```
                        <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

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.

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

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 **SHALL** be selected from ValueSet **Note Types** urn:oid:2.16.840.1.113883.11.20.9.68 **DYNAMIC** (CONF:3250-16939) such that it

For example - a Cardiologist consult note may specialize a Consult note but not a Progress note

i. When the Note Activity is within a Note Section, the code **SHOULD** match or specialize the section code (CONF:3250-16942).

ii. If the Note Activity is within a typically narrative-only section, the code **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 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" />
            <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" />
                            <name>Dr. Physician</name>
                        </assignedAuthor>
                    </author>
                    <!-- Reference to encounter -->
                    <entryRelationship typeCode="COMP" inversionInd="true">
                        <encounter>
                            <!-- 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" />
                    <name>Dr. Physician</name>
                </assignedAuthor>
            </author>
            <!-- Reference to encounter -->
            <entryRelationship typeCode="COMP" inversionInd="true">
                <encounter>
                    <!-- 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">e1xydGYxXGFuc2lcYW5zaWNwZzEyNTJcZGVmZjBcbm91aWNvbXBhdFxkZWZsYW5nMTAzM3
tcZm9udHRibHtcZjBcZm5pbFxmY2hhcnNldDAgQ2FsaWJyaTt9fQ0Ke1wqXGdlbmVyYXRvciBSaWNoZWQyMCA2LjMuO
TYwMH1cdmlld2tpbmQ0XHVjMSANClxwYXJkXHNhMjAwXHNsMjc2XHNsbXVsdDFcZjBcZnMyMlxsYW5nOSBDb21wbGV0
ZWQgcm91bmRzOyBubyBpbmNpZGVudFxwYXINCn0NCiA=
                <reference value="#note1"/>
            </text>
            <!--...-->
        </act>
    </entry>
```

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.

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

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

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