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Implementation Guide for CDA R2 Meaningful Use, Stage 2 HL7 Ballot

Sponsored By:

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Acknowledgments

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Revision History

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

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Chapter

1

INTRODUCTION

Topics:

- Overview
- Approach
- Scope
- Audience
- Organization of This Guide
- Use of Templates
- Conventions Used in This Guide

Overview

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

Approach

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

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

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

Scope

TODO: scope of this implementation guide.

Audience

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

Organization of This Guide

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

Templates

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

Vocabulary and Value Sets

Vocabularies recommended in this guide are from standard vocabularies. When SNOMED codes are used, rules defined in Using SNOMED CT in HL7 Version 3 are adhered to. In many cases, these vocabularies are further constrained into value sets for use within this guide. Value set names and OIDs are summarized in the table Summary of Value Sets. Each named value set in this summary table is stored in a template database that will be maintained by CHCA.

Use of Templates

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

Originator Responsibilities

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

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

Recipient Responsibilities

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

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

Conventions Used in This Guide

Conformance Requirements

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

Template name

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

Description of the template will be here

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

Figure 1: Template name and "conforms to" appearance

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

The following cardinality indicators may be interpreted as follows:

- 0..1 as zero to one present
- 1..1 as one and only one present
- 2..2 as two must be present
- 1..* as one or more present
- 0..* as zero to many present

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

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

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

Figure 2: Template-based conformance statements example

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

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

Figure 3: CCD conformance statements example

Keywords

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

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

XML Examples

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

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

Figure 4: ClinicalDocument example

Missing Product Name in BookMap (bookmap/bookmeta/prodinfo/prodname) _ Missing Release (DSTU) in BookMap (bookmap/bookmeta/prodinfo/vrmlist/vrm/@release) _ Missing Version (YYYYMM) in BookMap (bookmap/bookmeta/prodinfo/vrmlist/vrm/@version) | INTRODUCTION | 14

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

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Chapter

2

DOCUMENT TEMPLATES

Topics:

- Clinical Office Visit Summary
- General Header Constraints
- Summary Of Care Record
- Transition Of Care Ambulatory Summary
- Transition Of Care Inpatient Summary
- VDT Ambulatory Summary
- VDT Inpatient Summary
- View Download Transmit Summary

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

Clinical Office Visit Summary

```
[ClinicalDocument: templateId 2.16.840.1.113883.10.20.22.1.1]
```

MU2 170.314(e)(2) Clinical Summary

- 1. SHALL contain exactly one [1..1] templateId () such that it
 - **a. SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.1.1"
- 2. SHALL conform to *General Header Constraints* template (templateId: 2.16.840.1.113883.10.20.22.1.1)
- 3. SHALL contain exactly one [1..1] component
 - **a.** Contains exactly one [1..1] *Consol Problem Section* (templateId: 2.16.840.1.113883.10.20.22.2.5.1)
- 4. Contains exactly one [1..1] component
 - **a.** Contains exactly one [1..1] *Consol Medications Section* (templateId: 2.16.840.1.113883.10.20.22.2.1.1)
- 5. SHALL contain exactly one [1..1] component
 - **a.** Contains exactly one [1..1] *Consol Allergies Section* (templateId: 2.16.840.1.113883.10.20.22.2.6.1)
- 6. SHALL contain exactly one [1..1] component
 - **a.** Contains exactly one [1..1] *Results Section* (templateId: 2.16.840.1.113883.10.20.22.2.3.1)
- 7. SHALL contain exactly one [1..1] component
 - a. Contains exactly one [1..1] Procedures Section (templateId: 2.16.840.1.113883.10.20.22.2.7.1)
- 8. SHALL contain exactly one [1..1] component
 - **a.** Contains exactly one [1..1] *Consol Immunizations Section* (templateId: 2.16.840.1.113883.10.20.22.2.1)
- 9. SHALL contain exactly one [1..1] component
 - **a.** Contains exactly one [1..1] *Consol Instructions Section* (templateId: 2.16.840.1.113883.10.20.22.2.45)
- 10. SHALL contain exactly one [1..1] component
 - a. Contains exactly one [1..1] Social History Section (templateId: 2.16.840.1.113883.10.20.22.2.17)
- 11. Contains exactly one [1..1] component
 - **a.** Contains exactly one [1..1] *Medications Administered Section* (templateId: 2.16.840.1.113883.10.20.22.2.38)
- 12. SHALL have one Reason for Visit Section (TemplateID = 2.16.840.1.113883.10.20.22.2.12) or Chief Complaint Section (TemplateID = 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1) or Chief Complaint and Reason for Visit Section (2.16.840.1.113883.10.20.22.2.13) or Encounters section entries optional (TemplateID: 2.16.840.1.113883.10.20.22.2.2.2) or Encounters section entries required (TemplateID: 2.16.840.1.113883.10.20.22.2.2.2.1)
- **13. SHALL** have one of Plan of Care (2.16.840.1.113883.10.20.22.2.10) or Assessment and Plan (2.16.840.1.113883.10.20.22.2.9)
- **14. SHALL** satisfy: Shall have one documentationOf/serviceEvent/effectiveTime or componentOf/encompassingEncounter/effectiveTime or Encounters section entries optional (TemplateID: 2.16.840.1.113883.10.20.22.2.22) or Encounters section entries required (TemplateID: 2.16.840.1.113883.10.20.22.2.2.2.1)
- **15. SHALL** satisfy: Shall have componentOf/encompassingEncounter/location or Encounters section entries optional (TemplateID: 2.16.840.1.113883.10.20.22.2.22) or Encounters section entries required (TemplateID: 2.16.840.1.113883.10.20.22.2.22.1)

- 16. SHALL have at least one documentationOf/serviceEvent/performer/assignedEntity including a documentationOf/serviceEvent/performer/assignedEntity/assignedPerson/name and documentationOf/serviceEvent/performer/assignedEntity/addr OR at least one componentOf/encompassingEncounter/responsibleParty including a componentOf/encompassingEncounter/responsibleParty/assignedEntity/assignedPerson/name and componentOf/encompassingEncounter/responsibleParty/assignedEntity/telecom and componentOf/encompassingEncounter/responsibleParty/assignedEntity/telecom and componentOf/encompassingEncounterParticipant including a componentOf/encompassingEncounter/encounterParticipant/assignedEntity/assignedPerson/name and componentOf/encompassingEncounter/encounterParticipant/assignedEntity/telecom and componentOf/encompassingEncounter/encounterParticipant/assignedEntity/telecom and componentOf/encompassingEncounter/encounterParticipant/assignedEntity/telecom and componentOf/encompassingEncounter/encounterParticipant/assignedEntity/telecom and componentOf/encompassingEncounter/encounterParticipant/assignedEntity/addr
- 17. SHALL have one Vital Signs Section with entries optional (TemplateID = 2.16.840.1.113883.10.20.22.2.4) or one Vital Signs Section with entries required (TemplateID = 2.16.840.1.113883.10.20.22.2.4.1)
- **18. SHALL** contain one Medications Administered Section (Template ID = 2.16.840.1.113883.10.20.22.2.38) or Medications Section with entries required (Template ID = 2.16.840.1.113883.10.20.22.2.1.1)

Clinical Office Visit Summary example

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <typeId root="2.16.840.1.113883.1.3"/>
 <templateId root="2.16.840.1.113883.10.20.22.1.1"/>
 <id root="MDHT" extension="1711018725"/>
 <code code="1261193819"/>
 <title>TEXT FOR TITLE</title>
 <effectiveTime/>
 <confidentialityCode code="799408742"/>
 <setId root="MDHT" extension="8535f284-bbdb-48cd-aa9c-0e0175597514"/>
  <versionNumber value="1"/>
  <recordTarget>
    <typeId root="2.16.840.1.113883.1.3"/>
    <patientRole/>
  </recordTarget>
  <author>
    <typeId root="2.16.840.1.113883.1.3"/>
    <time/>
    <assignedAuthor/>
  </author>
 <custodian/>
  <component>
    <structuredBody>
      <component>
        <section/>
      </component>
      <component>
        <section/>
      </component>
      <component>
        <section/>
      </component>
      <component>
        <section>
          <typeId root="2.16.840.1.113883.1.3"/>
          <templateId root="2.16.840.1.113883.10.20.22.2.3.1"/>
          <id root="MDHT" extension="275312484"/>
          <code code="1786213961"/>
          <title>TEXT FOR TITLE</title>
          <confidentialityCode code="135804773"/>
          <entry>
            <organizer>
              <typeId root="2.16.840.1.113883.1.3"/>
```

```
<templateId root="2.16.840.1.113883.10.20.22.4.1"/>
        <id root="MDHT" extension="764020758"/>
        <code code="623147910"/>
        <statusCode code="completed"/>
        <effectiveTime>
          <low value="2014"/>
          <high value="2014"/>
        </effectiveTime>
        <component>
          <observation>
            <templateId root="2.16.840.1.113883.10.20.22.4.2"/>
          </observation>
        </component>
      </organizer>
    </entry>
  </section>
</component>
<component>
  <section>
    <typeId root="2.16.840.1.113883.1.3"/>
    <templateId root="2.16.840.1.113883.10.20.22.2.7.1"/>
    <id root="MDHT" extension="1593393134"/>
    <code code="685571774"/>
    <title>TEXT FOR TITLE</title>
    <confidentialityCode code="1558514783"/>
    <entry>
      <typeId root="2.16.840.1.113883.1.3"/>
        <templateId root="2.16.840.1.113883.10.20.22.4.14"/>
        <id root="MDHT" extension="1544811783"/>
        <code code="618771256"/>
        <effectiveTime>
          <low value="2014"/>
          <high value="2014"/>
        </effectiveTime>
      </procedure>
    </entry>
  </section>
</component>
<component>
  <section/>
</component>
<component>
  <section/>
</component>
<component>
  <section>
    <typeId root="2.16.840.1.113883.1.3"/>
    <templateId root="2.16.840.1.113883.10.20.22.2.17"/>
    <id root="MDHT" extension="1173442336"/>
    <code code="1443111462"/>
    <title>TEXT FOR TITLE</title>
    <confidentialityCode code="1897437313"/>
    <entry>
      <observation>
        <typeId root="2.16.840.1.113883.1.3"/>
        <templateId root="2.16.840.1.113883.10.20.22.4.78"/>
        <id root="MDHT" extension="1292612391"/>
        <code code="359181351"/>
        <effectiveTime>
          <low value="2014"/>
          <high value="2014"/>
        </effectiveTime>
      </observation>
```

```
</entry>
        </section>
      </component>
      <component>
        <section>
          <typeId root="2.16.840.1.113883.1.3"/>
          <templateId root="2.16.840.1.113883.10.20.22.2.38"/>
          <id root="MDHT" extension="1286893049"/>
          <code code="524833184"/>
          <title>TEXT FOR TITLE</title>
          <confidentialityCode code="949915804"/>
          <entry>
            <substanceAdministration classCode="SBADM"/>
          </entry>
        </section>
      </component>
    </structuredBody>
 </component>
</ClinicalDocument>
```

General Header Constraints

[ClinicalDocument: templateId 2.16.840.1.113883.10.20.22.1.1]

Known Subclasses: Summary Of Care Record, Clinical Office Visit Summary, View Download Transmit Summary

- 1. SHALL contain exactly one [1..1] templateId () such that it
 - **a. SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.1.1"
- **2. SHALL** conform to *Consol General Header Constraints* template (templateId: 2.16.840.1.113883.10.20.22.1.1)
- 3. SHALL contain at least one [1..*] recordTarget
 - a. Such recordTargets SHALL contain exactly one [1..1] patientRole
 - a. This patientRole SHALL contain at least one [1..*] addr with @xsi:type="US Realm Address" (CONF:5271)
 - **b.** This patientRole **SHALL** contain at least one [1..*] **id** (CONF:5268)
 - c. This patientRole SHALL contain at least one [1..*] telecom with @xsi:type="TEL" (CONF:5280)
 - **d.** This patientRole **SHALL** contain exactly one [1..1] **patient**
 - a. This patient **SHALL** contain exactly one [1..1] **administrativeGenderCode**, which **SHALL** be selected from ValueSet *Administrative Gender (HL7 V3)* 2.16.840.1.113883.1.11.1 **DYNAMIC** (CONF:6394)
 - **b.** This patient **SHALL** contain exactly one [1..1] **birthTime** with @xsi:type="TS" (CONF:5298)
 - c. This patient **SHALL** contain exactly one [1..1] **ethnicGroupCode**, which **SHALL** be selected from ValueSet *Ethnicity Category ValueSet* **STATIC**
 - d. This patient SHOULD contain zero or one [0..1] maritalStatusCode (CONF:5303), which SHALL be selected from ValueSet HL7 Marital Status 2.16.840.1.113883.1.11.12212 STATIC 1
 - e. This patient **SHALL** contain at least one [1..*] **name** with @xsi:type="*US Realm Patient Name*" (CONF:5284, CONF:10411)
 - f. This patient SHALL contain exactly one [1..1] raceCode, which SHALL be selected from ValueSet Race Category ValueSet STATIC
 - g. This patient MAY contain zero or one [0..1] religiousAffiliationCode (CONF:5317), which SHALL be selected from ValueSet HL7 Religious Affiliation 2.16.840.1.113883.1.11.19185 STATIC 1

h. This patient MAY contain zero or more [0..*] sDTCRaceCode, which SHALL be selected from ValueSet Race Value Set 2.16.840.1.113883.1.11.14914 DYNAMIC (CONF:7263)

Note: The sdtc:raceCode is only used to record additional values when the patient has indicated multiple races or additional race detail beyond the five categories required for Meaningful Use Stage 2. The prefix sdtc: SHALL be bound to the namespace "urn:hl7-org:sdtc". The use of the namespace provides a necessary extension to CDA R2 for the use of the additional raceCode elements.

- i. This patient MAY contain zero or one [0..1] birthplace (CONF:5395)
 - a. This birthplace SHALL contain exactly one [1..1] place (CONF:5396)
 - a. This place SHALL contain exactly one [1..1] addr (CONF:5397)
 - **b.** This place If country is US, this addr **SHALL** contain exactly one [1..1] state, which **SHALL** be selected from ValueSet StateValueSet 2.16.840.1.113883.3.88.12.80.1 DYNAMIC
 - **c.** This place This addr **MAY** contain zero or one [0..1] postalCode, which **SHALL** be selected from ValueSet PostalCodeValueSet 2.16.840.1.113883.3.88.12.80.2 DYNAMIC
 - **d.** This place This addr **SHOULD** contain zero or one [0..1] country, which **SHALL** be selected from ValueSet CountryValueSet 2.16.840.1.113883.3.88.12.80.63 DYNAMIC
- j. This patient MAY contain zero or more [0..*] guardian (CONF:5325)
 - a. Such guardians SHOULD contain zero or more [0,.*] addr with @xsi:type="US Realm Address"
 - **b.** Such guardians **SHOULD** contain zero or one [0..1] **code** (CONF:5326)
 - **c.** Such guardians **MAY** contain zero or more [0..*] **telecom** with @xsi:type="*TEL*"
 - d. Such guardians SHALL contain exactly one [1..1] guardianPerson
 - a. This guardianPerson SHALL contain at least one [1..*] name
 - **b.** This guardianPerson The content of name **SHALL** be a conformant US Realm Person Name (PTN.US.FIELDED) (2.16.840.1.113883.10.20.22.5.1.1) (CONF:10414)
 - e. Such guardians The guardian code, if present, SHALL be selected from ValueSet PersonalRelationshipRoleType 2.16.840.1.113883.1.11.19563 DYNAMIC or ValueSet Responsible Party 2.16.840.1.113883.1.11.19830 DYNAMIC (CONF:5326)
- k. This patient SHOULD contain zero or more [0..*] languageCommunication
 - a. Such languageCommunications SHALL contain exactly one [1..1] languageCode
 - b. Such languageCommunications MAY contain zero or one [0..1] modeCode, which SHALL be selected from ValueSet HL7 LanguageAbilityMode 2.16.840.1.113883.1.11.12249 STATIC 1 (CONF:5409)
 - c. Such languageCommunications MAY contain zero or one [0..1] preferenceInd (CONF:5414)
 - d. Such languageCommunications SHOULD contain zero or one [0..1] proficiencyLevelCode, which SHALL be selected from ValueSet LanguageAbilityProficiency 2.16.840.1.113883.1.11.12199 STATIC (CONF:9965)
 - e. Such languageCommunications languageCode SHALL be selected from ValueSet LanguageCode STATIC where the @code SHALL be selected from the set of alpha-3 codes of ISO 639-2 that are in ISO 639-1
- e. This patientRole MAY contain zero or one [0..1] providerOrganization (CONF:5416)
 - a. This providerOrganization SHALL contain at least one [1..*] addr with @xsi:type="US Realm Address" (CONF:5422)
 - **b.** This providerOrganization **SHALL** contain at least one [1..*] **id** (CONF:5417)
 - c. This providerOrganization SHALL contain at least one [1..*] name (CONF:5419)
 - **d.** This providerOrganization **SHALL** contain at least one [1..*] **telecom** with @xsi:type="*TEL*" (CONF:5420)
 - e. This providerOrganization The id **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:9996) (CONF:9996)
- **4. SHALL** have at least one documentationOf/serviceEvent/performer OR have at least one componentOf/encompassingEncounter/responsibleParty OR have at least one componentOf/encompassingEncounter/encounterParticipant

General Header Constraints example

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <typeId root="2.16.840.1.113883.1.3"/>
 <templateId root="2.16.840.1.113883.10.20.22.1.1"/>
 <id root="MDHT" extension="1267059504"/>
 <code code="751275156"/>
 <title>TEXT FOR TITLE</title>
 <effectiveTime/>
 <confidentialityCode code="828364318"/>
 <setId root="MDHT" extension="822fc693-9a19-4cd9-a107-9f5afeb05418"/>
 <versionNumber value="1"/>
 <recordTarget>
    <patientRole>
      <id root="MDHT" extension="1374466129"/>
      <addr/>
      <telecom/>
      <patient>
        <raceCode codeSystem="2.16.840.1.113883.6.238" codeSystemName="Race</pre>
 and Ethnicity - CDC"/>
        <ethnicGroupCode codeSystem="2.16.840.1.113883.6.238"</pre>
 codeSystemName="Race and Ethnicity - CDC"/>
      </patient>
    </patientRole>
 </recordTarget>
  <author>
   <typeId root="2.16.840.1.113883.1.3"/>
   <time/>
   <assignedAuthor/>
 </author>
 <custodian/>
 <component/>
</ClinicalDocument>
```

Summary Of Care Record

```
[ClinicalDocument: templateId 2.16.840.1.113883.10.20.22.1.1]
```

Known Subclasses: Transition Of Care Ambulatory Summary, Transition Of Care Inpatient Summary

Summary Of Care Record

- 1. SHALL contain exactly one [1..1] templateId () such that it
 - **a. SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.1.1"
- 2. SHALL conform to *General Header Constraints* template (templateId:

```
2.16.840.1.113883.10.20.22.1.1)
```

- 3. SHALL contain exactly one [1..1] component
 - MU2 Requirement for 'Smoking status'
 - a. Contains exactly one [1..1] Social History Section (templateId: 2.16.840.1.113883.10.20.22.2.17)
- 4. SHALL contain exactly one [1..1] component
 - MU2 Requirement for 'Problems'
 - **a.** Contains exactly one [1..1] *Consol Problem Section* (templateId: 2.16.840.1.113883.10.20.22.2.5.1)
- 5. SHALL contain exactly one [1..1] component

- **a.** Contains exactly one [1..1] *Consol Allergies Section* (templateId: 2.16.840.1.113883.10.20.22.2.6.1)
- 6. SHALL contain exactly one [1..1] component
 - **a.** Contains exactly one [1..1] *Results Section* (templateId: 2.16.840.1.113883.10.20.22.2.3.1)
- 7. SHALL contain exactly one [1..1] component
 - a. Contains exactly one [1..1] *Procedures Section* (templateId: 2.16.840.1.113883.10.20.22.2.7.1)
- 8. SHALL contain exactly one [1..1] component
 - **a.** Contains exactly one [1..1] *Consol Immunizations Section* (templateId: 2.16.840.1.113883.10.20.22.2.1)
- 9. SHALL contain exactly one [1..1] component
 - **a.** Contains exactly one [1..1] *Consol Functional Status Section* (templateId: 2.16.840.1.113883.10.20.22.2.14)
- **10. SHALL** have one of Plan of Care (2.16.840.1.113883.10.20.22.2.10) or Assessment and Plan (2.16.840.1.113883.10.20.22.2.9)
- 11. SHALL have one Vital Signs Section with entries optional (TemplateID = 2.16.840.1.113883.10.20.22.2.4) or one Vital Signs Section with entries required (TemplateID = 2.16.840.1.113883.10.20.22.2.4.1)

Summary Of Care Record example

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
 <typeId root="2.16.840.1.113883.1.3"/>
 <templateId root="2.16.840.1.113883.10.20.22.1.1"/>
 <id root="MDHT" extension="1619037907"/>
 <code code="1300241102"/>
 <title>TEXT FOR TITLE</title>
 <effectiveTime/>
 <confidentialityCode code="395831273"/>
 <setId root="MDHT" extension="16fdecd1-87e4-4d86-be8d-2654802266f7"/>
 <versionNumber value="1"/>
 <recordTarget>
    <typeId root="2.16.840.1.113883.1.3"/>
    <patientRole/>
 </recordTarget>
  <author>
    <typeId root="2.16.840.1.113883.1.3"/>
   <time/>
    <assignedAuthor/>
  </author>
 <custodian/>
 <component>
    <structuredBody>
      <component>
        <section/>
      </component>
      <component>
        <section/>
      </component>
      <component>
        <section/>
      </component>
      <component>
        <section>
          <typeId root="2.16.840.1.113883.1.3"/>
          <templateId root="2.16.840.1.113883.10.20.22.2.17"/>
          <id root="MDHT" extension="1430905565"/>
```

```
<code code="2077568690"/>
    <title>TEXT FOR TITLE</title>
    <confidentialityCode code="2076473207"/>
    <entry>
      <observation>
        <typeId root="2.16.840.1.113883.1.3"/>
        <templateId root="2.16.840.1.113883.10.20.22.4.78"/>
        <id root="MDHT" extension="327091915"/>
        <code code="880289741"/>
        <effectiveTime>
          <low value="2014"/>
          <high value="2014"/>
        </effectiveTime>
      </observation>
    </entry>
  </section>
</component>
<component>
  <section>
    <typeId root="2.16.840.1.113883.1.3"/>
    <templateId root="2.16.840.1.113883.10.20.22.2.3.1"/>
    <id root="MDHT" extension="1562429799"/>
    <code code="1544065768"/>
    <title>TEXT FOR TITLE</title>
    <confidentialityCode code="211010615"/>
    <entry>
      <organizer>
        <typeId root="2.16.840.1.113883.1.3"/>
        <templateId root="2.16.840.1.113883.10.20.22.4.1"/>
        <id root="MDHT" extension="1841115635"/>
        <code code="384300499"/>
        <statusCode code="completed"/>
        <effectiveTime>
          <low value="2014"/>
          <high value="2014"/>
        </effectiveTime>
        <component>
          <observation>
            <templateId root="2.16.840.1.113883.10.20.22.4.2"/>
        </component>
      </organizer>
    </entry>
  </section>
</component>
<component>
  <section>
    <typeId root="2.16.840.1.113883.1.3"/>
    <templateId root="2.16.840.1.113883.10.20.22.2.7.1"/>
    <id root="MDHT" extension="1411981155"/>
    <code code="786271388"/>
    <title>TEXT FOR TITLE</title>
    <confidentialityCode code="52741286"/>
    <entry>
      cedure>
        <typeId root="2.16.840.1.113883.1.3"/>
        <templateId root="2.16.840.1.113883.10.20.22.4.14"/>
        <id root="MDHT" extension="18810869"/>
        <code code="927277478"/>
        <effectiveTime>
          <low value="2014"/>
          <high value="2014"/>
        </effectiveTime>
      </procedure>
```

```
</entry>
  </section>
</component>
<component>
  <section>
    <typeId root="2.16.840.1.113883.1.3"/>
    <id root="MDHT" extension="1382276153"/>
    <code code="599998718"/>
    <title>TEXT FOR TITLE</title>
    <confidentialityCode code="134807875"/>
    <entry>
      <organizer>
        <typeId root="2.16.840.1.113883.1.3"/>
        <id root="MDHT" extension="820787957"/>
        <code code="621841905"/>
        <statusCode code="completed"/>
        <effectiveTime>
          <low value="2014"/>
          <high value="2014"/>
        </effectiveTime>
        <component>
          <observation/>
        </component>
      </organizer>
    </entry>
    <entry>
      <organizer>
        <typeId root="2.16.840.1.113883.1.3"/>
        <id root="MDHT" extension="783324708"/>
        <code code="172267348"/>
        <statusCode code="completed"/>
        <effectiveTime>
          <low value="2014"/>
          <high value="2014"/>
        </effectiveTime>
        <component>
          <observation/>
        </component>
      </organizer>
    </entry>
    <entry>
      <observation>
        <typeId root="2.16.840.1.113883.1.3"/>
        <id root="MDHT" extension="1720492715"/>
        <code code="1249000442"/>
        <effectiveTime>
          <low value="2014"/>
          <high value="2014"/>
        </effectiveTime>
        <entryRelationship>
          <supply classCode="SPLY"/>
        </entryRelationship>
        <entryRelationship>
          <observation/>
        </entryRelationship>
        <entryRelationship>
          <observation/>
        </entryRelationship>
      </observation>
    </entry>
    <entry>
      <observation>
        <typeId root="2.16.840.1.113883.1.3"/>
        <id root="MDHT" extension="654756820"/>
```

```
<code code="1205645882"/>
              <effectiveTime>
                <low value="2014"/>
                <high value="2014"/>
              </effectiveTime>
              <entryRelationship>
                <supply classCode="SPLY"/>
              </entryRelationship>
              <entryRelationship>
                <observation/>
              </entryRelationship>
              <entryRelationship>
                <observation/>
              </entryRelationship>
            </observation>
          </entry>
          <entry>
            <observation/>
          </entry>
          <entry>
            <observation/>
          </entry>
          <entry>
            <observation/>
          </entry>
          <entry>
            <observation/>
          </entry>
          <entry>
            <supply classCode="SPLY"/>
          </entry>
          <entry>
            <observation/>
          </entry>
          <entry>
            <observation/>
          </entry>
          <entry>
            <observation/>
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Transition Of Care Ambulatory Summary

```
[ClinicalDocument: templateId 2.16.840.1.113883.10.20.22.1.1]
```

MU2 170.314(b)(2) Transition of Care/Referral Summary - For Ambulatory Care MU2 170.314(b)(7) Export Summary - For Ambulatory Care

- 1. SHALL contain exactly one [1..1] templateId () such that it
 - **a. SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.1.1"
- **2. SHALL** conform to *Summary Of Care Record* template (templateId: 2.16.840.1.113883.10.20.22.1.1)
- 3. SHALL contain exactly one [1..1] component

- **a.** Contains exactly one [1..1] *Consol Medications Section* (templateId: 2.16.840.1.113883.10.20.22.2.1.1)
- 4. SHALL have at least one documentationOf/serviceEvent/performer/assignedEntity including a documentationOf/serviceEvent/performer/assignedEntity/telecom and documentationOf/serviceEvent/performer/assignedEntity/telecom and documentationOf/serviceEvent/performer/assignedEntity/addr OR at least one componentOf/encompassingEncounter/responsibleParty including a componentOf/encompassingEncounter/responsibleParty/assignedEntity/assignedPerson/name and componentOf/encompassingEncounter/responsibleParty/assignedEntity/telecom and componentOf/encompassingEncounter/responsibleParty/assignedEntity/addr OR at least one componentOf/encompassingEncounter/encounterParticipant including a componentOf/encompassingEncounter/encounterParticipant/assignedEntity/assignedPerson/name and componentOf/encompassingEncounter/encounterParticipant/assignedEntity/telecom and componentOf/encompassingEncounter/encounterParticipant/assignedEntity/telecom
- 5. SHALL have one Reason for Referral Section (TemplateID = 1.3.6.1.4.1.19376.1.5.3.1.3.1) or Plan or Care Section (TemplateID = 2.16.840.1.113883.10.20.22.2.10) or Assessment and Plan Section (Template ID = 2.16.840.1.113883.10.20.22.2.9)
- 6. document provided does not satisfy part or all of the Encounter Diagnoses MU2 Data Requirement: If section/ @nullFlavor is not present, the Assessment Section (TemplateID = 2.16.840.1.113883.10.20.22.2.8), if present, **SHALL** have at least one Problem Observation Entry (TemplateID = 2.16.840.1.113883.10.20.22.4.4) or If section/@nullFlavor is not present, the Assessment And Plan Section (TemplateID = 2.16.840.1.113883.10.20.22.2.9), if present, SHALL have at least one Problem Observation Entry (TemplateID = 2.16.840.1.113883.10.20.22.4.4) or If section/@nullFlavor is not present, the Postoperative Diagnosis section (TemplateID = 2.16.840.1.113883.10.20.22.2.35), if present, **SHALL** have at least one Problem Observation Entry (TemplateID = 2.16.840.1.113883.10.20.22.4.4) or If section/@nullFlavor is not present, the Problem Section (entries required: TemplateID = 2.16.840.1.113883.10.20.22.2.5.1), if present, SHALL have a Problem Concern Act Entry (TemplateID = 2.16.840.1.113883.10.20.22.4.3) or a Problem Observation Entry (TemplateID = 2.16.840.1.113883.10.20.22.4.4) or If section/@nullFlavor is not present, the Hospital Admission Diagnosis Section (TemplateID = 2.16.840.1.113883.10.20.22.2.43), if present, SHALL have a Hospital Admission Diagnosis Entry (TemplateID = 2.16.840.1.113883.10.20.22.4.34) or If section/@nullFlavor is not present, the Hospital Discharge Diagnosis Section (TemplateID = 2.16.840.1.113883.10.20.22.2.24), if present, SHALL have a Hospital Discharge Diagnosis Entry (TemplateID = 2.16.840.1.113883.10.20.22.4.33) or If section/@nullFlavor is not present, the Encounters Section (entries required: TemplateID = 2.16.840.1.113883.10.20.22.2.2.1), if present, **SHALL** have a Encounter Activities Entry (TemplateID = 2.16.840.1.113883.10.20.22.4.49) or a Encounter Diagnosis Entry (TemplateID = 2.16.840.1.113883.10.20.22.4.80)

Transition Of Care Ambulatory Summary example

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <typeId root="2.16.840.1.113883.1.3"/>
 <templateId root="2.16.840.1.113883.10.20.22.1.1"/>
 <id root="MDHT" extension="699690778"/>
 <code code="596959332"/>
 <title>TEXT FOR TITLE</title>
 <effectiveTime/>
 <confidentialityCode code="701048001"/>
 <setId root="MDHT" extension="2cc1544a-da0a-4e43-9667-a5594929c8de"/>
 <versionNumber value="1"/>
  <recordTarget>
    <typeId root="2.16.840.1.113883.1.3"/>
    <patientRole/>
  </recordTarget>
  <author>
    <typeId root="2.16.840.1.113883.1.3"/>
   <time/>
    <assignedAuthor/>
  </author>
  <custodian/>
```

Transition Of Care Inpatient Summary

```
[ClinicalDocument: templateId 2.16.840.1.113883.10.20.22.1.1]
```

MU2 170.314(b)(2) Transition of Care/Referral Summary - For Inpatient Care MU2 170.314(b)(7) Export Summary - For Inpatient Care

- 1. SHALL contain exactly one [1..1] templateId () such that it
 - **a. SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.1.1"
- **2. SHALL** conform to *Summary Of Care Record* template (templateId: 2.16.840.1.113883.10.20.22.1.1)
- 3. SHALL contain exactly one [1..1] component
 - **a.** Contains exactly one [1..1] *Consol Hospital Discharge Instructions Section* (templateId: 2.16.840.1.113883.10.20.22.2.41)
- **4. SHALL** have one Medications Section with entries required (TemplateID = 2.16.840.1.113883.10.20.22.2.1.1) or Hospital Discharge Medications (TemplateID = 2.16.840.1.113883.10.20.22.2.11.1)
- 5. document provided does not satisfy part or all of the Encounter Diagnoses MU2 Data Requirement: If section/ @nullFlavor is not present, the Assessment Section (TemplateID = 2.16.840.1.113883.10.20.22.2.8), if present, **SHALL** have at least one Problem Observation Entry (TemplateID = 2.16.840.1.113883.10.20.22.4.4) or If section/@nullFlavor is not present, the Assessment And Plan Section (TemplateID = 2.16.840.1.113883.10.20.22.2.9), if present, SHALL have at least one Problem Observation Entry (TemplateID = 2.16.840.1.113883.10.20.22.4.4) or If section/@nullFlavor is not present, the Postoperative Diagnosis section (TemplateID = 2.16.840.1.113883.10.20.22.2.35), if present, SHALL have at least one Problem Observation Entry (TemplateID = 2.16.840.1.113883.10.20.22.4.4) or If section/@nullFlavor is not present, the Problem Section (entries required: TemplateID = 2.16.840.1.113883.10.20.22.2.5.1), if present, SHALL have a Problem Concern Act Entry (TemplateID = 2.16.840.1.113883.10.20.22.4.3) or a Problem Observation Entry (TemplateID = 2.16.840.1.113883.10.20.22.4.4) or If section/@nullFlavor is not present, the Hospital Admission Diagnosis Section (TemplateID = 2.16.840.1.113883.10.20.22.2.43), if present, SHALL have a Hospital Admission Diagnosis Entry (TemplateID = 2.16.840.1.113883.10.20.22.4.34) or If section/@nullFlavor is not present, the Hospital Discharge Diagnosis Section (TemplateID = 2.16.840.1.113883.10.20.22.2.24), if present, SHALL have a Hospital Discharge Diagnosis Entry (TemplateID = 2.16.840.1.113883.10.20.22.4.33) or If section/@nullFlavor is not present, the Encounters Section (entries required: TemplateID = 2.16.840.1.113883.10.20.22.2.22.1), if present, SHALL have a Encounter Activities Entry (TemplateID = 2.16.840.1.113883.10.20.22.4.49) or a Encounter Diagnosis Entry (TemplateID = 2.16.840.1.113883.10.20.22.4.80)

Transition Of Care Inpatient Summary example

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
        <typeId root="2.16.840.1.113883.1.3"/>
        <templateId root="2.16.840.1.113883.10.20.22.1.1"/>
        <id root="MDHT" extension="1536011480"/>
        <code code="7226591"/>
        <title>TEXT FOR TITLE</title>
        <effectiveTime/>
```

```
<confidentialityCode code="136124614"/>
 <setId root="MDHT" extension="603121cc-cc1b-4d28-909b-e8e8eb778f16"/>
 <versionNumber value="1"/>
  <recordTarget>
    <typeId root="2.16.840.1.113883.1.3"/>
    <patientRole/>
  </recordTarget>
  <author>
    <typeId root="2.16.840.1.113883.1.3"/>
    <assignedAuthor/>
  </author>
  <custodian/>
  <component>
    <structuredBody>
      <component>
        <section/>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

VDT Ambulatory Summary

[ClinicalDocument: templateId 2.16.840.1.113883.10.20.22.1.1]

MU2 170.314 (e)(1) Ambulatory Summary

- 1. SHALL contain exactly one [1..1] templateId () such that it
 - **a.** SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.1.1"
- 2. SHALL conform to *View Download Transmit Summary* template (templateId: 2.16.840.1.113883.10.20.22.1.1)
- 3. SHALL contain exactly one [1..1] component
 - **a.** Contains exactly one [1..1] *Consol Medications Section* (templateId: 2.16.840.1.113883.10.20.22.2.1.1)
- 4. SHALL have at least one documentationOf/serviceEvent/performer/assignedEntity including a documentationOf/serviceEvent/performer/assignedEntity/assignedPerson/name and documentationOf/serviceEvent/performer/assignedEntity/telecom and documentationOf/serviceEvent/performer/assignedEntity/addr OR at least one componentOf/encompassingEncounter/responsibleParty/assignedEntity/assignedPerson/name and componentOf/encompassingEncounter/responsibleParty/assignedEntity/telecom and componentOf/encompassingEncounter/responsibleParty/assignedEntity/addr OR at least one componentOf/encompassingEncounter/encounterParticipant including a componentOf/encompassingEncounter/encounterParticipant/assignedEntity/assignedPerson/name and componentOf/encompassingEncounter/encounterParticipant/assignedEntity/telecom and componentOf/encompassingEncounter/encounterParticipant/assignedEntity/telecom and componentOf/encompassingEncounter/encounterParticipant/assignedEntity/telecom and componentOf/encompassingEncounter/encounterParticipant/assignedEntity/telecom

VDT Ambulatory Summary example

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
        <typeId root="2.16.840.1.113883.1.3"/>
        <templateId root="2.16.840.1.113883.10.20.22.1.1"/>
        <id root="MDHT" extension="1306063933"/>
        <code code="1547300686"/>
        <title>TEXT FOR TITLE</title>
        <effectiveTime/>
```

Missing Product Name in BookMap (bookmap/bookmeta/prodinfo/prodname) _ Missing Release (DSTU) in BookMap (bookmap/bookmeta/prodinfo/vrmlist/vrm/@release) _ Missing Version (YYYYMM) in BookMap (bookmap/bookmeta/prodinfo/vrmlist/vrm/@version) | DOCUMENT TEMPLATES | 30

```
<confidentialityCode code="428167626"/>
 <setId root="MDHT" extension="ff681cee-92bc-4d11-bcc7-dfcdfcdfdbfe"/>
 <versionNumber value="1"/>
  <recordTarget>
    <typeId root="2.16.840.1.113883.1.3"/>
    <patientRole/>
  </recordTarget>
  <author>
    <typeId root="2.16.840.1.113883.1.3"/>
    <assignedAuthor/>
  </author>
  <custodian/>
  <component>
    <structuredBody>
      <component>
        <section/>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

VDT Inpatient Summary

[ClinicalDocument: templateId 2.16.840.1.113883.10.20.22.1.1]

MU2 170.314 (e)(1) Inpatient Summary

- 1. SHALL contain exactly one [1..1] templateId () such that it
 - **a. SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.1.1"
- 2. SHALL conform to *View Download Transmit Summary* template (templateId: 2.16.840.1.113883.10.20.22.1.1)
- 3. SHALL contain exactly one [1..1] component
 - **a.** Contains exactly one [1..1] *Consol Hospital Discharge Instructions Section* (templateId: 2.16.840.1.113883.10.20.22.2.41)
- **4. SHALL** satisfy: Shall have one documentationOf/serviceEvent/effectiveTime/low or componentOf/encompassingEncounter/effectiveTime/low or Encounters section entries optional (TemplateID: 2.16.840.1.113883.10.20.22.2.22) or Encounters section entries required (TemplateID: 2.16.840.1.113883.10.20.22.2.22.1)
- 5. SHALL satisfy: Shall have one documentationOf/serviceEvent/effectiveTime/high or componentOf/encompassingEncounter/effectiveTime/high or Encounters section entries optional (TemplateID: 2.16.840.1.113883.10.20.22.2.22) or Encounters section entries required (TemplateID: 2.16.840.1.113883.10.20.22.2.2.2.1)
- **6. SHALL** satisfy: Shall have componentOf/encompassingEncounter/location or Encounters section entries optional (TemplateID: 2.16.840.1.113883.10.20.22.2.22) or Encounters section entries required (TemplateID: 2.16.840.1.113883.10.20.22.2.22.1)
- 7. SHALL have one Medications Section with entries required (TemplateID = 2.16.840.1.113883.10.20.22.2.1.1) or Hospital Discharge Medications (TemplateID = 2.16.840.1.113883.10.20.22.2.11.1)
- 8. SHALL have one Reason for Visit Section (TemplateID = 2.16.840.1.113883.10.20.22.2.12) or Chief Complaint Section (TemplateID = 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1) or Chief Complaint and Reason for Visit Section (2.16.840.1.113883.10.20.22.2.13) or Encounters section entries optional (TemplateID: 2.16.840.1.113883.10.20.22.2.2.2) or Encounters section entries required (TemplateID: 2.16.840.1.113883.10.20.22.2.2.2)

VDT Inpatient Summary example

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
 <typeId root="2.16.840.1.113883.1.3"/>
 <templateId root="2.16.840.1.113883.10.20.22.1.1"/>
 <id root="MDHT" extension="189439341"/>
 <code code="1785861590"/>
 <title>TEXT FOR TITLE</title>
 <effectiveTime/>
 <confidentialityCode code="900122159"/>
 <setId root="MDHT" extension="9ee6c284-3bdd-4c56-a4cf-980f219b5386"/>
 <versionNumber value="1"/>
 <recordTarget>
   <typeId root="2.16.840.1.113883.1.3"/>
    <patientRole/>
  </recordTarget>
  <author>
   <typeId root="2.16.840.1.113883.1.3"/>
   <time/>
    <assignedAuthor/>
  </author>
  <custodian/>
  <component>
    <structuredBody>
      <component>
        <section/>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

View Download Transmit Summary

```
[ClinicalDocument: templateId 2.16.840.1.113883.10.20.22.1.1]
```

Known Subclasses: VDT Inpatient Summary, VDT Ambulatory Summary

- 1. SHALL contain exactly one [1..1] templateId () such that it
 - **a.** SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.1.1"
- **2. SHALL** conform to *General Header Constraints* template (templateId: 2.16.840.1.113883.10.20.22.1.1)
- 3. SHALL contain exactly one [1..1] component
 - **a.** Contains exactly one [1..1] *Consol Allergies Section* (templateId: 2.16.840.1.113883.10.20.22.2.6.1)
- 4. SHALL contain exactly one [1..1] component
 - **a.** Contains exactly one [1..1] *Consol Problem Section* (templateId: 2.16.840.1.113883.10.20.22.2.5.1)
- 5. SHALL contain exactly one [1..1] component
 - a. Contains exactly one [1..1] *Procedures Section* (templateId: 2.16.840.1.113883.10.20.22.2.7.1)
- 6. SHALL contain exactly one [1..1] component
 - **a.** Contains exactly one [1..1] *Results Section* (templateId: 2.16.840.1.113883.10.20.22.2.3.1)
- 7. SHALL contain exactly one [1..1] component
 - a. Contains exactly one [1..1] Social History Section (templateId: 2.16.840.1.113883.10.20.22.2.17)

- **8. SHALL** have one of Assessment and Plan section or Plan of Care section
- 9. SHALL have one Vital Signs Section with entries optional (TemplateID = 2.16.840.1.113883.10.20.22.2.4) or one Vital Signs Section with entries required (TemplateID = 2.16.840.1.113883.10.20.22.2.4.1)

View Download Transmit Summary example

```
<?xml version="1.0" encoding="UTF-8"?>
<ClinicalDocument xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
xmlns="urn:hl7-org:v3" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
 <typeId root="2.16.840.1.113883.1.3"/>
 <templateId root="2.16.840.1.113883.10.20.22.1.1"/>
 <id root="MDHT" extension="1190873125"/>
 <code code="1139644926"/>
 <title>TEXT FOR TITLE</title>
 <effectiveTime/>
 <confidentialityCode code="1642584178"/>
 <setId root="MDHT" extension="4b2dbfb2-48de-4734-ba3f-e42b7987a4a9"/>
 <versionNumber value="1"/>
 <recordTarget>
    <typeId root="2.16.840.1.113883.1.3"/>
    <patientRole/>
 </recordTarget>
  <author>
    <typeId root="2.16.840.1.113883.1.3"/>
    <time/>
    <assignedAuthor/>
 </author>
  <custodian/>
  <component>
    <structuredBody>
      <component>
        <section/>
      </component>
      <component>
        <section/>
      </component>
      <component>
        <section>
          <typeId root="2.16.840.1.113883.1.3"/>
          <templateId root="2.16.840.1.113883.10.20.22.2.7.1"/>
          <id root="MDHT" extension="1112299438"/>
          <code code="950257416"/>
          <title>TEXT FOR TITLE</title>
          <confidentialityCode code="1091174264"/>
          <entry>
            cedure>
              <typeId root="2.16.840.1.113883.1.3"/>
              <templateId root="2.16.840.1.113883.10.20.22.4.14"/>
              <id root="MDHT" extension="1321177271"/>
              <code code="1004014383"/>
              <effectiveTime>
                <low value="2014"/>
                <high value="2014"/>
              </effectiveTime>
            </procedure>
          </entry>
        </section>
      </component>
      <component>
        <section>
          <typeId root="2.16.840.1.113883.1.3"/>
          <templateId root="2.16.840.1.113883.10.20.22.2.3.1"/>
          <id root="MDHT" extension="71357786"/>
```

```
<code code="134505260"/>
          <title>TEXT FOR TITLE</title>
          <confidentialityCode code="1277346316"/>
          <entry>
            <organizer>
              <typeId root="2.16.840.1.113883.1.3"/>
              <templateId root="2.16.840.1.113883.10.20.22.4.1"/>
              <id root="MDHT" extension="1229908303"/>
              <code code="1932130648"/>
              <statusCode code="completed"/>
              <effectiveTime>
                <low value="2014"/>
                <high value="2014"/>
              </effectiveTime>
              <component>
                <observation>
                  <templateId root="2.16.840.1.113883.10.20.22.4.2"/>
                </observation>
              </component>
            </organizer>
          </entry>
        </section>
      </component>
      <component>
        <section>
          <typeId root="2.16.840.1.113883.1.3"/>
          <templateId root="2.16.840.1.113883.10.20.22.2.17"/>
          <id root="MDHT" extension="649218741"/>
          <code code="1625060670"/>
          <title>TEXT FOR TITLE</title>
          <confidentialityCode code="532442960"/>
          <entry>
            <observation>
              <typeId root="2.16.840.1.113883.1.3"/>
              <templateId root="2.16.840.1.113883.10.20.22.4.78"/>
              <id root="MDHT" extension="1314292729"/>
              <code code="720699380"/>
              <effectiveTime>
                <low value="2014"/>
                <high value="2014"/>
              </effectiveTime>
            </observation>
          </entry>
        </section>
      </component>
    </structuredBody>
  </component>
</ClinicalDocument>
```

Missing Product Name in BookMap (bookmap/bookmeta/prodinfo/prodname) _ Missing Release (DSTU) in BookMap (bookmap/bookmeta/prodinfo/vrmlist/vrm/@release) _ Missing Version (YYYYMM) in BookMap (bookmap/bookmeta/prodinfo/vrmlist/vrm/@version) | SECTION TEMPLATES | 34

Chapter

3

SECTION TEMPLATES

Topics:

- Functional Status Section
- Medications Administered Section
- Procedures Section
- Results Section
- Social History Section

Functional Status Section

[Section: templateId 2.16.840.1.113883.10.20.22.2.14]

- 1. SHALL contain exactly one [1..1] templateId () such that it
 - **a.** SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.14"
- **2. SHALL** conform to *Consol Functional Status Section* template (templateId: 2.16.840.1.113883.10.20.22.2.14)
- 3. If section/@nullFlavor is not present, Contains zero or more [0..*] entry
 - **a.** Contains exactly one [1..1] *Cognitive Status Result Observation* (templateId: 2.16.840.1.113883.10.20.22.4.74)
- 4. If section/@nullFlavor is not present, Contains zero or more [0..*] entry
 - **a.** Contains exactly one [1..1] *Cognitive Status Result Organizer* (templateId: 2.16.840.1.113883.10.20.22.4.75)
- 5. If section/@nullFlavor is not present, Contains zero or more [0..*] entry
 - **a.** Contains exactly one [1..1] *Functional Status Result Observation* (templateId: 2.16.840.1.113883.10.20.22.4.67)
- **6.** If section/@nullFlavor is not present, Contains zero or more [0..*] **entry**
 - **a.** Contains exactly one [1..1] *Functional Status Result Organizer* (templateId: 2.16.840.1.113883.10.20.22.4.66)

Functional Status Section example

```
<section xmlns="urn:hl7-org:v3">
 <templateId root="2.16.840.1.113883.10.20.22.2.14"/>
 <id root="MDHT" extension="1571486302"/>
 <title>TEXT FOR TITLE</title>
 <text/>
 <entry>
   <observation>
      <templateId root="2.16.840.1.113883.10.20.22.4.74"/>
      <templateId root="2.16.840.1.113883.10.20.22.4.2"/>
      <id root="MDHT" extension="1136874800"/>
      <code code="1880755931"/>
      <text>Text Value</text>
      <effectiveTime>
        <low value="2014"/>
        <high value="2014"/>
      </effectiveTime>
    </observation>
 </entry>
  <entry>
    <organizer>
      <templateId root="2.16.840.1.113883.10.20.22.4.75"/>
      <templateId root="2.16.840.1.113883.10.20.22.4.1"/>
      <id root="MDHT" extension="1776221176"/>
      <statusCode code="completed"/>
      <effectiveTime>
        <low value="2014"/>
        <high value="2014"/>
      </effectiveTime>
      <component>
        <observation>
          <templateId root="2.16.840.1.113883.10.20.22.4.74"/>
          <templateId root="2.16.840.1.113883.10.20.22.4.2"/>
```

```
<id root="MDHT" extension="785183459"/>
          <code code="1424918384"/>
          <text>Text Value</text>
          <effectiveTime>
            <low value="2014"/>
            <high value="2014"/>
          </effectiveTime>
        </observation>
      </component>
    </organizer>
 </entry>
  <entry>
    <observation>
      <templateId root="2.16.840.1.113883.10.20.22.4.67"/>
      <templateId root="2.16.840.1.113883.10.20.22.4.2"/>
      <id root="MDHT" extension="214646007"/>
      <code code="322909917"/>
      <text>Text Value</text>
      <effectiveTime>
        <low value="2014"/>
        <high value="2014"/>
      </effectiveTime>
    </observation>
  </entry>
  <entry>
    <organizer>
      <templateId root="2.16.840.1.113883.10.20.22.4.66"/>
      <templateId root="2.16.840.1.113883.10.20.22.4.1"/>
      <id root="MDHT" extension="1025348011"/>
      <statusCode code="completed"/>
      <effectiveTime>
        <low value="2014"/>
        <high value="2014"/>
      </effectiveTime>
      <component>
        <observation>
          <templateId root="2.16.840.1.113883.10.20.22.4.67"/>
          <templateId root="2.16.840.1.113883.10.20.22.4.2"/>
          <id root="MDHT" extension="1936354119"/>
          <code code="919035654"/>
          <text>Text Value</text>
          <effectiveTime>
            <low value="2014"/>
            <high value="2014"/>
          </effectiveTime>
        </observation>
      </component>
    </organizer>
 </entry>
</section>
```

Medications Administered Section

[Section: templateId 2.16.840.1.113883.10.20.22.2.38]

- 1. SHALL contain exactly one [1..1] templateId () such that it
 - **a.** SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.38"
- **2. SHALL** conform to *Consol Medications Administered Section* template (templateId: 2.16.840.1.113883.10.20.22.2.38)

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- 3. If section/@nullFlavor is not present, SHALL contain at least one [1..*] entry (CONF:8156)
 - **a.** Contains exactly one [1..1] *Consol Medication Activity* (templateId: 2.16.840.1.113883.10.20.22.4.16)

Medications Administered Section example

```
<section xmlns="urn:h17-org:v3">
  <templateId root="2.16.840.1.113883.10.20.22.2.38"/>
  <id root="MDHT" extension="1383679631"/>
    <code code="1183129429"/>
    <title>TEXT FOR TITLE</title>
    <text/>
    <entry>
        <substanceAdministration/>
        </entry>
        <substanceAdministration/>
        </esction>
```

Procedures Section

[Section: templateId 2.16.840.1.113883.10.20.22.2.7.1]

- 1. SHALL contain exactly one [1..1] templateId () such that it
 - **a. SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.7.1"
- **2. SHALL** conform to *Consol Procedures Section* template (templateId: 2.16.840.1.113883.10.20.22.2.7.1)
- 3. If section/@nullFlavor is not present, MAY contain zero or more [0..*] entry (CONF:7895, CONF:7896)
 - **a.** Contains exactly one [1..1] *Procedure Activity Procedure* (templateId: 2.16.840.1.113883.10.20.22.4.14)

Procedures Section example

```
<section xmlns="urn:hl7-org:v3">
 <templateId root="2.16.840.1.113883.10.20.22.2.7.1"/>
 <id root="MDHT" extension="1844822737"/>
 <code code="21607475"/>
 <title>TEXT FOR TITLE</title>
 <text/>
  <entry>
    <templateId root="2.16.840.1.113883.10.20.22.4.14"/>
     <id root="MDHT" extension="2078807700"/>
     <code code="435313805"/>
     <text>Text Value</text>
     <effectiveTime>
       <low value="2014"/>
       <high value="2014"/>
     </effectiveTime>
   </procedure>
 </entry>
</section>
```

Results Section

[Section: templateId 2.16.840.1.113883.10.20.22.2.3.1]

- 1. SHALL contain exactly one [1..1] templateId () such that it
 - **a. SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.3.1"
- 2. SHALL conform to *Consol Results Section* template (templateId: 2.16.840.1.113883.10.20.22.2.3.1)
- 3. If section/@nullFlavor is not present, SHALL contain at least one [1..*] entry (CONF:7112, CONF:7113)
 - **a.** Contains exactly one [1..1] *Result Organizer* (templateId: 2.16.840.1.113883.10.20.22.4.1)

Results Section example

```
<section xmlns="urn:hl7-org:v3">
 <templateId root="2.16.840.1.113883.10.20.22.2.3.1"/>
 <id root="MDHT" extension="1113539263"/>
 <code code="1016050967"/>
 <title>TEXT FOR TITLE</title>
 <text/>
 <entry>
   <organizer>
     <templateId root="2.16.840.1.113883.10.20.22.4.1"/>
      <id root="MDHT" extension="332275843"/>
      <code code="1383036004"/>
      <statusCode code="completed"/>
      <effectiveTime>
        <low value="2014"/>
        <high value="2014"/>
      </effectiveTime>
      <component>
        <observation>
          <templateId root="2.16.840.1.113883.10.20.22.4.2"/>
          <id root="MDHT" extension="29352409"/>
          <code code="261639178"/>
          <text>Text Value</text>
          <effectiveTime>
            <low value="2014"/>
            <high value="2014"/>
          </effectiveTime>
        </observation>
      </component>
   </organizer>
 </entry>
</section>
```

Social History Section

[Section: templateId 2.16.840.1.113883.10.20.22.2.17]

- 1. SHALL contain exactly one [1..1] templateId () such that it
 - **a. SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.17"
- **2. SHALL** conform to *Consol Social History Section* template (templateId: 2.16.840.1.113883.10.20.22.2.17)
- 3. If section/@nullFlavor is not present, SHALL contain at least one [1..*] entry
 - **a.** Contains exactly one [1..1] *Smoking Status Observation* (templateId: 2.16.840.1.113883.10.20.22.4.78)

Missing Product Name in BookMap (bookmap/bookmeta/prodinfo/prodname) _ Missing Release (DSTU) in BookMap (bookmap/bookmeta/prodinfo/vrmlist/vrm/@release) _ Missing Version (YYYYMM) in BookMap (bookmap/bookmeta/prodinfo/vrmlist/vrm/@version) | SECTION TEMPLATES | 39

Social History Section example

```
<section xmlns="urn:hl7-org:v3">
 <templateId root="2.16.840.1.113883.10.20.22.2.17"/>
 <id root="MDHT" extension="106639057"/>
 <code code="2005106438"/>
 <title>TEXT FOR TITLE</title>
 <text/>
 <entry>
   <observation>
     <templateId root="2.16.840.1.113883.10.20.22.4.78"/>
     <id root="MDHT" extension="989803485"/>
     <code code="1151399486"/>
     <text>Text Value</text>
      <effectiveTime>
       <low value="2014"/>
        <high value="2014"/>
      </effectiveTime>
   </observation>
 </entry>
</section>
```

Chapter

4

CLINICAL STATEMENT TEMPLATES

Topics:

- Cognitive Status Result Observation
- Cognitive Status Result Organizer
- Functional Status Result Observation
- Functional Status Result Organizer
- Procedure Activity Procedure
- Result Observation
- Result Organizer
- Smoking Status Observation

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

Cognitive Status Result Observation

[Observation: templateId 2.16.840.1.113883.10.20.22.4.74]

- 1. SHALL contain exactly one [1..1] templateId () such that it
 - **a.** SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.74"
- 2. SHALL conform to *Result Observation* template (templateId: 2.16.840.1.113883.10.20.22.4.2)
- **3. SHALL** conform to *Consol Cognitive Status Result Observation* template (templateId: 2.16.840.1.113883.10.20.22.4.74)

Cognitive Status Result Observation example

Cognitive Status Result Organizer

[Organizer: templateId 2.16.840.1.113883.10.20.22.4.75]

- 1. SHALL contain exactly one [1..1] templateId () such that it
 - **a.** SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.75"
- 2. SHALL conform to Result Organizer template (templateId: 2.16.840.1.113883.10.20.22.4.1)
- **3. SHALL** conform to *Consol Cognitive Status Result Organizer* template (templateId: 2.16.840.1.113883.10.20.22.4.75)
- 4. Contains zero or more [0..*] component
 - **a.** Contains exactly one [1..1] *Cognitive Status Result Observation* (templateId: 2.16.840.1.113883.10.20.22.4.74)

Cognitive Status Result Organizer example

Functional Status Result Observation

[Observation: templateId 2.16.840.1.113883.10.20.22.4.67]

- 1. SHALL contain exactly one [1..1] templateId () such that it
 - **a.** SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.67"
- 2. SHALL conform to *Result Observation* template (templateId: 2.16.840.1.113883.10.20.22.4.2)
- **3. SHALL** conform to *Consol Functional Status Result Observation* template (templateId: 2.16.840.1.113883.10.20.22.4.67)

Functional Status Result Observation example

Functional Status Result Organizer

[Organizer: templateId 2.16.840.1.113883.10.20.22.4.66]

- 1. SHALL contain exactly one [1..1] templateId () such that it
 - **a.** SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.66"
- 2. SHALL conform to Result Organizer template (templateId: 2.16.840.1.113883.10.20.22.4.1)
- **3. SHALL** conform to *Consol Functional Status Result Organizer* template (templateId: 2.16.840.1.113883.10.20.22.4.66)
- 4. Contains zero or more [0..*] component

a. Contains exactly one [1..1] *Functional Status Result Observation* (templateId: 2.16.840.1.113883.10.20.22.4.67)

Functional Status Result Organizer example

```
<organizer xmlns="urn:hl7-org:v3">
 <templateId root="2.16.840.1.113883.10.20.22.4.66"/>
 <templateId root="2.16.840.1.113883.10.20.22.4.1"/>
 <id root="MDHT" extension="222043494"/>
 <code code="411828648"/>
 <statusCode code="completed"/>
  <effectiveTime>
    <low value="2014"/>
    <high value="2014"/>
 </effectiveTime>
  <component>
   <observation>
      <templateId root="2.16.840.1.113883.10.20.22.4.67"/>
      <templateId root="2.16.840.1.113883.10.20.22.4.2"/>
      <id root="MDHT" extension="1840299746"/>
      <code code="541174340"/>
      <statusCode code="completed"/>
      <effectiveTime>
        <low value="2014"/>
        <high value="2014"/>
      </effectiveTime>
    </observation>
  </component>
</organizer>
```

Procedure Activity Procedure

[Procedure: templateId 2.16.840.1.113883.10.20.22.4.14]

- 1. SHALL contain exactly one [1..1] templateId () such that it
 - **a. SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.14"
- **2. SHALL** conform to *Consol Procedure Activity Procedure* template (templateId: 2.16.840.1.113883.10.20.22.4.14)
- 3. SHALL contain exactly one [1..1] code (CONF:7656)
- **4.** 'code' **SHALL** be selected from SNOMED CT (codeSystem 2.16.840.1.113883.6.96) or CPT-4 (CodeSystem 2.16.840.1.113883.6.12)

Procedure Activity Procedure example

Result Observation

[Observation: templateId 2.16.840.1.113883.10.20.22.4.2]

Known Subclasses: Cognitive Status Result Observation, Functional Status Result Observation

- 1. SHALL contain exactly one [1..1] templateId () such that it
 - **a.** SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.2"
- **2. SHALL** conform to *Consol Result Observation* template (templateId: 2.16.840.1.113883.10.20.22.4.2)

Result Observation example

```
<observation xmlns="urn:h17-org:v3">
  <templateId root="2.16.840.1.113883.10.20.22.4.2"/>
  <id root="MDHT" extension="541262708"/>
  <code code="1278697928"/>
  <text>Text Value</text>
  <statusCode code="completed"/>
  <effectiveTime>
      <low value="2014"/>
      <high value="2014"/>
      </effectiveTime>
      <interpretationCode code="388224481"/>
      <methodCode code="1835958170"/>
      <targetSiteCode code="601792804"/>
  </observation>
```

Result Organizer

[Organizer: templateId 2.16.840.1.113883.10.20.22.4.1]

Known Subclasses: Cognitive Status Result Organizer, Functional Status Result Organizer

- 1. SHALL contain exactly one [1..1] templateId () such that it
 - **a.** SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.1"
- 2. SHALL conform to Consol Result Organizer template (templateId: 2.16.840.1.113883.10.20.22.4.1)
- 3. SHALL contain at least one [1..*] component (CONF:7124, CONF:14850)
 - **a.** Contains exactly one [1..1] *Result Observation* (templateId: 2.16.840.1.113883.10.20.22.4.2)

Result Organizer example

Smoking Status Observation

[Observation: templateId 2.16.840.1.113883.10.20.22.4.78]

- 1. SHALL contain exactly one [1..1] templateId () such that it
 - **a. SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.78"
- **2. SHALL** conform to *Consol Smoking Status Observation* template (templateId: 2.16.840.1.113883.10.20.22.4.78)
- 3. SHALL contain exactly one [1..1] value, which SHALL be selected from ValueSet *Smoking Status* STATIC

Smoking Status Observation example

```
<observation xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns="urn:h17-org:v3">
  <templateId root="2.16.840.1.113883.10.20.22.4.78"/>
  <id root="MDHT" extension="156783149"/>
  <code code="134081755"/>
  <statusCode code="completed"/>
  <effectiveTime>
    <low value="2014"/>
    <high value="2014"/>
    </effectiveTime>
  <value xsi:type="CD" code="1141817250"/>
  </observation>
```

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Chapter

5

OTHER CLASSES

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

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Chapter

6

VALUE SETS

Topics:

- Ethnicity Category ValueSet
- Language Code
- Race Category ValueSet
- Smoking Status

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

Ethnicity Category ValueSet

Value Set	Ethnicity Category ValueSet - (OID not specified)
Code System	Race and Ethnicity - CDC - 2.16.840.1.113883.6.238

Code	Code System	Print Name
2135-2	Race and Ethnicity - CDC	Hispanic or Latino
2186-5	Race and Ethnicity - CDC	Not Hispanic or Latino

Language Code

Value Set	LanguageCode - (OID not specified)
Code System	LOINC - 2.16.840.1.113883.6.1

Code	Code System	Print Name
aar	LOINC	Afar
abk	LOINC	Abkhazian
afr	LOINC	Afrikaans
aka	LOINC	Akan
sqi	LOINC	Albanian
amh	LOINC	Amharic
ara	LOINC	Arabic
arg	LOINC	Aragonese
hye	LOINC	Armenian
asm	LOINC	Assamese
ava	LOINC	Avaric
ave	LOINC	Avestan
aym	LOINC	Aymara
aze	LOINC	Azerbaijani
bak	LOINC	Bashkir
bam	LOINC	Bambara
eus	LOINC	Basque
bel	LOINC	Belarusian
ben	LOINC	Bengali
bih	LOINC	Bihari languages
bis	LOINC	Bislama
bod	LOINC	Tibetan
bos	LOINC	Bosnian

Code	Code System	Print Name
bre	LOINC	Breton
bul	LOINC	Bulgarian
mya	LOINC	Burmese
cat	LOINC	Catalan; Valencian
ces	LOINC	Czech
cha	LOINC	Chamorro
che	LOINC	Chechen
zho	LOINC	Chinese
chu	LOINC	Church Slavic; Old Slavonic; Church Slavonic; Old Bulgarian; Old Church Slavonic
chv	LOINC	Chuvash
cor	LOINC	Cornish
cos	LOINC	Corsican
cre	LOINC	Cree
cym	LOINC	Welsh
dan	LOINC	Danish
deu	LOINC	German
div	LOINC	Divehi; Dhivehi; Maldivian
nld	LOINC	Dutch; Flemish
dzo	LOINC	Dzongkha
ell	LOINC	Greek, Modern (1453-)
eng	LOINC	English
еро	LOINC	Esperanto
est	LOINC	Estonian
ewe	LOINC	Ewe
fao	LOINC	Faroese
fas	LOINC	Persian
fij	LOINC	Fijian
fin	LOINC	Finnish
fra	LOINC	French
fry	LOINC	Western Frisian
ful	LOINC	Fulah
kat	LOINC	Georgian
ger	LOINC	German
gla	LOINC	Gaelic; Scottish Gaelic
gle	LOINC	Irish

Code	Code System	Print Name
glg	LOINC	Galician
glv	LOINC	Manx
grn	LOINC	Guarani
guj	LOINC	Gujarati
hat	LOINC	Haitian; Haitian Creole
hau	LOINC	Hausa
heb	LOINC	Hebrew
her	LOINC	Herero
hin	LOINC	Hindi
hmo	LOINC	Hiri Motu
hrv	LOINC	Croatian
hun	LOINC	Hungarian
ibo	LOINC	Igbo
isl	LOINC	Icelandic
ido	LOINC	Ido
iii	LOINC	Sichuan Yi; Nuosu
iku	LOINC	Inuktitut
ile	LOINC	Interlingue; Occidental
ina	LOINC	Interlingua (International Auxiliary Language Association)
ind	LOINC	Indonesian
ipk	LOINC	Inupiaq
ita	LOINC	Italian
jav	LOINC	Javanese
jpn	LOINC	Japanese
kal	LOINC	Kalaallisut; Greenlandic
kan	LOINC	Kannada
kas	LOINC	Kashmiri
kau	LOINC	Kanuri
kaz	LOINC	Kazakh
khm	LOINC	Central Khmer
kik	LOINC	Kikuyu; Gikuyu
kin	LOINC	Kinyarwanda
kir	LOINC	Kirghiz; Kyrgyz
kom	LOINC	Komi
kon	LOINC	Kongo

Code	Code System	Print Name
kor	LOINC	Korean
kua	LOINC	Kuanyama; Kwanyama
kur	LOINC	Kurdish
lao	LOINC	Lao
lat	LOINC	Latin
lav	LOINC	Latvian
lim	LOINC	Limburgan; Limburger; Limburgish
lin	LOINC	Lingala
lit	LOINC	Lithuanian
ltz	LOINC	Luxembourgish; Letzeburgesch
lub	LOINC	Luba-Katanga
lug	LOINC	Ganda
mkd	LOINC	Macedonian
mah	LOINC	Marshallese
mal	LOINC	Malayalam
mri	LOINC	Maori
mar	LOINC	Marathi
msa	LOINC	Malay
mlg	LOINC	Malagasy
mlt	LOINC	Maltese
mon	LOINC	Mongolian
nau	LOINC	Nauru
nav	LOINC	Navajo; Navaho
nbl	LOINC	Ndebele, South; South Ndebele
nde	LOINC	Ndebele, North; North Ndebele
ndo	LOINC	Ndonga
nep	LOINC	Nepali
nno	LOINC	Norwegian Nynorsk; Nynorsk, Norwegian
nob	LOINC	Bokm??l, Norwegian; Norwegian Bokm??l
nor	LOINC	Norwegian
nya	LOINC	Chichewa; Chewa; Nyanja
oci	LOINC	Occitan (post 1500)
oji	LOINC	Ojibwa
ori	LOINC	Oriya
orm	LOINC	Oromo
oss	LOINC	Ossetian; Ossetic

Code	Code System	Print Name
pan	LOINC	Panjabi; Punjabi
pli	LOINC	Pali
pol	LOINC	Polish
por	LOINC	Portuguese
pus	LOINC	Pushto; Pashto
que	LOINC	Quechua
roh	LOINC	Romansh
ron	LOINC	Romanian; Moldavian; Moldovan
run	LOINC	Rundi
rus	LOINC	Russian
sag	LOINC	Sango
san	LOINC	Sanskrit
sin	LOINC	Sinhala; Sinhalese
slk	LOINC	Slovak
slv	LOINC	Slovenian
sme	LOINC	Northern Sami
smo	LOINC	Samoan
sna	LOINC	Shona
snd	LOINC	Sindhi
som	LOINC	Somali
sot	LOINC	Sotho, Southern
spa	LOINC	Spanish; Castilian
srd	LOINC	Sardinian
srp	LOINC	Serbian
SSW	LOINC	Swati
sun	LOINC	Sundanese
swa	LOINC	Swahili
swe	LOINC	Swedish
tah	LOINC	Tahitian
tam	LOINC	Tamil
tat	LOINC	Tatar
tel	LOINC	Telugu
tgk	LOINC	Tajik
tgl	LOINC	Tagalog
tha	LOINC	Thai
tir	LOINC	Tigrinya

Code	Code System	Print Name
ton	LOINC	Tonga (Tonga Islands)
tsn	LOINC	Tswana
tso	LOINC	Tsonga
tuk	LOINC	Turkmen
tur	LOINC	Turkish
twi	LOINC	Twi
uig	LOINC	Uighur; Uyghur
ukr	LOINC	Ukrainian
urd	LOINC	Urdu
uzb	LOINC	Uzbek
ven	LOINC	Venda
vie	LOINC	Vietnamese
vol	LOINC	Volap??k
wln	LOINC	Walloon
wol	LOINC	Wolof
xho	LOINC	Xhosa
yid	LOINC	Yiddish
yor	LOINC	Yoruba
zha	LOINC	Zhuang; Chuang
zul	LOINC	Zulu

Race Category ValueSet

Value Set	Race Category ValueSet - (OID not specified)
Code System	Race and Ethnicity - CDC - 2.16.840.1.113883.6.238

Code	Code System	Print Name
1002-5	Race and Ethnicity - CDC	American Indian or Alaska Native
2028-9	Race and Ethnicity - CDC	Asian
2076-8	Race and Ethnicity - CDC	Native Hawaiian or Other Pacific Islander
2106-3	Race and Ethnicity - CDC	White
2054-5	Race and Ethnicity - CDC	Black or African American

Smoking Status

Value Set	Smoking Status - (OID not specified)
Code System	SNOMEDCT - 2.16.840.1.113883.6.96

Code	Code System	Print Name
449868002	SNOMEDCT	Current every day smoker
428041000124106	SNOMEDCT	Current some day smoker
8517006	SNOMEDCT	Former smoker
266919005	SNOMEDCT	Never smoker (Never Smoked)
77176002	SNOMEDCT	Smoker, current status unknown
266927001	SNOMEDCT	Unknown if ever smoked
428071000124103	SNOMEDCT	Heavy tobacco smoker
428061000124105	SNOMEDCT	Light tobacco smoker

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