



**HL7 CDA® R2 Implementation Guide:
C-CDA Templates for Clinical Notes R2.1
Companion Guide
Release 2 (US Realm)
Standard for Trial Use**

**October 2019
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Appendix A: Templates defined in C-CDA R2.1 Companion Guide

**Sponsored by:
Structured Documents Work Group**

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Appendix A: Templates defined in C-CDA R2.1 Companion Guide

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Logical Observation Identifiers Names & Codes (LOINC)	Regenstrief Institute
International Classification of Diseases (ICD) codes	World Health Organization (WHO)
NUCC Health Care Provider Taxonomy code set	American Medical Association. Please see www.nucc.org . AMA licensing contact: 312-464-5022 (AMA IP services)

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1 SECTION

1.1 Care Teams Section

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.500:2019-07-01 (open)]

Table 1: Care Teams Section Contexts

Contained By:	Contains:
	Care Team Organizer (optional)

The Care Team Section is used to share historical and current Care Team information.

The Care Team Section may be included in any type of C-CDA structured document that is an open template.

An individual can have more than one Care Team. A Care Team can exist over time such as a longitudinal care team which includes historical members that may be active or inactive on the care team as needed. Or a Care Team, such as a rehabilitation team, may exist to address a person's needs associated with a particular care event, or a team can be based on addressing a specific condition.

The Care Team Organizer entry template used in the C-CDA Care Teams Section is meant to support the foundation of effective communication, interaction channels and maintenance of current clinical context awareness for the patient, caregivers and care providers to promote care coordination.

Table 2: Care Teams Section Constraints Overview

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.500:2019-07-01)					
templateId	1..1	SHALL		4435-3	
@root	1..1	SHALL		4435-7	2.16.840.1.113883.10.20.22.2.500
@extension	1..1	SHALL		4435-8	2019-07-01
code	1..1	SHALL		4435-5	
@code	1..1	SHALL		4435-9	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 85847-2
@codeSystem	1..1	SHALL		4435-10	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
title	1..1	SHALL		4435-4	
text	1..1	SHALL		4435-6	
entry	0..*	SHOULD		4435-1	
organizer	1..1	SHALL		4435-159	Care Team Organizer (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500:2019-07-01)

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1. **SHALL** contain exactly one [1..1] **templateId** (CONF:4435-3) such that it
 - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.2.500" (CONF:4435-7).
 - b. **SHALL** contain exactly one [1..1] **@extension**="2019-07-01" (CONF:4435-8).
2. **SHALL** contain exactly one [1..1] **code** (CONF:4435-5) such that it
 - a. **SHALL** contain exactly one [1..1] **@code**="85847-2" Patient Care team information (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:4435-9).
 - b. **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:4435-10).
3. **SHALL** contain exactly one [1..1] **title** (CONF:4435-4).
4. **SHALL** contain exactly one [1..1] **text** (CONF:4435-6).
5. **SHOULD** contain zero or more [0..*] **entry** (CONF:4435-1) such that it
 - a. **SHALL** contain exactly one [1..1] Care Team Organizer (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500:2019-07-01) (CONF:4435-159).

Figure 1: Care Teams Section

```
<section>
  <templateId root="2.16.840.1.113883.10.20.22.2.500" extension="2019-07-01"/>
  <code code="85847-2" codeSystem="2.16.840.1.113883.6.1"/>
  <title>Patient Care Teams</title>
  <text>
    <list>
      <item>
        <content ID= "CareTeamName1">Inpatient Diabetes Care Team</content>
        (<content>Active</content>) (10/08/2018 - )
        <table>
          <thead>
            <tr>
              <th>Member</th>
              <th>Role on Team</th>
              <th>Status</th>
              <th>Date</th>
            </tr>
          </thead>
          <tbody>
            <tr>
              <td>Dr. Henry Seven </td>
              <td ID="CT1_M01">PCP</td>
              <td>(Active)</td>
              <td>10/18/2019</td>
            </tr>
          </tbody>
        </table>
      </item>
    </list>

  </text>
  <entry>
    <!--Care Team Organizer-->
    ... entry info here, if coded data available for care team members...
  </entry>
</section>
```

1.2 Notes Section

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.65:2016-11-01
(open)]

Table 3: Notes Section Contexts

Contained By:	Contains:
	Note Activity (required)

The Notes Section allow for inclusion of clinical documentation which does not fit precisely within any other C-CDA section. Multiple Notes sections may be included in a document provided they each include different types of note content as indicated by a different section.code.

The Notes Section SHOULD NOT be used in place of a more specific C-CDA section. For example,

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notes about procedure should be placed within the Procedures Section, not a Notes Section. When a Notes Section is present, Note Activity entries contain structured information about the note information allowing it to be more machine processable.

Table 4: Notes Section Constraints Overview

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.65:2016-11-01)					
templateId	1..1	SHALL		3250-16935	
@root	1..1	SHALL		3250-16936	2.16.840.1.113883.10.20.22.2.65
@extension	1..1	SHALL		3250-16938	2016-11-01
code	1..1	SHALL		3250-16892	urn:oid:2.16.840.1.113883.11.20.9.68 (Note Types)
title	1..1	SHALL		3250-16891	
text	1..1	SHALL		3250-16894	
entry	1..*	SHALL		3250-16904	
act	1..1	SHALL		3250-16905	Note Activity (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01)

1. **SHALL** contain exactly one [1..1] **templateId** (CONF:3250-16935) such that it
 - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.2.65" (CONF:3250-16936).
 - b. **SHALL** contain exactly one [1..1] **@extension**="2016-11-01" (CONF:3250-16938).
2. **SHALL** contain exactly one [1..1] **code**, which **SHOULD** be selected from ValueSet [Note Types](#) urn:oid:2.16.840.1.113883.11.20.9.68 **DYNAMIC** (CONF:3250-16892).

This title should reflect the kind of notes included in this section, corresponding to the code.

3. **SHALL** contain exactly one [1..1] **title** (CONF:3250-16891).

The narrative **SHOULD** contain human-readable representations using standard CDA narrative markup of each note to ensure widest compatibility with receivers. While allowed by CDA, the use of <renderMultiMedia> elements, which contain a referencedObject attribute pointing to an <observationMedia> or <regionOfInterest> element in the discrete entries, is discouraged in Note Sections because rendering support for these elements is not widespread.

4. **SHALL** contain exactly one [1..1] **text** (CONF:3250-16894).
5. **SHALL** contain at least one [1..*] **entry** (CONF:3250-16904) such that it
 - a. **SHALL** contain exactly one [1..1] [Note Activity](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01) (CONF:3250-16905).

Figure 2: Note Section Example

```
<section>
  <!-- Notes Section -->
  <templateId root="2.16.840.1.113883.10.20.22.2.65" extension="2016-11-01"/>
  <code code="11488-4" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
displayName="Consultation note"/>
  <title>Consultation Notes</title>
  <text>
    <list>
      <item ID="ConsultNote1">
        <paragraph>Dr. Specialist - September 8, 2016</paragraph>
        <paragraph>Evaluated patient due to symptoms of...</paragraph>
      </item>
    </list>
  </text>
  <!-- Note Activity entry -->
  <entry>
    <act classCode="ACT" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.22.4.202" extension="2016-11-01"/>
      <code code="34109-9" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
displayName="Note">
        <!-- Code must match or be equivalent to section code -->
        <translation code="11488-4" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC" displayName="Consultation note" />
      </code>
      <text>
        <reference value="#ConsultNote1" />
      </text>
      <statusCode code="completed"/>
      <!-- Clinically-relevant time of the note -->
      <effectiveTime value="20160908" />
      <!--...-->
    </act>
  </entry>
</section>
```

2 ENTRY

2.1 Birth Sex Observation

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.200:2016-06-01 (open)]

This observation represents the sex of the patient at birth. It is the sex that is entered on the person's birth certificate at time of birth.

This observation is not appropriate for recording patient gender (administrativeGender).

Table 5: Birth Sex Observation Constraints Overview

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.200:2016-06-01)					
@classCode	1..1	SHALL		3250-18230	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		3250-18231	urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN
templateId	1..1	SHALL		3250-18232	
@root	1..1	SHALL		3250-18233	2.16.840.1.113883.10.20.22.4.200
@extension	1..1	SHALL		3250-32949	2016-06-01
code	1..1	SHALL		3250-18234	
@code	1..1	SHALL		3250-18235	76689-9
@codeSystem	1..1	SHALL		3250-21163	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
statusCode	1..1	SHALL		3250-18124	
@code	1..1	SHALL		3250-18125	urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed
value	1..1	SHALL	CD	3250-32947	urn:oid:2.16.840.1.113762.1.4.1 (ONC Administrative Sex)

1. **SHALL** contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:3250-18230).
2. **SHALL** contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:3250-18231).
3. **SHALL** contain exactly one [1..1] templateId (CONF:3250-18232) such that it
 - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.200" (CONF:3250-18233).

- b. **SHALL** contain exactly one [1..1] **@extension**="2016-06-01" (CONF:3250-32949).
4. **SHALL** contain exactly one [1..1] **code** (CONF:3250-18234).
 - a. This code **SHALL** contain exactly one [1..1] **@code**="76689-9" Sex Assigned At Birth (CONF:3250-18235).
 - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1 **STATIC**) (CONF:3250-21163).
5. **SHALL** contain exactly one [1..1] **statusCode** (CONF:3250-18124).
 - a. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:3250-18125).
6. **SHALL** contain exactly one [1..1] **value** with **@xsi:type**="CD", where the code **SHALL** be selected from ValueSet ONC Administrative Sex urn:oid:2.16.840.1.113762.1.4.1 **STATIC** 2016-06-01 (CONF:3250-32947).
 - a. If value/@code not from value set ONC Administrative Sex urn:oid:2.16.840.1.113762.1.4.1 **STATIC** 2016-06-01, then value/@nullFlavor **SHALL** be "UNK" (CONF:3250-32948).

Figure 3: Birth Sex Example

```
<observation classCode="OBS" moodCode="EVN">
  <!-- New templateId for Birth Sex -->
  <!-- Not asserting conformance to Social History Observation due to different vocab. -->
  >
  <templateId root="2.16.840.1.113883.10.20.22.4.200" extension="2016-06-01"/>
  <code code="76689-9" codeSystem="2.16.840.1.113883.6.1"
    displayName="Sex Assigned At Birth"/>
  <text>
    <reference value="#BSex_Narrative1"/>
  </text>
  <statusCode code="completed"/>
  <!-- effectiveTime if present should match birthTime -->
  <!-- Request name change to QRDA value set (2.16.840.1.113762.1.4.1) - ONC Birth Sex - -->
  <value xsi:type="CD" codeSystem="2.16.840.1.113883.5.1"
codeSystemName="AdministrativeGender"
    code="F" displayName="Female">
    <originalText>
      <reference value="#BSex_value"/>
    </originalText>
  </value>
  <author>
    ...
  </author>
</observation>
```

2.2 Care Team Member Act

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.1:2019-07-01
(open)]

Table 6: Care Team Member Act Contexts

Contained By:	Contains:
Care Team Organizer (required)	Note Activity (optional) Care Team Member Schedule Observation (optional)

This template is used to represent a member of the care team. Care team members can include healthcare and community services providers, caregivers, relatives, the patient themselves, etc. A care team member can be another care team or an organization.

Care team member attributes include the following:

- Care team member status on the care team
- Care team member time (e.g. duration, point-in-time, etc.) on the care team
- Schedule of the care team member describing when the care team member usually participates on the care team
- Care team member function on the care team such as the care team member specialty, relationship to the patient, and also role on the care team
- Care team member name, address, telecom, organization, etc.
- Care team member information (narrative description about the care team member)

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Table 7: Care Team Member Act Constraints Overview

XPath	Card.	Verb	Data Type	CONF#	Value
act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.1:2019-07-01)					
@classCode	1..1	SHALL		4435-53	PCPR
@moodCode	1..1	SHALL		4435-54	EVN
templateId	1..1	SHALL		4435-45	
@root	1..1	SHALL		4435-66	2.16.840.1.113883.10.20.22.4.500.1
@extension	1..1	SHALL		4435-67	2019-07-01
id	1..*	SHALL		4435-162	
code	1..1	SHALL		4435-27	
@code	1..1	SHALL		4435-48	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 85847-2
@codeSystem	1..1	SHALL		4435-49	2.16.840.1.113883.6.1
statusCode	1..1	SHALL		4435-62	
@code	1..1	SHALL		4435-68	urn:oid:2.16.840.1.113883.1.11.15933 (ActStatus)
effectiveTime	1..1	SHALL		4435-33	
low	1..1	SHALL		4435-167	
high	0..1	MAY		4435-168	
performer	1..1	SHALL		4435-160	
sdtc:functionCode	0..1	MAY		4435-161	urn:oid:2.16.840.1.113762.1.4.1099.30 (Care Team Member Function)
participant	0..*	MAY		4435-76	
@typeCode	1..1	SHALL		4435-78	urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = IND
sdtc:functionCode	1..1	SHALL		4435-169	urn:oid:2.16.840.1.113762.1.4.1099.30 (Care Team Member Function)
participant	0..*	MAY		4435-171	
@typeCode	1..1	SHALL		4435-174	urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = LOC
participantRole	1..1	SHALL		4435-173	
entryRelationship	0..*	MAY		4435-86	
@typeCode	1..1	SHALL		4435-87	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
encounter	1..1	SHALL		4435-88	
id	1..1	SHALL		4435-89	
entryRelationship	0..*	MAY		4435-91	

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XPath	Card.	Verb	Data Type	CONF#	Value
@typeCode	1..1	SHALL		4435-92	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
act	1..1	SHALL		4435-93	Note Activity (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01)
entryRelationship	0..1	MAY		4435-94	
@typeCode	1..1	SHALL		4435-96	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		4435-95	Care Team Member Schedule Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.3:2019-07-01)

1. **SHALL** contain exactly one [1..1] **@classCode**="PCPR" Provision of Care (CONF:4435-53).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CONF:4435-54).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:4435-45) such that it
 - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.500.1" (CONF:4435-66).
 - b. **SHALL** contain exactly one [1..1] **@extension**="2019-07-01" (CONF:4435-67).
4. **SHALL** contain at least one [1..*] **id** (CONF:4435-162).
5. **SHALL** contain exactly one [1..1] **code** (CONF:4435-27).
 - a. This code **SHALL** contain exactly one [1..1] **@code**="85847-2" Patient Care team information (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:4435-48).
 - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" LOINC (CONF:4435-49).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:4435-62).
 - a. This statusCode **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [ActStatus](#) urn:oid:2.16.840.1.113883.1.11.15933 **STATIC** 2019-05-27 (CONF:4435-68).
7. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:4435-33).
 - a. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:4435-167).
 - b. This effectiveTime **MAY** contain zero or one [0..1] **high** (CONF:4435-168).
8. **SHALL** contain exactly one [1..1] **performer** (CONF:4435-160) such that it
 - a. **MAY** contain zero or one [0..1] **sdct:functionCode**, which **SHOULD** be selected from ValueSet [Care Team Member Function](#) urn:oid:2.16.840.1.113762.1.4.1099.30 **DYNAMIC** (CONF:4435-161).
Note: This sdct:functionCode represents the function or role of the member on the care team. For example, the care team member roles on the care team can be a caregiver and a professional nurse or a primary care provider and the care coordinator.

Appendix A: Templates defined in C-CDA R2.1 Companion Guide

This participant is used to express additional care team functions performed by this member of the team.

9. **MAY** contain zero or more [0..*] **participant** (CONF:4435-76) such that it
- SHALL** contain exactly one [1..1] **@typeCode="IND"** Indirect Target (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90) (CONF:4435-78).
 - SHALL** contain exactly one [1..1] **sdtc:functionCode**, which **SHALL** be selected from ValueSet [Care Team Member Function](#) urn:oid:2.16.840.1.113762.1.4.1099.30 **DYNAMIC** (CONF:4435-169).
 - This participantRole **SHALL** contain exactly one [1..1] **@nullFlavor="NI"** No Information. (CONF:4435-172).

This participant represents the location where the care team member provides the service

10. **MAY** contain zero or more [0..*] **participant** (CONF:4435-171) such that it
- SHALL** contain exactly one [1..1] **@typeCode="LOC"** Location (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90) (CONF:4435-174).
 - SHALL** contain exactly one [1..1] **participantRole** (CONF:4435-173).
11. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4435-86) such that it
- SHALL** contain exactly one [1..1] **@typeCode="REFR"** Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4435-87).
 - SHALL** contain exactly one [1..1] **encounter** (CONF:4435-88).
 - This encounter **SHALL** contain exactly one [1..1] **id** (CONF:4435-89).
 - If the id does not match an encounter/id from an encounter elsewhere within the same document and the id does not contain **@nullFlavor=NA**, then this entry **SHALL** conform to the Encounter Activity (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2015-08-01) (CONF:4435-90).

This is the note activity to narratively describe information about the member on the care team.

12. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4435-91) such that it
- SHALL** contain exactly one [1..1] **@typeCode="REFR"** Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4435-92).
 - SHALL** contain exactly one [1..1] [Note Activity](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01) (CONF:4435-93).

This is the schedule of when or how frequently the care team member participates (or provides care to the patient) on the care team.

13. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:4435-94) such that it
- SHALL** contain exactly one [1..1] **@typeCode="REFR"** Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4435-96).
 - SHALL** contain exactly one [1..1] [Care Team Member Schedule Observation](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.3:2019-07-01) (CONF:4435-95).

Figure 4: Care Team Member Act

```

<!--Care Team Organizer-->
  <entry>
    <organizer classCode="CLUSTER" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.22.4.500" extension="2019-07-
01"/>
      ...
      <!--NEW Care Team Organizer Entry Template ID and extension-->
      ...
      <!-- #1 Care Team Member Act - This component is a care team member who is a
provider -->
      <component>
        <act classCode="PCPR" moodCode="EVN">
          <templateId root="2.16.840.1.113883.10.20.22.4.500.1" extension="2019-
07-01"/>
          <id root="1.5.5.5.5.5.5"/>
          <code code="85847-2" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC" displayName="Care Team Information"/>
          <!--Care Team Member Status -
https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.15933/expansion-->
          <statusCode code="active"/>
          <effectiveTime xsi:type="IVL_TS">
            <low value="201810081426-0500"/>
          </effectiveTime>
          <!--Attributes about the provider member - name-->
          <performer typeCode="PRF">
            <functionCode xmlns="urn:hl7-org:sdctc" code="PCP"
displayName="primary care physician"
codeSystem="2.16.840.1.113883.5.88"
codeSystemName="ParticipationFunction">
              <originalText xmlns="urn:hl7-org:v3">
                <reference value="#CT1_M01"></reference>
              </originalText>
            </functionCode> <!-- A care team member role -->
            <assignedEntity>
              <id root="B00B14E8-CDE4-48EA-8A09-01BC4945122A" extension="1"/>
              <id root="1.5.5.5.5.5.5"/>
              <assignedPerson>
                <name><given>John</given><given>D</given><family>Smith</family>,<suffix>MD</suffix> </name>
              </assignedPerson>
            </assignedEntity>
          </performer>
        </act>
      </component>
    </organizer>
  </entry>

```


2.3 Care Team Member Schedule Observation

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.3:2019-07-01 (open)]

Table 8: Care Team Member Schedule Observation Contexts

Contained By:	Contains:
Care Team Member Act (optional)	

This template represents the schedule of when the care team member participates on the care team. Examples include:

- An oncologist who participates on the care team once a year to monitor the patient for disease relapse.
- A primary care provider who participates on the care team during the summer or winter months (e.g. in the case of patients who are snow-birds).
- A crisis team who participates on the care team when the patient is admitted to an inpatient setting (e.g. in the case of children with special needs)

Table 9: Care Team Member Schedule Observation Constraints Overview

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.3:2019-07-01)					
@classCode	1..1	SHALL		4435-24	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		4435-25	urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN
templateId	1..1	SHALL		4435-12	
@root	1..1	SHALL		4435-18	2.16.840.1.113883.10.20.22.4.500.3
@extension	1..1	SHALL		4435-19	2019-07-01
code	1..1	SHALL		4435-13	
@code	1..1	SHALL		4435-20	57203-2
@codeSystem	1..1	SHALL		4435-21	2.16.840.1.113883.6.1
text	1..1	SHALL		4435-15	
reference	1..1	SHALL		4435-16	
@value	1..1	SHALL		4435-26	
statusCode	1..1	SHALL		4435-11	
@code	1..1	SHALL		4435-17	urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed
value	1..1	SHALL	TS	4435-14	

1. **SHALL** contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:4435-24).

2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:4435-25).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:4435-12) such that it
 - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.500.3" (CONF:4435-18).
 - b. **SHALL** contain exactly one [1..1] **@extension**="2019-07-01" (CONF:4435-19).
4. **SHALL** contain exactly one [1..1] **code** (CONF:4435-13).
 - a. This code **SHALL** contain exactly one [1..1] **@code**="57203-2" Episode Timing [CMS Assessment] (CONF:4435-20).
 - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" LOINC (CONF:4435-21).
5. **SHALL** contain exactly one [1..1] **text** (CONF:4435-15).
 - a. This text **SHALL** contain exactly one [1..1] **reference** (CONF:4435-16).
 - i. This reference **SHALL** contain exactly one [1..1] **@value** (CONF:4435-26).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:4435-11).
 - a. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:4435-17).
7. **SHALL** contain exactly one [1..1] **value** with **@xsi:type**="TS" (CONF:4435-14).

2.4 Care Team Organizer

[organizer: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.500:2019-07-01 (open)]

Table 10: Care Team Organizer Contexts

Contained By:	Contains:
Care Teams Section (optional)	Note Activity (optional) Care Team Member Act (required) Care Team Type Observation (optional)

This organizer template contains information about a single care team.

The author of the organizer is the person who documented the care team information.

The participants of the organizer are the care team lead(s) and the care team organization.

The components of the organizer contain the following information:

- The encounter that caused the care team to be formed
- Narrative information about the care team
- The care team members
- Reasons for the care team
- The care team type(s) - a care team can have multiple care team types

Appendix A: Templates defined in C-CDA R2.1 Companion Guide

Table 11: Care Team Organizer Constraints Overview

XPath	Card.	Verb	Data Type	CONF#	Value
organizer (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500:2019-07-01)					
@classCode	1..1	SHALL		4435-124	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = CLUSTER
@moodCode	1..1	SHALL		4435-125	urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN
templateId	1..1	SHALL		4435-112	
@root	1..1	SHALL		4435-117	2.16.840.1.113883.10.20.22.4.500
@extension	1..1	SHALL		4435-118	2019-07-01
id	1..*	SHALL		4435-126	
code	1..1	SHALL		4435-114	
@code	1..1	SHALL		4435-120	86744-0
@codeSystem	1..1	SHALL		4435-121	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
originalText	1..1	SHALL		4435-154	
reference	1..1	SHALL		4435-155	
@value	1..1	SHALL		4435-156	
statusCode	1..1	SHALL		4435-113	
@code	1..1	SHALL		4435-119	urn:oid:2.16.840.1.113883.1.11.15933 (ActStatus)
effectiveTime	1..1	SHALL		4435-127	
low	1..1	SHALL		4435-157	
high	0..1	MAY		4435-158	
author	0..*	SHOULD		4435-116	Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)
participant	0..*	SHOULD		4435-128	
@typeCode	1..1	SHALL		4435-129	urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = PPRF
sdtc:functionCode	0..1	MAY		4435-130	urn:oid:2.16.840.1.113762.1.4.1099.30 (Care Team Member Function)
participantRole	1..1	SHALL		4435-131	
id	1..*	SHALL		4435-132	
participant	0..*	MAY		4435-134	
@typeCode	1..1	SHALL		4435-137	urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = LOC
participantRole	1..1	SHALL		4435-135	

Appendix A: Templates defined in C-CDA R2.1 Companion Guide

XPath	Card.	Verb	Data Type	CONF#	Value
id	1..*	SHALL		4435-138	
addr	0..1	SHOULD		4435-139	
telecom	0..*	SHOULD		4435-140	
playingEntity	1..1	SHALL		4435-136	
@classCode	1..1	SHALL		4435-141	urn:oid:2.16.840.1.113883.5.41 (HL7EntityClass) = PLC
name	1..1	SHALL		4435-142	
component	0..*	MAY		4435-110	
observation	1..1	SHALL		4435-163	Care Team Type Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.2:2019-07-01)
component	0..*	MAY		4435-146	
act	1..1	SHALL		4435-147	Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122)
component	0..*	MAY		4435-148	
encounter	1..1	SHALL		4435-164	
id	1..*	SHALL		4435-165	
component	0..1	MAY		4435-150	
act	1..1	SHALL		4435-151	Note Activity (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01)
component	1..*	SHALL		4435-152	
act	1..1	SHALL		4435-166	Care Team Member Act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.1:2019-07-01)

1. **SHALL** contain exactly one [1..1] @classCode="CLUSTER" CLUSTER (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:4435-124).
2. **SHALL** contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:4435-125).
3. **SHALL** contain exactly one [1..1] templateId (CONF:4435-112) such that it
 - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.500" (CONF:4435-117).
 - b. **SHALL** contain exactly one [1..1] @extension="2019-07-01" (CONF:4435-118).
4. **SHALL** contain at least one [1..*] id (CONF:4435-126).
5. **SHALL** contain exactly one [1..1] code (CONF:4435-114).
 - a. This code **SHALL** contain exactly one [1..1] @code="86744-0" Care Team (CONF:4435-120).

- b. This code **SHALL** contain exactly one [1..1]
`@codeSystem="2.16.840.1.113883.6.1" LOINC (CodeSystem: LOINC
urn:oid:2.16.840.1.113883.6.1) (CONF:4435-121).`
- c. This code **SHALL** contain exactly one [1..1] **originalText** (CONF:4435-154) such that it
 - i. **SHALL** contain exactly one [1..1] **reference** (CONF:4435-155).

The value attribute references the narrative in section.text where the care team name is rendered.

- 1. This reference **SHALL** contain exactly one [1..1] **@value** (CONF:4435-156).
- 6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:4435-113).
 - a. This statusCode **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet ActStatus urn:oid:2.16.840.1.113883.1.11.15933 **STATIC** (CONF:4435-119).
Note: When statusCode has a value set, its value MAY be rendered in the narrative.
- 7. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:4435-127).
 - a. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:4435-157).
 - b. This effectiveTime **MAY** contain zero or one [0..1] **high** (CONF:4435-158).
- 8. **SHOULD** contain zero or more [0..*] Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:4435-116).
- 9. **SHOULD** contain zero or more [0..*] **participant** (CONF:4435-128) such that it
 - a. **SHALL** contain exactly one [1..1] **@typeCode="PPRF"** Primary Performer (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90) (CONF:4435-129).
 - b. **MAY** contain zero or one [0..1] **sdtc:functionCode**, which **SHOULD** be selected from ValueSet Care Team Member Function urn:oid:2.16.840.1.113762.1.4.1099.30 **DYNAMIC** (CONF:4435-130).
Note: Describes the person's, caregiver's or health care provider's functional role on the care team.
 - c. **SHALL** contain exactly one [1..1] **participantRole** (CONF:4435-131).
 - i. This participantRole **SHALL** contain at least one [1..*] **id** (CONF:4435-132).
 - 1. This id **SHALL** match at least one of the member's id in the Care Team Member act template (CONF:4435-133).
- 10. **MAY** contain zero or more [0..*] **participant** (CONF:4435-134) such that it
 - a. **SHALL** contain exactly one [1..1] **@typeCode="LOC"** Location (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90) (CONF:4435-137).
 - b. **SHALL** contain exactly one [1..1] **participantRole** (CONF:4435-135).
 - i. This participantRole **SHALL** contain at least one [1..*] **id** (CONF:4435-138).
 - ii. This participantRole **SHOULD** contain zero or one [0..1] **addr** (CONF:4435-139).
 - iii. This participantRole **SHOULD** contain zero or more [0..*] **telecom** (CONF:4435-140).
 - iv. This participantRole **SHALL** contain exactly one [1..1] **playingEntity** (CONF:4435-136).

1. This playingEntity **SHALL** contain exactly one [1..1] `@classCode="PLC"` Place (CodeSystem: HL7EntityClass urn:oid:2.16.840.1.113883.5.41) (CONF:4435-141).
 2. This playingEntity **SHALL** contain exactly one [1..1] **name** (CONF:4435-142).
11. **MAY** contain zero or more [0..*] **component** (CONF:4435-110) such that it
- a. **SHALL** contain exactly one [1..1] Care Team Type Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.2:2019-07-01) (CONF:4435-163).

The following components represent the reasons for the existence of the care team. These entry references are typically a health concern, risk concern or problem but can also be some other entry present in the document.

12. **MAY** contain zero or more [0..*] **component** (CONF:4435-146) such that it
- a. **SHALL** contain exactly one [1..1] Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:4435-147).
13. **MAY** contain zero or more [0..*] **component** (CONF:4435-148) such that it
- a. **SHALL** contain exactly one [1..1] **encounter** (CONF:4435-164).
 - i. This encounter **SHALL** contain at least one [1..*] **id** (CONF:4435-165).
Note: 1. If the id does not match an encounter/id from an encounter elsewhere within the same document and the id does not contain `@nullFlavor=NA`, then this entry SHALL conform to the Encounter Activity (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2015-08-01) (CONF:4435-145).
14. **MAY** contain zero or one [0..1] **component** (CONF:4435-150) such that it
- a. **SHALL** contain exactly one [1..1] Note Activity (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01) (CONF:4435-151).
15. **SHALL** contain at least one [1..*] **component** (CONF:4435-152) such that it
- a. **SHALL** contain exactly one [1..1] Care Team Member Act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.1:2019-07-01) (CONF:4435-166).

Figure 5: Care Team Organizer Example 1

```
<!--Care Team Organizer-->
<entry>
  <organizer classCode="CLUSTER" moodCode="EVN">
    <templateId root="2.16.840.1.113883.10.20.22.4.500" extension="2019-07-01"/>

    <!--NEW Care Team Organizer Entry Template ID and extension-->
    <id root="1.1.1.1.1.1"/>
    <code code="86744-0" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC" displayName="Care Team">
      <originalText><reference value="#CareTeamName1"></reference></originalText>
    </code>
    <!--Care Team Status -
https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.15933/expansion-->
    <statusCode code="active"/>
    <effectiveTime>
      <low value="201810081426-0500"/>
    </effectiveTime>
    <!-- This participant is the Care Team Lead (1..1)-->
    <!-- Care Team Lead is one of the contained care team members in the list of
care team members-->
    <!--<participant typeCode="PPRF">
    <!--\-<This id matches at least one of the member's id in the Care Team
Member act template>-\->
      <participantRole>
        <id root="1.5.5.5.5.5.5"/>
      </participantRole>
    </participant>-->
    <!-- #1 Care Team Member Act - This component is a care team member who is a
provider -->
    <component>
      <act classCode="PCPR" moodCode="EVN">
        <templateId root="2.16.840.1.113883.10.20.22.4.500.1" extension="2019-07-01"/>

        <id root="1.5.5.5.5.5.5"/>
        <code code="85847-2" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC" displayName="Care Team Information"/>
        <!--Care Team Member Status -
https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.15933/expansion-->
        <statusCode code="active"/>
        <effectiveTime xsi:type="IVL_TS">
          <low value="201810081426-0500"/>
        </effectiveTime>
        <!--Attributes about the provider member - name-->
        <performer typeCode="PRF">
          <functionCode xmlns="urn:hl7-org:sdct" code="PCP"
displayName="primary care physician"
          codeSystem="2.16.840.1.113883.5.88"
codeSystemName="ParticipationFunction">
            <originalText xmlns="urn:hl7-org:v3">
              <reference value="#CT1_M01"></reference>
            </originalText>
          </functionCode> <!-- A care team member role -->
        <assignedEntity>
          <id root="B00B14E8-CDE4-48EA-8A09-01BC4945122A" extension="1"/>
          <id root="1.5.5.5.5.5.5"/>
```

```

        <assignedPerson>
<name><given>John</given><given>D</given><family>Smith</family>,<suffix>MD</suffix> </name>
        </assignedPerson>
    </assignedEntity>
</performer>
</act>
</component>
</organizer>
</entry>

```

2.5 Care Team Type Observation

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.2:2019-07-01 (open)]

Table 12: Care Team Type Observation Contexts

Contained By:	Contains:
Care Team Organizer (optional)	

This template is used to express the care team type. A care team can have multiple care team types. Examples include but are not limited to:

- Condition focused, longitudinal care team
- Event focused, Home & Community Based Services care team
- Condition focused, clinical research care team
- Public health focused, Longitudinal care-coordination care team

Appendix A: Templates defined in C-CDA R2.1 Companion Guide

Table 13: Care Team Type Observation Constraints Overview

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.2:2019-07-01)					
@classCode	1..1	SHALL		4435-101	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		4435-102	urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN
templateId	1..1	SHALL		4435-99	
@root	1..1	SHALL		4435-106	2.16.840.1.113883.10.20.22.4.500.2
@extension	1..1	SHALL		4435-108	2019-07-01
code	1..1	SHALL		4435-97	
@code	1..1	SHALL		4435-103	86744-0
@codeSystem	1..1	SHALL		4435-104	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
statusCode	1..1	SHALL		4435-100	
@code	1..1	SHALL		4435-107	urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed
value	1..1	SHALL	CD	4435-98	
@code	1..1	SHALL		4435-109	urn:oid:2.16.840.1.113883.4.642.3.155 (Care Team Category)

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:4435-101).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:4435-102).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:4435-99) such that it
 - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.500.2" (CONF:4435-106).
 - b. **SHALL** contain exactly one [1..1] **@extension**="2019-07-01" (CONF:4435-108).
4. **SHALL** contain exactly one [1..1] **code** (CONF:4435-97).
 - a. This code **SHALL** contain exactly one [1..1] **@code**="86744-0" Care Team (CONF:4435-103).
 - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" LOINC (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:4435-104).
5. **SHALL** contain exactly one [1..1] **statusCode** (CONF:4435-100).
 - a. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:4435-107).
6. **SHALL** contain exactly one [1..1] **value** with **@xsi:type**="CD" (CONF:4435-98) such that it

- a. **SHALL** contain exactly one [1..1] @code, which **SHALL** be selected from ValueSet [Care Team Category](#) urn:oid:2.16.840.1.113883.4.642.3.155 **DYNAMIC** (CONF:4435-109).

Figure 6: Care Team Type Example

```
<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.500.2" extention="2019-07-01"/>
  <!--Care Team Type-->
  <code code="86744-0"
    codeSystem="2.16.840.1.113883.6.1"
    displayName="Care team" />
  <statusCode code="completed" />
  <value xsi:type="CD" code="LA28865-6"
    codeSystem="2.16.840.1.113883.6.1"
    displayName="Longitudinal care-coordination focused care team"/>
</observation>
```

2.6 Note Activity

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01
(open)]

Table 14: Note Activity Contexts

Contained By:	Contains:
Notes Section (required) Care Team Member Act (optional) Care Team Organizer (optional)	

The Note Activity represents a clinical note. Notes require authorship, authentication, timing information, and references to other discrete data such as encounters. Similar to the Comment Activity, the Note Activity permits a more specific code to characterize the type of information available in the note. The Note Activity template **SHOULD NOT** be used in place of a more specific C-CDA entry. Note information included needs to be relevant and pertinent to the information being communicated in the document.

When the note information augments data represented in a more specific entry template, the Note Activity can be used in an entryRelationship to the associated standard C-CDA entry. For example, a Procedure Note added as an entryRelationship to a Procedure Activity Procedure entry).

The Note Activity template can be used as a standalone entry within a standard C-CDA section (e.g., a note about various procedures which have occurred during a visit as an entry in the Procedures Section) when it does not augment another standard entry. It may also be used to provide additional data about the source of a currently narrative-only section, such as Hospital Course.

Finally, if the type of data in the note is not known or no single C-CDA section is appropriate enough, the Note Activity should be placed in a Notes Section. (e.g., a free-text consultation note or a note which includes subjective, objective, assessment, and plan information combined).

An alternative is to place the Note Activity as an entryRelationship to an Encounter Activity entry in the Encounters Section, but implementers may wish to group notes categorically into a separate location in CDA documents rather than overloading the Encounters Section.

Appendix A: Templates defined in C-CDA R2.1 Companion Guide

Table 15: Note Activity Constraints Overview

XPath	Card.	Verb	Data Type	CONF#	Value
act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01)					
@classCode	1..1	SHALL		3250-16899	ACT
@moodCode	1..1	SHALL		3250-16900	EVN
templateId	1..1	SHALL		3250-16933	
@root	1..1	SHALL		3250-16934	2.16.840.1.113883.10.20.22.4.202
@extension	1..1	SHALL		3250-16937	2016-11-01
code	1..1	SHALL		3250-16895	
@code	1..1	SHALL		3250-16940	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 34109-9
@codeSystem	1..1	SHALL		3250-16941	2.16.840.1.113883.6.1
translation	0..*	SHOULD		3250-16939	urn:oid:2.16.840.1.113883.11.20.9.68 (Note Types)
text	1..1	SHALL		3250-16896	
@mediaType	0..1	MAY		3250-16906	urn:oid:2.16.840.1.113883.11.20.7.1 (SupportedFileFormats)
reference	1..1	SHALL		3250-16897	
@nullFlavor	0..0	SHALL NOT		3250-16920	
@value	1..1	SHALL		3250-16898	
statusCode	1..1	SHALL		3250-16916	
effectiveTime	1..1	SHALL		3250-16903	
@value	0..1	SHOULD		3250-16917	
author	1..*	SHALL		3250-16913	Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)
participant	0..*	MAY		3250-16923	
@typeCode	1..1	SHALL		3250-16925	LA
time	1..1	SHALL		3250-	US Realm Date and Time

Appendix A: Templates defined in C-CDA R2.1 Companion Guide

XPath	Card.	Verb	Data Type	CONF#	Value
				16926	(DT.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3)
participantRole	1..1	SHALL		3250-16924	
id	1..*	SHALL		3250-16927	
playingEntity	0..1	MAY		3250-16928	
name	1..*	SHALL		3250-16929	US Realm Person Name (PN.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1)
entryRelationship	0..*	SHOULD		3250-16907	
@typeCode	1..1	SHALL		3250-16921	COMP
@inversionInd	1..1	SHALL		3250-16922	true
@negationInd	0..1	MAY		3250-16931	
encounter	1..1	SHALL		3250-16908	
id	1..*	SHALL		3250-16909	
reference	0..*	MAY		3250-16910	
externalDocument	1..1	SHALL		3250-16911	
id	1..1	SHALL		3250-16915	
code	0..1	SHOULD		3250-16918	

1. **SHALL** contain exactly one [1..1] **@classCode="ACT"** Act (CONF:3250-16899).
2. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** Event (CONF:3250-16900).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:3250-16933) such that it
 - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.22.4.202"** (CONF:3250-16934).
 - b. **SHALL** contain exactly one [1..1] **@extension="2016-11-01"** (CONF:3250-16937).
4. **SHALL** contain exactly one [1..1] **code** (CONF:3250-16895).
 - a. This code **SHALL** contain exactly one [1..1] **@code="34109-9"** Note (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:3250-16940).
 - b. This code **SHALL** contain exactly one [1..1] **@codeSystem="2.16.840.1.113883.6.1"** LOINC (CONF:3250-16941).

- c. This code **SHOULD** contain zero or more [0..*] **translation**, which **SHOULD** be selected from ValueSet [Note Types](#) urn:oid:2.16.840.1.113883.11.20.9.68 **DYNAMIC** (CONF:3250-16939).
 - i. If the Note Activity is within a Note Section, the translation **SHOULD** match or specialize the section code (CONF:3250-16942).
Note: For example, a cardiologist consult note may specialize a consult note but not a progress note.
 - ii. If the Note Activity is within a narrative-only section (e.g. Hospital Course), the translation **MAY** match the section code (CONF:3250-16943).
- 5. **SHALL** contain exactly one [1..1] **text** (CONF:3250-16896).

If the note was originally in another format, such as RTF, this element may also contain the base-64-encoded raw data of the note in addition to a reference to the narrative.

- a. This text **MAY** contain zero or one [0..1] **@mediaType**, which **SHOULD** be selected from ValueSet [SupportedFileFormats](#) urn:oid:2.16.840.1.113883.11.20.7.1 **DYNAMIC** (CONF:3250-16906).
 - i. If **@mediaType** is present, the text **SHALL** contain exactly one [1..1] **@representation="B64"** and mixed content corresponding to the contents of the note (CONF:3250-16912).
- b. This text **SHALL** contain exactly one [1..1] **reference** (CONF:3250-16897).

The note activity must reference human-readable content in the narrative, so this reference must not be null.

- i. This reference **SHALL NOT** contain [0..0] **@nullFlavor** (CONF:3250-16920).
- ii. This reference **SHALL** contain exactly one [1..1] **@value** (CONF:3250-16898).
 - 1. This reference/**@value** **SHALL** begin with a '#' and **SHALL** point to its corresponding narrative (using the approach defined in CDA Release 2, section 4.3.5.1) (CONF:3250-16902).

Indicates the status of the note. The most common statusCode is completed indicating the note is signed and finalized.

- 6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:3250-16916).

The effectiveTime represents the clinically relevant time of the note. The precise timestamp of creation / updating should be conveyed in author/time.

- 7. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:3250-16903).
 - a. This effectiveTime **SHOULD** contain zero or one [0..1] **@value** (CONF:3250-16917).

Represents the person(s) who wrote the note.

- 8. **SHALL** contain at least one [1..*] Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:3250-16913).

Represents the person(s) legally responsible for the contents of the note.

- 9. **MAY** contain zero or more [0..*] **participant** (CONF:3250-16923) such that it
 - a. **SHALL** contain exactly one [1..1] **@typeCode="LA"** Legal Authenticator (CONF:3250-16925).

Indicates the time of signing the note.

- b. **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:3250-16926).
- c. **SHALL** contain exactly one [1..1] **participantRole** (CONF:3250-16924).

This may be the ID of the note author. If so, no additional information in this participant is required.

- i. This participantRole **SHALL** contain at least one [1..*] **id** (CONF:3250-16927).
- ii. This participantRole **MAY** contain zero or one [0..1] **playingEntity** (CONF:3250-16928).
 - 1. The playingEntity, if present, **SHALL** contain at least one [1..*] US Realm Person Name (PN.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:3250-16929).
- iii. If no id matches an author or participant elsewhere in the document, then playingEntity **SHALL** be present (CONF:3250-16930).

Links the note to an encounter. If the Note Activity is present within a document containing an encompassingEncounter, then this entryRelationship is optional and the note is associated with the encounter represented by the encompassingEncounter.

10. **SHOULD** contain zero or more [0..*] **entryRelationship** (CONF:3250-16907) such that it

- a. **SHALL** contain exactly one [1..1] **@typeCode="COMP"** (CONF:3250-16921).
- b. **SHALL** contain exactly one [1..1] **@inversionInd="true"** (CONF:3250-16922).

To communicate that the note is not associated with any encounter, this entryRelationship **MAY** be included with **@negationInd="true"** and **encounter/id/@nullFlavor="NA"**. The **negationInd + encounter** indicate this note is not associated with any encounter.

- c. **MAY** contain zero or one [0..1] **@negationInd** (CONF:3250-16931).
- d. **SHALL** contain exactly one [1..1] **encounter** (CONF:3250-16908).
 - i. This encounter **SHALL** contain at least one [1..*] **id** (CONF:3250-16909).
 - 1. If the id does not match an encounter/id from the Encounters Section or encompassingEncounter within the same document and the id does not contain **@nullFlavor="NA"**, then this entry **SHALL** conform to the Encounter Activity (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2015-08-01) (CONF:3250-16914).

Represents an unstructured C-CDA document containing the original contents of the note in the original format.

11. **MAY** contain zero or more [0..*] **reference** (CONF:3250-16910) such that it

- a. **SHALL** contain exactly one [1..1] **externalDocument** (CONF:3250-16911).
 - i. This externalDocument **SHALL** contain exactly one [1..1] **id** (CONF:3250-16915).
 - ii. This externalDocument **SHOULD** contain zero or one [0..1] **code** (CONF:3250-16918).

Figure 7: Note Activity as entryRelationship to C-CDA Entry

```
<?xml version="1.0" encoding="UTF-8"?>
<section>
  <!-- C-CDA 2.1 Procedures Section -->
  <templateId root="2.16.840.1.113883.10.20.22.2.7.1"/>
  <templateId root="2.16.840.1.113883.10.20.22.2.7.1" extension="2014-06-09"/>
  <code code="47519-4" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
displayName="HISTORY OF PROCEDURES"/>
  <title>Procedures</title>
  <text>
    <table>
      <thead>
        <tr>
          <th>Description</th>
          <th>Date and Time (Range)</th>
          <th>Status</th>
          <th>Notes</th>
        </tr>
      </thead>
      <tbody>
        <tr ID="Procedure1">
          <td ID="ProcedureDesc1">Laparoscopic appendectomy</td>
          <td>(03 Feb 2014 09:22am- 03 Feb 2014 11:15am)</td>
          <td>Completed</td>
          <td ID="ProcedureNote1">
            <paragraph>Dr. Physician - 03 Feb 2014</paragraph>
            <paragraph>Free-text note about the procedure.</paragraph>
          </td>
        </tr>
      </tbody>
    </table>
  </text>
  <entry typeCode="DRIV">
    <!-- Procedures should be used for care that directly changes the patient's
physical state.-->
    <procedure moodCode="EVN" classCode="PROC">
      <templateId root="2.16.840.1.113883.10.20.22.4.14" extension="2014-06-09"/>
      <id root="64af26d5-88ef-4169-ba16-c6ef16a1824f"/>
      <code code="6025007" displayName="Laparoscopic appendectomy"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT">
        <originalText>
          <reference value="#ProcedureDesc1" />
        </originalText>
      </code>
      <text>
        <reference value="#Procedure1" />
      </text>
      <statusCode code="completed" />
      <effectiveTime>
        <low value="20140203092205-0700" />
        <high value="20140203111514-0700" />
      </effectiveTime>
      <!-- Note Activity entry -->
      <entryRelationship typeCode="COMP">
        <act classCode="ACT" moodCode="EVN">
```

Appendix A: Templates defined in C-CDA R2.1 Companion Guide

```
<templateId root="2.16.840.1.113883.10.20.22.4.202" extension="2016-11-01"/>
<code code="34109-9" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC" displayName="note">
  <translation code="28570-0" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC" displayName="Procedure note" />
</code>
<text>
  <reference value="#ProcedureNote1" />
</text>
<statusCode code="completed"/>
<!-- Clinically-relevant time of the note -->
<effectiveTime value="20140203" />
<!-- Author Participation -->
<author>
  <templateId root="2.16.840.1.113883.10.20.22.4.119" />
  <!-- Time note was actually written -->
  <time value="20140204083215-0500" />
  <assignedAuthor>
    <id root="20cf14fb-b65c-4c8c-a54d-b0cca834c18c" />
    <assignedPerson>
      <name>Dr. Physician</name>
    </assignedPerson>
  </assignedAuthor>
</author>
<!-- Reference to encounter -->
<entryRelationship typeCode="COMP" inversionInd="true">
  <encounter classCode="ENC" moodCode="EVN">
    <!-- Encounter ID matches an encounter in the Encounters
Section -->
    <id root="1.2.3.4" />
  </encounter>
</entryRelationship>
</act>
</entryRelationship>
</procedure>
</entry>
</section>
```


Figure 8: Note Activity as Standalone Entry

```
<section>
  <!-- C-CDA 2.1 Procedures Section, entries optional -->
  <templateId root="2.16.840.1.113883.10.20.22.2.7"/>
  <templateId root="2.16.840.1.113883.10.20.22.2.7" extension="2014-06-09"/>
  <code code="47519-4" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
displayName="HISTORY OF PROCEDURES"/>
  <title>Procedures</title>
  <text>
    <list>
      <item ID="ProcedureNote1">
        <paragraph>Dr. Physician - 03 Feb 2014</paragraph>
        <paragraph>Free-text note about procedures which have occurred during this
visit.</paragraph>
      </item>
    </list>
  </text>
  <!-- If section were entries required, an additional <entry nullFlavor="NI"> would be
required for a Procedure Activity -->
  <!-- Note Activity entry -->
  <entry>
    <act classCode="ACT" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.22.4.202" extension="2016-11-01"/>
      <code code="34109-9" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
displayName="Note">
        <translation code="28570-0" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC" displayName="Procedure note" />
      </code>
      <text>
        <reference value="#ProcedureNote1" />
      </text>
      <statusCode code="completed"/>
      <!-- Clinically-relevant time of the note -->
      <effectiveTime value="20140203" />
      <!-- Author Participation -->
      <author>
        <templateId root="2.16.840.1.113883.10.20.22.4.119" />
        <!-- Time note was actually written -->
        <time value="20140204083215-0500" />
        <assignedAuthor>
          <id root="20cf14fb-b65c-4c8c-a54d-b0cca834c18c" />
          <assignedPerson>
            <name>Dr. Physician</name>
          </assignedPerson>
        </assignedAuthor>
      </author>
      <!-- Reference to encounter -->
      <entryRelationship typeCode="COMP" inversionInd="true">
        <encounter classCode="ENC" moodCode="EVN">
          <!-- Encounter ID matches an encounter in the Encounters Section -->
          <id root="1.2.3.4" />
        </encounter>
      </entryRelationship>
    </act>
  </entry>
</section>
```

Figure 9: RTF Example

```
<section>
  <text>
    <list>
      <item ID="note1">
        <caption>Nursing Note written by Nick Nurse</caption>
        <paragraph>Completed rounds; no incident</paragraph>
      </item>
    </list>
  </text>
  <!-- Note Activity (extra markup removed to focus on <text>) -->
  <entry>
    <act>
      <code>...</code>
      <text mediaType="text/rtf"
representation="B64">e1xydGYxXGFuc2lcYW5zaWNwZzEyNTJcZGVmZjBcbm9laWNvbXBhdFxxZWZsYW5nMTAzM3
tcZm9udHRibHtcZjBcZm5pbFxmY2hhcnNldDagQ2FsaWJyaTt9fQ0KelwqXGdlbmVyYXRvciBSaWNoZWQyMCA2LjMuO
TYwMHlcdmllld2tpbmQ0XHVjMSANC1xwYXJkXHNhMjAwXHNsMjc2XHNsbXVsdDFcZjBcZnMyMlxsYW5nOSBDd21wbGV0
ZWQgcm91bmRzOyBubyBpbmNpZGVudFxxYXINCn0NCiA=
      <reference value="#note1"/>
    </text>
    <!--...-->
  </act>
</entry>
</section>
```

2.7 Section Time Range Observation

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.201:2016-06-01 (open)]

This observation represents the date and time range of the information contained in a section. It is an optional entry and may be used in any section.

Appendix A: Templates defined in C-CDA R2.1 Companion Guide

Table 16: Section Time Range Observation Constraints Overview

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.201:2016-06-01)					
@classCode	1..1	SHALL		3250-32960	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		3250-32961	urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN
templateId	1..1	SHALL		3250-32951	
@root	1..1	SHALL		3250-32955	2.16.840.1.113883.10.20.22.4.201
@extension	1..1	SHALL		3250-32956	2016-06-01
code	1..1	SHALL		3250-32952	
@code	1..1	SHALL		3250-32957	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 82607-3
@codeSystem	1..1	SHALL		3250-32958	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
text	1..1	SHALL		3250-32962	
reference	1..1	SHALL		3250-32963	
@value	1..1	SHALL		3250-32964	
statusCode	1..1	SHALL		3250-32950	
@code	1..1	SHALL		3250-32954	urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed
value	1..1	SHALL	IVL_TS	3250-32953	
low	1..1	SHALL		3250-32965	
high	1..1	SHALL		3250-32966	

1. **SHALL** contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:3250-32960).
2. **SHALL** contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:3250-32961).
3. **SHALL** contain exactly one [1..1] templateId (CONF:3250-32951) such that it
 - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.201" (CONF:3250-32955).
 - b. **SHALL** contain exactly one [1..1] @extension="2016-06-01" (CONF:3250-32956).

4. **SHALL** contain exactly one [1..1] **code** (CONF:3250-32952).
 - a. This code **SHALL** contain exactly one [1..1] **@code**="82607-3" Section Time Range (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1 **STATIC**) (CONF:3250-32957).
 - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1 **STATIC**) (CONF:3250-32958).
5. **SHALL** contain exactly one [1..1] **text** (CONF:3250-32962).
 - a. This text **SHALL** contain exactly one [1..1] **reference** (CONF:3250-32963).
 - i. This reference **SHALL** contain exactly one [1..1] **@value** (CONF:3250-32964).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:3250-32950).
 - a. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:3250-32954).
7. **SHALL** contain exactly one [1..1] **value** with **@xsi:type**="IVL_TS" (CONF:3250-32953).
 - a. This value **SHALL** contain exactly one [1..1] **low** (CONF:3250-32965).
 - b. This value **SHALL** contain exactly one [1..1] **high** (CONF:3250-32966).

Figure 10: Section Time Range Example

```
<!-- Section Time Range Observation -->
<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.68.99999"/>
  <code code="X-SECTIONTIMERANGE" codeSystem="2.16.840.1.113883.6.1"
    displayName="Section Date and Time Range"/>
  <text>
    <reference value="#TS_Narrative1"/>
  </text>
  <statusCode code="completed"/>
  <value xsi:type="IVL_TS">
    <low value="20120815"/>
    <high value="20150815"/>
  </value>
</observation>
```

3 TEMPLATE IDS IN THIS GUIDE

Table 17: Template List

Template Title	Template Type	templateId
Care Teams Section	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.500:2019-07-01
Notes Section	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.65:2016-11-01
Birth Sex Observation	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.200:2016-06-01
Care Team Member Act	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.1:2019-07-01
Care Team Member Schedule Observation	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.3:2019-07-01
Care Team Organizer	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.500:2019-07-01
Care Team Type Observation	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.2:2019-07-01
Note Activity	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01
Section Time Range Observation	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.201:2016-06-01

Appendix A: Templates defined in C-CDA R2.1 Companion Guide

Table 18: Template Containments

Template Title	Template Type	templateId
Birth Sex Observation	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.200:2016-06-01
Section Time Range Observation	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.201:2016-06-01
Care Teams Section	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.500:2019-07-01
Care Team Organizer	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.500:2019-07-01
Note Activity	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01
Care Team Member Act	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.1:2019-07-01
Note Activity	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01
Care Team Member Schedule Observation	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.3:2019-07-01
Care Team Type Observation	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.2:2019-07-01
Notes Section	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.65:2016-11-01
Note Activity	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01

4 VALUE SETS IN THIS GUIDE

Table 19: Note Types

<p>Value Set: Note Types urn:oid:2.16.840.1.113883.11.20.9.68</p> <p>(Clinical Focus: Types of clinical notes that may exist in an EHR as narrative text, and may not have associated structured data, but are relevant and need to be included in the interoperable documentation as narrative notes. Although the content of the note is not coded, the type of note is known. The note type code is used to encode the type of note being exchanged.), (Data Element Scope: Section or entry.), (Inclusion Criteria: LOINC codes where class=DOC. ONTOLOGY.), (Exclusion Criteria: CHARINDEX('CONSENT',LNC.COMPONENT) = 0 OR CHARINDEX('Advance directives',LNC.COMPONENT) = 0 OR CHARINDEX('Agreement',LNC.COMPONENT) = 0 OR CHARINDEX('ALERT',LNC.COMPONENT) = 0 OR CHARINDEX('REPORT',LNC.COMPONENT) = 0 OR CHARINDEX('certificate',LNC.COMPONENT) = 0 OR CHARINDEX('Flowsheet',LNC.COMPONENT) = 0 OR CHARINDEX('SIGNOUT NOTE',LNC.COMPONENT) = 0 OR CHARINDEX('DIAGRAM',LNC.COMPONENT) = 0 OR CHARINDEX('Do not resuscitate',LNC.COMPONENT) = 0 OR CHARINDEX('LICENSE',LNC.COMPONENT) = 0 OR CHARINDEX('Form',LNC.COMPONENT) = 0 OR CHARINDEX('Letter',LNC.COMPONENT) = 0 OR CHARINDEX('document',LNC.COMPONENT) = 0 OR CHARINDEX('Living will',LNC.COMPONENT) = 0 OR CHARINDEX('Power of attorney',LNC.COMPONENT) = 0 OR CHARINDEX('Prescription',LNC.COMPONENT) = 0 OR CHARINDEX('VA C&P',LNC.COMPONENT) = 0 OR CHARINDEX('product list',LNC.COMPONENT) = 0 OR CHARINDEX('IMAGE',LNC.COMPONENT) = 0 OR CHARINDEX('ORDER',LNC.COMPONENT) = 0 OR CHARINDEX('CARD',LNC.COMPONENT) = 0)</p> <p>This value set was imported on 10/17/2019 with a version of 20191017.</p> <p>Value Set Source:</p> <p>https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.68/expansion</p>			
Code	Code System	Code System OID	Print Name
11488-4	LOINC	urn:oid:2.16.840.1.113883.6.1	Consult note
11490-0	LOINC	urn:oid:2.16.840.1.113883.6.1	Physician Discharge summary
11492-6	LOINC	urn:oid:2.16.840.1.113883.6.1	Provider-unspecified, History and physical note
11504-8	LOINC	urn:oid:2.16.840.1.113883.6.1	Surgical operation note
11505-5	LOINC	urn:oid:2.16.840.1.113883.6.1	Physician procedure note
11506-3	LOINC	urn:oid:2.16.840.1.113883.6.1	Progress note
11507-1	LOINC	urn:oid:2.16.840.1.113883.6.1	Occupational therapy Progress note
11508-9	LOINC	urn:oid:2.16.840.1.113883.6.1	Physical therapy Progress note

Appendix A: Templates defined in C-CDA R2.1 Companion Guide

11509-7	LOINC	urn:oid:2.16.840.1.113883.6.1	Podiatry Progress note
11510-5	LOINC	urn:oid:2.16.840.1.113883.6.1	Psychology Progress note
...			

Table 20: ONC Administrative Sex

Value Set: ONC Administrative Sex urn:oid:2.16.840.1.113762.1.4.1 (Clinical Focus: Gender identity restricted to only Male and Female used in administrative situations requiring a restriction to these two categories.),(Data Element Scope: Gender),(Inclusion Criteria: Male and Female only.),(Exclusion Criteria: Any gender identity that is not male or female.) This value set was imported on 10/17/2019 with a version of 20190425. Value Set Source: https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1/expansion			
Code	Code System	Code System OID	Print Name
F	Administrative Gender	urn:oid:2.16.840.1.113883.5.1	Female
M	Administrative Gender	urn:oid:2.16.840.1.113883.5.1	Male

Table 21: ActStatus

Value Set: ActStatus urn:oid:2.16.840.1.113883.1.11.15933 Contains the names (codes) for each of the states in the state-machine of the RIM Act class. Value Set Source: https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.15933/expansion			
Code	Code System	Code System OID	Print Name
normal	HL7ActStatus	urn:oid:2.16.840.1.113883.5.14	normal
aborted	HL7ActStatus	urn:oid:2.16.840.1.113883.5.14	aborted
active	HL7ActStatus	urn:oid:2.16.840.1.113883.5.14	active
cancelled	HL7ActStatus	urn:oid:2.16.840.1.113883.5.14	cancelled
completed	HL7ActStatus	urn:oid:2.16.840.1.113883.5.14	completed
held	HL7ActStatus	urn:oid:2.16.840.1.113883.5.14	held
new	HL7ActStatus	urn:oid:2.16.840.1.113883.5.14	new
suspended	HL7ActStatus	urn:oid:2.16.840.1.113883.5.14	suspended
nullified	HL7ActStatus	urn:oid:2.16.840.1.113883.5.14	nullified
obsolete	HL7ActStatus	urn:oid:2.16.840.1.113883.5.14	obsolete

Appendix A: Templates defined in C-CDA R2.1 Companion Guide

Table 22: Care Team Member Function

<p>Value Set: Care Team Member Function urn:oid:2.16.840.1.113762.1.4.1099.30</p> <p>(Clinical Focus: This set of concepts describes the function performed on a patient-centered care team. This value set contains concepts that describe a functional role played by a member of a care team on a particular care team.),(Data Element Scope: A functional role on a patient's care team.),(Inclusion Criteria: The set of commonly played roles on a patient-centered care team.),(Exclusion Criteria: Functional roles on care teams that are not patient-centered. For example, hospital's may define teams of practitioners who fill roles that are relevant to the function of the hospital's operation. These roles would not be included when they are not roles that would be played on a patient-centered care team.)</p> <p>This value set was imported on 10/17/2019 with a version of 20191016.</p> <p>Value Set Source: https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1099.30/expansion</p>			
Code	Code System	Code System OID	Print Name
106289002	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Dentist (occupation)
106292003	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Professional nurse (occupation)
106328005	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Social worker (occupation)
116154003	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Patient (person)
11911009	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Nephrologist (occupation)
11935004	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Obstetrician (occupation)
133932002	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Caregiver (person)
158965000	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Medical practitioner (occupation)
158967008	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Consultant physician (occupation)
159003003	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	School nurse (occupation)
...			

Appendix A: Templates defined in C-CDA R2.1 Companion Guide

Table 23: Care Team Category

<p>Value Set: Care Team Category urn:oid:2.16.840.1.113883.4.642.3.155 (Clinical Focus: Indicates the type of care team.), (Data Element Scope: Each care team can have multiple care team type categories assigned to describe it.), (Inclusion Criteria: Specific concepts determined to be terms used to classify a care team, for example: Event-focused, Longitudinal care coordination focused, Condition focused, Public health focused. This is the LOINC List LL4590-7 that is connected to LOINC 86744-0 Care Team), (Exclusion Criteria:)</p> <p>This value set was imported on 10/17/2019 with a version of 20191015.</p> <p>Value Set Source: https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.4.642.3.155/expansion</p>			
Code	Code System	Code System OID	Print Name
LA27975-4	LOINC	urn:oid:2.16.840.1.113883.6.1	Event-focused care team
LA27976-2	LOINC	urn:oid:2.16.840.1.113883.6.1	Encounter-focused care team
LA27977-0	LOINC	urn:oid:2.16.840.1.113883.6.1	Episode of care-focused care team
LA27978-8	LOINC	urn:oid:2.16.840.1.113883.6.1	Condition-focused care team
LA27980-4	LOINC	urn:oid:2.16.840.1.113883.6.1	Clinical research-focused care team
LA28865-6	LOINC	urn:oid:2.16.840.1.113883.6.1	Longitudinal care-coordination focused care team
LA28866-4	LOINC	urn:oid:2.16.840.1.113883.6.1	Home & Community Based Services (HCBS)-focused care team
LA28867-2	LOINC	urn:oid:2.16.840.1.113883.6.1	Public health-focused care team

Appendix A: Templates defined in C-CDA R2.1 Companion Guide

Table 24: SupportedFileFormats

<p>Value Set: SupportedFileFormats urn:oid:2.16.840.1.113883.11.20.7.1 (Clinical Focus: Indicates the file format of an unstructured document contained in a CDA Unstructured Document.), (Data Element Scope: File format concepts selected from the mediatype code system.), (Inclusion Criteria: Include concepts where the file format is supported by an Unstructured Document.), (Exclusion Criteria: Exclude concepts where the file format is not supported by an Unstructured Document.)</p> <p>This value set was imported on 10/17/2019 with a version of 20190425.</p> <p>Value Set Source: https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.7.1/expansion</p>			
Code	Code System	Code System OID	Print Name
application/msword	Media Type	urn:oid:2.16.840.1.113883.5.79	MSWORD
application/pdf	Media Type	urn:oid:2.16.840.1.113883.5.79	PDF
image/gif	Media Type	urn:oid:2.16.840.1.113883.5.79	GIF Image
image/jpeg	Media Type	urn:oid:2.16.840.1.113883.5.79	JPEG Image
image/png	Media Type	urn:oid:2.16.840.1.113883.5.79	PNG Image
image/tiff	Media Type	urn:oid:2.16.840.1.113883.5.79	TIFF Image
text/html	Media Type	urn:oid:2.16.840.1.113883.5.79	HTML Text
text/plain	Media Type	urn:oid:2.16.840.1.113883.5.79	Plain Text
text/rtf	Media Type	urn:oid:2.16.840.1.113883.5.79	RTF Text

5 CODE SYSTEMS IN THIS GUIDE

Table 25: Code Systems

Name	OID
Administrative Gender	urn:oid:2.16.840.1.113883.5.1
HL7ActClass	urn:oid:2.16.840.1.113883.5.6
HL7ActMood	urn:oid:2.16.840.1.113883.5.1001
HL7ActRelationshipType	urn:oid:2.16.840.1.113883.5.1002
HL7ActStatus	urn:oid:2.16.840.1.113883.5.14
HL7EntityClass	urn:oid:2.16.840.1.113883.5.41
HL7ParticipationFunction	urn:oid:2.16.840.1.113883.5.88
HL7ParticipationType	urn:oid:2.16.840.1.113883.5.90
LOINC	urn:oid:2.16.840.1.113883.6.1
Media Type	urn:oid:2.16.840.1.113883.5.79
SNOMED CT	urn:oid:2.16.840.1.113883.6.96