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**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**

**October 2021 Errata Version**

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

**Sponsored by:  
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| --- | --- |
| Current Procedures Terminology (CPT) code set | American Medical Association https://www.ama-assn.org/practice-management/cpt-licensing |
| SNOMED CT | SNOMED International http://www.snomed.org/snomed-ct/get-snomed-ct or info@ihtsdo.org |
| 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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# section

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](#E_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](#C_4435-3) |  |
| @root | 1..1 | SHALL |  | [4435-7](#C_4435-7) | 2.16.840.1.113883.10.20.22.2.500 |
| @extension | 1..1 | SHALL |  | [4435-8](#C_4435-8) | 2019-07-01 |
| code | 1..1 | SHALL |  | [4435-5](#C_4435-5) |  |
| @code | 1..1 | SHALL |  | [4435-9](#C_4435-9) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 85847-2 |
| @codeSystem | 1..1 | SHALL |  | [4435-10](#C_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](#C_4435-4) |  |
| text | 1..1 | SHALL |  | [4435-6](#C_4435-6) |  |
| entry | 0..\* | SHOULD |  | [4435-1](#C_4435-1) |  |
| organizer | 1..1 | SHALL |  | [4435-159](#C_4435-159) | [Care Team Organizer (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500:2019-07-01](#E_Care_Team_Organizer) |

1. SHALL contain exactly one [1..1] templateId (CONF:4435-3) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.500" (CONF:4435-7).
   2. 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
   1. 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).
   2. 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
   1. SHALL contain exactly one [1..1] [Care Team Organizer](#E_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>

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](#E_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, 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](#C_3250-16935) |  |
| @root | 1..1 | SHALL |  | [3250-16936](#C_3250-16936) | 2.16.840.1.113883.10.20.22.2.65 |
| @extension | 1..1 | SHALL |  | [3250-16938](#C_3250-16938) | 2016-11-01 |
| code | 1..1 | SHALL |  | [3250-16892](#C_3250-16892) | urn:oid:2.16.840.1.113883.11.20.9.68 (Note Types) |
| title | 1..1 | SHALL |  | [3250-16891](#C_3250-16891) |  |
| text | 1..1 | SHALL |  | [3250-16894](#C_3250-16894) |  |
| entry | 1..\* | SHALL |  | [3250-16904](#C_3250-16904) |  |
| act | 1..1 | SHALL |  | [3250-16905](#C_3250-16905) | [Note Activity (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01](#E_Note_Activity) |

1. SHALL contain exactly one [1..1] templateId (CONF:3250-16935) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.65" (CONF:3250-16936).
   2. 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](#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.

1. 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.

1. SHALL contain exactly one [1..1] text (CONF:3250-16894).
2. SHALL contain at least one [1..\*] entry (CONF:3250-16904) such that it
   1. SHALL contain exactly one [1..1] [Note Activity](#E_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>

# entry

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](#C_3250-18230) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [3250-18231](#C_3250-18231) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [3250-18232](#C_3250-18232) |  |
| @root | 1..1 | SHALL |  | [3250-18233](#C_3250-18233) | 2.16.840.1.113883.10.20.22.4.200 |
| @extension | 1..1 | SHALL |  | [3250-32949](#C_3250-32949) | 2016-06-01 |
| code | 1..1 | SHALL |  | [3250-18234](#C_3250-18234) |  |
| @code | 1..1 | SHALL |  | [3250-18235](#C_3250-18235) | 76689-9 |
| @codeSystem | 1..1 | SHALL |  | [3250-21163](#C_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](#C_3250-18124) |  |
| @code | 1..1 | SHALL |  | [3250-18125](#C_3250-18125) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| value | 1..1 | SHALL | CD | [3250-32947](#C_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
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.200" (CONF:3250-18233).
   2. SHALL contain exactly one [1..1] @extension="2016-06-01" (CONF:3250-32949).
4. SHALL contain exactly one [1..1] code (CONF:3250-18234).
   1. This code SHALL contain exactly one [1..1] @code="76689-9" Sex Assigned At Birth (CONF:3250-18235).
   2. 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).
   1. 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](#ONC_Administrative_Sex) urn:oid:2.16.840.1.113762.1.4.1 STATIC 2016-06-01 (CONF:3250-32947).
   1. 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>

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](#E_Care_Team_Organizer) (required) | [Note Activity](#E_Note_Activity) (optional)  [Care Team Member Schedule Observation](#E_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)

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](#C_4435-53) | PCPR |
| @moodCode | 1..1 | SHALL |  | [4435-54](#C_4435-54) | EVN |
| templateId | 1..1 | SHALL |  | [4435-45](#C_4435-45) |  |
| @root | 1..1 | SHALL |  | [4435-66](#C_4435-66) | 2.16.840.1.113883.10.20.22.4.500.1 |
| @extension | 1..1 | SHALL |  | [4435-67](#C_4435-67) | 2019-07-01 |
| id | 1..\* | SHALL |  | [4435-162](#C_4435-162) |  |
| code | 1..1 | SHALL |  | [4435-27](#C_4435-27) |  |
| @code | 1..1 | SHALL |  | [4435-48](#C_4435-48) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 85847-2 |
| @codeSystem | 1..1 | SHALL |  | [4435-49](#C_4435-49) | 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [4435-62](#C_4435-62) |  |
| @code | 1..1 | SHALL |  | [4435-68](#C_4435-68) | urn:oid:2.16.840.1.113883.1.11.15933 (ActStatus) |
| effectiveTime | 1..1 | SHALL |  | [4435-33](#C_4435-33) |  |
| low | 1..1 | SHALL |  | [4435-167](#C_4435-167) |  |
| high | 0..1 | MAY |  | [4435-168](#C_4435-168) |  |
| performer | 1..1 | SHALL |  | [4435-160](#C_4435-160) |  |
| sdtc:functionCode | 0..1 | MAY |  | [4435-161](#C_4435-161) | urn:oid:2.16.840.1.113762.1.4.1099.30 (Care Team Member Function) |
| participant | 0..\* | MAY |  | [4435-76](#C_4435-76) |  |
| @typeCode | 1..1 | SHALL |  | [4435-78](#C_4435-78) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = IND |
| sdtc:functionCode | 1..1 | SHALL |  | [4435-169](#C_4435-169) | urn:oid:2.16.840.1.113762.1.4.1099.30 (Care Team Member Function) |
| participant | 0..\* | MAY |  | [4435-171](#C_4435-171) |  |
| @typeCode | 1..1 | SHALL |  | [4435-174](#C_4435-174) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = LOC |
| participantRole | 1..1 | SHALL |  | [4435-173](#C_4435-173) |  |
| entryRelationship | 0..\* | MAY |  | [4435-86](#C_4435-86) |  |
| @typeCode | 1..1 | SHALL |  | [4435-87](#C_4435-87) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| encounter | 1..1 | SHALL |  | [4435-88](#C_4435-88) |  |
| id | 1..1 | SHALL |  | [4435-89](#C_4435-89) |  |
| entryRelationship | 0..\* | MAY |  | [4435-91](#C_4435-91) |  |
| @typeCode | 1..1 | SHALL |  | [4435-92](#C_4435-92) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [4435-93](#C_4435-93) | [Note Activity (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01](#E_Note_Activity) |
| entryRelationship | 0..1 | MAY |  | [4435-94](#C_4435-94) |  |
| @typeCode | 1..1 | SHALL |  | [4435-96](#C_4435-96) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4435-95](#C_4435-95) | [Care Team Member Schedule Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.3:2019-07-01](#E_Care_Team_Member_Schedule_Observation) |

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
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.500.1" (CONF:4435-66).
   2. 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).
   1. 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).
   2. 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).
   1. This statusCode SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [ActStatus](#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).
   1. This effectiveTime SHALL contain exactly one [1..1] low (CONF:4435-167).
   2. 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
   1. MAY contain zero or one [0..1] sdtc:functionCode, which SHOULD be selected from ValueSet [Care Team Member Function](#Care_Team_Member_Function) urn:oid:2.16.840.1.113762.1.4.1099.30 DYNAMIC (CONF:4435-161).  
      Note: This sdtc: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.

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

1. MAY contain zero or more [0..\*] participant (CONF:4435-76) such that it
   1. SHALL contain exactly one [1..1] @typeCode="IND" Indirect Target (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90) (CONF:4435-78).
   2. SHALL contain exactly one [1..1] sdtc:functionCode, which SHALL be selected from ValueSet [Care Team Member Function](#Care_Team_Member_Function) urn:oid:2.16.840.1.113762.1.4.1099.30 DYNAMIC (CONF:4435-169).
   3. 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

1. MAY contain zero or more [0..\*] participant (CONF:4435-171) such that it
   1. SHALL contain exactly one [1..1] @typeCode="LOC" Location (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90) (CONF:4435-174).
   2. SHALL contain exactly one [1..1] participantRole (CONF:4435-173).
2. MAY contain zero or more [0..\*] entryRelationship (CONF:4435-86) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4435-87).
   2. SHALL contain exactly one [1..1] encounter (CONF:4435-88).
      1. This encounter SHALL contain exactly one [1..1] id (CONF:4435-89).
         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:4435-90).

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

1. MAY contain zero or more [0..\*] entryRelationship (CONF:4435-91) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4435-92).
   2. SHALL contain exactly one [1..1] [Note Activity](#E_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.

1. MAY contain zero or one [0..1] entryRelationship (CONF:4435-94) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4435-96).
   2. SHALL contain exactly one [1..1] [Care Team Member Schedule Observation](#E_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:sdtc" 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>

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](#E_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](#C_4435-24) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [4435-25](#C_4435-25) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [4435-12](#C_4435-12) |  |
| @root | 1..1 | SHALL |  | [4435-18](#C_4435-18) | 2.16.840.1.113883.10.20.22.4.500.3 |
| @extension | 1..1 | SHALL |  | [4435-19](#C_4435-19) | 2019-07-01 |
| code | 1..1 | SHALL |  | [4435-13](#C_4435-13) |  |
| @code | 1..1 | SHALL |  | [4435-20](#C_4435-20) | 57203-2 |
| @codeSystem | 1..1 | SHALL |  | [4435-21](#C_4435-21) | 2.16.840.1.113883.6.1 |
| text | 1..1 | SHALL |  | [4435-15](#C_4435-15) |  |
| reference | 1..1 | SHALL |  | [4435-16](#C_4435-16) |  |
| @value | 1..1 | SHALL |  | [4435-26](#C_4435-26) |  |
| statusCode | 1..1 | SHALL |  | [4435-11](#C_4435-11) |  |
| @code | 1..1 | SHALL |  | [4435-17](#C_4435-17) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| value | 1..1 | SHALL | TS | [4435-14](#C_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
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.500.3" (CONF:4435-18).
   2. SHALL contain exactly one [1..1] @extension="2019-07-01" (CONF:4435-19).
4. SHALL contain exactly one [1..1] code (CONF:4435-13).
   1. This code SHALL contain exactly one [1..1] @code="57203-2" Episode Timing [CMS Assessment] (CONF:4435-20).
   2. 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).
   1. This text SHALL contain exactly one [1..1] reference (CONF:4435-16).
      1. This reference SHALL contain exactly one [1..1] @value (CONF:4435-26).
6. SHALL contain exactly one [1..1] statusCode (CONF:4435-11).
   1. 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).

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](#S_Care_Teams_Section) (optional) | [Note Activity](#E_Note_Activity) (optional)  [Care Team Member Act](#E_Care_Team_Member_Act) (required)  [Care Team Type Observation](#E_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

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](#C_4435-124) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = CLUSTER |
| @moodCode | 1..1 | SHALL |  | [4435-125](#C_4435-125) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [4435-112](#C_4435-112) |  |
| @root | 1..1 | SHALL |  | [4435-117](#C_4435-117) | 2.16.840.1.113883.10.20.22.4.500 |
| @extension | 1..1 | SHALL |  | [4435-118](#C_4435-118) | 2019-07-01 |
| id | 1..\* | SHALL |  | [4435-126](#C_4435-126) |  |
| code | 1..1 | SHALL |  | [4435-114](#C_4435-114) |  |
| @code | 1..1 | SHALL |  | [4435-120](#C_4435-120) | 86744-0 |
| @codeSystem | 1..1 | SHALL |  | [4435-121](#C_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](#C_4435-154) |  |
| reference | 1..1 | SHALL |  | [4435-155](#C_4435-155) |  |
| @value | 1..1 | SHALL |  | [4435-156](#C_4435-156) |  |
| statusCode | 1..1 | SHALL |  | [4435-113](#C_4435-113) |  |
| @code | 1..1 | SHALL |  | [4435-119](#C_4435-119) | urn:oid:2.16.840.1.113883.1.11.15933 (ActStatus) |
| effectiveTime | 1..1 | SHALL |  | [4435-127](#C_4435-127) |  |
| low | 1..1 | SHALL |  | [4435-157](#C_4435-157) |  |
| high | 0..1 | MAY |  | [4435-158](#C_4435-158) |  |
| author | 0..\* | SHOULD |  | [4435-116](#C_4435-116) | Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119 |
| participant | 0..\* | SHOULD |  | [4435-128](#C_4435-128) |  |
| @typeCode | 1..1 | SHALL |  | [4435-129](#C_4435-129) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = PPRF |
| sdtc:functionCode | 0..1 | MAY |  | [4435-130](#C_4435-130) | urn:oid:2.16.840.1.113762.1.4.1099.30 (Care Team Member Function) |
| participantRole | 1..1 | SHALL |  | [4435-131](#C_4435-131) |  |
| id | 1..\* | SHALL |  | [4435-132](#C_4435-132) |  |
| participant | 0..\* | MAY |  | [4435-134](#C_4435-134) |  |
| @typeCode | 1..1 | SHALL |  | [4435-137](#C_4435-137) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = LOC |
| participantRole | 1..1 | SHALL |  | [4435-135](#C_4435-135) |  |
| id | 1..\* | SHALL |  | [4435-138](#C_4435-138) |  |
| addr | 0..1 | SHOULD |  | [4435-139](#C_4435-139) |  |
| telecom | 0..\* | SHOULD |  | [4435-140](#C_4435-140) |  |
| playingEntity | 1..1 | SHALL |  | [4435-136](#C_4435-136) |  |
| @classCode | 1..1 | SHALL |  | [4435-141](#C_4435-141) | urn:oid:2.16.840.1.113883.5.41 (HL7EntityClass) = PLC |
| name | 1..1 | SHALL |  | [4435-142](#C_4435-142) |  |
| component | 0..\* | MAY |  | [4435-110](#C_4435-110) |  |
| observation | 1..1 | SHALL |  | [4435-163](#C_4435-163) | [Care Team Type Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.2:2019-07-01](#E_Care_Team_Type_Observation) |
| component | 0..\* | MAY |  | [4435-146](#C_4435-146) |  |
| act | 1..1 | SHALL |  | [4435-147](#C_4435-147) | Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122 |
| component | 0..\* | MAY |  | [4435-148](#C_4435-148) |  |
| encounter | 1..1 | SHALL |  | [4435-164](#C_4435-164) |  |
| id | 1..\* | SHALL |  | [4435-165](#C_4435-165) |  |
| component | 0..1 | MAY |  | [4435-150](#C_4435-150) |  |
| act | 1..1 | SHALL |  | [4435-151](#C_4435-151) | [Note Activity (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01](#E_Note_Activity) |
| component | 1..\* | SHALL |  | [4435-152](#C_4435-152) |  |
| act | 1..1 | SHALL |  | [4435-166](#C_4435-166) | [Care Team Member Act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.1:2019-07-01](#E_Care_Team_Member_Act) |

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
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.500" (CONF:4435-117).
   2. 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).
   1. This code SHALL contain exactly one [1..1] @code="86744-0" Care Team (CONF:4435-120).
   2. 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).
   3. This code SHALL contain exactly one [1..1] originalText (CONF:4435-154) such that it
      1. 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).

1. SHALL contain exactly one [1..1] statusCode (CONF:4435-113).
   1. This statusCode SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [ActStatus](#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.
2. SHALL contain exactly one [1..1] effectiveTime (CONF:4435-127).
   1. This effectiveTime SHALL contain exactly one [1..1] low (CONF:4435-157).
   2. This effectiveTime MAY contain zero or one [0..1] high (CONF:4435-158).
3. SHOULD contain zero or more [0..\*] Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:4435-116).
4. SHOULD contain zero or more [0..\*] participant (CONF:4435-128) such that it
   1. SHALL contain exactly one [1..1] @typeCode="PPRF" Primary Performer (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90) (CONF:4435-129).
   2. MAY contain zero or one [0..1] sdtc:functionCode, which SHOULD be selected from ValueSet [Care Team Member Function](#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.
   3. SHALL contain exactly one [1..1] participantRole (CONF:4435-131).
      1. 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).
5. MAY contain zero or more [0..\*] participant (CONF:4435-134) such that it
   1. SHALL contain exactly one [1..1] @typeCode="LOC" Location (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90) (CONF:4435-137).
   2. SHALL contain exactly one [1..1] participantRole (CONF:4435-135).
      1. This participantRole SHALL contain at least one [1..\*] id (CONF:4435-138).
      2. This participantRole SHOULD contain zero or one [0..1] addr (CONF:4435-139).
      3. This participantRole SHOULD contain zero or more [0..\*] telecom (CONF:4435-140).
      4. 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).
6. MAY contain zero or more [0..\*] component (CONF:4435-110) such that it
   1. SHALL contain exactly one [1..1] [Care Team Type Observation](#E_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.

1. MAY contain zero or more [0..\*] component (CONF:4435-146) such that it
   1. SHALL contain exactly one [1..1] Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:4435-147).
2. MAY contain zero or more [0..\*] component (CONF:4435-148) such that it
   1. SHALL contain exactly one [1..1] encounter (CONF:4435-164).
      1. 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).
3. MAY contain zero or one [0..1] component (CONF:4435-150) such that it
   1. SHALL contain exactly one [1..1] [Note Activity](#E_Note_Activity) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01) (CONF:4435-151).
4. SHALL contain at least one [1..\*] component (CONF:4435-152) such that it
   1. SHALL contain exactly one [1..1] [Care Team Member Act](#E_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:sdtc" 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>

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](#E_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

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](#C_4435-101) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [4435-102](#C_4435-102) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [4435-99](#C_4435-99) |  |
| @root | 1..1 | SHALL |  | [4435-106](#C_4435-106) | 2.16.840.1.113883.10.20.22.4.500.2 |
| @extension | 1..1 | SHALL |  | [4435-108](#C_4435-108) | 2019-07-01 |
| code | 1..1 | SHALL |  | [4435-97](#C_4435-97) |  |
| @code | 1..1 | SHALL |  | [4435-103](#C_4435-103) | 86744-0 |
| @codeSystem | 1..1 | SHALL |  | [4435-104](#C_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](#C_4435-100) |  |
| @code | 1..1 | SHALL |  | [4435-107](#C_4435-107) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| value | 1..1 | SHALL | CD | [4435-98](#C_4435-98) |  |
| @code | 1..1 | SHALL |  | [4435-109](#C_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
   1. SHALL contain exactly one [1..1] @root=" 2.16.840.1.113883.10.20.22.4.500.2" (CONF:4435-106).
   2. SHALL contain exactly one [1..1] @extension="2019-07-01" (CONF:4435-108).
4. SHALL contain exactly one [1..1] code (CONF:4435-97).
   1. This code SHALL contain exactly one [1..1] @code="86744-0" Care Team (CONF:4435-103).
   2. 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).
   1. 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
   1. SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [Care Team Category](#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>

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](#S_Notes_Section) (required)  [Care Team Member Act](#E_Care_Team_Member_Act) (optional)  [Care Team Organizer](#E_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.

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](#C_3250-16899) | ACT |
| @moodCode | 1..1 | SHALL |  | [3250-16900](#C_3250-16900) | EVN |
| templateId | 1..1 | SHALL |  | [3250-16933](#C_3250-16933) |  |
| @root | 1..1 | SHALL |  | [3250-16934](#C_3250-16934) | 2.16.840.1.113883.10.20.22.4.202 |
| @extension | 1..1 | SHALL |  | [3250-16937](#C_3250-16937) | 2016-11-01 |
| code | 1..1 | SHALL |  | [3250-16895](#C_3250-16895) |  |
| @code | 1..1 | SHALL |  | [3250-16940](#C_3250-16940) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 34109-9 |
| @codeSystem | 1..1 | SHALL |  | [3250-16941](#C_3250-16941) | 2.16.840.1.113883.6.1 |
| translation | 0..\* | SHOULD |  | [3250-16939](#C_3250-16939) | urn:oid:2.16.840.1.113883.11.20.9.68 (Note Types) |
| text | 1..1 | SHALL |  | [3250-16896](#C_3250-16896) |  |
| @mediaType | 0..1 | MAY |  | [3250-16906](#C_3250-16906) | urn:oid:2.16.840.1.113883.11.20.7.1 (SupportedFileFormats) |
| reference | 1..1 | SHALL |  | [3250-16897](#C_3250-16897) |  |
| @nullFlavor | 0..0 | SHALL NOT |  | [3250-16920](#C_3250-16920) |  |
| @value | 1..1 | SHALL |  | [3250-16898](#C_3250-16898) |  |
| statusCode | 1..1 | SHALL |  | [3250-16916](#C_3250-16916) |  |
| effectiveTime | 1..1 | SHALL |  | [3250-16903](#C_3250-16903) |  |
| @value | 0..1 | SHOULD |  | [3250-16917](#C_3250-16917) |  |
| author | 1..\* | SHALL |  | [3250-16913](#C_3250-16913) | Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119 |
| participant | 0..\* | MAY |  | [3250-16923](#C_3250-16923) |  |
| @typeCode | 1..1 | SHALL |  | [3250-16925](#C_3250-16925) | LA |
| time | 1..1 | SHALL |  | [3250-16926](#C_3250-16926) | US Realm Date and Time (DT.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3 |
| participantRole | 1..1 | SHALL |  | [3250-16924](#C_3250-16924) |  |
| id | 1..\* | SHALL |  | [3250-16927](#C_3250-16927) |  |
| playingEntity | 0..1 | MAY |  | [3250-16928](#C_3250-16928) |  |
| name | 1..\* | SHALL |  | [3250-16929](#C_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](#C_3250-16907) |  |
| @typeCode | 1..1 | SHALL |  | [3250-16921](#C_3250-16921) | COMP |
| @inversionInd | 1..1 | SHALL |  | [3250-16922](#C_3250-16922) | true |
| @negationInd | 0..1 | MAY |  | [3250-16931](#C_3250-16931) |  |
| encounter | 1..1 | SHALL |  | [3250-16908](#C_3250-16908) |  |
| id | 1..\* | SHALL |  | [3250-16909](#C_3250-16909) |  |
| reference | 0..\* | MAY |  | [3250-16910](#C_3250-16910) |  |
| externalDocument | 1..1 | SHALL |  | [3250-16911](#C_3250-16911) |  |
| id | 1..1 | SHALL |  | [3250-16915](#C_3250-16915) |  |
| code | 0..1 | SHOULD |  | [3250-16918](#C_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
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.202" (CONF:3250-16934).
   2. SHALL contain exactly one [1..1] @extension="2016-11-01" (CONF:3250-16937).
4. SHALL contain exactly one [1..1] code (CONF:3250-16895).
   1. 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).
   2. This code SHALL contain exactly one [1..1] @codeSystem="2.16.840.1.113883.6.1" LOINC (CONF:3250-16941).
   3. This code SHOULD contain zero or more [0..\*] translation, which SHOULD be selected from ValueSet [Note Types](#Note_Types) urn:oid:2.16.840.1.113883.11.20.9.68 DYNAMIC (CONF:3250-16939).
      1. 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.
      2. 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.

* 1. This text MAY contain zero or one [0..1] @mediaType, which SHOULD be selected from ValueSet [SupportedFileFormats](#SupportedFileFormats) urn:oid:2.16.840.1.113883.11.20.7.1 DYNAMIC (CONF:3250-16906).
     1. 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).
  2. 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.

* + 1. This reference SHALL NOT contain [0..0] @nullFlavor (CONF:3250-16920).
    2. 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.

1. 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.

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

Represents the person(s) who wrote the note.

1. 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.

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

Indicates the time of signing the note.

* 1. 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).
  2. 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.

* + 1. This participantRole SHALL contain at least one [1..\*] id (CONF:3250-16927).
    2. 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).
    3. 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.

1. SHOULD contain zero or more [0..\*] entryRelationship (CONF:3250-16907) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" (CONF:3250-16921).
   2. 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.

* 1. MAY contain zero or one [0..1] @negationInd (CONF:3250-16931).
  2. SHALL contain exactly one [1..1] encounter (CONF:3250-16908).
     1. 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.

1. MAY contain zero or more [0..\*] reference (CONF:3250-16910) such that it
   1. SHALL contain exactly one [1..1] externalDocument (CONF:3250-16911).
      1. This externalDocument SHALL contain exactly one [1..1] id (CONF:3250-16915).
      2. 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">

<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">e1xydGYxXGFuc2lcYW5zaWNwZzEyNTJcZGVmZjBcbm91aWNvbXBhdFxkZWZsYW5nMTAzM3tcZm9udHRibHtcZjBcZm5pbFxmY2hhcnNldDAgQ2FsaWJyaTt9fQ0Ke1wqXGdlbmVyYXRvciBSaWNoZWQyMCA2LjMuOTYwMH1cdmlld2tpbmQ0XHVjMSANClxwYXJkXHNhMjAwXHNsMjc2XHNsbXVsdDFcZjBcZnMyMlxsYW5nOSBDb21wbGV0ZWQgcm91bmRzOyBubyBpbmNpZGVudFxwYXINCn0NCiA=

<reference value="#note1"/>

</text>

<!--...-->

</act>

</entry>

</section>

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.

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](#C_3250-32960) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [3250-32961](#C_3250-32961) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [3250-32951](#C_3250-32951) |  |
| @root | 1..1 | SHALL |  | [3250-32955](#C_3250-32955) | 2.16.840.1.113883.10.20.22.4.201 |
| @extension | 1..1 | SHALL |  | [3250-32956](#C_3250-32956) | 2016-06-01 |
| code | 1..1 | SHALL |  | [3250-32952](#C_3250-32952) |  |
| @code | 1..1 | SHALL |  | [3250-32957](#C_3250-32957) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 82607-3 |
| @codeSystem | 1..1 | SHALL |  | [3250-32958](#C_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](#C_3250-32962) |  |
| reference | 1..1 | SHALL |  | [3250-32963](#C_3250-32963) |  |
| @value | 1..1 | SHALL |  | [3250-32964](#C_3250-32964) |  |
| statusCode | 1..1 | SHALL |  | [3250-32950](#C_3250-32950) |  |
| @code | 1..1 | SHALL |  | [3250-32954](#C_3250-32954) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| value | 1..1 | SHALL | IVL\_TS | [3250-32953](#C_3250-32953) |  |
| low | 1..1 | SHALL |  | [3250-32965](#C_3250-32965) |  |
| high | 1..1 | SHALL |  | [3250-32966](#C_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
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.201" (CONF:3250-32955).
   2. SHALL contain exactly one [1..1] @extension="2016-06-01" (CONF:3250-32956).
4. SHALL contain exactly one [1..1] code (CONF:3250-32952).
   1. 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).
   2. 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).
   1. This text SHALL contain exactly one [1..1] reference (CONF:3250-32963).
      1. This reference SHALL contain exactly one [1..1] @value (CONF:3250-32964).
6. SHALL contain exactly one [1..1] statusCode (CONF:3250-32950).
   1. 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).
   1. This value SHALL contain exactly one [1..1] low (CONF:3250-32965).
   2. 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>

# Template Ids in This Guide

Table 17: Template List

| Template Title | Template Type | templateId |
| --- | --- | --- |
| [Care Teams Section](#S_Care_Teams_Section) | section | urn:hl7ii:2.16.840.1.113883.10.20.22.2.500:2019-07-01 |
| [Notes Section](#S_Notes_Section) | section | urn:hl7ii:2.16.840.1.113883.10.20.22.2.65:2016-11-01 |
| [Birth Sex Observation](#E_Birth_Sex_Observation) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.200:2016-06-01 |
| [Care Team Member Act](#E_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](#E_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](#E_Care_Team_Organizer) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.500:2019-07-01 |
| [Care Team Type Observation](#E_Care_Team_Type_Observation) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.2:2019-07-01 |
| [Note Activity](#E_Note_Activity) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01 |
| [Section Time Range Observation](#E_Section_Time_Range_Observation) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.201:2016-06-01 |

Table 18: Template Containments

| Template Title | Template Type | templateId |
| --- | --- | --- |
| [Birth Sex Observation](#E_Birth_Sex_Observation) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.200:2016-06-01 |
| [Section Time Range Observation](#E_Section_Time_Range_Observation) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.201:2016-06-01 |
| [Care Teams Section](#S_Care_Teams_Section) | section | urn:hl7ii:2.16.840.1.113883.10.20.22.2.500:2019-07-01 |
| [Care Team Organizer](#E_Care_Team_Organizer) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.500:2019-07-01 |
| [Note Activity](#E_Note_Activity) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01 |
| [Care Team Member Act](#E_Care_Team_Member_Act) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.1:2019-07-01 |
| [Note Activity](#E_Note_Activity) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01 |
| [Care Team Member Schedule Observation](#E_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](#E_Care_Team_Type_Observation) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.2:2019-07-01 |
| [Notes Section](#S_Notes_Section) | section | urn:hl7ii:2.16.840.1.113883.10.20.22.2.65:2016-11-01 |
| [Note Activity](#E_Note_Activity) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01 |

# Value Sets In This Guide

Table 19: Note Types

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Note Types urn:oid:2.16.840.1.113883.11.20.9.68  (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)  This value set was imported on 10/17/2019 with a version of 20191017.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.68/expansion> | | | |
| 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-unspecifed, 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 |
| 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 |

Table 22: Care Team Member Function

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Care Team Member Function urn:oid:2.16.840.1.113762.1.4.1099.30  (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.)  This value set was imported on 10/17/2019 with a version of 20191016.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1099.30/expansion> | | | |
| 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) |
| ... | | | |

Table 23: Care Team Category

|  |  |  |  |
| --- | --- | --- | --- |
| 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: )  This value set was imported on 10/17/2019 with a version of 20191015.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.4.642.3.155/expansion> | | | |
| 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 |

Table 24: SupportedFileFormats

|  |  |  |  |
| --- | --- | --- | --- |
| 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 mediType 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.)  This value set was imported on 10/17/2019 with a version of 20190425.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.7.1/expansion> | | | |
| 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 |

# 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 |