contains:
<a href="#">Externally Defined CDE Organizer (CDP1)</a> (required)	<a href="#">Author Participation</a> <a href="#">Externally Defined CDE Supporting Observation (CDP1)</a>

The Externally Defined CDE Observation template is used to convey the contents of a single externally defined CDE template (or questionnaire). The externalDocument information is used to reference the externally defined CDE template, its content model and the specific name-value pairs.

**Table 50: Externally Defined CDE Observation (CDP1) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.3)					
@classCode	1..1	SHALL		<a href="#">CDP1-3701</a>	2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">CDP1-3702</a>	2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">CDP1-3703</a>	
@root	1..1	SHALL		<a href="#">CDP1-3704</a>	2.16.840.1.113883.10.20.35.4.3
id	1..*	SHALL		<a href="#">CDP1-3705</a>	
code	1..1	SHALL		<a href="#">CDP1-3706</a>	
statusCode	1..1	SHALL		<a href="#">CDP1-3708</a>	
@code	1..1	SHALL		<a href="#">CDP1-3709</a>	2.16.840.1.113883.5.14 (ActStatus) = completed
effectiveTime	1..1	SHALL		<a href="#">CDP1-3710</a>	
author	0..*	SHOULD		<a href="#">CDP1-3711</a>	<a href="#">Author Participation</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)
reference	1..1	SHALL		<a href="#">CDP1-3712</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-3713</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
externalDocument	1..1	SHALL		<a href="#">CDP1-3714</a>	2.16.840.1.113883.5.6 (HL7ActClass) = DOC
text	1..1	SHALL		<a href="#">CDP1-3715</a>	
reference	1..1	SHALL		<a href="#">CDP1-3716</a>	
id	1..1	SHALL		<a href="#">CDP1-3718</a>	
@root	1..1	SHALL		<a href="#">CDP1-3719</a>	
versionNumber	0..1	SHOULD		<a href="#">CDP1-3721</a>	
entryRelationship	1..*	SHALL		<a href="#">CDP1-3723</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-3724</a>	COMP
observation	1..1	SHALL		<a href="#">CDP1-3725</a>	<a href="#">Externally Defined CDE Supporting Observation (CDP1)</a> (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.13)

1. **SHALL** contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF:CDP1-3701).
2. **SHALL** contain exactly one [1..1] @moodCode="EVN" (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF:CDP1-3702).
3. **SHALL** contain exactly one [1..1] templateId (CONF:CDP1-3703) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.35.4.3" (CONF:CDP1-3704).

4. **SHALL** contain at least one [1..\*] **id** (CONF:CDP1-3705).
5. **SHALL** contain exactly one [1..1] **code** (CONF:CDP1-3706).
  - a. **SHOULD** be from LOINC (CodeSystem: 2.16.840.1.113883.6.1) or SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) identifying the externally defined template (CONF:CDP1-3707).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:CDP1-3708).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus 2.16.840.1.113883.5.14 **STATIC**) (CONF:CDP1-3709).

Represents time the externally defined template was used by the provider to record the CDEs.

7. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:CDP1-3710).

Represents the provider that used the externally defined template to record the CDEs.

8. **SHOULD** contain zero or more [0..\*] [Author Participation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:CDP1-3711).
9. **SHALL** contain exactly one [1..1] **reference** (CONF:CDP1-3712) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode**="REFR" refers to (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-3713).
  - b. **SHALL** contain exactly one [1..1] **externalDocument**="DOC" Document (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6) (CONF:CDP1-3714).
    - i. This externalDocument **SHALL** contain one [1..1] **text** (CONF:CDP1-3715).
      1. The text **SHALL** contain one [1..1] **reference** (CONF:CDP1-3716).
        - a. The URL of the externally defined CDE template or questionnaire **SHALL** be represented in Observation/reference/ExternalDocument/text/reference by a linkHTML element in narrative block (CONF:CDP1-3717).
    - ii. This externalDocument **SHALL** contain exactly one [1..1] **id** (CONF:CDP1-3718) such that it
      1. **SHALL** contain exactly one [1..1] **@root** (CONF:CDP1-3719).
        - a. This id is equal to the specific identifier for the externally defined CDE template or questionnaire. (CONF:CDP1-3720).
    - iii. This externalDocument **SHOULD** contain zero or one [0..1] **versionNumber** (CONF:CDP1-3721).
      1. The version number is equal to the externally defined CDE template or questionnaire version number (CONF:CDP1-3722).
10. **SHALL** contain one or more [1..\*] **entryRelationship** (CONF:CDP1-3723) such that it

- a. **SHALL** contain exactly one [1..1] @typeCode="COMP" has component (CONF:CDP1-3724).
- b. **SHALL** contain exactly one [1..1] [Externally Defined CDE Supporting Observation \(CDP1\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.13) (CONF:CDP1-3725).

**Figure 25: Externally Defined CDE Observation (CDP1) Example**

```
<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.35.4.3"/>
  <id root="c6b5a04b-2bf4-49d1-8336-636a3813df0b"/>
  <code code="54614-3"
    displayName="Brief Interview for Mental Status"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC"/>
  <statusCode code="completed"/>
  <effectiveTime value="20120214"/>
  <reference typeCode="REFR">
    <externalDocument>
      <id root="b50b7910-7ffb-4f4c-bbe4-177ed68cbbf3" />
      <text mediaType="text/xml">
        <reference value="http://www.library.example.org/179ed68cabf3.xml" />
      </text>
      <versionNumber value="1" />
    </externalDocument>
  </reference>
  <entryRelationship typeCode="COMP">
    <observation classCode="OBS" moodCode="EVN">
      <!-- ** Externally Defined CDE Supporting Observation (CDP1)** -->
      <templateId root="2.16.840.1.113883.10.20.35.4.13"/>
      . . .
    </observation>
  </entryRelationship>
</observation>
```

## 7.6 Externally Defined CDE Organizer (CDP1)

[act: templateId 2.16.840.1.113883.10.20.35.4.4 (open)]

**Table 51: Externally Defined CDE Organizer (CDP1) Contexts**

Contained By:	Contains:
<a href="#">Externally Defined CDE Section (CDP1)</a> (required)	<a href="#">Externally Defined CDE Observation (CDP1)</a>

This template provides the ability to group externally defined CDE templates (or questionnaires) based on based on clinical or administrative concepts.

**Table 52: Externally Defined CDE Organizer (CDP1) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Fixed Value
Organizer (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.4)					
@classCode	1..1	SHALL		<a href="#">CDP1-3801</a>	2.16.840.1.113883.5.6 (HL7ActClass) = CLUSTER
@moodCode	1..1	SHALL		<a href="#">CDP1-3802</a>	2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">CDP1-3803</a>	
@root	1..1	SHALL		<a href="#">CDP1-3804</a>	2.16.840.1.113883.10.20.35.4.4
id	1..*	SHALL		<a href="#">CDP1-3805</a>	
code	1..1	SHALL		<a href="#">CDP1-3806</a>	
@code	1..1	SHALL		<a href="#">CDP1-3807</a>	
statusCode	1..1	SHALL		<a href="#">CDP1-3809</a>	
@code	1..1	SHALL		<a href="#">CDP1-3810</a>	2.16.840.1.113883.5.14 (ActStatus) = completed
component	1..*	SHALL		<a href="#">CDP1-3811</a>	
observation	1..1	SHALL		<a href="#">CDP1-3812</a>	<a href="#">Externally Defined CDE Observation (CDP1)</a> (templateId:2.16.840.1.113883.10.20.35.4.3

1. **SHALL** contain exactly one [1..1] **@classCode** = "CLUSTER" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6) (CONF:CDP1-3801).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF:CDP1-3802).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:CDP1-3803) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.35.4.4" (CONF:CDP1-3804).
4. **SHALL** contain at least one [1..\*] **id** (CONF:CDP1-3805)
5. **SHALL** contain exactly one [1..1] **code** (CONF:CDP1-3806).
  - a. This code **SHALL** contain exactly one [1..1] **@code** (CONF:CDP1-3807).
    - i. Such that the **@code** **SHOULD** be from LOINC (CodeSystem: 2.16.840.1.113883.6.1) or SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) and represents the clinical or administrative concepts of the externally defined templates and CDEs in the Externally Defined CDE Observation (CONF:CDP1-3808).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:CDP1-3809).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus 2.16.840.1.113883.5.14 **STATIC**) (CONF:CDP1-3810).
7. **SHALL** contain at least one [1..\*] **component** (CONF:CDP1-3811) such that it

- a. **SHALL** contain one or more [1..\*] [Externally Defined CDE Observation \(CDP1\)](#) (templateId:2.16.840.1.113883.10.20.35.4.3) (CONF:CDP1-3812).

**Figure 26: Externally Defined CDE Organizer (CDP1) Example**

```
<organizer classCode="CLUSTER" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.35.4.4" />
  <!-- Externally Defined CDE Organizer (CDP1) template -->
  <code code="59284-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
  displayName="Consent" />
  <statusCode code="completed" />
  <component>
    <observation classCode="OBS" moodCode="EVN">
      <!-- Externally Defined CDE Observation (CDP1) template -->
      <templateId root="2.16.840.1.113883.10.20.35.4.3" />
      . . .
    </observation>
  </component>
</organizer>
```

## 7.7 Externally Defined CDE Supporting Observation (CDP1)

[observation: identifier urn:oid:2.16.840.1.113883.10.20.35.4.13  
(open)]

**Table 53: Externally Defined CDE Supporting Observation (CDP1) Contexts**

Contained By:	Contains:
<a href="#">Externally Defined CDE Observation (CDP1)</a> (required)	

An Externally Defined CDE Supporting Observation represents the components of an externally defined template used to facilitate the collection of information during an encounter. The individual parts that make up the template are a group of related observations (name-value pairs) as defined in the template.

**Table 54: Externally Defined CDE Supporting Observation (CDP1) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.13)					
@classCode	1..1	SHALL		<a href="#">CDP1-4701</a>	2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">CDP1-4702</a>	2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">CDP1-4703</a>	
@root	1..1	SHALL		<a href="#">CDP1-4704</a>	2.16.840.1.113883.10.20.35.4.13
id	1..1	SHALL		<a href="#">CDP1-4705</a>	
code	1..1	SHALL		<a href="#">CDP1-4706</a>	
@code	1..1	SHALL		<a href="#">CDP1-4707</a>	
statusCode	1..1	SHALL		<a href="#">CDP1-4709</a>	
@code	1..1	SHALL		<a href="#">CDP1-4710</a>	2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..*	SHALL		<a href="#">CDP1-4711</a>	

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF:CDP1-4701).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF:CDP1-4702).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:CDP1-4703) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.35.4.13" (CONF:CDP1-4704).  
The id is the unique id of the CDE defined in the template
4. **SHALL** contain exactly one [1..1] **id** (CONF:CDP1-4705).
5. **SHALL** contain exactly one [1..1] **code** (CONF:CDP1-4706).
  - a. This code **SHALL** contain exactly one [1..1] **@code** (CONF:CDP1-4707).
    - i. Such that the **@code** **SHOULD** be from LOINC (CodeSystem: 2.16.840.1.113883.6.1) or SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) and represents components of the template (CONF:CDP1-4708).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:CDP1-4709).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus 2.16.840.1.113883.5.14 **STATIC**) (CONF:CDP1-4710).
7. **SHALL** contain at least one [1..\*] **value** (CONF:CDP1-4711).



**Figure 27: Externally Defined CDE Supporting Observation (CDP1) Example**

```
<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.35.4.13"/>
  <id root="f4dce790-8328-11db-9fe1-0800200c9a44"/>
  <code code="248240001" displayName="motor response"
    codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/>
  <statusCode code="completed"/>
  <value xsi:type="INT" value="3"/>
</observation>
```

## 7.8 Immunization Activity Order (CDP1)

[substanceAdministration: identifier  
urn:oid:2.16.840.1.113883.10.20.35.4.9 (open)]

**Table 55: Immunization Activity Order (CDP1) Contexts**

Contained By:	Contains:
<a href="#">Orders Placed Section (CDP1)</a> (required)	<a href="#">Author Participation</a> <a href="#">Indication (V2)</a> <a href="#">Instruction (V2)</a> <a href="#">Immunization Medication Information (V2)</a> <a href="#">Precondition for Substance Administration (V2)</a> <a href="#">Priority Preference</a>

This template represents ordered immunizations. Planned Immunization Activity is very similar to Planned Medication Activity with some key differences; for example, the drug code system is constrained to CVX codes.

The priority of the immunization activity to the patient and provider is communicated through Priority Preference. The effectiveTime indicates the time when the immunization activity did take place or is intended to take place.

Entries using the Immunization Activity Order template must be placed orders (moodCode = RQO), with a status (statusCode) of “active” or “completed”.

Author Participation is required and indicates the provider who placed the order and the time when the order was placed

The Immunization Activity Order (CDP1) template conforms to the C-CDA R2 Planned Immunization Activity template (urn:oid:2.16.840.1.113883.10.20.22.4.120) with the following additional constraints:

- 1) moodCode = RQO.
- 2) statusCode = “active” or “completed”.
- 3) effectiveTime is the time when the immunization activity did take place (statusCode “completed”) or is intended to take place (statusCode “active”).
- 4) Author Participation is required and defines author and time the order was placed.

**Table 56: Immunization Activity Order (CDP1) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Fixed Value
substanceAdministration (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.9)					
@classCode	1..1	SHALL		<a href="#">CDP1-4301</a>	2.16.840.1.113883.5.6 (HL7ActClass) = SBADM
@moodCode	1..1	SHALL		<a href="#">CDP1-4302</a>	2.16.840.1.113883.5.1001 (ActMood)= RQO
templateId	1..1	SHALL		<a href="#">CDP1-4303</a>	
@root	1..1	SHALL		<a href="#">CDP1-4304</a>	2.16.840.1.113883.10.20.35.4.9
id	1..*	SHALL		<a href="#">CDP1-4305</a>	
statusCode	1..1	SHALL		<a href="#">CDP1-4306</a>	
@code	1..1	SHALL		<a href="#">CDP1-4307</a>	2.16.840.1.113883.10.20.35.6.1 (ActStatus2)
effectiveTime	1..1	SHALL		<a href="#">CDP1-4308</a>	
repeatNumber	0..1	MAY		<a href="#">CDP1-4309</a>	
routeCode	0..1	MAY		<a href="#">CDP1-4310</a>	2.16.840.1.113883.3.88.12.3221.8.7 (Medication Route FDA Value Set)
approachSiteCode	0..*	MAY		<a href="#">CDP1-4311</a>	2.16.840.1.113883.3.88.12.3221.8.9 (Body Site Value Set)
doseQuantity	0..1	MAY		<a href="#">CDP1-4312</a>	
@unit	0..1	SHOULD		<a href="#">CDP1-4313</a>	2.16.840.1.113883.1.11.12839 (UnitsOfMeasureCaseSensitive)
consumable	1..1	SHALL		<a href="#">CDP1-4318</a>	
manufacturedProduct	1..1	SHALL		<a href="#">CDP1-4319</a>	<b>Immunization Medication Information (V2)</b> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09)
performer	0..*	MAY		<a href="#">CDP1-4320</a>	
author	1..1	SHALL		<a href="#">CDP1-4321</a>	<b>Author Participation</b> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)
entryRelationship	0..*	MAY		<a href="#">CDP1-4325</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-4326</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">CDP1-4327</a>	<b>Priority Preference</b> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143)
entryRelationship	0..*	MAY		<a href="#">CDP1-4328</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-4329</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON
observation	1..1	SHALL		<a href="#">CDP1-4330</a>	<b>Indication (V2)</b> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09)
entryRelationship	0..*	MAY		<a href="#">CDP1-4331</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-4332</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ

XPath	Card.	Verb	Data Type	CONF#	Fixed Value
act	1..1	SHALL		<a href="#">CDP1-4333</a>	<a href="#">Instruction (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09)
precondition	0..*	MAY		<a href="#">CDP1-4334</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-4335</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = PRCN
criterion	1..1	SHALL		<a href="#">CDP1-4336</a>	<a href="#">Precondition for Substance Administration (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09)

1. Conforms to [Planned Immunization Activity \(V2\)](#) template (urn:oid:2.16.840.1.113883.10.20.22.4.120).
2. **SHALL** contain exactly one [1..1] **@classCode**="SBADM" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF:CDP1-4301).
3. **SHALL** contain exactly one [1..1] **@moodCode** = "RQO" (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF:CDP1-4302).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:CDP1-4303) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.35.4.9" (CONF:CDP1-4304).
5. **SHALL** contain at least one [1..\*] **id** (CONF:CDP1-4305).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:CDP1-4306).
  - a. This **statusCode** **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [ActStatus2](#) 2.16.840.1.113883.10.20.35.6.1 **STATIC** (CONF:CDP1-4307).

The **effectiveTime** in an ordered immunization activity represents the time that the activity did or should occur.

7. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:CDP1-4308).

In an immunization activity order, **repeatNumber** defines the number of allowed administrations. For example, a **repeatNumber** of "3" means that the substance can be administered up to 3 times.

8. **MAY** contain zero or one [0..1] **repeatNumber** (CONF:CDP1-4309).
9. **MAY** contain zero or one [0..1] **routeCode**, which **SHALL** be selected from ValueSet [Medication Route FDA Value Set](#) 2.16.840.1.113883.3.88.12.3221.8.7 **DYNAMIC** (CONF:CDP1-4310).
10. **MAY** contain zero or more [0..\*] **approachSiteCode**, which **SHALL** be selected from ValueSet [Body Site](#) 2.16.840.1.113883.3.88.12.3221.8.9 **DYNAMIC** (CONF:CDP1-4311).
11. **MAY** contain zero or one [0..1] **doseQuantity** (CONF:CDP1-4312).
  - a. The **doseQuantity**, if present, **SHOULD** contain zero or one [0..1] **@unit**, which **SHALL** be selected from ValueSet [T UnitsofMeasureCaseSensitive](#) 2.16.840.1.113883.1.11.12839 **DYNAMIC** (CONF:CDP1-4313).
12. **SHALL** contain exactly one [1..1] **consumable** (CONF:CDP1-4318).

- a. This consumable **SHALL** contain exactly one [1..1] [Immunization Medication Information \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09) (CONF:CDP1-4319).

The clinician who performed or is expected to perform the immunization activity could be identified using substanceAdministration/performer.

13. **MAY** contain zero or more [0..\*] **performer** (CONF:CDP1-4320).

The author in an immunization activity order represents the clinician who ordered the immunization activity and the time is the time the order was placed.

14. **SHALL** contain exactly one [1..1] [Author Participation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:CDP1-4321).

This entryRelationship represents the priority that a patient or a provider places on the immunization activity order.

15. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:CDP1-4325) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="REFR"** Refers to (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-4326).
  - b. **SHALL** contain exactly one [1..1] [Priority Preference](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:CDP1-4327).

This entryRelationship represents the indication for the immunization activity order.

16. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:CDP1-4328) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="RSON"** Has Reason (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-4329).
  - b. **SHALL** contain exactly one [1..1] [Indication \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09) (CONF:CDP1-4330).

This entryRelationship captures any instructions associated with the immunization activity order.

17. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:CDP1-4331) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="SUBJ"** Has Subject (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-4332).
  - b. **SHALL** contain exactly one [1..1] [Instruction \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:CDP1-4333).

18. **MAY** contain zero or more [0..\*] **precondition** (CONF:CDP1-4334).
  - a. The precondition, if present, **SHALL** contain exactly one [1..1] **@typeCode="PRCN"** Precondition (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-4335).
  - b. The precondition, if present, **SHALL** contain exactly one [1..1] [Precondition for Substance Administration \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09) (CONF:CDP1-4336).

**Table 57: Medication Route FDA**

Value Set: Medication Route FDA 2.16.840.1.113883.3.88.12.3221.8.7			
Route of Administration value set is based upon FDA Drug Registration and Listing Database (FDA Orange Book) which are used in FDA structured Product and Labelling (SPL). Specific URL Pending			
Value Set Source: <a href="http://ushik.ahrq.gov/ViewItemDetails?system=mdr&amp;itemKey=84244000">http://ushik.ahrq.gov/ViewItemDetails?system=mdr&amp;itemKey=84244000</a>			
Code	Code System	Code System OID	Print Name
C38192	FDA RouteOfAdministration	2.16.840.1.113883.3.26.1.1	AURICULAR (OTIC)
C38193	FDA RouteOfAdministration	2.16.840.1.113883.3.26.1.1	BUCCAL
C38194	FDA RouteOfAdministration	2.16.840.1.113883.3.26.1.1	CONJUNCTIVAL
C38675	FDA RouteOfAdministration	2.16.840.1.113883.3.26.1.1	CUTANEOUS
C38197	FDA RouteOfAdministration	2.16.840.1.113883.3.26.1.1	DENTAL
C38633	FDA RouteOfAdministration	2.16.840.1.113883.3.26.1.1	ELECTRO-OSMOSIS
C38205	FDA RouteOfAdministration	2.16.840.1.113883.3.26.1.1	ENDOCERVICAL
C38206	FDA RouteOfAdministration	2.16.840.1.113883.3.26.1.1	ENDOSINUSIAL
C38208	FDA RouteOfAdministration	2.16.840.1.113883.3.26.1.1	ENDOTRACHEAL
C38209	FDA RouteOfAdministration	2.16.840.1.113883.3.26.1.1	ENTERAL
...			

**Table 58: Body Site**

Value Set: Body Site 2.16.840.1.113883.3.88.12.3221.8.9			
Contains values descending from the SNOMED CT® Anatomical Structure (91723000) hierarchy or Acquired body structure (body structure) (280115004) or Anatomical site notations for tumor staging (body structure) (258331007) or Body structure, altered from its original anatomical structure (morphologic abnormality) (118956008) or Physical anatomical entity (body structure) (91722005) This indicates the anatomical site.			
Specific URL Pending			
Value Set Source: <a href="https://vsac.nlm.nih.gov">https://vsac.nlm.nih.gov</a>			
Code	Code System	Code System OID	Print Name
362783006	SNOMED CT	2.16.840.1.113883.6.96	entire medial surface of lower extremity (body structure)
302539009	SNOMED CT	2.16.840.1.113883.6.96	entire hand (body structure)
287679003	SNOMED CT	2.16.840.1.113883.6.96	left hip region structure (body structure)
3341006	SNOMED CT	2.16.840.1.113883.6.96	right lung structure (body structure)
87878005	SNOMED CT	2.16.840.1.113883.6.96	left ventricular structure (body structure)
49848007	SNOMED CT	2.16.840.1.113883.6.96	structure of myocardium of left ventricle (body structure)
38033009	SNOMED CT	2.16.840.1.113883.6.96	amputation stump (body structure)
305005006	SNOMED CT	2.16.840.1.113883.6.96	6/7 interchondral joint (body structure)
28726007	SNOMED CT	2.16.840.1.113883.6.96	corneal structure (body structure)
75324005	SNOMED CT	2.16.840.1.113883.6.96	70 to 79 percent of body surface (body structure)
...			

**Table 59: UnitsOfMeasureCaseSensitive**

Value Set: UnitsOfMeasureCaseSensitive 2.16.840.1.113883.1.11.12839			
The UCUM code system provides a set of structural units from which working codes are built. There is an unlimited number of possible valid UCUM codes.			
Value Set Source: <a href="http://unitsofmeasure.org/ucum.html">http://unitsofmeasure.org/ucum.html</a>			
Code	Code System	Code System OID	Print Name
min	UCUM	2.16.840.1.113883.6.8	minute
hour	UCUM	2.16.840.1.113883.6.8	hr
%	UCUM	2.16.840.1.113883.6.8	percent
cm	UCUM	2.16.840.1.113883.6.8	centimeter
g	UCUM	2.16.840.1.113883.6.8	gram
g/(12.h)	UCUM	2.16.840.1.113883.6.8	gram per 12 hour
g/L	UCUM	2.16.840.1.113883.6.8	gram per liter
mol	UCUM	2.16.840.1.113883.6.8	mole
[IU]	UCUM	2.16.840.1.113883.6.8	international unit
Hz	UCUM	2.16.840.1.113883.6.8	Hertz
...			

**Figure 28: Immunizations Activity Order (CDP1) Example**

```
<substanceAdministration classCode="SBADM" moodcode="RQO">
  <templateID root="2.16.840.1.1.113883.10.20.35.4.5" />
  <!-- Planned Immunization Activity -->
  <templateId root="2.16.840.1.1.113883.10.20.22.4.120" />
  <id root="81505d5e-2305-42b3-9273-f579d622000d" />
  <statusCode code="active" />
  <effectiveTime xsi:type="IVL_TS" value="20131115" />
  <repeatNumber value="1" />
  <routeCode code="IM" codeSystem="2.16.840.1.113883.5.112"
codeSystemName="RouteOfAdministration" displayName="Intramuscular injection"
/>
  <consumable>
    <!-- Immunization Medication Information (V2) -->
  </consumable>
  <performer>
    ...
  </performer>
  <author>
    <!-- Author Participation -->
  </author>
  <entryRelationship typeCode="REFR">
    <!-- Patient Priority Preference -->
    ...
  </entryRelationship>
  <entryRelationship typeCode="REFR">
    <!-- Provider Priority Preference -->
    ...
  </entryRelationship>
  <entryRelationship typeCode="RSON">
    <!-- Indication (V2) -->
    ...
  </entryRelationship>
  <entryRelationship typeCode="SUBJ">
    <!-- Instruction (V2) -->
    ...
  </entryRelationship>
  <precondition typeCode="PRCN">
    <!-- Precondition for Substance Administration (V2) -->
    ...
  </precondition>
</substanceAdministration>
```

## 7.9 Medication Activity Order (CDP1)

[substanceAdministration: identifier  
urn:oid:2.16.840.1.113883.10.20.35.4.5 (open)]

**Table 60: Medication Activity Order (CDP1) Contexts**

Contained By:	Contains:
<a href="#">Orders Placed Section (CDP1)</a> (required)	<a href="#">Author Participation</a> <a href="#">Indication (V2)</a> <a href="#">Instruction (V2)</a> <a href="#">Medication Information (V2)</a> <a href="#">Precondition for Substance Administration (V2)</a>

Contained By:	Contains:
	<a href="#">Priority Preference</a>

This template represents ordered medication activities.

The priority of the medication activity to the patient and provider is communicated through Priority Preference. The effectiveTime indicates the time when the medication activity did take place or is intended to take place.

Entries using the Medication Activity Order template must be placed orders (moodCode = RQO), with a status (statusCode) of “active” or “completed”.

Author Participation is required and indicates the provider who placed the order and the time when the order was placed

The Medication Activity Order (CDP1) template conforms to the C-CDA R2 Planned Medication Activity (V2) template

(urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09) with the following additional constraints:

- 5) moodCode = RQO.
- 6) statusCode = “active” or “completed”.
- 7) effectiveTime is the time when the medication activity did take place (statusCode “completed”) or is intended to take place (statusCode “active”).
- 8) Author Participation is required and defines author and time the order was placed.



**Table 61: Medication Activity Order (CDP1) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Fixed Value
substanceAdministration (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.5)					
@classCode	1..1	SHALL		<a href="#">CDP1-3901</a>	2.16.840.1.113883.5.6 (HL7ActClass) = SBADM
@moodCode	1..1	SHALL		<a href="#">CDP1_3902</a>	2.16.840.1.113883.5.1001 (ActMood)= RQO
templateId	1..1	SHALL		<a href="#">CDP1_3903</a>	
@root	1..1	SHALL		<a href="#">CDP1_3904</a>	2.16.840.1.113883.10.20.35.4.5
id	1..*	SHALL		<a href="#">CDP1_3905</a>	
statusCode	1..1	SHALL		<a href="#">CDP1_3906</a>	
@code	1..1	SHALL		<a href="#">CDP1-3907</a>	2.16.840.1.113883.10.20.35.6.1 (ActStatus2)
effectiveTime	1..1	SHALL		<a href="#">CDP1_3908</a>	
repeatNumber	0..1	MAY		<a href="#">CDP1_3909</a>	
routeCode	0..1	MAY		<a href="#">CDP1_3910</a>	2.16.840.1.113883.3.88.12.3221.8.7 (Medication Route FDA Value Set)
approachSiteCode	0..*	MAY		<a href="#">CDP1_3911</a>	2.16.840.1.113883.3.88.12.3221.8.9 (Body Site Value Set)
doseQuantity	0..1	MAY		<a href="#">CDP1_3912</a>	
@unit	0..1	SHOULD		<a href="#">CDP1_3913</a>	2.16.840.1.113883.1.11.12839 (UnitsOfMeasureCaseSensitive)
rateQuantity	0..1	MAY		<a href="#">CDP1_3914</a>	
@unit	0..1	SHOULD		<a href="#">CDP1_3915</a>	2.16.840.1.113883.1.11.12839 (UnitsOfMeasureCaseSensitive)
maxDoseQuantity	0..1	MAY		<a href="#">CDP1_3916</a>	
administrationUnitCode	0..1	MAY		<a href="#">CDP1_3917</a>	2.16.840.1.113883.1.11.14570 (AdministrableDrugForm)
consumable	1..1	SHALL		<a href="#">CDP1_3918</a>	
manufacturedProduct	1..1	SHALL		<a href="#">CDP1_3919</a>	<b>Medication Information (V2)</b> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09)
performer	0..*	MAY		<a href="#">CDP1_3920</a>	
author	1..1	SHALL		<a href="#">CDP1_3921</a>	<b>Author Participation</b> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)
entryRelationship	0..*	MAY		<a href="#">CDP1_3925</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1_3926</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">CDP1_3927</a>	<b>Priority Preference</b> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143)
entryRelationship	0..*	MAY		<a href="#">CDP1_3928</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1_3929</a>	2.16.840.1.113883.5.1002

XPath	Card.	Verb	Data Type	CONF#	Fixed Value
					(HL7ActRelationshipType) = RSON
observation	1..1	SHALL		<a href="#">CDP1_3930</a>	<b>Indication (V2)</b> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09)
entryRelationship	0..*	MAY		<a href="#">CDP1_3931</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1_3932</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
act	1..1	SHALL		<a href="#">CDP1_3933</a>	<b>Instruction (V2)</b> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09)
precondition	0..*	MAY		<a href="#">CDP1_3934</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1_3935</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = PRCN
criterion	1..1	SHALL		<a href="#">CDP1_3936</a>	<b>Precondition for Substance Administration (V2)</b> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09)

1. Conforms to [Planned Medication Activity \(V2\)](#) template (urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09).
2. **SHALL** contain exactly one [1..1] **@classCode**="SBADM" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF:CDP1-3901).
3. **SHALL** contain exactly one [1..1] **@moodCode** = "RQO" (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF:CDP1-3902).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:CDP1-3903) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.35.4.5" (CONF:CDP1-3904).
5. **SHALL** contain at least one [1..\*] **id** (CONF:CDP1-3905).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:CDP1-3906).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [ActStatus2](#) 2.16.840.1.113883.10.20.35.6.1 **STATIC** (CONF:CDP1-3907).

The effectiveTime in an ordered medication activity represents the time that the medication activity should occur.

7. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:CDP1-3908).

In a medication activity order, repeatNumber defines the number of allowed administrations. For example, a repeatNumber of "3" means that the substance can be administered up to 3 times.

8. **MAY** contain zero or one [0..1] **repeatNumber** (CONF:CDP1-3909).
9. **MAY** contain zero or one [0..1] **routeCode**, which **SHALL** be selected from ValueSet [Medication Route FDA Value Set](#) 2.16.840.1.113883.3.88.12.3221.8.7 **DYNAMIC** (CONF:CDP1-3910).

10. **MAY** contain zero or more [0..\*] **approachSiteCode**, which **SHALL** be selected from ValueSet [Body Site](#) 2.16.840.1.113883.3.88.12.3221.8.9 **DYNAMIC** (CONF:CDP1-3911).
11. **MAY** contain zero or one [0..1] **doseQuantity** (CONF:CDP1-3912).
  - a. The doseQuantity, if present, **SHOULD** contain zero or one [0..1] **@unit**, which **SHALL** be selected from ValueSet [UnitsofMeasureCaseSensitive](#) 2.16.840.1.113883.1.11.12839 **DYNAMIC** (CONF:CDP1-3913).
12. **MAY** contain zero or one [0..1] **rateQuantity** (CONF:CDP1-3914).
  - a. The rateQuantity, if present, **SHOULD** contain zero or one [0..1] **@unit**, which **SHALL** be selected from ValueSet [UnitsofMeasureCaseSensitive](#) 2.16.840.1.113883.1.11.12839 **DYNAMIC** (CONF:CDP1-3915).
13. **MAY** contain zero or one [0..1] **maxDoseQuantity** (CONF:CDP1-3916).
14. **MAY** contain zero or one [0..1] **administrationUnitCode**, which **SHALL** be selected from ValueSet [AdministrableDrugForm](#) 2.16.840.1.113883.1.11.14570 **DYNAMIC** (CONF:CDP1-3917).
15. **SHALL** contain exactly one [1..1] **consumable** (CONF:CDP1-3918).
  - a. This consumable **SHALL** contain exactly one [1..1] [Medication Information \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09) (CONF:CDP1-3919).

The clinician who performed or is expected to perform the medication activity could be identified using substanceAdministration/performer.

16. **MAY** contain zero or more [0..\*] **performer** (CONF:CDP1-3920).

The author in a medication activity order represents the clinician who ordered the medication activity and the time is the time the order was placed.

17. **SHALL** contain exactly one [1..1] [Author Participation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:CDP1-3921).

This entryRelationship represents the priority that a patient or a provider places on the medication activity order.

18. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:CDP1-3925) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="REFR"** Refers to (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-3926).
  - b. **SHALL** contain exactly one [1..1] [Priority Preference](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:CDP1-3927).

This entryRelationship represents the indication for the medication activity order.

19. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:CDP1-3928) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="RSON"** Has Reason (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-3929).
  - b. **SHALL** contain exactly one [1..1] [Indication \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09) (CONF:CDP1-3930).

This entryRelationship captures any instructions associated with the medication activity order.

20. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:CDP1-3931) such that it
- SHALL** contain exactly one [1..1] **@typeCode="SUBJ"** Has Subject (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-3932).
  - SHALL** contain exactly one [1..1] **Instruction (V2)** (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:CDP1-3933).
21. **MAY** contain zero or more [0..\*] **precondition** (CONF:CDP1-3934).
- The precondition, if present, **SHALL** contain exactly one [1..1] **@typeCode="PRCN"** Precondition (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-3935).
  - The precondition, if present, **SHALL** contain exactly one [1..1] **Precondition for Substance Administration (V2)** (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09) (CONF:CDP1-3936).

**Table 62: AdministrableDrugForm**

Value Set: AdministrableDrugForm 2.16.840.1.113883.1.11.14570			
Indicates the form in which the drug product should be administered.			
Value Set Source:			
<a href="http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html">http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html</a>			
Code	Code System	Code System OID	Print Name
PUFF	orderableDrugForm	2.16.840.1.113883.5.85	Puff
SCOOP	orderableDrugForm	2.16.840.1.113883.5.85	Scoops
APPFUL	orderableDrugForm	2.16.840.1.113883.5.85	Applicatorful
DROP	orderableDrugForm	2.16.840.1.113883.5.85	Drops
SPRY	orderableDrugForm	2.16.840.1.113883.5.85	Sprays
...			

**Figure 29: Medication Action Order (CDP1) Example**

```
<substanceAdministration moodCode="RQO" classCode="SBADM">
  <templateId root="2.16.840.1.113883.10.20.35.4.5" />
  <!-- Medication Activity Order (CDP1)-->
  <id root="cdbc33f0-6cde-11db-9fe1-0800200c9a66" />
  <text>Heparin 0.25 ml Pre-filled Syringe</text>
  <statusCode code="completed" />
  <!-- The effectiveTime in a medication activity order
       represents the time that the medication should occur. -->
  <effectiveTime value="20130905" />
  <consumable>
    <manufacturedProduct classCode="MANU">
      <!-- Medication Information (V2) -->
      ...
    </manufacturedProduct>
  </consumable>
  <entryRelationship typeCode="REFR">
    <observation classCode="OBS" moodCode="EVN">
      <!-- Patient Priority Preference-->
      ...
    </observation>
  </entryRelationship>
  <entryRelationship typeCode="REFR">
    <observation classCode="OBS" moodCode="EVN">
      <!-- Provider Priority Preference-->
      ...
    </observation>
  </entryRelationship>
  <entryRelationship typeCode="RSON">
    <!-- Indication (V2) -->
    ...
  </entryRelationship>
  <entryRelationship typeCode="SUBJ">
    <!-- Instruction (V2) -->
    ...
  </entryRelationship>
</substanceAdministration>
```

## 7.10 Observation Order (CDP1)

[observation: identifier urn:oid:2.16.840.1.113883.10.20.35.4.6 (open)]

**Table 63: Observation Order (CDP1) Contexts**

Contained By:	Contains:
<a href="#">Orders Placed Section (CDP1)</a> (required)	<a href="#">Author Participation</a> <a href="#">Indication (V2)</a> <a href="#">Instruction (V2)</a> <a href="#">Planned Coverage</a> <a href="#">Priority Preference</a>

This template represents ordered observations that result in new information about the patient which cannot be classified as a procedure according to the HL7 RIM. Examples of these procedures are diagnostic imaging procedures, EEGs, and EKGs.

The importance of the observation to the patient and provider is communicated through Priority Preference. The effectiveTime indicates the time when the observation occurred or is intended to take place.

The Observation Order template may also indicate the potential insurance coverage for the observation.

All entries in the Observation Order template must be placed orders (moodCode = RQO).

Author Participation is required and indicates the provider who placed the order and the time when the order was placed

The Observation Order (CDP1) template conforms to the C-CDA R2 Planned Observation (V2) template (urn:hl7ii:2.16.840.1.113883.10.20.22.4.44:2014-06-09) with the following additional constraints:

- 1) moodCode = RQO
- 2) statusCode = “active” or “completed”.
- 3) effectiveTime is the time when the observation did take place (statusCode “completed”) or is intended to take place (statusCode “active”).
- 4) Author Participation is required and defines author and time the order was placed.
- 5) Supported codeSystems for Observation Order code expanded to include CPT-4 and ICD10 PCS.

**Table 64: Observation Order (CDP1) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Fixed Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.6)					
@classCode	1..1	SHALL		<a href="#">CDP1-4001</a>	2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">CDP1-4002</a>	2.16.840.1.113883.5.1001 (ActMood)= RQO
templateId	1..1	SHALL		<a href="#">CDP1-4003</a>	
@root	1..1	SHALL		<a href="#">CDP1-4004</a>	2.16.840.1.113883.10.20.35.4.6
id	1..*	SHALL		<a href="#">CDP1-4005</a>	
code	1..1	SHALL		<a href="#">CDP1-4006</a>	
statusCode	1..1	SHALL		<a href="#">CDP1-4008</a>	
@code	1..1	SHALL		<a href="#">CDP1-4009</a>	2.16.840.1.113883.10.20.35.6.1 (ActStatus2)
effectiveTime	0..1	SHOULD		<a href="#">CDP1-4010</a>	
value	0..1	MAY		<a href="#">CDP1-4011</a>	
methodCode	0..1	MAY		<a href="#">CDP1-4012</a>	
targetSiteCode	0..*	SHOULD		<a href="#">CDP1-4013</a>	2.16.840.1.113883.3.88.12.3221.8.9 (Body Site Value Set)
performer	0..*	MAY		<a href="#">CDP1-4014</a>	
author	1..1	SHALL		<a href="#">CDP1-4015</a>	<b>Author Participation</b> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)
entryRelationship	0..*	MAY		<a href="#">CDP1-4018</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-4019</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">CDP1-4020</a>	<b>Priority Preference</b> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143)
entryRelationship	0..*	MAY		<a href="#">CDP1-4021</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-4022</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON
observation	1..1	SHALL		<a href="#">CDP1-4023</a>	<b>Indication (V2)</b> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09)
entryRelationship	0..*	MAY		<a href="#">CDP1-4024</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-4025</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
act	1..1	SHALL		<a href="#">CDP1-4026</a>	<b>Instruction (V2)</b> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09)
entryRelationship	0..*	MAY		<a href="#">CDP1-4027</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-4028</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
act	1..1	SHALL		<a href="#">CDP1-4029</a>	<b>Planned Coverage</b> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.129)

1. Conforms to [Planned Observation \(V2\)](#) template (urn:hl7ii:2.16.840.1.113883.10.20.22.4.44:2014-06-09).

2. **SHALL** contain exactly one [1..1] **@classCode="OBS"** (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF:CDP1-4001).
3. **SHALL** contain exactly one [1..1] **@moodCode = "RQO"** (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF:CDP1-4002).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:CDP1-4003) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.35.4.6"** (CONF:CDP1-4004).
5. **SHALL** contain at least one [1..\*] **id** (CONF:CDP1-4005).
6. **SHALL** contain exactly one [1..1] **code** (CONF:CDP1-4006).
  - a. This **@code** **SHOULD** be selected from LOINC (CodeSystem: 2.16.840.1.113883.6.1) or CPT-4 (CodeSystem: 2.16.840.1.113883.6.12) or ICD10 PCS (CodeSystem: 2.16.840.1.113883.6.4) (CONF:CDP1-4007).
7. **SHALL** contain exactly one [1..1] **statusCode** (CONF:CDP1-4008)
  - a. This **statusCode** **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [ActStatus2](#) 2.16.840.1.113883.10.20.35.6.1 **STATIC** (CONF:CDP1-4009)

The **effectiveTime** in an ordered observation represents the time when the observation did or should occur.

8. **SHOULD** contain zero or one [0..1] **effectiveTime** (CONF:CDP1-4010).
9. **MAY** contain zero or one [0..1] **value** (CONF:CDP1-4011).

In an ordered observation the provider may suggest that an observation should be performed using a particular method.

10. **MAY** contain zero or one [0..1] **methodCode** (CONF:CDP1-4012).

The **targetSiteCode** is used to identify the part of the body of concern for the ordered observation.

11. **SHOULD** contain zero or more [0..\*] **targetSiteCode**, which **SHALL** be selected from ValueSet [Body Site](#) 2.16.840.1.113883.3.88.12.3221.8.9 **DYNAMIC** (CONF:CDP1-4013).

The clinician who did or is expected to perform the observation is/could be identified using **procedure/performer**.

12. **MAY** contain zero or more [0..\*] **performer** (CONF:CDP1-4014).

The author in an observation order represents the clinician who ordered the observation and the time is the time the order was placed.

13. **SHALL** contain exactly one [1..1] [Author Participation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:CDP1-4015).

This **entryRelationship** represents the priority that a patient or provider places on the observation.

14. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:CDP1-4018) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="REFR"** Refers to (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-4019).



- b. **SHALL** contain exactly one [1..1] Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:CDP1-4020).

This entryRelationship represents the indication for the observation.

- 15. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:CDP1-4021) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="RSON"** Has Reason (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-4022).
  - b. **SHALL** contain exactly one [1..1] Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09) (CONF:CDP1-4023).

This entryRelationship captures any instructions associated with the ordered observation.

- 16. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:CDP1-4024) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="SUBJ"** Has subject (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-4025).
  - b. **SHALL** contain exactly one [1..1] Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:CDP1-4026).

This entryRelationship represents the insurance coverage the patient may have for the observation.

- 17. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:CDP1-4027) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="COMP"** Has Component (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-4028).
  - b. **SHALL** contain exactly one [1..1] Planned Coverage (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.129) (CONF:CDP1-4029).

**Figure 30: Observation Order (CDP1) Example**

```
<observation classCode="OBS" moodCode="RQO">
  <templateId root="2.16.840.1.113883.10.20.35.4.6" />
  <!--Observation Order CDP1 template -->
  <id root="b52bee94-c34b-4e2c-8c15-5ad9d6def205" />
  <code code="284034009" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED
CT" displayName="pulse oximetry monitoring" />
  <statusCode code="completed" />
  <effectiveTime value="20130903" />
  <author typeCode="AUT">
    <!-- Author Participation -->
  </author>
  <entryRelationship typeCode="REFR">
    <!-- Patient Priority Preference -->
    ...

  </entryRelationship>
  <entryRelationship typeCode="REFR">
    <!-- Provider Priority Preference -->
    ...

  </entryRelationship>
  <entryRelationship typeCode="RSON">
    <!-- Indication (V2) -->
    ...

  </entryRelationship>
  <entryRelationship typeCode="SUBJ">
    <!-- Instruction (V2) -->
    ...

  </entryRelationship>
  <entryRelationship typeCode="COMP">
    <!-- Planned Coverage -->
    ...

  </entryRelationship>
</observation>
```

## 7.11 Procedure Order (CDP1)

[procedure: identifier urn:oid:2.16.840.1.113883.10.20.35.4.7 (open)]

**Table 65: Procedure Order (CDP1) Contexts**

Contained By:	Contains:
<a href="#">Orders Placed Section (CDP1)</a> (required)	<a href="#">Author Participation</a> <a href="#">Indication (V2)</a> <a href="#">Instruction (V2)</a> <a href="#">Planned Coverage</a> <a href="#">Priority Preference</a>

This template represents ordered alterations of the patient's physical condition. Examples of such procedures are tracheostomy, knee replacement, and craniectomy.

The priority of the procedure to the patient and provider is communicated through Priority Preference. The effectiveTime indicates the time when the procedure occurred or is intended to take place.

The Procedure Order template may also indicate the potential insurance coverage for the procedure.

All entries in the Procedure Order template must be placed orders (moodCode = RQO).

Author Participation is required and indicates the provider who placed the order and the time when the order was placed.

The Procedure Order (CDP1) template conforms to the C-CDA R2 Planned Procedure (V2) template (urn:hl7ii:2.16.840.1.113883.10.20.22.4.21:2014-06-09) with the following additional constraints:

- 1) moodCode = RQO
- 2) statusCode = "active" or "completed".
- 3) effectiveTime is the time when the procedure did take place (statusCode "completed") or is intended to take place (statusCode "active").
- 4) Author Participation is required and defines author and time the order was placed.

**Table 66: Procedure Order (CDP1) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Fixed Value
procedure (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.7)					
@classCode	1..1	SHALL		<a href="#">CDP1-4101</a>	2.16.840.1.113883.5.6 (HL7ActClass) = PROC
@moodCode	1..1	SHALL		<a href="#">CDP1-4102</a>	2.16.840.1.113883.5.1001 (ActMood)= RQO
templateId	1..1	SHALL		<a href="#">CDP1-4103</a>	
@root	1..1	SHALL		<a href="#">CDP1-4104</a>	2.16.840.1.113883.10.20.35.4.7
id	1..*	SHALL		<a href="#">CDP1-4105</a>	
code	1..1	SHALL		<a href="#">CDP1-4106</a>	
statusCode	1..1	SHALL		<a href="#">CDP1-4108</a>	
@code	1..1	SHALL		<a href="#">CDP1-4109</a>	2.16.840.1.113883.10.20.35.6.1 (ActStatus2)
effectiveTime	1..1	SHALL		<a href="#">CDP1-4110</a>	
methodCode	0..*	MAY		<a href="#">CDP1-4111</a>	
targetSiteCode	0..*	MAY		<a href="#">CDP1-4112</a>	2.16.840.1.113883.3.88.12.3221.8.9 (Body Site Value Set)
performer	0..*	MAY		<a href="#">CDP1-4113</a>	
author	1..1	SHALL		<a href="#">CDP1-4114</a>	<b>Author Participation</b> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)
entryRelationship	0..*	MAY		<a href="#">CDP1-4117</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-4118</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">CDP1-4119</a>	<b>Priority Preference</b> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143)
entryRelationship	0..*	MAY		<a href="#">CDP1-4120</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-4121</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON
observation	1..1	SHALL		<a href="#">CDP1-4122</a>	<b>Indication (V2)</b> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09)
entryRelationship	0..*	MAY		<a href="#">CDP1-4123</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-4124</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
@inversionInd	1..1	SHALL		<a href="#">CDP1-4125</a>	true
act	1..1	SHALL		<a href="#">CDP1-4126</a>	<b>Instruction (V2)</b> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09)
entryRelationship	0..*	MAY		<a href="#">CDP1-4127</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-4128</a>	COMP
act	1..1	SHALL		<a href="#">CDP1-4129</a>	<b>Planned Coverage</b> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.129)

1. Conforms to [Planned Procedure \(V2\)](#) template (urn:hl7ii:2.16.840.1.113883.10.20.22.4.21:2014-06-09).

2. **SHALL** contain exactly one [1..1] **@classCode**="PROC" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF:CDP1-4101).
3. **SHALL** contain exactly one [1..1] **@moodCode** = "RQO" (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF:CDP1-4102).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:CDP1-4103) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.35.4.7" (CONF:CDP1-4104).
5. **SHALL** contain at least one [1..\*] **id** (CONF:CDP1-4105).
6. **SHALL** contain exactly one [1..1] **code** (CONF:CDP1-4106).
  - a. The procedure/code in a planned procedure **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) or ICD10 PCS (CodeSystem: 2.16.840.1.113883.6.4) (CONF:CDP1-4107).
7. **SHALL** contain exactly one [1..1] **statusCode** (CONF:CDP1-4108).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [ActStatus2](#) 2.16.840.1.113883.10.20.35.6.1 **STATIC** (CONF:CDP1-4109)

The effectiveTime in a procedure order represents the time that the procedure was performed or should occur.

8. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:CDP1-4110).

In a procedure order, the provider may suggest that a procedure should be performed using a particular method.

9. **MAY** contain zero or more [0..\*] **methodCode** (CONF:CDP1-4111).

The targetSiteCode is used to identify the part of the body of concern for the procedure order.

10. **MAY** contain zero or more [0..\*] **targetSiteCode**, which **SHALL** be selected from ValueSet [Body Site](#) 2.16.840.1.113883.3.88.12.3221.8.9 **DYNAMIC** (CONF:CDP1-4112).

The clinician who did or is expected to perform the procedure could be identified using procedure/performer.

11. **MAY** contain zero or more [0..\*] **performer** (CONF:CDP1-4113).

The author in a procedure order represents the clinician who ordered the procedure and the time is the time the order was placed.

12. **SHALL** contain exactly one [1..1] [Author Participation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:CDP1-4114).

This entryRelationship represents the priority that a patient or provider places on the procedure.

13. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:CDP1-4117) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode**="REFR" Refers to (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-4118).

- b. **SHALL** contain exactly one [1..1] Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:CDP1-4119).

This entryRelationship represents the indication for the procedure.

- 14. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:CDP1-4120) such that it
  - a. **SHALL** contain exactly one [1..1] @**typeCode**="RSON" Has Reason (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-4121).
  - b. **SHALL** contain exactly one [1..1] Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09) (CONF:CDP1-4122).

This entryRelationship captures any instructions associated with the procedure order.

- 15. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:CDP1-4123) such that it
  - a. **SHALL** contain exactly one [1..1] @**typeCode**="SUBJ" Has Subject (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-4124).
  - b. **SHALL** contain exactly one [1..1] @**inversionInd**="true" True (CONF:CDP1-4125).
  - c. **SHALL** contain exactly one [1..1] Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:CDP1-4126).

This entryRelationship represents the insurance coverage the patient may have for the procedure.

- 16. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:CDP1-4127) such that it
  - a. **SHALL** contain exactly one [1..1] @**typeCode**="COMP" Has component (CONF:CDP1-4128).
  - b. **SHALL** contain exactly one [1..1] Planned Coverage (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.129) (CONF:CDP1-4129).

**Figure 31: Procedure Order (CDP1) Example**

```
<entry>
  <procedure moodCode="RQO" classCode="PROC">
    <templateId root="2.16.840.1.113883.10.20.35.4.7"/>
    <!-- **Procedure Order CDP1 template ** -->
    <id root="9a6d1bac-17d3-4195-89c4-1121bc809b5a"/>
    <code code="73761001"
      codeSystem="2.16.840.1.113883.6.96"
      codeSystemName="SNOMED CT"
      displayName="Colonoscopy"/>
    <statusCode code="completed"/>
    <effectiveTime value="20130613"/>
    <!-- Author Participation -->
    <author typeCode="AUT">
      ...
    </author>
    <entryRelationship typeCode="REFR">
      <observation classCode="OBS" moodCode="EVN">
        <!-- Patient Priority Preference-->
        <templateId root="2.16.840.1.113883.10.20.22.4.142"/>
        ...
      </observation>
    </entryRelationship>
    <entryRelationship typeCode="REFR">
      <observation classCode="OBS" moodCode="EVN">
        <!-- Provider Priority Preference-->
        <templateId root="2.16.840.1.113883.10.20.22.4.143"/>
        ...
      </observation>
    </entryRelationship>
    <entryRelationship typeCode="RSON">
      <observation classCode="OBS" moodCode="EVN">
        <!-- Indication-->
        <templateId root="2.16.840.1.113883.10.20.22.4.19.2"/>
        ...
      </observation>
    </entryRelationship>
    <entryRelationship typeCode="SUBJ">
      <act classCode="ACT" moodCode="INT">
        <!-- Instruction-->
        <templateId root="2.16.840.1.113883.10.20.22.4.20.2"/>
        ...
      </act>
    </entryRelationship>
    <entryRelationship typeCode="COMP">
      <observation classCode="ACT" moodCode="INT">
        <!-- Planned Coverage -->
        <templateId root="2.16.840.1.113883.10.20.22.4.129"/>
        ...
      </observation>
    </entryRelationship>
  </procedure>
</entry>
```

## 7.12 Supply Order (CDP1)

[supply: identifier urn:oid:2.16.840.1.113883.10.20.35.4.8 (open)]

**Table 67: Supply Order (CDP1) Contexts**

Contained By:	Contains:
<a href="#">Orders Placed Section (CDP1)</a> (required)	<a href="#">Author Participation</a> <a href="#">Immunization Medication Information (V2)</a> <a href="#">Indication (V2)</a> <a href="#">Instruction (V2)</a> <a href="#">Medication Information (V2)</a> <a href="#">Planned Coverage</a> <a href="#">Product Instance</a> <a href="#">Priority Preference</a>

This template represents both medicinal and non-medicinal supplies ordered for the patient (e.g. medication prescription, order for wheelchair).

The importance of the supply order to the patient and provider is communicated through Priority Preference. The effectiveTime indicates the time when the supply occurred or when it is intended to take place.

The Supply Order template may also indicate the potential insurance coverage for the supply.

Depending on the type of supply, the product or participant will be either a Medication Information product (medication), an Immunization Medication Information product (immunization), or a Product Instance participant (device/equipment).

All entries in the Supply Order template must be placed orders (moodCode = RQO).

Author Participation is required and indicates the provider who placed the order and the time when the order was placed.

The Supply Order (CDP1) template conforms to the C-CDA R2 Planned Supply (V2) template (urn:hl7ii:2.16.840.1.113883.10.20.22.4.43:2014-06-09) with the following additional constraints:

- 1) moodCode = RQO
- 2) statusCode = “active” or “completed”.
- 3) effectiveTime is the time when the supply did take place (statusCode “completed”) or is intended to take place (statusCode “active”).
- 4) Author Participation is required and defines author and time the order was placed.
- 5) Product is required (SHALL).



**Table 68: Supply Order (CDP1) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Fixed Value
supply (identifier: urn:oid:2.16.840.1.113883.10.20.35.4.8)					
@classCode	1..1	SHALL		<a href="#">CDP1-4201</a>	2.16.840.1.113883.5.6 (HL7ActClass) = SPLY
@moodCode	1..1	SHALL		<a href="#">CDP1-4202</a>	2.16.840.1.113883.5.1001 (ActMood)= RQO
templateId	1..1	SHALL		<a href="#">CDP1-4203</a>	
@root	1..1	SHALL		<a href="#">CDP1-4204</a>	2.16.840.1.113883.10.20.35.4.8
id	1..*	SHALL		<a href="#">CDP1-4205</a>	
statusCode	1..1	SHALL		<a href="#">CDP1-4206</a>	
@code	1..1	SHALL		<a href="#">CDP1-4207</a>	2.16.840.1.113883.10.20.35.6.1 (ActStatus2)
effectiveTime	0..1	SHOULD		<a href="#">CDP1-4208</a>	
repeatNumber	0..1	MAY		<a href="#">CDP1-4209</a>	
quantity	0..1	MAY		<a href="#">CDP1-4210</a>	
product	0..1	MAY		<a href="#">CDP1-4211</a>	
manufacturedProduct	1..1	SHALL		<a href="#">CDP1-4212</a>	<b>Medication Information (V2)</b> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09)
product	0..1	MAY		<a href="#">CDP1-4214</a>	
manufacturedProduct	1..1	SHALL		<a href="#">CDP1-4215</a>	<b>Immunization Medication Information (V2)</b> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09)
product	1..1	SHALL		<a href="#">CDP1-4217</a>	
performer	0..*	MAY		<a href="#">CDP1-4218</a>	
author	1..1	SHALL		<a href="#">CDP1-4219</a>	<b>Author Participation</b> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)
participant	0..1	MAY		<a href="#">CDP1-4220</a>	
participantRole	1..1	SHALL		<a href="#">CDP1-4221</a>	<b>Product Instance</b> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.37)
entryRelationship	0..*	MAY		<a href="#">CDP1-4223</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-4224</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">CDP1-4225</a>	<b>Priority Preference</b> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143)
entryRelationship	0..*	MAY		<a href="#">CDP1-4226</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-4227</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON
observation	1..1	SHALL		<a href="#">CDP1-4228</a>	<b>Indication (V2)</b> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4

XPath	Card.	Verb	Data Type	CONF#	Fixed Value
					.19:2014-06-09)
entryRelationship	0..*	MAY		<a href="#">CDP1-4229</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-4230</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
act	1..1	SHALL		<a href="#">CDP1-4231</a>	<a href="#">Instruction (V2)</a> (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09)
entryRelationship	0..*	MAY		<a href="#">CDP1-4232</a>	
@typeCode	1..1	SHALL		<a href="#">CDP1-4233</a>	2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
act	1..1	SHALL		<a href="#">CDP1-4234</a>	<a href="#">Planned Coverage</a> (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.129)

1. Conforms to [Planned Supply \(V2\)](#) template (urn:hl7ii:2.16.840.1.113883.10.20.22.4.43:2014-06-09).
2. **SHALL** contain exactly one [1..1] **@classCode**="SPLY" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF:CDP1-4201).
3. **SHALL** contain exactly one [1..1] **@moodCode** = "RQO" (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF:CDP1-4202).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:CDP1-4203) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.35.4.8" (CONF:CDP1-4204).
5. **SHALL** contain at least one [1..\*] **id** (CONF:CDP1-4205).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:CDP1-4206).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [ActStatus2](#) 2.16.840.1.113883.10.20.35.6.1 **STATIC** (CONF:CDP1-4207)

The effectiveTime in an ordered supply represents the time that the supply occurred or should occur.

7. **SHOULD** contain zero or one [0..1] **effectiveTime** (CONF:CDP1-4208).

In a Supply Order, repeatNumber indicates the number of times the supply event can occur. For example, if a medication is filled at a pharmacy and the prescription may be refilled 3 more times, the supply RepeatNumber equals 4.

8. **MAY** contain zero or one [0..1] **repeatNumber** (CONF:CDP1-4209).
9. **MAY** contain zero or one [0..1] **quantity** (CONF:CDP1-4210).

This product represents medication that is ordered for the patient.

10. **MAY** contain zero or one [0..1] **product** (CONF:CDP1-4211) such that it
  - a. **SHALL** contain exactly one [1..1] [Medication Information \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09) (CONF:CDP1-4212).

- b. If the product is Medication Information then the product **SHALL NOT** be Immunization Medication Information and the participant **SHALL NOT** be Product Instance (CONF:CDP1-4213).

This product represents immunization medication that is ordered for the patient.

- 11. **MAY** contain zero or one [0..1] **product** (CONF:CDP1-4214) such that it
  - a. **SHALL** contain exactly one [1..1] Immunization Medication Information (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09) (CONF:CDP1-4215).
  - b. If the product is Immunization Medication Information then the product **SHALL NOT** be Medication Information and the participant **SHALL NOT** be Product Instance (CONF:CDP1-4216).

This product is recommended or even required under certain implementations. This IG makes product as required (SHALL)

- 12. **SHALL** contain exactly one [1..1] **product** (CONF:CDP1-4217).

The clinician who is expected to perform the supply could be identified using supply/performer.

- 13. **MAY** contain zero or more [0..\*] **performer** (CONF:CDP1-4218).

The author in a supply represents the clinician who is requesting the supply.

- 14. **SHALL** contain exactly one [1..1] Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:CDP1-4219).

This participant represents a device that is ordered for the patient.

- 15. **MAY** contain zero or one [0..1] **participant** (CONF:CDP1-4220) such that it
  - a. **SHALL** contain exactly one [1..1] Product Instance (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.37) (CONF:CDP1-4221).
  - b. If the participant is Product Instance then the product **SHALL NOT** be Medication Information (V2) and the product **SHALL NOT** be Immunization Medication Information (V2) (CONF:CDP1-4222).

This entryRelationship represents the priority that a provider places on the supply.

- 16. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:CDP1-4223) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="REFR"** Refers to (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-4224).
  - b. **SHALL** contain exactly one [1..1] Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:CDP1-4225).

This entryRelationship represents the indication for the supply.

- 17. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:CDP1-4226) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="RSON"** Has Reason (CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002) (CONF:CDP1-4227).

- b. **SHALL** contain exactly one [1..1] Indication (V2) (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09)  
(CONF:CDP1-4228).

This entryRelationship captures any instructions associated with the supply order.

- 18. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:CDP1-4229) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="SUBJ"** Has Subject  
(CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002)  
(CONF:CDP1-4230).
  - b. **SHALL** contain exactly one [1..1] Instruction (V2) (identifier:  
urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09)  
(CONF:CDP1-4231).

This entryRelationship represents the insurance coverage the patient may have for the supply.

- 19. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:CDP1-4232) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="COMP"** Has Component  
(CodeSystem: HL7ActRelationshipType 2.16.840.1.113883.5.1002)  
(CONF:CDP1-4233).
  - b. **SHALL** contain exactly one [1..1] Planned Coverage (identifier:  
urn:oid:2.16.840.1.113883.10.20.22.4.129) (CONF:CDP1-4234).

**Figure 32: Supply Order (CDP1) Example**

```
<supply moodCode="RQO" classCode="SPLY">
  <templateId root="2.16.840.1.113883.10.20.35.4.8" />
  <!-- Supply Order (CDP1) -->
  <id root="9a6d1bac-17d3-4195-89c4-1121bc809b5d" />
  <statusCode code="completed" />
  <!-- The effectiveTime in a supply order represents
        the time that the order should occur. -->
  <effectiveTime value="20130615" />
  <repeatNumber value="1" />
  <quantity value="3" />
  <!-- This product represents medication that is ordered
        for the patient. -->
  <product>
    <manufacturedProduct classCode="MANU">
      <!-- Medication Information (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.23.2" />
      <id root="2a620155-9d11-439e-92b3-5d9815ff4ee8" />
      <manufacturedMaterial>
        <code code="573621" codeSystem="2.16.840.1.113883.6.88"
displayName="Proventil 0.09 MG/ACTUAT inhalant solution">
          <originalText>
            <reference value="#MedSec_1" />
          </originalText>
          <translation code="573621" displayName="Proventil 0.09 MG/ACTUAT inhalant
solution" codeSystem="2.16.840.1.113883.6.88" codeSystemName="RxNorm" />
        </code>
      </manufacturedMaterial>
      <manufacturerOrganization>
        <name>Medication Factory Inc.</name>
      </manufacturerOrganization>
    </manufacturedProduct>
  </product>
  <!-- The clinician who is expected to perform the supply
        could be identified using supply/performer. -->
  <performer>
    ...
  </performer>
  <!-- The author in a supply represents the clinician
        who is requesting the supply. -->
  <author typeCode="AUT">
    ...
  </author>
  <entryRelationship typeCode="REFR">
    <!-- Patient Priority Preference -->
    ...
  </entryRelationship>
  <entryRelationship typeCode="REFR">
    <!-- Provider Priority Preference -->
    ...
  </entryRelationship>
  <entryRelationship typeCode="RSON">
    <!-- Indication (V2) -->
    ...
  </entryRelationship>
</supply>
```

```
<entryRelationship typeCode="SUBJ">
  <!-- Instruction (V2) -->
  ...

</entryRelationship>
<entryRelationship typeCode="COMP">
  <!-- Planned Coverage -->
  ...

</entryRelationship>
</supply>
```

## 7.13 Transportation Activity (CDP1)

[act: identifier urn:oid:2.16.840.1.113883.10.20.35.4.10 (open)]

**Table 69: Transportation Activity (CDP1) Contexts**

Contained By:	Contains:
<a href="#">Transportation Section (CDP1)</a> (optional)	

The transportation activity entry indicates the intended or actual mode of transportation and the time of departure and/or arrival of the patient.

**Table 70: Transportation Activity (CDP1) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
act (identifier: urn: oid:2.16.840.1.113883.10.20.35.4.10)					
@classCode	1..1	SHALL		<a href="#">CDP1-4401</a>	2.16.840.1.113883.5.6 (HL7ActClass) = ACT
@moodCode	1..1	SHALL		<a href="#">CDP1-4402</a>	2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">CDP1-4403</a>	
@root	1..1	SHALL		<a href="#">CDP1-4404</a>	2.16.840.1.113883.10.20.35.4.10
statusCode	1..1	SHALL		<a href="#">CDP1-4405</a>	
@code	1..1	SHALL		<a href="#">CDP1-4406</a>	2.16.840.1.113883.10.20.35.6.1 (ActStatus2)
code	1..1	SHALL		<a href="#">CDP1-4407</a>	<a href="#">Patient Transportation</a> 2.16.840.1.113883.10.20.35.6.3
effectiveTime	1..1	SHALL		<a href="#">CDP1-4408</a>	
low	1..1	SHALL		<a href="#">CDP1-4409</a>	
high	1..1	SHALL		<a href="#">CDP1-4411</a>	

1. **SHALL** contain exactly one [1..1] @classCode="ACT" (CodeSystem: HL7ActClass 2.16.840.1.113883.5.6 **STATIC**) (CONF:CDP1-4401).
2. **SHALL** contain exactly one [1..1] @moodCode="EVN" (CodeSystem: ActMood 2.16.840.1.113883.5.1001 **STATIC**) (CONF:CDP1-4402).
3. **SHALL** contain exactly one [1..1] templateId (CONF:CDP1-4303) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.35.4.10" (CONF:CDP1-4404).
4. **SHALL** contain exactly one [1..1] statusCode (CONF:CDP1-4405).
  - a. This statusCode **SHALL** contain exactly one [1..1] @code, which **SHALL** be selected from ValueSet [ActStatus2](#) 2.16.840.1.113883.10.20.35.6.1 **STATIC**) (CONF:CDP1-4406).
5. **SHALL** contain exactly one [1..1] code, which **SHALL** be selected from ValueSet [Patient Transportation](#) 2.16.840.1.113883.10.20.35.6.3 **DYNAMIC**) (CONF:CDP1-4407).
6. **SHALL** contain exactly one [1..1] effectiveTime (CONF:CDP1-4408).

- a. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:CDP1-4409).
  - i. If the Transportation Activity does not have a specified starting time, the <low> element **SHALL** have the nullFlavor attribute set to **NA** (CONF:CDP1-4410).
- b. This effectiveTime **SHALL** contain exactly one [1..1] **high** (CONF:CDP1-4411).
  - i. If the Transportation Activity does not have a specified ending time, the <high> element **SHALL** have the nullFlavor attribute set to **NA** (CDP1-4412).

**Figure 33: Transportation Activity (CDP1) Example**

```
<act classCode="ACT" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.35.4.9" />
  <code code="A0429"
    codeSystem="2.16.840.1.113883.6.13"
    displayName="Ambulance service, basic life support, emergency transport,
level 1">
  </code>
  <statusCode code="completed" />
  <effectiveTime>
    <low nullFlavor="NA" />
    <high value="201405011145-0800" />
  </effectiveTime>
</act>
```



**Table 71: Patient Transportation**

Value Set: Patient Transportation			
Code System: Level II HCPCS 2.16.840.1.113883.6.13			
Limited to terms describing emergency and non-emergency patient transportation			
Code	Code System	Code System OID	Print Name
A0100	HCPCS Level II	2.16.840.1.113883.6.13	Non-emergency transportation; taxi
A0130	HCPCS Level II	2.16.840.1.113883.6.13	Non-emergency transportation: wheel-chair van
A0140	HCPCS Level II	2.16.840.1.113883.6.13	Non-emergency transportation and air travel
A0426	HCPCS Level II	2.16.840.1.113883.6.13	Ambulance Service, advanced life support, non-emergency
A0427	HCPCS Level II	2.16.840.1.113883.6.13	Ambulance Service, advanced life support, emergency transport
A0428	HCPCS Level II	2.16.840.1.113883.6.13	Ambulance Service, basic life support, non-emergency
A0429	HCPCS Level II	2.16.840.1.113883.6.13	Ambulance Service, basic life support, emergency transport
A0430	HCPCS Level II	2.16.840.1.113883.6.13	Ambulance Service, conventional air services, transport, one way (fixed wing)
A0431	HCPCS Level II	2.16.840.1.113883.6.13	Ambulance Service, conventional air services, transport, one way (rotary wing)
A0432	HCPCS Level II	2.16.840.1.113883.6.13	Rural Transport furnished by volunteer
A0434	HCPCS Level II	2.16.840.1.113883.6.13	Specialty care transport (sct)
...			

## 8 REFERENCES

- Extensible Markup Language (XML) 1.0 (Fifth Edition),  
<http://www.w3c.org/TR/2008/REC-xml-20081126/>
- HL7 Clinical Document Architecture (CDA Release 2).  
<http://www.hl7.org/implement/standards/cda.cfm>
- *HL7 Implementation Guide for CDA® Release 2: Consolidated CDA Templates for Clinical Notes (US Realm) Draft Standard for Trial Use Release 2, Volume 1 and Volume 2*
- *HL7 Implementation Guide for CDA Release 2: Consultation Notes*, (U.S. Realm), Draft Standard for Trial Use, Release 1, Levels 1, 2, and 3, DSTU Updated: January 2010
- *HL7 Implementation Guide for CDA Release 2: History and Physical (H&P) Notes* (U.S. Realm) Draft Standard for Trial Use, Release 1, Levels 1, 2, and 3 A CDA Implementation guide for History and Physical Notes, DSTU Updated: January 2010
- *HL7 Implementation Guide for CDA Release 2: Procedure Note* (Universal Realm), Draft Standard for Trial Use, Release 1, Levels 1, 2, and 3, July 2010
- *HL7 Implementation Guide for CDA Release 2: Unstructured Documents*, Release 1, Level 1 (Universal Realm), Draft Standard for Trial Use, September 2010
- *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
- *HL7 Version 3 Interoperability Standards*, Normative Edition 2010.  
<http://www.hl7.org/memonly/downloads/v3edition.cfm - V32010>
- *HL7 Version 3 Publishing Facilitator's Guide*.  
<http://www.hl7.org/v3ballot/html/help/pfg/pfg.htm>
- *HL7 Implementation Guide for CDA® R2 - Supplement to Consolidated CDA for Attachments*, Release 1
- *Implementation Guide for CDA Release 2.0 Operative Note*, (U.S. Realm), Draft Standard for Trial Use, Release 1, Levels 1, 2 and 3, Published, March 2009
- *Implementation Guide for CDA Release 2.0, Care Record Summary Release 2 Discharge Summary*, (U.S. Realm) Draft Standard for Trial Use, Levels 1, 2 and 3, December 2009
- *Implementation Guide for CDA Release 2.0, Progress Note* (U.S. Realm), Draft Standard for Trial Use, Levels 1, 2, and 3, January 2011
- *Implementation Guide for CDA Release 2: Imaging Integration*, Levels 1, 2, and 3, *Basic Imaging Reports in CDA and DICOM Diagnostic Imaging Reports (DIR) – Universal Realm*, Based on HL7 CDA Release 2.0, Release 1.0, Informative Document, First Release, March 2009

- Joint Commission Requirements for Discharge Summary (JCAHO IM.6.10 EP7). See <http://www.jointcommission.org> .
- *Mosby's Medical Dictionary*, 8th edition. © 2009, Elsevier.
- Taber's Cyclopedic Medical Dictionary, 21st Edition, F.A. Davis Company. <http://www.tabers.com>
- Term Info. <http://www.hl7.org/special/committees/terminfo/index.cfm>
- XML Path Language (XPath), Version 1.0. <http://www.w3.org/TR/xpath/>
- ASC X12 277 – Health Care Claim Request for Additional Information
- ASC X12 275 – Additional Information to Support a Health Care Claim or Encounter
- ASC X12 278 – Health Care Services Request for Review and Response
- ASC X12 275 – Additional Information to Support a Health Care Service Review

## 9 TEMPLATE IDS IN THIS GUIDE

**Table 72: Template List -- In Guide**

Templates defined in this guide (for each template type, entries are in alphabetical order by Template Title)

Template Title	Template Type	templateId
<a href="#">Enhanced Discharge Document (CDP1)</a>	document	urn:oid:2.16.840.1.113883.10.20.35.1.2
<a href="#">Enhanced Encounter Document (CDP1)</a>	document	urn:oid:2.16.840.1.113883.10.20.35.1.1
<a href="#">Enhanced Operative Note Document (CDP1)</a>	document	urn:oid:2.16.840.1.113883.10.20.35.1.3
<a href="#">Enhanced Procedure Document (CDP1)</a>	document	urn:oid:2.16.840.1.113883.10.20.35.1.4
<a href="#">Interval Document (CDP1)</a>	document	urn:oid:2.16.840.1.113883.10.20.35.1.5
<a href="#">Additional Documentation Section (CDP1)</a>	section	urn:oid:2.16.840.1.113883.10.20.35.2.1
<a href="#">Externally Defined CDE Section (CDP1)</a>	section	urn:oid:2.16.840.1.113883.10.20.35.2.2
<a href="#">Functional Status Section (CDP1)</a>	section	urn:oid:2.16.840.1.113883.10.20.35.2.5
<a href="#">Orders Placed Section (CDP1)</a>	section	urn:oid:2.16.840.1.113883.10.20.35.2.3
<a href="#">Plan of Treatment Section (CDP1)</a>	section	urn:oid:2.16.840.1.113883.10.20.35.2.6
<a href="#">Social History Section (CDP1)</a>	section	urn:oid:2.16.840.1.113883.10.20.35.2.7
<a href="#">Transportation Section (CDP1)</a>	section	urn:oid:2.16.840.1.113883.10.20.35.2.4
<a href="#">Act Order (CDP1)</a>	entry	urn:oid:2.16.840.1.113883.10.20.35.4.1
<a href="#">Additional Documentation Activity (CDP1)</a>	entry	urn:oid:2.16.840.1.113883.10.20.35.4.11
<a href="#">Additional Documentation Organizer (CDP1)</a>	entry	urn:oid:2.16.840.1.113883.10.20.35.4.12
<a href="#">Encounter Order (CDP1)</a>	entry	urn:oid:2.16.840.1.113883.10.20.35.4.2
<a href="#">Externally Defined CDE Observation (CDP1)</a>	entry	urn:oid:2.16.840.1.113883.10.20.35.4.3
<a href="#">Externally Defined CDE Organizer (CDP1)</a>	entry	urn:oid:2.16.840.1.113883.10.20.35.4.4
<a href="#">Externally Defined CDE Supporting Observation (CDP1)</a>	entry	urn:oid:2.16.840.1.113883.10.20.35.4.13
<a href="#">Immunization Activity Order (CDP1)</a>	entry	urn:oid:2.16.840.1.113883.10.20.35.4.9
<a href="#">Medication Activity Order (CDP1)</a>	entry	urn:oid:2.16.840.1.113883.10.20.35.4.5
<a href="#">Observation Order (CDP1)</a>	entry	urn:oid:2.16.840.1.113883.10.20.35.4.6
<a href="#">Procedure Order (CDP1)</a>	entry	urn:oid:2.16.840.1.113883.10.20.35.4.7
<a href="#">Supply Order (CDP1)</a>	entry	urn:oid:2.16.840.1.113883.10.20.35.4.8
<a href="#">Transportation Activity (CDP1)</a>	entry	urn:oid:2.16.840.1.113883.10.20.35.4.10

**Table 73: Template List -- Incorporated by Reference**

The templates listed in this table are used in this guide and are incorporated by reference from C-CDA R2. C-CDA R2 contains the definition and constraints for each of these templates. For each Template Type, entries are in alphabetical order by Template Title

Template Title	Template Type	templateId
US Realm Header (V2)	document	urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2014-06-09
Admission Diagnosis Section (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.43:2014-06-09
Admission Medications Section (entries optional) (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.44:2014-06-09
Advance Directives Section (entries required) (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.21.1:2014-06-09
Allergies and Intolerances Section (entries required) (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.6.1:2014-06-09
Anesthesia Section (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.25:2014-06-09
Assessment and Plan Section (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09
Assessment Section	section	urn:oid:2.16.840.1.113883.10.20.22.2.8
Chief Complaint and Reason for Visit Section	section	urn:oid:2.16.840.1.113883.10.20.22.2.13
Chief Complaint Section	section	urn:oid:1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1
Complications Section (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.37:2014-06-09
Discharge Diagnosis Section(V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.24:2014-06-09
Discharge Medications Section(entries required) (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.11.1:2014-06-09
Encounters Section (entries required) (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.22.1:2014-06-09
Family History Section (V2)	section	urn:hl7ii:2.16.840.1.133883.10.20.22.2.15:2014-06-09
General Status Section	section	urn:oid:2.16.840.1.113883.10.20.2.5
Goals Section	section	urn:oid:2.16.840.1.113883.10.20.22.2.60
Health Concerns Section	section	urn:oid:2.16.840.1.113883.10.20.22.2.58
Health Status Evaluations and Outcomes Section	section	urn:oid:2.16.840.1.113883.10.20.22.2.61
History of Past Illness Section (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.20:2014-06-09
History of Present Illness Section	section	urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.4
Hospital Consultations Section	section	urn:oid:2.16.840.1.113883.10.20.22.2.42
Hospital Course Section	section	urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.5

<b>Template Title</b>	<b>Template Type</b>	<b>templateId</b>
Hospital Discharge Instructions Section	section	urn:oid:2.16.840.1.113883.10.20.22.2.41
Hospital Discharge Physical Section	section	urn:oid:1.3.6.1.4.1.19376.1.5.3.1.26
Hospital Discharge Studies Summary Section	section	urn:oid:2.16.840.1.113883.10.20.22.2.16
Immunizations Section (entries required) (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.2.1:2014-06-09
Instructions Section (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.45:2014-06-09
Interventions Section (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.21.2.3:2014-06-09
Medical (General) History Section	section	urn:oid:2.16.840.1.113883.10.20.22.2.39
Medical Equipment Section (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.23:2014-06-09
Medications Administered Section (V2)	section	urn:oid urn:hl7ii:2.16.840.1.113883.10.20.22.2.38:2014-06-09
Medications Section (entries required) (v2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.1.1:2014-06-09
Mental Status Section	section	urn:oid:2.16.840.1.113883.10.20.22.2.56
Nutrition Section	section	urn:oid:2.16.840.1.113883.10.20.22.2.57
Objective Section	section	urn:oid:2.16.840.1.113883.10.20.21.2.1
Operative Note Fluid Section	section	urn:oid:2.16.840.1.113883.10.20.7.12
Operative Note Surgical Procedure Section	section	urn:oid:2.16.840.1.113883.10.20.7.14
Payers Section (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2014-06-09
Physical Exam Section (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.2.10:2014-06-09
Planned Procedure Section (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.30:2014-06-09
Postoperative Diagnosis Section	section	urn:oid:2.16.840.1.113883.10.20.22.2.35
Postprocedure Diagnosis Section (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.36:2014-06-09
Preoperative Diagnosis Section (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.34:2014-06-09
Problem Section (entries required) (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.5.1:2014-06-09
Procedure Description Section	section	urn:oid:2.16.840.1.113883.10.20.22.2.27
Procedure Disposition Section	section	urn:oid:2.16.840.1.113883.10.20.18.2.12
Procedure Estimated Blood Loss Section	section	urn:oid:2.16.840.1.113883.10.20.18.2.9
Procedure Findings Section	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.28:2014-

Template Title	Template Type	templateId
(V2)		06-09
Procedure Implants Section	section	urn:oid:2.16.840.1.113883.10.20.22.2.40
Procedure Indications Section (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.29:2014-06-09
Procedure Specimens Taken Section	section	urn:oid:2.16.840.1.113883.10.20.22.2.31
Procedures Section (entries required) (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.7.1:2014-06-09
Reason for Referral Section (V2)	section	urn:hl7ii:1.3.6.1.4.1.19376.1.5.3.1.3.1:2014-06-09
Reason for Visit Section	section	urn:oid:2.16.840.1.113883.10.20.22.2.12
Results Section (entries required) (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.3.1:2014-06-09
Review of Systems Section	section	urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.18
Subjective Section	section	urn:oid:2.16.840.1.113883.10.20.22.2.2
Surgical Drains Section	section	urn:oid:2.16.840.1.113883.10.20.7.13
Vital Signs Section (entries required) (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2014-06-09
Assessment Scale Observation	entry	urn:oid:2.16.840.1.113883.10.20.22.4.69
Caregiver Characteristics	entry	urn:oid:2.16.840.1.113883.10.20.22.4.72
Characteristics of Home Environment	entry	urn:oid:2.16.840.1.113883.10.20.22.4.109
Comment Activity	entry	urn:oid:2.16.840.1.113883.10.20.22.4.64
Cultural and Religious Observation	entry	urn:oid:2.16.840.1.113883.10.20.22.4.111
Functional Status Observation (V2)	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.67:2014-06-09
Functional Status Organizer (V2)	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.66:2014-06-09
Handoff Communication Participants	entry	urn:oid:2.16.840.1.113883.10.20.22.4.141
Goal Observation	entry	urn:oid:2.16.840.1.113883.10.20.22.4.121
Immunization Medication Information (V2)	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
Indication (V2)	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
Instruction (V2)	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
Medication Information (V2)	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
Non-Medicinal Supply Activity (V2)	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.50:2014-06-09
Nutrition Recommendations	entry	urn:oid:2.16.840.1.113883.10.20.22.4.130

<b>Template Title</b>	<b>Template Type</b>	<b>templateId</b>
Planned Act (V2)	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.39:2014-06-09
Planned Coverage	entry	urn:oid:2.16.840.1.113883.10.20.22.4.129
Planned Immunization Activity	entry	urn:oid:2.16.840.1.113883.10.20.22.4.120
Planned Observation (V2)	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.44:2014-06-09
Planned Procedure (V2)	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2014-06-09
Planned Supply (V2)	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.43:2014-06-09
Planned Medication Activity (V2)	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09
Planned Encounter (V2)	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.40:2014-06-09
Precondition for Substance Administration (V2)	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09
Pregnancy Observation	entry	urn:oid:2.16.840.1.113883.10.20.15.3.8
Product Instance	entry	urn:oid:2.16.840.1.113883.10.20.22.4.37
Priority Preference	entry	urn:oid:2.16.840.1.113883.10.20.22.4.143
Self-Care Activities (ADL and IADL)	entry	urn:oid:2.16.840.1.113883.10.20.22.4.128
Sensory Status	entry	urn:oid:2.16.840.1.113883.10.20.22.4.127
Service Delivery Location	entry	urn:oid:2.16.840.1.113883.10.20.22.4.32
Smoking Status – Meaningful Use (V2)	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09
Social History Observation (V2)	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2014-06-09
Tobacco Use (V2)	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09
Author Participation	unspecified	urn:oid:2.16.840.1.113883.10.20.22.4.119
US Realm Date and Time (DT.US.FIELDDED)	unspecified	urn:oid:2.16.840.1.113883.10.20.22.5.3



**Table 74: Template List -- Referenced and not Incorporated**

The templates in this table are referenced but not used in this guide. This includes templates:

- 1) in “conforms to” statements (where the templates are not included in the incorporated by reference list),
- 2) where the CDP1 document template uses the (entries required) section template instead of the (entries optional) template as included in a C-CDA R2 document template to which it conforms (references are included for completeness), and
- 3) deprecated templates that are noted but not supported in this guide.

See C-CDA R2 for definitions of the templates in this table.

Template Title	Template Type	templateId
Discharge Summary (V2)	document	urn:hl7ii:2.16.840.1.113883.10.20.22.1.8:2014-06-09
Operative Note (V2)	document	urn:hl7ii:2.16.840.1.113883.10.20.22.1.7:2014-06-09
Procedure Note (V2)	document	urn:hl7ii:2.16.840.1.113883.10.20.22.1.6:2014-06-09
Allergies and Intolerances Section (entries optional) (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.6:2014-06-09
Discharge Diet Section (DEPRECATED)	section	urn:hl7ii:1.3.6.1.4.1.19376.1.5.3.1.3.33:2014-06-09
Discharge Medications Section(entries optional) (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.11:2014-06-09
Functional Status Section (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.14:2014-06-09
Immunizations Section (entries optional) (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.2:2014-06-09
Medications Section (entries optional) (v2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.1:2014-06-09
Plan of Treatment Section (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09
Problem Section (entries optional) (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.5:2014-06-09
Procedures Section (entries optional) (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.7:2014-06-09
Social History Section (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2014-06-09
Vital Signs Section (entries optional) (V2)	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.4:2014-06-09
Cognitive Status Problem Observation (DEPRECATED)	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.73:2014-06-09
Functional Status Problem	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.68:2014-

<b>Template Title</b>	<b>Template Type</b>	<b>templateId</b>
Observation (DEPRECATED)		06-09
Pressure Ulcer Observation (DEPRECATED)	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.70:2014-06-09

## 10 VALUE SETS IN THIS GUIDE

**Table 75: Valueset List**

Name	OID	URL
<a href="#">ActStatus2</a>	2.16.840.1.113883.1.0.20.35.6.1	<a href="http://www.hl7.org">http://www.hl7.org</a>
<a href="#">AdministrableDrugForm</a>	2.16.840.1.113883.1.11.14570	<a href="http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastucture/vocabulary/vocabulary.html">http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastucture/vocabulary/vocabulary.html</a>
<a href="#">Body Site</a>	2.16.840.1.113883.3.88.12.32.21.8.9	<a href="https://vsac.nlm.nih.gov">https://vsac.nlm.nih.gov</a>
<a href="#">ConsultDocumentType</a>	2.16.840.1.113883.11.20.9.31	<a href="http://www.loinc.org/">http://www.loinc.org/</a>
<a href="#">DischargeSummaryDocumentTypeCode</a>	2.16.840.1.113883.11.20.4.1	<a href="http://www.loinc.org/">http://www.loinc.org/</a>
<a href="#">Encounter Ordered</a>	2.16.840.1.113883.10.20.35.6.2	<a href="http://www.hl7.org">http://www.hl7.org</a>
<a href="#">Healthcare Provider Taxonomy (HIPAA)</a>	2.16.840.1.114222.4.11.1066	<a href="http://www.nucc.org/index.php?option=com_content&amp;view=article&amp;id=14&amp;Itemid=125">http://www.nucc.org/index.php?option=com_content&amp;view=article&amp;id=14&amp;Itemid=125</a>
<a href="#">HPDocumentType</a>	2.16.840.1.113883.1.11.20.22	<a href="http://www.loinc.org/">http://www.loinc.org/</a>
<a href="#">INDRoleclassCodes</a>	2.16.840.1.113883.11.20.9.33	<a href="http://www.hl7.org">http://www.hl7.org</a>
<a href="#">nullFlavorCDP1</a>	2.16.840.1.113883.10.20.35.6.4	<a href="http://www.hl7.org">http://www.hl7.org</a>
<a href="#">Medication Route FDA Value Set</a>	2.16.840.1.113883.3.88.12.32.21.8.7	<a href="http://ushik.ahrq.gov/ViewItemDetails?system=mdr&amp;itemKey=84244000">http://ushik.ahrq.gov/ViewItemDetails?system=mdr&amp;itemKey=84244000</a>
<a href="#">NUBC UB-04 FL17 Patient Status</a>	2.16.840.1.113883.3.88.12.80.33	<a href="http://www.nubc.org">http://www.nubc.org</a>
<a href="#">Patient Transportation</a>	2.16.840.1.113883.10.20.35.6.3	<a href="http://www.hl7.org">http://www.hl7.org</a>
<a href="#">ProcedureNoteDocumentTypeCodes</a>	2.16.840.1.113883.11.20.6.1	<a href="http://search.loinc.org">http://search.loinc.org</a>
<a href="#">ProgressNoteDocumentTypeCode</a>	2.16.840.1.113883.11.20.8.1	<a href="http://www.loinc.org/">http://www.loinc.org/</a>
<a href="#">SurgicalOperationNoteDocumentTypeCode</a>	2.16.840.1.113883.11.20.1.1	<a href="http://www.loinc.org/">http://www.loinc.org/</a>
<a href="#">T_UnitsofMeasureCaseSensitive</a>	2.16.840.1.113883.1.11.12839	<a href="http://unitsofmeasure.org/ucum.html">http://unitsofmeasure.org/ucum.html</a>

**Table 76: ActStatus2**

Value Set: ActStatus2 2.16.840.1.113883.10.20.35.6.1			
Contains the names (codes) for states in the state-machine of the RIM Act class used in this guide.			
Code	Code System	Code System OID	Print Name
active	ActStatus	2.16.840.1.113883.5.14	active
completed	ActStatus	2.16.840.1.113883.5.14	completed

# 11 CODE SYSTEMS IN THIS GUIDE

**Table 77: Code Systems**

Name	OID
ActMood	2.16.840.1.113883.5.1001
ActStatus	2.16.840.1.113883.5.14
CPT4	2.16.840.1.113883.6.12
FDA RouteOfAdministration	2.16.840.1.113883.3.26.1.1
HCPCS Level II	2.16.840.1.113883.6.13
Healthcare Provider Taxonomy (HIPAA)	2.16.840.1.113883.6.101
HL7ActClass	2.16.840.1.113883.5.6
HL7ActRelationshipType	2.16.840.1.113883.5.1002
HL7NullFlavor	2.16.840.1.113883.5.1008
HL7ParticipationType	2.16.840.1.113883.5.90
ICD10PCS	2.16.840.1.113883.6.4
ICD9 CM Procedures	2.16.840.1.113883.6.104
LOINC	2.16.840.1.113883.6.1
Nubc-UB-04-Manual-code set	2.16.840.1.113883.6.301
orderableDrugForm	2.16.840.1.113883.5.85
participationFunction	2.16.840.1.113883.5.88
Provider Role (HL7)	2.16.840.1.113883.88.12.3221.4
RoleClass	2.16.840.1.113883.5.110
RxNorm	2.16.840.1.113883.6.88
SNOMED CT	2.16.840.1.113883.6.96
UCUM	2.16.840.1.113883.6.8

## APPENDIX A — ACRONYMS AND ABBREVIATIONS

ADL	Activities of Daily Living
C-CDA	Consolidated CDA
C-CDA R1.1	Consolidated CDA Release 1.1
C-CDA R2	Consolidated CDA Release 2
C-CDA R2 V1	Consolidated CDA Release 2 Volume 1
C-CDA R2 V2	Consolidated CDA Release 2 Volume 2
CCD	Continuity of Care Document
CDA	Clinical Document Architecture
CDA R2	Clinical Document Architecture Release 2
CDE	Clinical Data Element
CDP1	Clinical Documents for Payers – Set 1 (this document)
CPT	Current Procedural Terminology
DSTU	Draft Standard for Trial Use
EHR	Electronic Health Record
esMD	electronic submission of Medical Documentation
H&P	History and Physical
HIT	Healthcare Information Technology
HL7	Health Level Seven
HTML	Hypertext Markup Language
IADL	Instrumental Activities of Daily Living
ICD	International Classification of Diseases
IG	Implementation Guide
IHE	Integrating the Healthcare Enterprise
LOINC	Logical Observation Identifiers Names and Codes
MIME	Multipurpose Internet Mail Extensions
NUBC	National Uniform Billing Committee
ONC	Office of National Coordinator
PDF	Portable Document Format
RIM	Reference Information Model
S&I	Standards and Interoperability
SDWG	Structured Documents Working Group
SNOMED CT	Systemized Nomenclature for Medicine – Clinical Terms
SWG	Sub Work Group

UCUM	Unified Code for Units of Measure
UML	Unified Modeling Language
URL	Uniform Resource Locator
VIS	Vaccine Information Statement
XML	eXtensible Markup language
XPath	XML Path Language

## APPENDIX B — EXTENSIONS TO CDA R2

This implementation guide inherits all extensions from the C-CDA R2 – see C-CDA R2 V1 Appendix C (Extensions to CDA R2) for details.

## APPENDIX C — MIME MULTIPART/RELATED MESSAGES

Refer to the HL7 Implementation Guide for CDA® Release 2: Consolidated CDA Templates for Clinical Notes (US Realm) Draft Standard for Trial Use Release 2, Volume 1 — Introductory Material, Appendix D (MIME Multipart/Related Messages) for details on MIME encapsulation of documents and referencing documents in multipart messages.



## APPENDIX D — USAGE

### D.1 Overview

The document-level templates defined in this implementation guide, in conjunction with document-level templates from the C-CDA R2, give the provider a comprehensive set of documents to exchange the relevant clinical and administrative information from a single encounter between a provider and a patient. When these documents are created by a conformant EHR, the provider is able to communicate all relevant information from an encounter with the patient and, where appropriate, indicate that information is not available at the time of document creation or is not applicable for each “required” section or entry template (see section 3.4 on use of null flavors). The provider can apply a digital signature to the document, allowing the provider to declare the role and purpose for the signature. The digital signature allows the recipient of the signed document to verify that the signed content has not been altered since applying the digital signature.

### D.2 Document Template Use

This table describes the use of one or more document templates to describe the relevant clinical information in a single encounter between a provider and patient.

**Table 78: Document Template Use**

	Structured Documents						C-CDA R2	C-CDA R2
	Clinical Document for Payers					C-CDA R2		
Encounter Type	Enhanced Encounter Document	Enhanced Discharge Document	Interval Document	Enhanced Procedure Document	Enhanced Op Note Document	Diagnostic Imaging Document	Unstructured Document	
Office Visit	Base	n/a	n/a	As Needed	As Needed	As Needed	As Needed	
Consult	Base	n/a	n/a	As Needed	As Needed	As Needed	As Needed	
Home Health	Base	n/a	As Needed	As Needed	As Needed	As Needed	As Needed	
LTC	As Needed	Base	Per period	As Needed	As Needed	As Needed	As Needed	
Hospitalization	As Needed	Base	Per period	As Needed	As Needed	As Needed	As Needed	

**Legend:**

- 1) Base – primary document for this type of encounter (e.g. Enhanced Encounter Document)
- 2) n/a – not applicable – not expected for this encounter type
- 3) As Needed – documents that may be necessary for the encounter type to describe the entire visit with the patient (e.g. if a colonoscopy is performed during a consult, the documentation should consist of both an Enhanced Encounter Document and a Enhanced Procedure Document)
- 4) Per Period – used to represent documentation that is created on a periodic basis (e.g. a shift, a day) in addition to the Base.
- 5) Optional – may substitute for or be supplied in addition to the Base.

The other document types defined in the C-CDA R2 may be used for any of the original intended clinical or administrative purposes where the provider deems the information contained in the document type for the encounter necessary and sufficient for the intended purpose.

### D.3 Contents of New Document Templates

Each new document-level template contains all of the sections defined for the C-CDA R2 document level template(s) listed. Please note that all new document templates require the

contents of each section or a null flavor to define why the information is not included (see Section 3.4 on use of null flavors). Each new document type includes additional section level templates that are defined or additionally constrained in this implementation guide.

- 1) Enhanced Encounter Document includes all:
  - a. C-CDA R2 Progress Note Document sections
  - b. C-CDA R2 Consult Document sections
  - c. C-CDA R2 History and Physical Document sections
- 2) Enhanced Discharge Document includes all:
  - a. C-CDA R2 Discharge Summary Document sections
  - b. C-CDA R2 History and Physical Document sections
- 3) Enhanced Procedure Document includes all:
  - a. C-CDA R2 Procedure Document sections
- 4) Enhanced Operative Note Document includes all:
  - a. C-CDA R2 Operative Note Document sections
- 5) Interval Document has no equivalent templates.

## D.4 Comparison Tables

The following tables provide a comparison of the new Document Level templates in this implementation guide versus the existing Document Level templates in the C-CDA R2.

### Definitions:

see CDP1 there is a CDP1 version of the section

RENW Required (SHALL) if **E**xists and **N**ot **W**ithheld (as indicated by nullFlavor)

Required SHALL

Optional SHOULD and MAY

<sup>1</sup> additional constraints may apply (e.g. Assessment and Plan Section vs Assessment Section and Plan Section)

**Table 79: Comparison of C-CDA R2 and CDP1 Operative Note and Procedure Note**

Sections	Op Note R2	Enhanced Op Note CDP1		Procedure Note R2	Enhanced Procedure CDP1
Section templates defined in this guide					
Additional Documentation Section (CDP1)		RENW			RENW
Externally Defined CDE Section (CDP1)		RENW			RENW
Orders Placed Section (CDP1)		RENW			RENW
Plan of Treatment Section (CDP1)		RENW			RENW <sup>1</sup>
Social History Section (CDP1)					RENW
Section templates incorporated by reference to C-CDA R2					
Allergies and Intolerances Section (entries optional) (V2)				Optional	
Allergies and Intolerances Section (entries required) (V2)					RENW
Anesthesia Section (V2)	Required	RENW		Optional	RENW
Assessment and Plan Section (V2)				Optional <sup>1</sup>	RENW <sup>1</sup>
Assessment Section				Optional <sup>1</sup>	RENW <sup>1</sup>
Chief Complaint and Reason for Visit Section				Optional <sup>1</sup>	RENW <sup>1</sup>
Chief Complaint Section				Optional <sup>1</sup>	RENW <sup>1</sup>
Complications Section (V2)	Required	RENW		Required	RENW
Family History Section (V2)				Optional	RENW
History of Past Illness Section (V2)				Optional	RENW
History of Present Illness Section				Optional	RENW

Sections	Op Note	Enhanced Op Note		Procedure Note	Enhanced Procedure
Medical (General) History Section				Optional	RENW
Medical Equipment Section (V2)		RENW			RENW
Medications Administered Section (V2)				Optional	RENW
Medications Section (entries optional) (V2)				Optional	
Medications Section (entries required) (V2)					RENW
Operative Note Fluid Section	Optional	RENW			
Operative Note Surgical Procedure Section	Optional	RENW			
Payers Section (V2)		RENW			RENW
Physical Exam Section					
Physical Exam Section (V2)				Optional	RENW
Plan of Treatment Section (V2)	Optional	See CDP1		Optional <sup>1</sup>	See CDP1
Planned Procedure Section (V2)	Optional	RENW		Optional	RENW
Postoperative Diagnosis Section	Required	RENW			
Postprocedure Diagnosis Section (V2)				Required	RENW
Preoperative Diagnosis Section (V2)	Required	RENW			
Procedure Description Section	Required	RENW		Required	RENW
Procedure Disposition Section	Optional	RENW		Optional	RENW
Procedure Estimated Blood Loss Section	Required	RENW		Optional	RENW
Procedure Findings Section (V2)	Required	RENW		Optional	RENW
Procedure Implants Section	Optional	RENW		Optional	RENW
Procedure Indications Section (V2)	Optional	RENW		Required	RENW
Procedure Specimens Taken Section	Required	RENW		Optional	RENW
Procedures Section (entries optional) (V2)				Optional	
Procedures Section (entries required) (V2)					RENW
Reason for Visit Section				Optional <sup>1</sup>	RENW <sup>1</sup>
Review of Systems Section				Optional	RENW
Social History Section (V2)				Optional	See CDP1
Surgical Drains Section	Optional	RENW			

**Table 80: Comparison of C-CDA R2 Consultation Note, History and Physical, Progress Note and CDP1 Enhanced Encounter**

Sections	Consultation Note	H&P	Progress Note	Enhanced Encounter
	R2	R2	R2	CDP1
Section templates defined in this guide				
Additional Documentation Section (CDP1)				RENW
Externally Defined CDE Section (CDP1)				RENW
Orders Placed Section (CDP1)				RENW
Transportation Section (CDP1)				RENW
Functional Status Section (CDP1)				RENW
Plan of Treatment Section (CDP1)				RENW <sup>1</sup>
Social History Section (CDP1)				RENW
Section templates incorporated by reference to C-CDA R2				
Advance Directives Section (entries optional) (V2)	Optional			
Advance Directives Section (entries required) (V2)				Optional
Allergies and Intolerances Section (entries optional) (V2)		Required	Optional	
Allergies and Intolerances Section (entries required) (V2)	Required			RENW
Assessment and Plan Section (V2)	Optional <sup>1</sup>	Optional <sup>1</sup>	Optional <sup>1</sup>	RENW <sup>1</sup>
Assessment Section	Optional <sup>1</sup>	Optional <sup>1</sup>	Optional <sup>1</sup>	RENW <sup>1</sup>
Chief Complaint and Reason for Visit Section	Optional <sup>1</sup>	Optional <sup>1</sup>		RENW <sup>1</sup>
Chief Complaint Section	Optional <sup>1</sup>	Optional <sup>1</sup>	Optional	RENW <sup>1*</sup>
Encounters Section (entries required) (V2)				RENW

Sections	Consultation Note	H&P	Progress Note	Enhanced Encounter
Family History Section (V2)	Optional	Required		RENW
Functional Status Section (V2)	Optional			See CDP1
General Status Section	Optional	Required		RENW
Goals Section				RENW
Health Concerns Section				RENW
Health Status Evaluations and Outcomes Section				RENW
History of Past Illness Section (V2)	Optional	Required		RENW
History of Present Illness Section	Required	Optional		RENW
Immunizations Section (entries optional) (V2)	Optional	Optional		
Immunizations Section (entries required) (V2)				RENW
Instructions Section (V2)		Optional	Optional	RENW
Interventions Section (V2)			Optional	RENW
Medical Equipment Section (V2)	Optional			RENW
Medications Section (entries optional) (V2)		Required	Optional	
Medications Section (entries required) (V2)	Optional			RENW
Mental Status Section	Optional			RENW
Nutrition Section	Optional		Optional	RENW
Objective Section			Optional	RENW
Payers Section (V2)				RENW
Physical Exam Section (V2)	Optional	Required	Optional	RENW
Plan of Treatment Section (V2)	Optional <sup>1</sup>	Optional <sup>1</sup>	Optional <sup>1</sup>	See CDP1
Problem Section (entries optional) (V2)		Optional	Optional	
Problem Section (entries required) (V2)	Required			RENW
Procedures Section (entries optional) (V2)	Optional	Optional		
Procedures Section (entries required) (V2)				RENW
Reason for Referral Section (V2)	Optional <sup>1</sup>			RENW
Reason for Visit Section	Optional <sup>1</sup>	Optional <sup>1</sup>		RENW <sup>1</sup>
Results Section (entries optional) (V2)		Required	Optional	
Results Section (entries required) (V2)	Optional			RENW
Review of Systems Section	Optional	Required	Optional	RENW
Social History Section (V2)	Optional	Required		See CDP1
Subjective Section			Optional	RENW
Vital Signs Section (entries optional) (V2)		Required	Optional	
Vital Signs Section (entries required) (V2)	Optional			RENW

**Table 81: Comparison of C-CDA R2 Discharge Summary, History and Physical, and CDP1 Enhanced Discharge**

Sections in CCDA	Discharge Summary	H&P	Enhanced Discharge
	R2	R2	CDP1
Section templates defined in this guide			
Additional Documentation Section (CDP1)			RENW
Externally Defined CDE Section (CDP1)			RENW
Orders Placed Section (CDP1)			RENW
Transportation Section (CDP1)			RENW
Functional Status Section (CDP1)			RENW
Plan of Treatment Section (CDP1)			RENW <sup>1</sup>
Social History Section (CDP1)			RENW
Section templates incorporated by reference to C-CDA R2			
Allergies and Intolerances Section (entries optional) (V2)	Required	Required	
Allergies and Intolerances Section (entries required) (V2)			RENW
Assessment and Plan Section (V2)		Optional <sup>1</sup>	RENW <sup>1</sup>
Assessment Section		Optional <sup>1</sup>	RENW <sup>1</sup>
Chief Complaint and Reason for Visit Section	Optional <sup>1</sup>	Optional <sup>1</sup>	RENW <sup>1</sup>

Sections in CCDA	Discharge Summary	H&P	Enhanced Discharge
Chief Complaint Section	Optional <sup>1</sup>	Optional <sup>1</sup>	RENW <sup>1</sup>
Family History Section (V2)	Optional	Optional	RENW
Functional Status Section (V2)	Optional		See CDP1
General Status Section		Optional	RENW
Goals Section			RENW
Health Concerns Section			RENW
Health Status Evaluations and Outcomes Section			RENW
History of Past Illness Section (V2)	Optional	Required	RENW
History of Present Illness Section	Optional	Optional	RENW
Admission Diagnosis Section (V2)	Optional		RENW
Admission Medications Section (entries optional) (V2)	Optional		RENW
Hospital Consultations Section	Optional		RENW
Hospital Course Section	Required		RENW
Discharge Diagnosis Section (V2)	Required		RENW
Hospital Discharge Instructions Section	Optional		RENW
Discharge Medications Section (entries optional) (V2)	Optional		
Discharge Medications Section (entries required) (V2)	Optional		RENW
Hospital Discharge Physical Section	Optional		RENW
Hospital Discharge Studies Summary Section	Optional		RENW
Immunizations Section (entries optional) (V2)	Optional	Optional	
Immunizations Section (entries required) (V2)			RENW
Instructions Section (V2)		Optional	RENW
Medical (General) History Section			RENW
Medical Equipment Section (V2)			RENW
Medications Section (entries optional) (V2)		Required	
Medications Section (entries required) (V2)			RENW
Mental Status Section			RENW
Nutrition Section	Optional		RENW
Payers Section (V2)			RENW
Physical Exam Section (V2)		Required	RENW
Plan of Treatment Section (V2)	Required	Optional <sup>1</sup>	See CDP1
Problem Section (entries optional) (V2)	Optional	Optional	
Problem Section (entries required) (V2)			RENW
Procedures Section (entries optional) (V2)	Optional	Optional	
Procedures Section (entries required) (V2)			RENW
Reason for Visit Section	Optional <sup>1</sup>	Optional <sup>1</sup>	RENW <sup>1</sup>
Results Section (entries optional) (V2)		Required	
Results Section (entries required) (V2)			RENW
Review of Systems Section	Optional	Required	RENW
Social History Section (V2)	Optional	Required	See CDP1
Vital Signs Section (entries optional) (V2)	Optional	Required	
Vital Signs Section (entries required) (V2)			RENW

Additional Definitions for Coded Info column:

RC RENW Coded information

OC Optional Coded Information

**Table 82: Comparison of CDP1 Document-Level Templates**

Section	Coded Info	Enhanced Encounter	Interval	Enhanced Op Note	Enhanced Procedure	Enhanced Discharge
		CDP1	CDP1	CDP1	CDP1	CDP1
Section templates defined in this guide						
Additional Documentation Section (CDP1)		RENW	RENW	RENW	RENW	RENW
Externally Defined CDE Section (CDP1)	RC	RENW	RENW	RENW	RENW	RENW

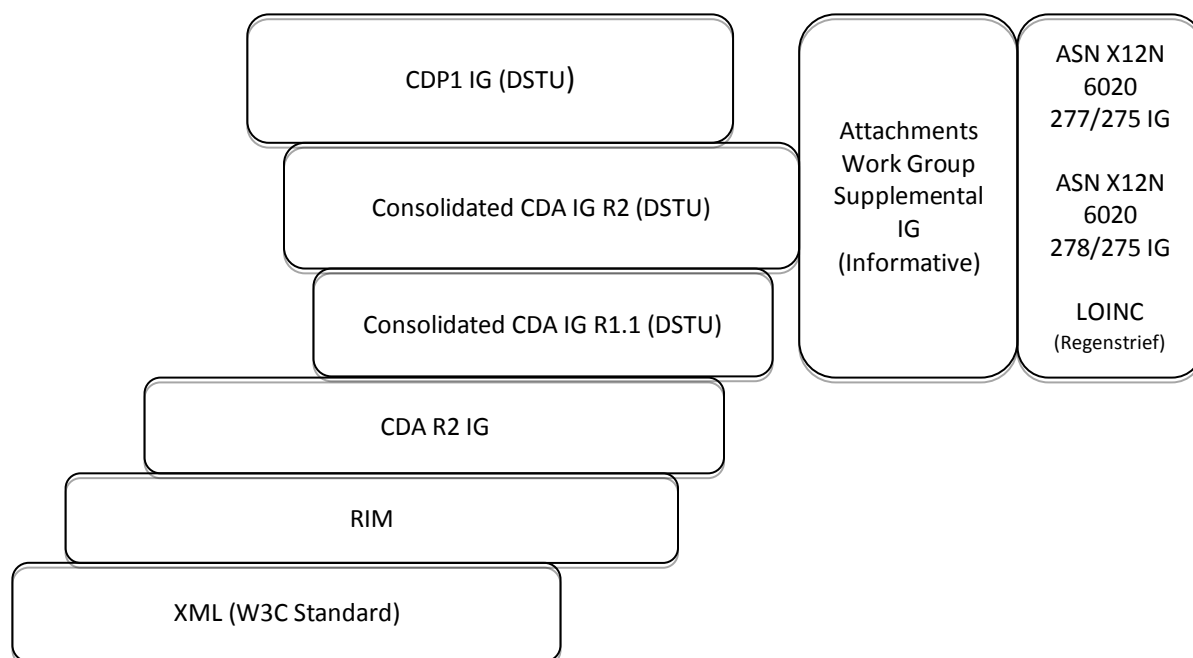
Section	Coded Info	Enhanced Encounter	Interval	Enhanced Op Note	Enhanced Procedure	Enhanced Discharge
Orders Placed Section (CDP1)	RC	RENW	RENW	RENW	RENW	RENW
Transportation Section (CDP1)		RENW				RENW
Functional Status Section (CDP1)	RC	RENW	RENW			RENW
Plan of Treatment Section (CDP1)	RC	RENW <sup>1</sup>	RENW <sup>1</sup>	RENW	RENW <sup>1</sup>	RENW <sup>1</sup>
Social History Section (CDP1)	RC	RENW			RENW	RENW
Section templates incorporated by reference to C-CDA R2						
Advance Directives Section (entries required) (V2)	RC	MAY				
Allergies and Intolerances Section (entries required) (V2)	RC	RENW	RENW		RENW	RENW
Anesthesia Section (V2)	OC			RENW	RENW	
Assessment and Plan Section (V2)	OC	RENW <sup>1</sup>	RENW <sup>1</sup>		RENW <sup>1</sup>	RENW <sup>1</sup>
Assessment Section		RENW <sup>1</sup>	RENW <sup>1</sup>		RENW <sup>1</sup>	RENW <sup>1</sup>
Chief Complaint and Reason for Visit Section		RENW <sup>1</sup>			RENW <sup>1</sup>	RENW <sup>1</sup>
Chief Complaint Section		RENW <sup>1</sup>			RENW <sup>1</sup>	RENW <sup>1</sup>
Complications Section (V2)	OC			RENW	RENW	
Encounters Section (entries required) (V2)	RC	RENW				
Family History Section (V2)	OC	RENW			RENW	RENW
General Status Section		RENW	RENW			RENW
Goals Section	RC	RENW	RENW			RENW
Health Concerns Section	RC	RENW	RENW			RENW
Health Status Evaluations and Outcomes Section	RC	RENW	RENW			RENW
History of Past Illness Section (V2)	OC	RENW			RENW	RENW
History of Present Illness Section		RENW			RENW	RENW
Admission Diagnosis Section (V2)	OC					RENW
Admission Medications Section (entries optional) (V2)	OC					RENW
Hospital Consultations Section			RENW			RENW
Hospital Course Section			RENW			RENW
Discharge Diagnosis Section (V2)	OC					RENW
Hospital Discharge Instructions Section						RENW
Discharge Medications Section (entries required) (V2)	RC					RENW
Hospital Discharge Physical Section						RENW
Hospital Discharge Studies Summary Section						RENW
Immunizations Section (entries required) (V2)	RC	RENW	RENW			RENW
Instructions Section (V2)	OC	RENW	RENW			RENW
Interventions Section (V2)	OC	RENW	RENW			
Medical (General) History Section					RENW	RENW
Medical Equipment Section (V2)	OC	RENW	RENW	RENW	RENW	RENW
Medications Administered Section (V2)	OC				RENW	
Medications Section (entries required) (V2)	RC	RENW	RENW		RENW	RENW
Mental Status Section	OC	RENW	RENW			RENW
Nutrition Section	OC	RENW	RENW			RENW
Objective Section		RENW	RENW			
Operative Note Fluid Section				RENW		
Operative Note Surgical Procedure Section				RENW		
Payers Section (V2)	OC	RENW	RENW	RENW	RENW	RENW
Physical Exam Section (V2)	OC	RENW	RENW		RENW	RENW
Planned Procedure Section (V2)	OC			RENW	RENW	
Postoperative Diagnosis Section				RENW		
Postprocedure Diagnosis Section (V2)	SC				RENW	

Section	Coded Info	Enhanced Encounter	Interval	Enhanced Op Note	Enhanced Procedure	Enhanced Discharge
Preoperative Diagnosis Section (V2)	SC			RENW		
Problem Section (entries required) (V2)	OC	RENW	RENW			RENW
Procedure Description Section				RENW	RENW	
Procedure Disposition Section				RENW	RENW	
Procedure Estimated Blood Loss Section				RENW	RENW	
Procedure Findings Section (V2)	OC			RENW	RENW	
Procedure Implants Section				RENW	RENW	
Procedure Indications Section (V2)	OC			RENW	RENW	
Procedure Specimens Taken Section				RENW	RENW	
Procedures Section (entries required) (V2)	RC	RENW	RENW		RENW	RENW
Reason for Referral Section (V2)	OC	RENW				
Reason for Visit Section		RENW <sup>1</sup>			RENW <sup>1</sup>	RENW <sup>1</sup>
Results Section (entries required) (V2)	RC	RENW	RENW			RENW
Review of Systems Section		RENW			RENW	RENW
Subjective Section		RENW	RENW			
Surgical Drains Section			RENW	RENW		
Vital Signs Section (entries required) (V2)	RC	RENW	RENW			RENW

## APPENDIX E — OVERVIEW

### E.1 Relationship of standards and Implementation Guides

**Figure 34: Relationship Of Standards and Implementation Guides**



The HL7 Clinical Document Architecture Release 2 (CDA R2) is based on the HL7 Reference Information Model and the W3C XML standard. Release 1.1 and 2 of the Consolidated CDA are both based on CDA R2 and are designated C-CDA R1.1 and C-CDA R2 respectively. This document, the Clinical Documents for Payers – Set 1 (CDP1), incorporates, by reference, many of the C-CDA R2 templates. C-CDA R1.1 is DSTU. C-CDA R2 and CDP1 are balloted as DSTU. The Attachments Work Group created a Supplemental Implementation Guide to describe how a payer requests a C-CDA document by LOINC code from a provider using an ANS X12N 277 or 278 transaction and receives it using the ASN X12N 275 transaction. This supplemental guide is an Informative Guide.



## E.2 Observations vs EHR vs MU2 vs Certification

**Table 83: Comparison of MU2/EHR Certification vs C-CDA R2 and CDP1**

Information	Information Collected	MU 2	EHR Cert C-CDA R2	C-CDA R2 H&P	C-CDA R2 Progress	CDT R1 Encounter
Assessment & Plan	Yes	Yes	Yes	MAY	MAY	SHALL
Chief Complaint /RoV	No	Yes	Yes	MAY	MAY	nF=NI
Family History	Yes	No	No	SHALL		SHALL
History Present Illness	Yes	Yes	Yes	MAY		SHALL
Placed Orders	Yes					SHALL
Results	Yes	Yes	Yes	MAY	MAY	SHALL
Social History	Yes	Yes	Yes	SHALL		SHALL
Vital Signs	Yes	Yes	Yes	SHALL		SHALL

## APPENDIX F — ENTRY TEMPLATE DISPLAY NAMES

This is a non-normative appendix.

This appendix suggests display names for use when the entry level template is required and no information exists (NI) or is not-applicable (NA). See section 3.4.1 “*Use of nullFlavors for Section and Entry Templates Conformance Statements*” for a description of the use of nullFlavors. See Figure 2 “*Example use of Entry -Level nullFlavor*” for an example of the use of the display names. Only entry templates constrained to SHALL in C-CDA R2 and adopted by reference or the CDP1 section templates are included in the table below.

**Table 84: Entry Template Display Names**

Sections	Entry Template	templateId	Class Code	Mood Code	Code	Required or <i>Suggested</i> Display Text
Orders Placed						
	Act Order (CDP1)	urn:oid:2.16.840.1.113883.10.20.35.4.1	ACT	RQO	LOINC/SNOMED CT	<i>Other Orders</i>
	Encounter Order (CDP1)	urn:oid:2.16.840.1.113883.10.20.35.4.2	ENC	RQO	SNOMED CT/List	<i>Encounter Order</i>
	Immunization Order (CDP1)	urn:oid:2.16.840.1.113883.10.20.35.4.9	SBADM	RQO		<i>Immunization Order</i>
	Medication Activity Order (CDP1)	urn:oid:2.16.840.1.113883.10.20.35.4.5	SBADM	RQO		<i>Medication Order</i>
	Observation Order (CDP1)	urn:oid:2.16.840.1.113883.10.20.35.4.6	OBS	RQO	LOINC	<i>Test Orders</i>
	Procedure Order (CDP1)	urn:oid:2.16.840.1.113883.10.20.35.4.7	PROC	RQO	LOINC/SNOMED CT/CPT-4/ICD10 PCS	<i>Procedure Order</i>
	Supply Order (CDP1)	urn:oid:2.16.840.1.113883.10.20.35.4.8	SPLY	RQO		<i>Supply/Equipment Order</i>
Functional Status						
	Assessment Scale Observation	urn:oid:2.16.840.1.113883.10.20.22.4.69	OBS	EVN	LOINC/SNOMED CT	<i>Standardized Assessments</i>
	Caregiver Characteristics	urn:oid:2.16.840.1.113883.10.20.22.4.72	OBS	EVN	LOINC/ASSERTION	<i>Caregiver Information</i>
	Functional Status Observation (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.67:2014-06-09	OBS	EVN	LOINC = 54522-8	Functional Status
	Functional Status Organizer (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.66:2014-06-09	CLUSTER	EVN	ICF/LOINC	<i>Functional Status Grouping</i>
	Non-Medicinal Supply Activity (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.50:2014-06-09	SPLY	List		<i>Equipment and Implants</i>
	Self-Care Activities (ADL and IADL)	urn:oid:2.16.840.1.113883.10.20.22.4.128	OBS	EVN	LOINC/List	<i>Self-Care Activities (ADL and IADL)</i>
	Sensory Status	urn:oid:2.16.840.1.113883.10.20.22.4.127	OBS	EVN	SNOMED CT/List	<i>Sensory or Speech Assessment</i>
Plan of Treatment						
	Goal Observation	urn:oid:2.16.840.1.113883.10.20.22.4.121	OBS	GOL	LOINC	<i>Health goals</i>

	Handoff Communication Participants	urn:oid:2.16.840.1.113883.10.20.22.4.141	ACT	EVN	SNOMEDCT = 432138007	handoff communication (procedure)
	Instruction (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09	ACT	INT	SNOMED CT/List	<i>Instructions</i>
	Nutrition Recommendations	urn:oid:2.16.840.1.113883.10.20.22.4.130	ACT	List	SNOMED CT/List	<i>Nutrition Recommendations</i>
	Planned Act (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.39:2014-06-09	ACT	List	LOINC/SNOMED CT	<i>Other Planned Activities</i>
	Planned Encounter (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.40:2014-06-09	ENC	List	SNOMED CT/List	<i>Planned Encounters</i>
	Planned Immunization Activity	urn:oid:2.16.840.1.113883.10.20.22.4.120	SBADM	List		<i>Planned Immunizations</i>
	Planned Medication Activity (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09	SBADM	List		<i>Planned Medications</i>
	Planned Observation (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.44:2014-06-09	OBS	List	LOINC	<i>Planned Tests</i>
	Planned Procedure (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2014-06-09	PROC	List	LOINC/SNOMED CT/CPT-4/ICD10 PCS	<i>Planned Procedures</i>
	Planned Supply (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.43:2014-06-09	SPLY	List		<i>Planned Supplies/Equipment</i>
Social History						
	Caregiver Characteristics	urn:oid:2.16.840.1.113883.10.20.22.4.72	OBS	EVN	LOINC/ASSERTION	<i>Caregiver Information</i>
	Characteristics of Home Environment	urn:oid:2.16.840.1.113883.10.20.22.4.109	OBS	EVN	LOINC = 75274-1	Characteristics of residence
	Pregnancy Observation	urn:oid:2.16.840.1.113883.10.20.15.3.8	OBS	EVN	ASSERTION	Assertion <i>Pregnancy</i>
	Smoking Status - Meaningful Use (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09	OBS	EVN	LOINC = 72166-2	Tobacco smoking status NHIS
	Social History Observation (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2014-06-09	OBS	EVN	LOINC	<i>Health Risks</i>
	Tobacco Use (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09	OBS	EVN	LOINC = 11367-0	History of tobacco use
Allergies and Intolerances Section (entries required) (V2)						
	Allergy Concern Act (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.30:2014-06-09	ACT	EVN	HL7ActClass = CONC	Concern <i>Coded Allergies</i>
Discharge Medications Section (entries required) (V2)						
	Discharge Medication (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.35:2014-06-09	ACT	EVN	LOINC = 10183-2	Discharge medication
Encounters Section (entries required) (V2)						
	Encounter Activity (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2014-06-09	ENC	EVN	CP# 4/List	<i>Coded Encounters</i>
Immunizations Section (entries required) (V2)						
	Immunization Activity (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.52:2014-06-09	SBADM	List		<i>Coded Immunizations</i>
Medications Section (entries required) (V2)						
	Medication Activity (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09	SBADM	List		<i>Coded Medications</i>
Problem Section (entries required) (V2)						
	Problem Concern Act (V2)	urn:hl7ii:2.16.840.1.113883.10.20.22.4.3:2014-06-09	ACT	EVN	HL7ActClass = CONC	Concern <i>Coded Problems</i>
Procedures Section (entries required) (V2)						

	Procedure Activity Act (V2)	urn:hl7ii:2.16.840.1.113883.10.2 0.22.4.12:2014-06-09	ACT	EVN	LOINC/SNOMED CT/CPT-4/ICD10 PCS/CDT-2	<i>Other Coded Procedure Activity</i>
	Procedure Activity Observation (V2)	urn:hl7ii:2.16.840.1.113883.10.2 0.22.4.13:2014-06-09	OBS	EVN	LOINC/SNOMED CT/CPT-4/ICD10 PCS/CDT-2	<i>Coded Tests</i>
	Procedure Activity Procedure (V2)	urn:hl7ii:2.16.840.1.113883.10.2 0.22.4.14:2014-06-09	PROC	EVN	LOINC/SNOMED CT/CPT-4/ICD10 PCS/CDT-2	<i>Coded Procedures</i>
Results Section (entries required) (V2)						
	Result Organizer (V2)	urn:hl7ii:2.16.840.1.113883.10.2 0.22.4.1:2014-06-09	List	EVN	LOINC/SNOMED CT/CPT-4	<i>Coded Results</i>
Vital Signs Section (entries required) (V2)						
	Vital Signs Organizer	urn:hl7ii:2.16.840.1.113883.10.2 0.22.4.26:2014-06-09	CLUSTER	EVN	LOINC	<i>Coded Vital Signs</i>