CDAR2\_IG\_CCDA\_COMPANION\_R3\_STU\_2022MAY\_AppxA



**HL7 CDA® R2 Implementation Guide:**

**C-CDA Templates for Clinical Notes STU Companion Guide**

**Release 3 (US Realm)**

**Standard for Trial Use**

**May 2022**

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

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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) |

Table of Contents

[1 document 7](#_Toc103325878)

[1.1 Provenance - Assembler Participation (V2) 7](#_Toc103325879)

[2 section 10](#_Toc103325880)

[2.1 Care Teams Section (V2) 10](#_Toc103325881)

[2.2 Notes Section 12](#_Toc103325882)

[3 entry 15](#_Toc103325883)

[3.1 Assessment Scale Observation (V2) 15](#_Toc103325884)

[3.2 Assessment Scale Supporting Observation (V2) 20](#_Toc103325885)

[3.3 Birth Sex Observation 21](#_Toc103325886)

[3.4 Care Team Member Act (V2) 23](#_Toc103325887)

[3.5 Care Team Member Schedule Observation (V2) 30](#_Toc103325888)

[3.6 Care Team Organizer (V2) 32](#_Toc103325889)

[3.7 Care Team Type Observation 38](#_Toc103325890)

[3.8 Date of Diagnosis Act 40](#_Toc103325891)

[3.9 Gender Identity Observation (V3) 42](#_Toc103325892)

[3.10 Goal Observation (V2) 45](#_Toc103325893)

[3.11 Health Concern Act (V3) 52](#_Toc103325894)

[3.12 Note Activity 70](#_Toc103325895)

[3.13 Planned Procedure (V3) 78](#_Toc103325896)

[3.14 Problem Observation (V4) 85](#_Toc103325897)

[3.15 Procedure Activity Procedure (V3) 93](#_Toc103325898)

[3.16 Section Time Range Observation 102](#_Toc103325899)

[3.17 Sexual Orientation Observation 104](#_Toc103325900)

[3.18 Social History Observation (V4) 107](#_Toc103325901)

[4 unspecified 112](#_Toc103325902)

[4.1 Provenance - Author Participation (V2) 112](#_Toc103325903)

[5 Template Ids in This Guide 116](#_Toc103325904)

[6 Value Sets In This Guide 119](#_Toc103325905)

[7 Code Systems in This Guide 136](#_Toc103325906)

Table of Figures

[Figure 1: Provenance – Assembler Participation Example 9](#_Toc103325907)

[Figure 2: Care Teams Section Example 12](#_Toc103325908)

[Figure 3: Note Section Example 14](#_Toc103325909)

[Figure 4: Assessment Scale Observation Example 18](#_Toc103325910)

[Figure 5: Assessment Scale Observation - Hunger Vital Signs Example 19](#_Toc103325911)

[Figure 6: Assessment Scale Supporting Observation Example 21](#_Toc103325912)

[Figure 7: Birth Sex Example 23](#_Toc103325913)

[Figure 8: Care Team Member Act Example 29](#_Toc103325914)

[Figure 9: Care Team Member Schedule Observation Example 32](#_Toc103325915)

[Figure 10: Care Team Organizer Example 37](#_Toc103325916)

[Figure 11: Care Team Type Observation Example 40](#_Toc103325917)

[Figure 12: Date of Diagnosis Act Example 42](#_Toc103325918)

[Figure 13: Gender Identity Observation Example 44](#_Toc103325919)

[Figure 14: Goal Observation Example 50](#_Toc103325920)

[Figure 15: Social Determinant of Health Goal Example 51](#_Toc103325921)

[Figure 16: Social Determinant of Health Text Goal Example 52](#_Toc103325922)

[Figure 17: Health Concern Act Example 67](#_Toc103325923)

[Figure 18: Health Concern Act wrapping Social Determinant of Health Problem Observation Example 69](#_Toc103325924)

[Figure 19: Note Activity as entryRelationship to C-CDA Entry 75](#_Toc103325925)

[Figure 20: Note Activity as Standalone Entry 77](#_Toc103325926)

[Figure 21: RTF Example 78](#_Toc103325927)

[Figure 22: Planned Procedure Example 84](#_Toc103325928)

[Figure 23: Social Determinant of Health Planned Procedure Example 85](#_Toc103325929)

[Figure 24: Problem Observation Example 92](#_Toc103325930)

[Figure 25: Social Determinant of Health Problem Observation Example 93](#_Toc103325931)

[Figure 26: Procedure Activity Procedure Example 101](#_Toc103325932)

[Figure 27: Procedure Activity Procedure Social Determinant of Health Intervention Example 102](#_Toc103325933)

[Figure 28: Section Time Range Example 104](#_Toc103325934)

[Figure 29: Sexual Orientation Observation Example 106](#_Toc103325935)

[Figure 30: Social History Observation Example 110](#_Toc103325936)

[Figure 31: Social Determinant of Health Social History Observation Example 111](#_Toc103325937)

[Figure 32: Provenance - Author Participation Example 115](#_Toc103325938)

Table of Tables

[Table 1: Provenance - Assembler Participation (V2) Constraints Overview 8](#_Toc103325939)

[Table 2: Care Teams Section (V2) Contexts 10](#_Toc103325940)

[Table 3: Care Teams Section (V2) Constraints Overview 10](#_Toc103325941)

[Table 4: Notes Section Contexts 12](#_Toc103325942)

[Table 5: Notes Section Constraints Overview 13](#_Toc103325943)

[Table 6: Assessment Scale Observation (V2) Constraints Overview 15](#_Toc103325944)

[Table 7: Assessment Scale Supporting Observation (V2) Constraints Overview 20](#_Toc103325945)

[Table 8: Birth Sex Observation Constraints Overview 22](#_Toc103325946)

[Table 9: Care Team Member Act (V2) Contexts 23](#_Toc103325947)

[Table 10: Care Team Member Act (V2) Constraints Overview 24](#_Toc103325948)

[Table 11: Care Team Member Schedule Observation (V2) Constraints Overview 31](#_Toc103325949)

[Table 12: Care Team Organizer (V2) Contexts 32](#_Toc103325950)

[Table 13: Care Team Organizer (V2) Constraints Overview 33](#_Toc103325951)

[Table 14: Care Team Type Observation Contexts 38](#_Toc103325952)

[Table 15: Care Team Type Observation Constraints Overview 39](#_Toc103325953)

[Table 16: Date of Diagnosis Act Contexts 40](#_Toc103325954)

[Table 17: Date of Diagnosis Act Constraints Overview 41](#_Toc103325955)

[Table 18: Gender Identity Observation (V3) Constraints Overview 43](#_Toc103325956)

[Table 19: Goal Observation (V2) Constraints Overview 45](#_Toc103325957)

[Table 20: Health Concern Act (V3) Constraints Overview 53](#_Toc103325958)

[Table 21: Note Activity Contexts 70](#_Toc103325959)

[Table 22: Note Activity Constraints Overview 70](#_Toc103325960)

[Table 23: Planned Procedure (V3) Constraints Overview 79](#_Toc103325961)

[Table 24: Problem Observation (V4) Contexts 85](#_Toc103325962)

[Table 25: Problem Observation (V4) Constraints Overview 86](#_Toc103325963)

[Table 26: Procedure Activity Procedure (V3) Constraints Overview 94](#_Toc103325964)

[Table 27: Section Time Range Observation Constraints Overview 103](#_Toc103325965)

[Table 28: Sexual Orientation Observation Constraints Overview 105](#_Toc103325966)

[Table 29: Social History Observation (V4) Constraints Overview 108](#_Toc103325967)

[Table 30: Provenance - Author Participation (V2) Constraints Overview 112](#_Toc103325968)

[Table 31: Template List 116](#_Toc103325969)

[Table 32: Template Containments 117](#_Toc103325970)

[Table 33: Note Types 119](#_Toc103325971)

[Table 34: ONC Administrative Sex 120](#_Toc103325972)

[Table 35: ActStatus 120](#_Toc103325973)

[Table 36: Care Team Member Function 121](#_Toc103325974)

[Table 37: Care Team Category 122](#_Toc103325975)

[Table 38: Gender Identity USCDI core 123](#_Toc103325976)

[Table 39: Asked but Unknown and Other 123](#_Toc103325977)

[Table 40: ProblemAct statusCode 124](#_Toc103325978)

[Table 41: SupportedFileFormats 124](#_Toc103325979)

[Table 42: Planned moodCode (Act/Encounter/Procedure) 125](#_Toc103325980)

[Table 43: Body Site Value Set 126](#_Toc103325981)

[Table 44: Problem 127](#_Toc103325982)

[Table 45: Problem Type (SNOMEDCT) 128](#_Toc103325983)

[Table 46: Problem Type (LOINC) 129](#_Toc103325984)

[Table 47: ProcedureAct statusCode 129](#_Toc103325985)

[Table 48: ActPriority 130](#_Toc103325986)

[Table 49: Sexual Orientation 130](#_Toc103325987)

[Table 50: Other or unknown or refused to answer 131](#_Toc103325988)

[Table 51: Social History Type 132](#_Toc103325989)

[Table 52: UnitsOfMeasureCaseSensitive 133](#_Toc103325990)

[Table 53: Healthcare Provider Taxonomy 134](#_Toc103325991)

[Table 54: Personal And Legal Relationship Role Type 135](#_Toc103325992)

[Table 55: Code Systems 136](#_Toc103325993)

# document

Provenance - Assembler Participation (V2)

[participant: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.5.7:2020-05-19 (open)]

This template represents the organization that supported generation of a CDA document. The Assembler Organization may be different than the Author Organization, and may be different from the Organization that developed the software used to generate the document.

This Participation is appropriate to use in the CDA Header because it applies to the entire content in the document.

This template is consistent with the prior Assembler Document Participant (2.16.840.1.113883.3.5019.1.1) in the 2016 HL7 Data Provenance guide, however, makes no claim about representing the software organization. All constraints for conformance are defined in this template.

Note: The CDA Participant does not support a software device or the organization that created the software. The Assembler role can only be expressed at the level of organization. This is a known issue with the current CDA R2 model.  
Note: The Provenance template title includes a version 2 to support moving from the 'Basic Provenance' guide to the this Companion Guide, so the templateId has not changed.

Table 1: Provenance - Assembler Participation (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| participant (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.5.7:2020-05-19) | | | | | |
| @typeCode | 1..1 | SHALL |  | [4515-55](#C_4515-55) | DEV |
| templateId | 1..1 | SHALL |  | [4515-40](#C_4515-40) |  |
| @root | 1..1 | SHALL |  | [4515-44](#C_4515-44) | 2.16.840.1.113883.10.20.22.5.7 |
| @extension | 1..1 | SHALL |  | [4515-32974](#C_4515-32974) | 2020-05-19 |
| functionCode | 1..1 | SHALL |  | [4515-38](#C_4515-38) |  |
| @code | 1..1 | SHALL |  | [4515-32972](#C_4515-32972) | assembler |
| @codeSystem | 1..1 | SHALL |  | [4515-41](#C_4515-41) | urn:oid:2.16.840.1.113883.4.642.4.1131 (ProvenanceParticipantType) |
| time | 1..1 | SHALL |  | [4515-42](#C_4515-42) |  |
| associatedEntity | 1..1 | SHALL |  | [4515-39](#C_4515-39) |  |
| @classCode | 1..1 | SHALL |  | [4515-32973](#C_4515-32973) | OWN |
| scopingOrganization | 1..1 | SHALL |  | [4515-43](#C_4515-43) |  |
| id | 1..\* | SHALL |  | [4515-50](#C_4515-50) |  |
| name | 1..\* | SHALL |  | [4515-51](#C_4515-51) |  |
| telecom | 0..\* | SHOULD |  | [4515-52](#C_4515-52) |  |
| addr | 0..\* | SHOULD |  | [4515-47](#C_4515-47) | US Realm Address (AD.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2 |

1. SHALL contain exactly one [1..1] @typeCode="DEV" Device (CONF:4515-55).
2. SHALL contain exactly one [1..1] templateId (CONF:4515-40) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.5.7" (CONF:4515-44).
   2. SHALL contain exactly one [1..1] @extension="2020-05-19" (CONF:4515-32974).
3. SHALL contain exactly one [1..1] functionCode (CONF:4515-38).
   1. This functionCode SHALL contain exactly one [1..1] @code="assembler" Assembler (CONF:4515-32972).
   2. This functionCode SHALL contain exactly one [1..1] @codeSystem (CodeSystem: ProvenanceParticipantType urn:oid:2.16.840.1.113883.4.642.4.1131) (CONF:4515-41).
4. SHALL contain exactly one [1..1] time (CONF:4515-42).
5. SHALL contain exactly one [1..1] associatedEntity (CONF:4515-39).  
   Note: The template does not require any elements from the associatedEntity since the information is recorded in the scopingOrganization.
   1. This associatedEntity SHALL contain exactly one [1..1] @classCode="OWN" Owned Entity (CONF:4515-32973).
   2. This associatedEntity SHALL contain exactly one [1..1] scopingOrganization (CONF:4515-43).
      1. This scopingOrganization SHALL contain at least one [1..\*] id (CONF:4515-50).
      2. This scopingOrganization SHALL contain at least one [1..\*] name (CONF:4515-51).
      3. This scopingOrganization SHOULD contain zero or more [0..\*] telecom (CONF:4515-52).
      4. This scopingOrganization SHOULD contain zero or more [0..\*] US Realm Address (AD.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:4515-47).

Figure 1: Provenance – Assembler Participation Example

<participant typeCode="DEV">

<templateId root="2.16.840.1.113883.10.20.22.5.7" extension="2020-05-19" />

<functionCode code="assembler" codeSystem="2.16.840.1.113883.4.642.4.1131"

codeSystemName="ProvenanceParticipantType"/>

<time value="20191206011130-0400" />

<associatedEntity classCode="OWN">

<scopingOrganization>

<!-- Represents the Assembler Organization -->

<id root="2.16.840.1.113883.19.5" extension="4"/>

<name use="L">Good Health HIE</name>

<telecom value="tel:+1(202)776-7700" use="WP" />

<addr use="WP">

<streetAddressLine partType="SAL">555 Badger Way</streetAddressLine>

<city partType="CTY">Amherst</city>

<state partType="STA">WI</state>

<postalCode partType="ZIP">01002</postalCode>

<country partType="CNT">US</country>

</addr>

</scopingOrganization>

</associatedEntity>

</participant>

# section

Care Teams Section (V2)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.500:2022-06-01 (open)]

Table 2: Care Teams Section (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
|  | [Care Team Organizer (V2)](#E_Care_Team_Organizer_V2) (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 3: Care Teams Section (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.500:2022-06-01) | | | | | |
| templateId | 1..1 | SHALL |  | [4515-3](#C_4515-3) |  |
| @root | 1..1 | SHALL |  | [4515-7](#C_4515-7) | 2.16.840.1.113883.10.20.22.2.500 |
| @extension | 1..1 | SHALL |  | [4515-8](#C_4515-8) | 2022-06-01 |
| code | 1..1 | SHALL |  | [4515-5](#C_4515-5) |  |
| @code | 1..1 | SHALL |  | [4515-9](#C_4515-9) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 85847-2 |
| @codeSystem | 1..1 | SHALL |  | [4515-10](#C_4515-10) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [4515-4](#C_4515-4) |  |
| text | 1..1 | SHALL |  | [4515-6](#C_4515-6) |  |
| entry | 0..\* | SHOULD |  | [4515-1](#C_4515-1) |  |
| organizer | 1..1 | SHALL |  | [4515-159](#C_4515-159) | [Care Team Organizer (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500:2022-06-01](#E_Care_Team_Organizer_V2) |

1. SHALL contain exactly one [1..1] templateId (CONF:4515-3) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.500" (CONF:4515-7).
   2. SHALL contain exactly one [1..1] @extension="2022-06-01" (CONF:4515-8).
2. SHALL contain exactly one [1..1] code (CONF:4515-5) 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:4515-9).
   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:4515-10).
3. SHALL contain exactly one [1..1] title (CONF:4515-4).
4. SHALL contain exactly one [1..1] text (CONF:4515-6).
5. SHOULD contain zero or more [0..\*] entry (CONF:4515-1) such that it
   1. SHALL contain exactly one [1..1] [Care Team Organizer (V2)](#E_Care_Team_Organizer_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500:2022-06-01) (CONF:4515-159).

Figure 2: Care Teams Section Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.500" extension="2019-07-01"/>

<templateId root="2.16.840.1.113883.10.20.22.2.500" extension="2022-06-01"/>

<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 4: 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 5: 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 3: 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

Assessment Scale Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.69:2022-06-01 (open)]

An assessment scale is a collection of observations that together can yield a calculated or non-calculated summary evaluation of a one or more conditions. Examples include the Braden Scale (assesses pressure ulcer risk), APACHE Score (estimates mortality in critically ill patients), Mini-Mental Status Exam (assesses cognitive function), APGAR Score (assesses the health of a newborn), Glasgow Coma Scale (assesses coma and impaired consciousness), and WE CARE (Well Child Care, Evaluation, Community Resources, Advocacy, Referral, Education - a clinic-based screening and referral system developed for pediatric settings).

When an Assessment Scale Observation is contained in a Problem Observation, a Social History Observation or a Procedure instance that is Social Determinant of Health focused, that Assessment scale MAY contain assessment scale observations that represent question and answer pairs from SDOH screening instruments that are represented in LOINC. Note that guidance on the use of LOINC in assessment scales already exists in Assessment Scale Observation constraints and Assessment Scale Supporting Observations constraints.

Table 6: Assessment Scale Observation (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.69:2022-06-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [4515-14434](#C_4515-14434) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [4515-14435](#C_4515-14435) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [4515-14436](#C_4515-14436) |  |
| @root | 1..1 | SHALL |  | [4515-14437](#C_4515-14437) | 2.16.840.1.113883.10.20.22.4.69 |
| @extension | 1..1 | SHALL |  | [4515-33037](#C_4515-33037) | 2022-06-01 |
| id | 1..\* | SHALL |  | [4515-14438](#C_4515-14438) |  |
| code | 1..1 | SHALL |  | [4515-14439](#C_4515-14439) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| derivationExpr | 0..1 | MAY |  | [4515-14637](#C_4515-14637) |  |
| statusCode | 1..1 | SHALL |  | [4515-14444](#C_4515-14444) |  |
| @code | 1..1 | SHALL |  | [4515-19088](#C_4515-19088) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [4515-14445](#C_4515-14445) |  |
| value | 1..1 | SHALL |  | [4515-14450](#C_4515-14450) |  |
| interpretationCode | 0..\* | MAY |  | [4515-14459](#C_4515-14459) |  |
| translation | 0..\* | MAY |  | [4515-14888](#C_4515-14888) |  |
| author | 0..\* | MAY |  | [4515-14460](#C_4515-14460) |  |
| entryRelationship | 0..\* | SHOULD |  | [4515-14451](#C_4515-14451) |  |
| @typeCode | 1..1 | SHALL |  | [4515-16741](#C_4515-16741) | COMP |
| observation | 1..1 | SHALL |  | [4515-16742](#C_4515-16742) | Assessment Scale Supporting Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.86 |
| referenceRange | 0..\* | MAY |  | [4515-16799](#C_4515-16799) |  |
| observationRange | 1..1 | SHALL |  | [4515-16800](#C_4515-16800) |  |
| text | 0..1 | SHOULD |  | [4515-16801](#C_4515-16801) |  |
| reference | 0..1 | SHOULD |  | [4515-16802](#C_4515-16802) |  |
| @value | 0..1 | MAY |  | [4515-16803](#C_4515-16803) |  |

1. SHALL contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:4515-14434).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:4515-14435).
3. SHALL contain exactly one [1..1] templateId (CONF:4515-14436) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.69" (CONF:4515-14437).
   2. SHALL contain exactly one [1..1] @extension="2022-06-01" (CONF:4515-33037).
4. SHALL contain at least one [1..\*] id (CONF:4515-14438).
5. SHALL contain exactly one [1..1] code, which SHALL be selected from CodeSystem LOINC (urn:oid:2.16.840.1.113883.6.1) DYNAMIC (CONF:4515-14439).

Such derivation expression can contain a text calculation of how the components total up to the summed score

1. MAY contain zero or one [0..1] derivationExpr (CONF:4515-14637).
2. SHALL contain exactly one [1..1] statusCode (CONF:4515-14444).
   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:4515-19088).

Represents clinically effective time of the measurement, which may be when the measurement was performed (e.g., a BP measurement), or may be when sample was taken (and measured some time afterwards)

1. SHALL contain exactly one [1..1] effectiveTime (CONF:4515-14445).
2. SHALL contain exactly one [1..1] value (CONF:4515-14450).
3. MAY contain zero or more [0..\*] interpretationCode (CONF:4515-14459).
   1. The interpretationCode, if present, MAY contain zero or more [0..\*] translation (CONF:4515-14888).
4. MAY contain zero or more [0..\*] author (CONF:4515-14460).
5. SHOULD contain zero or more [0..\*] entryRelationship (CONF:4515-14451) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" has component (CONF:4515-16741).
   2. SHALL contain exactly one [1..1] Assessment Scale Supporting Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.86) (CONF:4515-16742).
6. MAY contain zero or more [0..\*] referenceRange (CONF:4515-16799).
   1. The referenceRange, if present, SHALL contain exactly one [1..1] observationRange (CONF:4515-16800).

The text may contain a description of the scale (e.g., for a Pain Scale 1 to 10: 1 to 3 = little pain, 4 to 7= moderate pain, 8 to 10 = severe pain)

* + 1. This observationRange SHOULD contain zero or one [0..1] text (CONF:4515-16801).
       1. The text, if present, SHOULD contain zero or one [0..1] reference (CONF:4515-16802).
          1. The reference, if present, MAY contain zero or one [0..1] @value (CONF:4515-16803).

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:4515-16804).

Figure 4: Assessment Scale Observation Example

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.69" extension="2022-06-01"/>

<id root="c6b5a04b-2bf4-49d1-8336-636a3813df0b"/>

<code code="54614-3"

displayName="Brief Interview for Mental Status"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"/>

<derivationExpr>Text description of the calculation</derivationExpr>

<statusCode code="completed"/>

<effectiveTime value="20120214"/>

<!-- Summed score of the component values -->

<value xsi:type="INT" value="7"/>

<entryRelationship typeCode="COMP">

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.86"/>

. . .

</entryRelationship>

</observation>

Figure 5: Assessment Scale Observation - Hunger Vital Signs Example

<entry>

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.69" extension="2022-06-01"/>

<id root="c6b5a04b-2bf4-49d1-8336-636a3813df0b"/>

<code code="88121-9" displayName="Hunger Vital Signs"

codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>

<derivationExpr>Text description of the calculation</derivationExpr>

<statusCode code="completed"/>

<effectiveTime value="20120214"/>

<!-- Summed score of the component values -->

<value xsi:type="INT" value="2"/>

<entryRelationship typeCode="COMP">

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.86"/>

<id root="f4dce790-8328-11db-9fe1-0800200c9a44"/>

<code code="88122-7" displayName="(I/We) worried whether (my/our) food would run out before (I/we) got money to buy more"

codeSystem="2.16.840.1.113883.6.1" codeSystemName="SNOMED"/>

<statusCode code="completed"/>

<value xsi:type="CD" code="LA28397-0" displayName="Often true" codeSystem="2.16.840.1.113883.6.1">

<translation code="1" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>

</value>

</observation>

</entryRelationship>

<entryRelationship typeCode="COMP">

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.86"/>

<id root="f4dce790-8328-11db-9fe1-0800200c9a44"/>

<code code="88123-5" displayName="Within the past 12Mo the food we bought just didn't last and we didn't have money to get more"

codeSystem="2.16.840.1.113883.6.1" codeSystemName="SNOMED"/>

<statusCode code="completed"/>

<value xsi:type="CD" code="LA28397-0" displayName="Often true" codeSystem="2.16.840.1.113883.6.1">

<translation code="1" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>

</value>

</observation>

</entryRelationship>

<entryRelationship typeCode="COMP">

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.86"/>

<id root="f4dce790-8328-11db-9fe1-0800200c9a44"/>

<code code="88124-3" displayName="Food insecurity risk [HVS]"

codeSystem="2.16.840.1.113883.6.1" codeSystemName="SNOMED"/>

<statusCode code="completed"/>

<value xsi:type="CD" code="LA19952-3" displayName="At risk" codeSystem="2.16.840.1.113883.6.1"/>

</observation>

</entryRelationship>

</observation>

</entry>

Assessment Scale Supporting Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.86:2022-06-01 (open)]

An Assessment Scale Supporting Observation represents the components of a scale used in an Assessment Scale Observation. The individual parts that make up the component may be a group of physical, cognitive, functional status, social observations or answers to questions.

Table 7: Assessment Scale Supporting Observation (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.86:2022-06-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [4515-16715](#C_4515-16715) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [4515-16716](#C_4515-16716) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [4515-16722](#C_4515-16722) |  |
| @root | 1..1 | SHALL |  | [4515-16723](#C_4515-16723) | 2.16.840.1.113883.10.20.22.4.86 |
| @extension | 1..1 | SHALL |  | [4515-33036](#C_4515-33036) | 2022-06-01 |
| id | 1..\* | SHALL |  | [4515-16724](#C_4515-16724) |  |
| code | 1..1 | SHALL |  | [4515-19178](#C_4515-19178) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| statusCode | 1..1 | SHALL |  | [4515-16720](#C_4515-16720) |  |
| @code | 1..1 | SHALL |  | [4515-19089](#C_4515-19089) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| value | 1..\* | SHALL |  | [4515-16754](#C_4515-16754) |  |

1. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:4515-16715).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:4515-16716).
3. SHALL contain exactly one [1..1] templateId (CONF:4515-16722) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.86" (CONF:4515-16723).
   2. SHALL contain exactly one [1..1] @extension="2022-06-01" (CONF:4515-33036).
4. SHALL contain at least one [1..\*] id (CONF:4515-16724).
5. SHALL contain exactly one [1..1] code, which SHALL be selected from CodeSystem LOINC (urn:oid:2.16.840.1.113883.6.1) DYNAMIC (CONF:4515-19178).
6. SHALL contain exactly one [1..1] statusCode (CONF:4515-16720).
   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:4515-19089).
7. SHALL contain at least one [1..\*] value (CONF:4515-16754).
   1. If xsi:type="CD", MAY have a translation code to further specify the source if the instrument has an applicable code system and value set for the integer (CONF:14639) (CONF:4515-16755).

Figure 6: Assessment Scale Supporting Observation Example

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.86" extension="2022-06-01"/>

<id root="f4dce790-8328-11db-9fe1-0800200c9a44"/>

<code code="60715-0" displayName="Defensive Reaction - Head and Neck Response" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>

<statusCode code="completed"/>

<value xsi:type="INT" value="3"/>

</observation>

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 8: 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 7: 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 (V2)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.1:2022-06-01 (open)]

Table 9: Care Team Member Act (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Care Team Organizer (V2)](#E_Care_Team_Organizer_V2) (required) | [Note Activity](#E_Note_Activity) (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)

The performer/assignedEntity/id may be set equal to (a pointer to) an id on a performer elsewhere in the document (header or entries) or a new performer can be described here. If the id is pointing to a performer already described elsewhere in the document, assignedEntity/id is sufficient to identify this performer and none of the remaining details of assignedEntity are required to be set. Application Software must be responsible for resolving the identifier back to its original object and then rendering the information in the correct place in the containing section's narrative text.

This id must be a pointer to another Performer.

Table 10: Care Team Member Act (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.1:2022-06-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [4515-53](#C_4515-53) | PCPR |
| @moodCode | 1..1 | SHALL |  | [4515-54](#C_4515-54) | EVN |
| templateId | 1..1 | SHALL |  | [4515-45](#C_4515-45) |  |
| @root | 1..1 | SHALL |  | [4515-66](#C_4515-66) | 2.16.840.1.113883.10.20.22.4.500.1 |
| @extension | 1..1 | SHALL |  | [4515-67](#C_4515-67) | 2022-06-01 |
| code | 1..1 | SHALL |  | [4515-27](#C_4515-27) |  |
| @code | 1..1 | SHALL |  | [4515-48](#C_4515-48) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 85847-2 |
| @codeSystem | 1..1 | SHALL |  | [4515-49](#C_4515-49) | 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [4515-62](#C_4515-62) |  |
| @code | 1..1 | SHALL |  | [4515-68](#C_4515-68) | urn:oid:2.16.840.1.113883.1.11.15933 (ActStatus) |
| effectiveTime | 1..1 | SHALL |  | [4515-33](#C_4515-33) |  |
| low | 1..1 | SHALL |  | [4515-167](#C_4515-167) |  |
| high | 0..1 | MAY |  | [4515-168](#C_4515-168) |  |
| performer | 1..1 | SHALL |  | [4515-160](#C_4515-160) |  |
| sdtc:functionCode | 0..1 | MAY |  | [4515-161](#C_4515-161) | urn:oid:2.16.840.1.113762.1.4.1099.30 (Care Team Member Function) |
| assignedEntity | 1..1 | SHALL |  | [4515-175](#C_4515-175) |  |
| id | 1..\* | SHALL |  | [4515-176](#C_4515-176) |  |
| @root | 0..1 | SHOULD |  | [4515-177](#C_4515-177) | 2.16.840.1.113883.4.6 |
| addr | 0..\* | SHOULD |  | [4515-182](#C_4515-182) |  |
| telecom | 0..\* | SHOULD |  | [4515-183](#C_4515-183) |  |
| assignedPerson | 0..1 | SHOULD |  | [4515-178](#C_4515-178) |  |
| name | 1..1 | SHALL |  | [4515-179](#C_4515-179) | US Realm Person Name (PN.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1 |
| representedOrganization | 0..1 | MAY |  | [4515-181](#C_4515-181) |  |
| participant | 0..\* | MAY |  | [4515-171](#C_4515-171) |  |
| @typeCode | 1..1 | SHALL |  | [4515-174](#C_4515-174) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = LOC |
| participantRole | 1..1 | SHALL |  | [4515-173](#C_4515-173) |  |
| participant | 0..\* | MAY |  | [4515-76](#C_4515-76) |  |
| @typeCode | 1..1 | SHALL |  | [4515-78](#C_4515-78) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = IND |
| sdtc:functionCode | 1..1 | SHALL |  | [4515-169](#C_4515-169) | urn:oid:2.16.840.1.113762.1.4.1099.30 (Care Team Member Function) |
| entryRelationship | 0..\* | MAY |  | [4515-86](#C_4515-86) |  |
| @typeCode | 1..1 | SHALL |  | [4515-87](#C_4515-87) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| encounter | 1..1 | SHALL |  | [4515-88](#C_4515-88) |  |
| id | 1..1 | SHALL |  | [4515-89](#C_4515-89) |  |
| entryRelationship | 0..\* | MAY |  | [4515-91](#C_4515-91) |  |
| @typeCode | 1..1 | SHALL |  | [4515-92](#C_4515-92) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [4515-93](#C_4515-93) | [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 |  | [4515-94](#C_4515-94) |  |
| @typeCode | 1..1 | SHALL |  | [4515-96](#C_4515-96) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-95](#C_4515-95) | Care Team Member Schedule Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.3:2019-07-01 |

1. SHALL contain exactly one [1..1] @classCode="PCPR" Provision of Care (CONF:4515-53).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CONF:4515-54).
3. SHALL contain exactly one [1..1] templateId (CONF:4515-45) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.500.1" (CONF:4515-66).
   2. SHALL contain exactly one [1..1] @extension="2022-06-01" (CONF:4515-67).
4. SHALL contain exactly one [1..1] code (CONF:4515-27).
   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:4515-48).
   2. This code SHALL contain exactly one [1..1] @codeSystem="2.16.840.1.113883.6.1" LOINC (CONF:4515-49).
5. SHALL contain exactly one [1..1] statusCode (CONF:4515-62).
   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:4515-68).
6. SHALL contain exactly one [1..1] effectiveTime (CONF:4515-33).
   1. This effectiveTime SHALL contain exactly one [1..1] low (CONF:4515-167).
   2. This effectiveTime MAY contain zero or one [0..1] high (CONF:4515-168).
7. SHALL contain exactly one [1..1] performer (CONF:4515-160) 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:4515-161).  
      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.
   2. SHALL contain exactly one [1..1] assignedEntity (CONF:4515-175).
      1. This assignedEntity SHALL contain at least one [1..\*] id (CONF:4515-176).
         1. Such ids SHOULD contain zero or one [0..1] @root="2.16.840.1.113883.4.6" National Provider Identifier (CONF:4515-177).
         2. If the assignedEntity/id is not referencing a Performer elsewhere in the document with an assignedPerson populated, this assignedEntity SHALL contain exactly one [1..1] assignedPerson (CONF:4515-180).
      2. This assignedEntity SHOULD contain zero or more [0..\*] addr (CONF:4515-182).
      3. This assignedEntity SHOULD contain zero or more [0..\*] telecom (CONF:4515-183).
      4. This assignedEntity SHOULD contain zero or one [0..1] assignedPerson (CONF:4515-178).  
         Note: This assignedPerson must be present on at least one performer in this document for each unique assignedEntity/id.
         1. The assignedPerson, if present, SHALL contain exactly one [1..1] US Realm Person Name (PN.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:4515-179).
      5. This assignedEntity MAY contain zero or one [0..1] representedOrganization (CONF:4515-181).
         1. When a provider is working on behalf of an organization an addr & telecom SHALL be present in representedOrganization (CONF:4515-184).

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

1. MAY contain zero or more [0..\*] participant (CONF:4515-171) 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:4515-174).
   2. SHALL contain exactly one [1..1] participantRole (CONF:4515-173).

This participant is used to express additional care team functions performed by this member of the team. Include additional participant to record additional roles (functionCode) this Care Team member plays.

1. MAY contain zero or more [0..\*] participant (CONF:4515-76) 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:4515-78).
   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:4515-169).
   3. This participantRole SHALL contain exactly one [1..1] @nullFlavor="NI" No Information. (CONF:4515-172).
2. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-86) 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:4515-87).
   2. SHALL contain exactly one [1..1] encounter (CONF:4515-88).
      1. This encounter SHALL contain exactly one [1..1] id (CONF:4515-89).
         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:4515-90).

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:4515-91) 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:4515-92).
   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:4515-93).

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:4515-94) 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:4515-96).
   2. SHALL contain exactly one [1..1] Care Team Member Schedule Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.3:2019-07-01) (CONF:4515-95).

Figure 8: Care Team Member Act Example

<!--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"/>

<templateId root="2.16.840.1.113883.10.20.22.4.500.1" extension="2022-06-01"/>

<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 (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.3:2022-06-01 (open)]

This template represents the schedule of when the care team member participates on the care team. Examples include:  
• An oncologist who participated on the care team for one week.  
• A primary care provider who participated on a care team during one summer (e.g. in the case of patients who are snow-birds).  
• A crisis team who participated on the care team for the patient during an inpatient stay (e.g. in the case of children with special needs).

Table 11: Care Team Member Schedule Observation (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.3:2022-06-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [4515-33026](#C_4515-33026) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [4515-33027](#C_4515-33027) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [4515-33019](#C_4515-33019) |  |
| @root | 1..1 | SHALL |  | [4515-33022](#C_4515-33022) | 2.16.840.1.113883.10.20.22.4.500.3 |
| @extension | 1..1 | SHALL |  | [4515-19](#C_4515-19) | 2022-06-01 |
| code | 1..1 | SHALL |  | [4515-13](#C_4515-13) |  |
| @code | 1..1 | SHALL |  | [4515-33023](#C_4515-33023) | 57203-2 |
| @codeSystem | 1..1 | SHALL |  | [4515-33024](#C_4515-33024) | 2.16.840.1.113883.6.1 |
| text | 1..1 | SHALL |  | [4515-33020](#C_4515-33020) |  |
| reference | 1..1 | SHALL |  | [4515-16](#C_4515-16) |  |
| @value | 1..1 | SHALL |  | [4515-33025](#C_4515-33025) |  |
| statusCode | 1..1 | SHALL |  | [4515-33018](#C_4515-33018) |  |
| @code | 1..1 | SHALL |  | [4515-33021](#C_4515-33021) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| value | 1..1 | SHALL | IVL\_TS | [4515-14](#C_4515-14) |  |
| low | 1..1 | SHALL |  | [4515-33030](#C_4515-33030) |  |
| high | 0..1 | SHOULD |  | [4515-33029](#C_4515-33029) |  |

1. SHALL contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:4515-33026).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:4515-33027).
3. SHALL contain exactly one [1..1] templateId (CONF:4515-33019) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.500.3" (CONF:4515-33022).
   2. SHALL contain exactly one [1..1] @extension="2022-06-01" (CONF:4515-19).
4. SHALL contain exactly one [1..1] code (CONF:4515-13).
   1. This code SHALL contain exactly one [1..1] @code="57203-2" Episode Timing [CMS Assessment] (CONF:4515-33023).
   2. This code SHALL contain exactly one [1..1] @codeSystem="2.16.840.1.113883.6.1" LOINC (CONF:4515-33024).
5. SHALL contain exactly one [1..1] text (CONF:4515-33020).
   1. This text SHALL contain exactly one [1..1] reference (CONF:4515-16).
      1. This reference SHALL contain exactly one [1..1] @value (CONF:4515-33025).
6. SHALL contain exactly one [1..1] statusCode (CONF:4515-33018).
   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:4515-33021).

Observation/value Interval Time Stamp holds the time range the Care Team Member participated on the Care Team of the patient.

1. SHALL contain exactly one [1..1] value with @xsi:type="IVL\_TS" (CONF:4515-14).
   1. This value SHALL contain exactly one [1..1] low (CONF:4515-33030).
   2. This value SHOULD contain zero or one [0..1] high (CONF:4515-33029).

Figure 9: Care Team Member Schedule Observation Example

<!-- Care Team Member Schedule Observation (contained in Care Team Member Act) -->

<entry>

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.500.3" extension="2016-06-01"/>

<templateId root="2.16.840.1.113883.10.20.22.4.500.3" extension="2022-06-01"/>

<code code="57203-2" displayName="Episode Timing [CMS Assessment]"

codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>

<text>

<reference value="#CareTeam\_CT"/>

</text>

<statusCode code="completed"/>

<value xsi:type="IVL\_TS">

<low value="20210401"/>

<high value="20210412"/>

</value>

</observation>

</entry>

Care Team Organizer (V2)

[organizer: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.500:2022-06-01 (open)]

Table 12: Care Team Organizer (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Care Teams Section (V2)](#S_Care_Teams_Section_V2) (optional) | [Note Activity](#E_Note_Activity) (optional)  [Care Team Type Observation](#E_Care_Team_Type_Observation) (optional)  [Care Team Member Act (V2)](#E_Care_Team_Member_Act_V2) (required) |

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 13: Care Team Organizer (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| organizer (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500:2022-06-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [4515-124](#C_4515-124) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = CLUSTER |
| @moodCode | 1..1 | SHALL |  | [4515-125](#C_4515-125) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [4515-112](#C_4515-112) |  |
| @root | 1..1 | SHALL |  | [4515-117](#C_4515-117) | 2.16.840.1.113883.10.20.22.4.500 |
| @extension | 1..1 | SHALL |  | [4515-118](#C_4515-118) | 2022-06-01 |
| id | 1..\* | SHALL |  | [4515-126](#C_4515-126) |  |
| code | 1..1 | SHALL |  | [4515-114](#C_4515-114) |  |
| @code | 1..1 | SHALL |  | [4515-120](#C_4515-120) | 86744-0 |
| @codeSystem | 1..1 | SHALL |  | [4515-121](#C_4515-121) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| originalText | 0..1 | SHOULD |  | [4515-154](#C_4515-154) |  |
| reference | 1..1 | SHALL |  | [4515-155](#C_4515-155) |  |
| @value | 1..1 | SHALL |  | [4515-156](#C_4515-156) |  |
| statusCode | 1..1 | SHALL |  | [4515-113](#C_4515-113) |  |
| @code | 1..1 | SHALL |  | [4515-119](#C_4515-119) | urn:oid:2.16.840.1.113883.1.11.15933 (ActStatus) |
| effectiveTime | 1..1 | SHALL |  | [4515-127](#C_4515-127) |  |
| low | 1..1 | SHALL |  | [4515-157](#C_4515-157) |  |
| high | 0..1 | MAY |  | [4515-158](#C_4515-158) |  |
| author | 0..\* | SHOULD |  | [4515-116](#C_4515-116) | Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119 |
| participant | 0..\* | SHOULD |  | [4515-128](#C_4515-128) |  |
| @typeCode | 1..1 | SHALL |  | [4515-129](#C_4515-129) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = PPRF |
| sdtc:functionCode | 0..1 | MAY |  | [4515-130](#C_4515-130) | urn:oid:2.16.840.1.113762.1.4.1099.30 (Care Team Member Function) |
| participantRole | 1..1 | SHALL |  | [4515-131](#C_4515-131) |  |
| id | 1..\* | SHALL |  | [4515-132](#C_4515-132) |  |
| participant | 0..\* | MAY |  | [4515-134](#C_4515-134) |  |
| @typeCode | 1..1 | SHALL |  | [4515-137](#C_4515-137) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = LOC |
| participantRole | 1..1 | SHALL |  | [4515-135](#C_4515-135) |  |
| id | 1..\* | SHALL |  | [4515-138](#C_4515-138) |  |
| addr | 0..1 | SHOULD |  | [4515-139](#C_4515-139) |  |
| telecom | 0..\* | SHOULD |  | [4515-140](#C_4515-140) |  |
| playingEntity | 1..1 | SHALL |  | [4515-136](#C_4515-136) |  |
| @classCode | 1..1 | SHALL |  | [4515-141](#C_4515-141) | urn:oid:2.16.840.1.113883.5.41 (HL7EntityClass) = PLC |
| name | 1..1 | SHALL |  | [4515-142](#C_4515-142) |  |
| component | 0..\* | MAY |  | [4515-110](#C_4515-110) |  |
| observation | 1..1 | SHALL |  | [4515-163](#C_4515-163) | [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 |  | [4515-146](#C_4515-146) |  |
| act | 1..1 | SHALL |  | [4515-147](#C_4515-147) | Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122 |
| component | 0..\* | MAY |  | [4515-148](#C_4515-148) |  |
| encounter | 1..1 | SHALL |  | [4515-164](#C_4515-164) |  |
| id | 1..\* | SHALL |  | [4515-165](#C_4515-165) |  |
| component | 0..1 | MAY |  | [4515-150](#C_4515-150) |  |
| act | 1..1 | SHALL |  | [4515-151](#C_4515-151) | [Note Activity (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01](#E_Note_Activity) |
| component | 1..\* | SHALL |  | [4515-152](#C_4515-152) |  |
| act | 1..1 | SHALL |  | [4515-166](#C_4515-166) | [Care Team Member Act (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.1:2022-06-01](#E_Care_Team_Member_Act_V2) |

1. SHALL contain exactly one [1..1] @classCode="CLUSTER" CLUSTER (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:4515-124).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:4515-125).
3. SHALL contain exactly one [1..1] templateId (CONF:4515-112) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.500" (CONF:4515-117).
   2. SHALL contain exactly one [1..1] @extension="2022-06-01" (CONF:4515-118).
4. SHALL contain at least one [1..\*] id (CONF:4515-126).
5. SHALL contain exactly one [1..1] code (CONF:4515-114).
   1. This code SHALL contain exactly one [1..1] @code="86744-0" Care Team (CONF:4515-120).
   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:4515-121).
   3. This code SHOULD contain zero or one [0..1] originalText (CONF:4515-154) such that it
      1. SHALL contain exactly one [1..1] reference (CONF:4515-155).

The value attribute references the narrative in section.text where the care team name is rendered. The intention of this reference is to clarify which care team this Organizer refers to.

* + - 1. This reference SHALL contain exactly one [1..1] @value (CONF:4515-156).

1. SHALL contain exactly one [1..1] statusCode (CONF:4515-113).
   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:4515-119).  
      Note: When statusCode has a value set, its value MAY be rendered in the narrative.
2. SHALL contain exactly one [1..1] effectiveTime (CONF:4515-127).
   1. This effectiveTime SHALL contain exactly one [1..1] low (CONF:4515-157).
   2. This effectiveTime MAY contain zero or one [0..1] high (CONF:4515-158).
3. SHOULD contain zero or more [0..\*] Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:4515-116).

This Participant represents the Care Team lead.

1. SHOULD contain zero or more [0..\*] participant (CONF:4515-128) 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:4515-129).
   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:4515-130).  
      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:4515-131).
      1. This participantRole SHALL contain at least one [1..\*] id (CONF:4515-132).
         1. This id SHALL match a performer/assignedEntity/id of at least one Care Team Member described in component/act (CONF:4515-133).
2. MAY contain zero or more [0..\*] participant (CONF:4515-134) 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:4515-137).
   2. SHALL contain exactly one [1..1] participantRole (CONF:4515-135).
      1. This participantRole SHALL contain at least one [1..\*] id (CONF:4515-138).
      2. This participantRole SHOULD contain zero or one [0..1] addr (CONF:4515-139).
      3. This participantRole SHOULD contain zero or more [0..\*] telecom (CONF:4515-140).
      4. This participantRole SHALL contain exactly one [1..1] playingEntity (CONF:4515-136).
         1. This playingEntity SHALL contain exactly one [1..1] @classCode="PLC" Place (CodeSystem: HL7EntityClass urn:oid:2.16.840.1.113883.5.41) (CONF:4515-141).
         2. This playingEntity SHALL contain exactly one [1..1] name (CONF:4515-142).
3. MAY contain zero or more [0..\*] component (CONF:4515-110) 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:4515-163).

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:4515-146) 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:4515-147).
2. MAY contain zero or more [0..\*] component (CONF:4515-148) such that it
   1. SHALL contain exactly one [1..1] encounter (CONF:4515-164).
      1. This encounter SHALL contain at least one [1..\*] id (CONF:4515-165).  
         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:4515-150) 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:4515-151).
4. SHALL contain at least one [1..\*] component (CONF:4515-152) such that it
   1. SHALL contain exactly one [1..1] [Care Team Member Act (V2)](#E_Care_Team_Member_Act_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.1:2022-06-01) (CONF:4515-166).

Figure 10: Care Team Organizer Example

<!--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"/>

<templateId root="2.16.840.1.113883.10.20.22.4.500"

extension="2022-06-01"/>

<!--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"/>

</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">

<participantRole>

<!--<This id matches at least one of the member's id in the Care Team Member act template-->

<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"/>

<templateId root="2.16.840.1.113883.10.20.22.4.500.1"

extension="2022-06-01"/>

<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"/>

</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 14: Care Team Type Observation Contexts

| Contained By: | Contains: |
| --- | --- |
| [Care Team Organizer (V2)](#E_Care_Team_Organizer_V2) (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 15: 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 11: Care Team Type Observation 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>

Date of Diagnosis Act

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.502:2022-06-01 (open)]

Table 16: Date of Diagnosis Act Contexts

| Contained By: | Contains: |
| --- | --- |
| [Problem Observation (V4)](#E_Problem_Observation_V4) (optional) |  |

This template represents the Date of Diagnosis, which is the date of first determination by a qualified professional of the presence of a problem or condition affecting a patient.

The date of diagnosis is usually not the same date as the date of condition onset. A patient may have a condition for some time before it is formally diagnosed.

Table 17: Date of Diagnosis Act Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.502:2022-06-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [4515-33010](#C_4515-33010) | urn:oid:2.16.840.1.113883.5.4 (HL7ActCode) = ACT |
| @moodCode | 1..1 | SHALL |  | [4515-33011](#C_4515-33011) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [4515-33000](#C_4515-33000) |  |
| @root | 1..1 | SHALL |  | [4515-33002](#C_4515-33002) | 2.16.840.1.113883.10.20.22.4.502 |
| @extension | 1..1 | SHALL |  | [4515-33003](#C_4515-33003) | 2022-06-01 |
| code | 1..1 | SHALL |  | [4515-33001](#C_4515-33001) |  |
| @code | 0..1 | SHALL |  | [4515-33004](#C_4515-33004) | 77975-1 |
| @codeSystem | 1..1 | SHALL |  | [4515-33005](#C_4515-33005) | 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [4515-33006](#C_4515-33006) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [4515-33007](#C_4515-33007) |  |
| @value | 1..1 | SHALL |  | [4515-33008](#C_4515-33008) |  |
| low | 0..0 | SHALL NOT |  | [4515-33016](#C_4515-33016) |  |
| high | 0..0 | SHALL NOT |  | [4515-33017](#C_4515-33017) |  |

1. SHALL contain exactly one [1..1] @classCode="ACT" Act (CodeSystem: HL7ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:4515-33010).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:4515-33011).
3. SHALL contain exactly one [1..1] templateId (CONF:4515-33000) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.502" (CONF:4515-33002).
   2. SHALL contain exactly one [1..1] @extension="2022-06-01" (CONF:4515-33003).
4. SHALL contain exactly one [1..1] code (CONF:4515-33001).
   1. This code SHALL contain zero or one [0..1] @code="77975-1" Earliest date of diagnosis (CONF:4515-33004).
   2. This code SHALL contain exactly one [1..1] @codeSystem="2.16.840.1.113883.6.1" LOINC (CONF:4515-33005).
5. SHALL contain exactly one [1..1] statusCode="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:4515-33006).
6. SHALL contain exactly one [1..1] effectiveTime (CONF:4515-33007).
   1. This effectiveTime SHALL contain exactly one [1..1] @value (CONF:4515-33008).
      1. SHALL be precise to at least the year (CONF:4515-33009).
   2. This effectiveTime SHALL NOT contain [0..0] low (CONF:4515-33016).
   3. This effectiveTime SHALL NOT contain [0..0] high (CONF:4515-33017).

Figure 12: Date of Diagnosis Act Example

<!-- INSIDE PROBLEM OBSERVATION -->

<entryRelationship typeCode="COMP">

<act classCode="ACT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.502" extension="2022-06-01"/>

<code code="77975-1" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="Earliest date of diagnosis"/>

<text>

<reference value="#ProblemObs\_1\_PS1"/>

</text>

<statusCode code="completed"/>

<!-- SHALL to the year (MAY be more specific) -->

<effectiveTime value="200802"/>

</act>

</entryRelationship>

Gender Identity Observation (V3)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.3.45:2022-06-01 (open)]

This observation represents the gender identity of the patient, defined as:

"One’s basic sense of being male, female, or other gender (for example, transgender or gender queer). Gender identity can be congruent or incongruent with one’s sex assigned at birth based on the appearance of external genitalia.” (Advancing Effective Communication, Cultural Competence, and Patient- and Family-Centered Care for the Lesbian, Gay, Bisexual, and Transgender (LGBT) Community—A Field Guide, The Joint Commission (2011).)

This template follows the guidelines from the HL7 Gender Harmony project . This template is based on C-CDA Social History Observation template.

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

Table 18: Gender Identity Observation (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.45:2022-06-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [4515-1230](#C_4515-1230) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [4515-1231](#C_4515-1231) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [4515-1221](#C_4515-1221) |  |
| @root | 1..1 | SHALL |  | [4515-1225](#C_4515-1225) | 2.16.840.1.113883.10.20.34.3.45 |
| @extension | 1..1 | SHALL |  | [4515-1226](#C_4515-1226) | 2022-06-01 |
| code | 1..1 | SHALL |  | [4515-1222](#C_4515-1222) |  |
| @code | 1..1 | SHALL |  | [4515-1227](#C_4515-1227) | 76691-5 |
| @codeSystem | 1..1 | SHALL |  | [4515-1228](#C_4515-1228) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [4515-33031](#C_4515-33031) |  |
| @code | 1..1 | SHALL |  | [4515-33032](#C_4515-33032) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [4515-33033](#C_4515-33033) |  |
| low | 1..1 | SHALL |  | [4515-33034](#C_4515-33034) |  |
| high | 0..1 | MAY |  | [4515-33035](#C_4515-33035) |  |
| value | 1..1 | SHALL | CD | [4515-1223](#C_4515-1223) | urn:oid:2.16.840.1.113762.1.4.1021.101 (Gender Identity USCDI core) |
| @nullFlavor | 0..1 | MAY |  | [4515-1232](#C_4515-1232) | urn:oid:2.16.840.1.113762.1.4.1114.17 (Asked but Unknown and Other) |

1. Conforms to Social History Observation (V3) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2015-08-01).
2. SHALL contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:4515-1230).
3. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:4515-1231).
4. SHALL contain exactly one [1..1] templateId (CONF:4515-1221) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.34.3.45" (CONF:4515-1225).
   2. SHALL contain exactly one [1..1] @extension="2022-06-01" (CONF:4515-1226).
5. SHALL contain exactly one [1..1] code (CONF:4515-1222).
   1. This code SHALL contain exactly one [1..1] @code="76691-5" Gender identity (CONF:4515-1227).
   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:4515-1228).
6. SHALL contain exactly one [1..1] statusCode (CONF:4515-33031).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:4515-33032).
7. SHALL contain exactly one [1..1] effectiveTime (CONF:4515-33033).

The effectiveTime represents the relevant time of the observation. A patient's "gender identity" may change and using effectiveTime/low and effectiveTime/high defines the time during which the patient had identified as specified.

* 1. This effectiveTime SHALL contain exactly one [1..1] low (CONF:4515-33034).
  2. This effectiveTime MAY contain zero or one [0..1] high (CONF:4515-33035).

1. SHALL contain exactly one [1..1] value with @xsi:type="CD", where the code SHALL be selected from ValueSet [Gender Identity USCDI core](#Gender_Identity_USCDI_core) urn:oid:2.16.840.1.113762.1.4.1021.101 DYNAMIC (CONF:4515-1223).

To represent additional Gender Identities, set nullFlavor="OTH". To represent "choose not to disclose", set nullFlavor="ASKU".

* 1. This value MAY contain zero or one [0..1] @nullFlavor, which SHOULD be selected from ValueSet [Asked but Unknown and Other](#Asked_but_Unknown_and_Other) urn:oid:2.16.840.1.113762.1.4.1114.17 DYNAMIC (CONF:4515-1232).

Figure 13: Gender Identity Observation Example

<observation classCode="OBS" moodCode="EVN">

<!-- Gender Identity Observation -->

<templateId root="2.16.840.1.113883.10.20.34.3.45" extension="2019-04-01" />

<templateId root="2.16.840.1.113883.10.20.34.3.45" extension="2022-06-01" />

<id root="5501b49a-32ea-4c78-9c31-3dbe782871b7" />

<code code="76691-5"

displayName="Gender identity"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" />

<statusCode code="completed" />

<effectiveTime>

<low value="20180703" />

</effectiveTime>

<value xsi:type="CD" code="446141000124107"

displayName="Identifies as female gender (finding)"

codeSystem="2.16.840.1.113883.6.96"

codeSystemName="SNOMED CT" />

</observation>

Goal Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.121:2022-06-01 (open)]

This template represents a patient health goal. A Goal Observation template may have related components that are acts, encounters, observations, procedures, substance administrations, or supplies. A goal identifies a future desired condition or state. Goals are often related to physical or mental health conditions or diseases, but also may be related to a Social Determinant of Health (SDOH) risks or states. For example, to have adequate quality meals and snacks, gain transportation security - able to access health and social needs). SDOH data relate to conditions in which people live, learn, work, and play and their effects on health risks and outcomes. A Goal is established by the patient or provider.

A goal may be a patient or provider goal. If the author is set to the recordTarget (patient), this is a patient goal. If the author is set to a provider, this is a provider goal. If both patient and provider are set as authors, this is a negotiated goal.

A goal usually has a related health concern and/or risk.

A goal may have components consisting of other goals (milestones). These milestones are related to the overall goal through entryRelationships.

Table 19: Goal Observation (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.121:2022-06-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [4515-30418](#C_4515-30418) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [4515-30419](#C_4515-30419) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = GOL |
| templateId | 1..1 | SHALL |  | [4515-8583](#C_4515-8583) |  |
| @root | 1..1 | SHALL |  | [4515-10512](#C_4515-10512) | 2.16.840.1.113883.10.20.22.4.121 |
| @extension | 1..1 | SHALL |  | [4515-32886](#C_4515-32886) | 2022-06-01 |
| id | 1..\* | SHALL |  | [4515-32332](#C_4515-32332) |  |
| code | 1..1 | SHALL |  | [4515-30784](#C_4515-30784) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| statusCode | 1..1 | SHALL |  | [4515-32333](#C_4515-32333) |  |
| @code | 1..1 | SHALL |  | [4515-32334](#C_4515-32334) | urn:oid:2.16.840.1.113883.1.11.15933 (ActStatus) |
| effectiveTime | 0..1 | SHOULD |  | [4515-32335](#C_4515-32335) |  |
| value | 0..1 | MAY |  | [4515-32743](#C_4515-32743) |  |
| author | 0..\* | SHOULD |  | [4515-30995](#C_4515-30995) | Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119 |
| entryRelationship | 0..\* | MAY |  | [4515-30701](#C_4515-30701) |  |
| @typeCode | 1..1 | SHALL |  | [4515-30702](#C_4515-30702) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [4515-30703](#C_4515-30703) | Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122 |
| entryRelationship | 0..\* | MAY |  | [4515-30704](#C_4515-30704) |  |
| @typeCode | 1..1 | SHALL |  | [4515-30705](#C_4515-30705) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| act | 1..1 | SHALL |  | [4515-32879](#C_4515-32879) | Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122 |
| entryRelationship | 0..1 | SHOULD |  | [4515-30785](#C_4515-30785) |  |
| @typeCode | 1..1 | SHALL |  | [4515-30786](#C_4515-30786) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-30787](#C_4515-30787) | Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143 |
| entryRelationship | 0..\* | MAY |  | [4515-31448](#C_4515-31448) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31449](#C_4515-31449) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| observation | 1..1 | SHALL |  | [4515-32880](#C_4515-32880) | Goal Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.121 |
| entryRelationship | 0..\* | MAY |  | [4515-31559](#C_4515-31559) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31560](#C_4515-31560) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [4515-31588](#C_4515-31588) | Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122 |
| reference | 0..\* | MAY |  | [4515-32754](#C_4515-32754) |  |
| @typeCode | 1..1 | SHALL |  | [4515-32755](#C_4515-32755) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| externalDocument | 1..1 | SHALL |  | [4515-32756](#C_4515-32756) | External Document Reference (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.115:2014-06-09 |

1. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:4515-30418).
2. SHALL contain exactly one [1..1] @moodCode="GOL" Goal (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:4515-30419).
3. SHALL contain exactly one [1..1] templateId (CONF:4515-8583) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.121" (CONF:4515-10512).
   2. SHALL contain exactly one [1..1] @extension="2022-06-01" (CONF:4515-32886).
4. SHALL contain at least one [1..\*] id (CONF:4515-32332).
5. SHALL contain exactly one [1..1] code, which SHOULD be selected from CodeSystem LOINC (urn:oid:2.16.840.1.113883.6.1) (CONF:4515-30784).
   1. When the Goal is Social Determinant of Health Goal, the observation/code SHOULD contain exactly one [1..1] code, which SHOULD contain exactly one [1..1] @code="8689-2 "History of Social function” This code SHALL contain exactly one [1..1] @codeSystem="2.16.840.1.113883.6.1" (CodeSystem: LOINC 2.16.840.1.113883.6.1) (CONF:4515-32887).
6. SHALL contain exactly one [1..1] statusCode (CONF:4515-32333).
   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:4515-32334).
7. SHOULD contain zero or one [0..1] effectiveTime (CONF:4515-32335).
8. MAY contain zero or one [0..1] value (CONF:4515-32743).
   1. When the Goal is Social Determinant of Health Goal, the observation/value SHOULD be selected from ValueSet [Social Determinant of Health Goals](https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1247.71/expansion)DYNAMIC (CONF:4515-32963).

If the author is the recordTarget (patient), this is a patient goal. If the author is a provider, this is a provider goal. If both patient and provider are authors, this is a negotiated goal. If no author is present, it is assumed the document or section author(s) is the author of this goal.

1. SHOULD contain zero or more [0..\*] Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:4515-30995).

The following entryRelationship represents the relationship between a Goal Observation and a Health Concern Act (Goal Observation REFERS TO Health Concern Act). As Health Concern Act is already defined in Health Concerns Section, rather than clone the whole Health Concern Act template, an Entry Reference may be used in entryRelationship to refer the template.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-30701) 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:4515-30702).
   2. SHALL contain exactly one [1..1] Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:4515-30703).

The following entryRelationship represents a planned component of the goal such as Planned Encounter (V2), Planned Observation (V2), Planned Procedure (V2), Planned Medication Activity (V2), Planned Supply (V2), Planned Act (V2) or Planned Immunization Activity. Because these entries are already described in the Interventions Section of the CDA document instance, rather than repeating the full content of the entries, the Entry Reference template may be used to reference the entries.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-30704) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" Has component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4515-30705).
   2. SHALL contain exactly one [1..1] Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:4515-32879).

The following entryRelationship represents the priority that the patient or a provider puts on the goal.

1. SHOULD contain zero or one [0..1] entryRelationship (CONF:4515-30785) 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:4515-30786).
   2. SHALL contain exactly one [1..1] Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:4515-30787).

The following entryRelationship represents the relationship between two Goal Observations where the target is a component of the source (Goal Observation HAS COMPONENT Goal Observation). The component goal (target) is a Milestone.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31448) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" Has component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4515-31449).
   2. SHALL contain exactly one [1..1] Goal Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.121) (CONF:4515-32880).

Where a Goal Observation needs to reference another entry already described in the CDA document instance, rather than repeating the full content of the entry, the Entry Reference template may be used to reference this entry.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31559) 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:4515-31560).
   2. SHALL contain exactly one [1..1] Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:4515-31588).

Where it is necessary to reference an external clinical document such a Referral document, Discharge Summary document etc., the External Document Reference template can be used to reference this document. However, if this Care Plan document is replacing or appending another Care Plan document in the same set, that relationship is set in the header, using ClinicalDocument/relatedDocument.

1. MAY contain zero or more [0..\*] reference (CONF:4515-32754).
   1. The reference, if present, SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4515-32755).
   2. The reference, if present, SHALL contain exactly one [1..1] External Document Reference (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.115:2014-06-09) (CONF:4515-32756).

Figure 14: Goal Observation Example

<observation classCode="OBS" moodCode="GOL">

<templateId root="2.16.840.1.113883.10.20.22.4.121" />

<templateId root="2.16.840.1.113883.10.20.22.4.121" extension="2022-06-01" />

<id root="3700b3b0-fbed-11e2-b778-0800200c9a66" />

<code code="59408-5"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="Oxygen saturation in Arterial blood by Pulse oximetry" />

<statusCode code="active" />

<effectiveTime value="20130902" />

<value xsi:type="IVL\_PQ">

<low value="92" unit="%" />

</value>

<!--

If the author is set to the recordTarget (patient), this is a patient goal.

If the author is set to a provider, this is a provider goal.

If both patient and provider are set as authors, this is a negotiated goal.

-->

<!-- Provider Author -->

<author>

<templateId root="2.16.840.1.113883.10.20.22.4.119" />

...

</author>

<!-- Patient Author -->

<author typeCode="AUT">

<templateId root="2.16.840.1.113883.10.20.22.4.119" />

...

</author>

<!-- This entryRelationship represents the relationship "Goal REFERS TO Health Concern" -->

<entryRelationship typeCode="REFR">

<!-- Entry Reference Concern Act -->

<act classCode="ACT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.122" />

<!-- This id points to an already defined Health Concern in the Health Concerns Section -->

<id root="4eab0e52-dd7d-4285-99eb-72d32ddb195c" />

...

</act>

</entryRelationship>

<!-- Priority Preference -->

<entryRelationship typeCode="RSON">

<!-- Priority Preference - this is the preference that the patient

(specified by the Author Participation template)

places on the Goal -->

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.143" />

...

</observation>

</entryRelationship>

<!-- Priority Preference - this is the preference that the provider

(specified by the Author Participation template)

places on the Goal -->

<entryRelationship typeCode="RSON">

<!-- Priority Preference -->

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.143" />

...

</observation>

</entryRelationship>

</observation>

Figure 15: Social Determinant of Health Goal Example

<entry>

<observation classCode="OBS" moodCode="GOL">

<templateId root="2.16.840.1.113883.10.20.22.4.121" />

<templateId root="2.16.840.1.113883.10.20.22.4.121" extension="2022-06-01"/>

<id extension="3241"

root="1.2.840.114350.1.13.6289.1.7.2.737179"/>

<code code="8689-2" displayName="History of Social function"

codeSystem="2.16.840.1.113883.5.61"

codeSystemName="LOINC">

<originalText>

<reference value="#goal1"/>

</originalText>

</code>

<statusCode code="active"/>

<effectiveTime>

<!-- The effectiveTime/low indicates the desired "Achieve by"

date -->

<low value="20220814"/>

<high nullFlavor="NI"/>

<value xsi:type="CD" code="1078229009"

displayName="Food security (finding)"

codeSystem="2.16.840.1.113883.6.96"

codeSystemName="SNOMED CT"/>

</effectiveTime>

</observation>

</entry>

Figure 16: Social Determinant of Health Text Goal Example

<component>

<section>

<!-- Goals Section -->

<templateId root="2.16.840.1.113883.10.20.22.2.60"/>

<code code="61146-7" displayName="Goals" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>

<title>Goals Section</title>

<text>

<paragraph ID="Goals">Patient wants to move into Cherry Street subsidized housing</paragraph>

</text>

<entry>

<!-- Goal Observation -->

<observation classCode="OBS" moodCode="GOL">

<!-- Goal Observation -->

<templateId root="2.16.840.1.113883.10.20.22.4.121"/>

<templateId root="2.16.840.1.113883.10.20.22.4.121" extension="2022-06-01"/>

<!-- If you have an id for your goal, include here -->

<id nullFlavor="UNK"/>

<code nullFlavor="UNK"/>

<text>

<reference value="#Goals"></reference>

</text>

<statusCode code="active"/>

<!-- Author could be included to indicate a patient authored goal or a provider different than the document or section author. -->

</observation>

</entry>

</section>

</component>

Health Concern Act (V3)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.132:2022-06-01 (open)]

This template represents a health concern.

It is a wrapper for a single health concern which may be derived from a variety of sources within an EHR (such as Problem List, Family History, Social History, Social Worker Note, etc.).

A Health Concern Act is used to track non-optimal physical or psychological situations drawing the patient to the healthcare system. These may be from the perspective of the care team or from the perspective of the patient.  
When the underlying condition is of concern (i.e., as long as the condition, whether active or resolved, is of ongoing concern and interest), the statusCode is “active”. Only when the underlying condition is no longer of concern is the statusCode set to “completed”. The effectiveTime reflects the time that the underlying condition was felt to be a concern; it may or may not correspond to the effectiveTime of the condition (e.g., even five years later, a prior heart attack may remain a concern).  
Health concerns require intervention(s) to increase the likelihood of achieving the goals of care for the patient and they specify the condition oriented reasons for creating the plan.

Table 20: Health Concern Act (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.132:2022-06-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [4515-30750](#C_4515-30750) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [4515-30751](#C_4515-30751) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [4515-30752](#C_4515-30752) |  |
| @root | 1..1 | SHALL |  | [4515-30753](#C_4515-30753) | 2.16.840.1.113883.10.20.22.4.132 |
| @extension | 1..1 | SHALL |  | [4515-32861](#C_4515-32861) | 2022-06-01 |
| id | 1..\* | SHALL |  | [4515-30754](#C_4515-30754) |  |
| code | 1..1 | SHALL |  | [4515-32310](#C_4515-32310) |  |
| @code | 1..1 | SHALL |  | [4515-32311](#C_4515-32311) | 75310-3 |
| @codeSystem | 1..1 | SHALL |  | [4515-32312](#C_4515-32312) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [4515-30758](#C_4515-30758) |  |
| @code | 1..1 | SHALL |  | [4515-32313](#C_4515-32313) | urn:oid:2.16.840.1.113883.11.20.9.19 (ProblemAct statusCode) |
| effectiveTime | 0..1 | MAY |  | [4515-30759](#C_4515-30759) |  |
| author | 0..\* | SHOULD |  | [4515-31546](#C_4515-31546) | Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119 |
| entryRelationship | 0..\* | MAY |  | [4515-30761](#C_4515-30761) |  |
| @typeCode | 1..1 | SHALL |  | [4515-30762](#C_4515-30762) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-31001](#C_4515-31001) | Problem Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01 |
| entryRelationship | 0..\* | MAY |  | [4515-31007](#C_4515-31007) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31008](#C_4515-31008) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-31186](#C_4515-31186) | Allergy - Intolerance Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.7:2014-06-09 |
| entryRelationship | 0..\* | MAY |  | [4515-31157](#C_4515-31157) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31158](#C_4515-31158) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [4515-32106](#C_4515-32106) | Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122 |
| entryRelationship | 0..\* | MAY |  | [4515-31160](#C_4515-31160) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31161](#C_4515-31161) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| act | 1..1 | SHALL |  | [4515-32107](#C_4515-32107) | Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122 |
| entryRelationship | 0..\* | MAY |  | [4515-31190](#C_4515-31190) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31191](#C_4515-31191) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-31192](#C_4515-31192) | Assessment Scale Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69 |
| entryRelationship | 0..\* | MAY |  | [4515-31232](#C_4515-31232) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31264](#C_4515-31264) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-31265](#C_4515-31265) | Self-Care Activities (ADL and IADL) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.128 |
| entryRelationship | 0..\* | MAY |  | [4515-31234](#C_4515-31234) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31268](#C_4515-31268) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-31273](#C_4515-31273) | Mental Status Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.74:2015-08-01 |
| entryRelationship | 0..\* | MAY |  | [4515-31235](#C_4515-31235) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31269](#C_4515-31269) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-31275](#C_4515-31275) | Smoking Status - Meaningful Use (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09 |
| entryRelationship | 0..\* | MAY |  | [4515-31236](#C_4515-31236) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31270](#C_4515-31270) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [4515-31277](#C_4515-31277) | Encounter Diagnosis (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.80:2015-08-01 |
| entryRelationship | 0..\* | MAY |  | [4515-31237](#C_4515-31237) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31279](#C_4515-31279) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| organizer | 1..1 | SHALL |  | [4515-31280](#C_4515-31280) | Family History Organizer (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.45:2015-08-01 |
| entryRelationship | 0..\* | MAY |  | [4515-31238](#C_4515-31238) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31282](#C_4515-31282) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-31283](#C_4515-31283) | Functional Status Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.67:2014-06-09 |
| entryRelationship | 0..\* | MAY |  | [4515-31241](#C_4515-31241) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31291](#C_4515-31291) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [4515-31292](#C_4515-31292) | Hospital Admission Diagnosis (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.34:2015-08-01 |
| entryRelationship | 0..\* | MAY |  | [4515-31244](#C_4515-31244) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31300](#C_4515-31300) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-31301](#C_4515-31301) | Nutrition Assessment (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.138 |
| entryRelationship | 0..\* | MAY |  | [4515-31246](#C_4515-31246) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31306](#C_4515-31306) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [4515-31307](#C_4515-31307) | Postprocedure Diagnosis (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.51:2015-08-01 |
| entryRelationship | 0..\* | MAY |  | [4515-31247](#C_4515-31247) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31309](#C_4515-31309) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-31310](#C_4515-31310) | Pregnancy Observation (identifier: urn:oid:2.16.840.1.113883.10.20.15.3.8 |
| entryRelationship | 0..\* | MAY |  | [4515-31248](#C_4515-31248) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31312](#C_4515-31312) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [4515-31313](#C_4515-31313) | Preoperative Diagnosis (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.65:2015-08-01 |
| entryRelationship | 0..\* | MAY |  | [4515-31250](#C_4515-31250) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31318](#C_4515-31318) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-31319](#C_4515-31319) | Reaction Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09 |
| entryRelationship | 0..\* | MAY |  | [4515-31251](#C_4515-31251) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31321](#C_4515-31321) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-31322](#C_4515-31322) | Result Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.2:2015-08-01 |
| entryRelationship | 0..\* | MAY |  | [4515-31252](#C_4515-31252) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31324](#C_4515-31324) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-31325](#C_4515-31325) | Sensory Status (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.127 |
| entryRelationship | 0..\* | MAY |  | [4515-31253](#C_4515-31253) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31327](#C_4515-31327) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-31328](#C_4515-31328) | Social History Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2015-08-01 |
| entryRelationship | 0..\* | MAY |  | [4515-31254](#C_4515-31254) |  |
| @typeCode | 1..1 | SHALL |  | [4515-32961](#C_4515-32961) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-31331](#C_4515-31331) | Substance or Device Allergy - Intolerance Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.24.3.90:2014-06-09 |
| entryRelationship | 0..\* | MAY |  | [4515-31255](#C_4515-31255) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31333](#C_4515-31333) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-31334](#C_4515-31334) | Tobacco Use (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09 |
| entryRelationship | 0..\* | MAY |  | [4515-31256](#C_4515-31256) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31336](#C_4515-31336) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-31337](#C_4515-31337) | Vital Sign Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.27:2014-06-09 |
| entryRelationship | 0..\* | MAY |  | [4515-31257](#C_4515-31257) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31339](#C_4515-31339) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-31340](#C_4515-31340) | Longitudinal Care Wound Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.114:2015-08-01 |
| entryRelationship | 0..\* | MAY |  | [4515-31365](#C_4515-31365) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31366](#C_4515-31366) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SPRT |
| observation | 1..1 | SHALL |  | [4515-31367](#C_4515-31367) | Problem Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01 |
| entryRelationship | 0..\* | MAY |  | [4515-31368](#C_4515-31368) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31369](#C_4515-31369) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-31370](#C_4515-31370) | Caregiver Characteristics (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.72 |
| entryRelationship | 0..\* | MAY |  | [4515-31371](#C_4515-31371) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31372](#C_4515-31372) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-31373](#C_4515-31373) | Cultural and Religious Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.111 |
| entryRelationship | 0..\* | MAY |  | [4515-31374](#C_4515-31374) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31375](#C_4515-31375) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-31376](#C_4515-31376) | Characteristics of Home Environment (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.109 |
| entryRelationship | 0..\* | MAY |  | [4515-31377](#C_4515-31377) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31378](#C_4515-31378) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-31379](#C_4515-31379) | Nutritional Status Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.124 |
| entryRelationship | 0..\* | MAY |  | [4515-31380](#C_4515-31380) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31381](#C_4515-31381) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| organizer | 1..1 | SHALL |  | [4515-31382](#C_4515-31382) | Result Organizer (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.1:2015-08-01 |
| entryRelationship | 0..\* | MAY |  | [4515-31442](#C_4515-31442) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31443](#C_4515-31443) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-31444](#C_4515-31444) | Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143 |
| entryRelationship | 0..\* | MAY |  | [4515-31549](#C_4515-31549) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31550](#C_4515-31550) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [4515-31551](#C_4515-31551) | Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122 |
| reference | 0..\* | MAY |  | [4515-32757](#C_4515-32757) |  |
| @typeCode | 1..1 | SHALL |  | [4515-32758](#C_4515-32758) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| externalDocument | 1..1 | SHALL |  | [4515-32759](#C_4515-32759) | External Document Reference (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.115:2014-06-09 |

1. SHALL contain exactly one [1..1] @classCode="ACT" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:4515-30750).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:4515-30751).
3. SHALL contain exactly one [1..1] templateId (CONF:4515-30752) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.132" (CONF:4515-30753).
   2. SHALL contain exactly one [1..1] @extension="2022-06-01" (CONF:4515-32861).
4. SHALL contain at least one [1..\*] id (CONF:4515-30754).
5. SHALL contain exactly one [1..1] code (CONF:4515-32310).
   1. This code SHALL contain exactly one [1..1] @code="75310-3" Health Concern (CONF:4515-32311).
   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) (CONF:4515-32312).
6. SHALL contain exactly one [1..1] statusCode (CONF:4515-30758).
   1. This statusCode SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [ProblemAct statusCode](#ProblemAct_statusCode) urn:oid:2.16.840.1.113883.11.20.9.19 STATIC (CONF:4515-32313).
7. MAY contain zero or one [0..1] effectiveTime (CONF:4515-30759).

A health concern may be a patient or provider concern. If the author is set to the recordTarget (patient), this is a patient concern. If the author is set to a provider, this is a provider concern. If both patient and provider are set as authors, this is a concern of both the patient and the provider.

1. SHOULD contain zero or more [0..\*] Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:4515-31546).
2. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-30761) 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:4515-30762).
   2. SHALL contain exactly one [1..1] Problem Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01) (CONF:4515-31001).
3. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31007) 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:4515-31008).
   2. SHALL contain exactly one [1..1] Allergy - Intolerance Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.7:2014-06-09) (CONF:4515-31186).

The following entryRelationship represents the relationship between two Health Concern Acts where there is a general relationship between the source and the target (Health Concern REFERS TO Health Concern). For example, a patient has 2 health concerns identified in a CARE Plan: Failure to Thrive and Poor Feeding, while it could be that one may have caused the other, at the time of care planning and documentation it is not necessary, nor desirable to have to assert what caused what. The Entry Reference template is used here because the target Health Concern Act will be defined elsewhere in the Health Concerns Section and thus a reference to that template is all that is required.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31157) 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:4515-31158).
   2. SHALL contain exactly one [1..1] Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:4515-32106).
      1. The Entry Reference template SHALL contain an id that references a Health Concern Act (CONF:4515-32860).

The following entryRelationship represents the relationship between two Health Concern Acts where the target is a component of the source (Health Concern HAS COMPONENT Health Concern). For example, a patient has an Impaired Mobility Health Concern. There may then be the need to document several component health concerns, such as "Unable to Transfer Bed to Chair", "Unable to Rise from Commode", "Short of Breath Walking with Walker". The Entry Reference template is used here because the target Health Concern Act will be defined elsewhere in the Health Concerns Section and thus a reference to that template is all that is required.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31160) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" Has component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4515-31161).
   2. SHALL contain exactly one [1..1] Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:4515-32107).
      1. The Entry Reference template SHALL contain an id that references a Health Concern Act (CONF:4515-32745).
2. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31190) 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:4515-31191).
   2. SHALL contain exactly one [1..1] Assessment Scale Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69) (CONF:4515-31192).
3. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31232) 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:4515-31264).
   2. SHALL contain exactly one [1..1] Self-Care Activities (ADL and IADL) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.128) (CONF:4515-31265).
4. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31234) 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:4515-31268).
   2. SHALL contain exactly one [1..1] Mental Status Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.74:2015-08-01) (CONF:4515-31273).
5. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31235) 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:4515-31269).
   2. SHALL contain exactly one [1..1] Smoking Status - Meaningful Use (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09) (CONF:4515-31275).
6. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31236) 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:4515-31270).
   2. SHALL contain exactly one [1..1] Encounter Diagnosis (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.80:2015-08-01) (CONF:4515-31277).
7. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31237) 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:4515-31279).
   2. SHALL contain exactly one [1..1] Family History Organizer (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.45:2015-08-01) (CONF:4515-31280).
8. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31238) 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:4515-31282).
   2. SHALL contain exactly one [1..1] Functional Status Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.67:2014-06-09) (CONF:4515-31283).
9. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31241) 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:4515-31291).
   2. SHALL contain exactly one [1..1] Hospital Admission Diagnosis (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.34:2015-08-01) (CONF:4515-31292).
10. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31244) 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:4515-31300).
    2. SHALL contain exactly one [1..1] Nutrition Assessment (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.138) (CONF:4515-31301).
11. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31246) 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:4515-31306).
    2. SHALL contain exactly one [1..1] Postprocedure Diagnosis (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.51:2015-08-01) (CONF:4515-31307).
12. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31247) 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:4515-31309).
    2. SHALL contain exactly one [1..1] Pregnancy Observation (identifier: urn:oid:2.16.840.1.113883.10.20.15.3.8) (CONF:4515-31310).
13. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31248) 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:4515-31312).
    2. SHALL contain exactly one [1..1] Preoperative Diagnosis (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.65:2015-08-01) (CONF:4515-31313).
14. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31250) 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:4515-31318).
    2. SHALL contain exactly one [1..1] Reaction Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09) (CONF:4515-31319).
15. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31251) 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:4515-31321).
    2. SHALL contain exactly one [1..1] Result Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.2:2015-08-01) (CONF:4515-31322).
16. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31252) 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:4515-31324).
    2. SHALL contain exactly one [1..1] Sensory Status (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.127) (CONF:4515-31325).
17. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31253) 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:4515-31327).
    2. SHALL contain exactly one [1..1] Social History Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2015-08-01) (CONF:4515-31328).
18. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31254) 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:4515-32961).
    2. SHALL contain exactly one [1..1] Substance or Device Allergy - Intolerance Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.24.3.90:2014-06-09) (CONF:4515-31331).
19. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31255) 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:4515-31333).
    2. SHALL contain exactly one [1..1] Tobacco Use (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09) (CONF:4515-31334).
20. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31256) 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:4515-31336).
    2. SHALL contain exactly one [1..1] Vital Sign Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.27:2014-06-09) (CONF:4515-31337).
21. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31257) 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:4515-31339).
    2. SHALL contain exactly one [1..1] Longitudinal Care Wound Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.114:2015-08-01) (CONF:4515-31340).

The following entryRelationship represents the relationship Health Concern HAS SUPPORT Observation.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31365) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SPRT" Has support (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4515-31366).
   2. SHALL contain exactly one [1..1] Problem Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01) (CONF:4515-31367).
2. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31368) 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:4515-31369).
   2. SHALL contain exactly one [1..1] Caregiver Characteristics (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.72) (CONF:4515-31370).
3. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31371) 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:4515-31372).
   2. SHALL contain exactly one [1..1] Cultural and Religious Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.111) (CONF:4515-31373).
4. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31374) 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:4515-31375).
   2. SHALL contain exactly one [1..1] Characteristics of Home Environment (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.109) (CONF:4515-31376).
5. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31377) 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:4515-31378).
   2. SHALL contain exactly one [1..1] Nutritional Status Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.124) (CONF:4515-31379).
6. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31380) 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:4515-31381).
   2. SHALL contain exactly one [1..1] Result Organizer (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.1:2015-08-01) (CONF:4515-31382).

The following entryRelationship represents the priority that the patient or a provider puts on the health concern.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31442) 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:4515-31443).
   2. SHALL contain exactly one [1..1] Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:4515-31444).

Where a Health Concern needs to reference another entry already described in the CDA document instance, rather than repeating the full content of the entry, the Entry Reference template may be used to reference this entry.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31549) 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:4515-31550).
   2. SHALL contain exactly one [1..1] Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:4515-31551).

Where it is necessary to reference an external clinical document such as a Referral document, Discharge Summary document etc., the External Document Reference template can be used to reference this document. However, if this Care Plan document is replacing or appending another Care Plan document in the same set, that relationship is set in the header, using ClinicalDocument/relatedDocument.

1. MAY contain zero or more [0..\*] reference (CONF:4515-32757).
   1. The reference, if present, SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4515-32758).
   2. The reference, if present, SHALL contain exactly one [1..1] External Document Reference (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.115:2014-06-09) (CONF:4515-32759).
2. When this Health Concern Act is a Social Determinant of Health Health Concern it SHOULD contain one or more [1..\*] entryRelationship subentries such that it contains an observation with an observation/value selected from ValueSet Social Determinant of Health Conditions 2.16.840.1.113762.1.4.1247.YY DYNAMIC (CONF:4515-32962).

Figure 17: Health Concern Act Example

<act classCode="ACT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.132" />

<templateId root="2.16.840.1.113883.10.20.22.4.132" extension="2015-08-01"/>

<templateId root="2.16.840.1.113883.10.20.22.4.132" extension="2022-06-01"/>

<id root="4eab0e52-dd7d-4285-99eb-72d32ddb195c" />

<code code="75310-3"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="Health Concern" />

<!-- This Health Concern has a statusCode of active because it is an active concern -->

<statusCode code="active" />

<!-- The effective time is the date that the Health Concern started being followed -

this does not necessarily correlate to the onset date of the contained health issues-->

<effectiveTime value="20130616" />

<!-- Health Concern: Current every day smoker-->

<entryRelationship typeCode="REFR">

<!-- Tobacco Use (V2) -->

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.85" extension="2014-06-09" />

...

</observation>

</entryRelationship>

<!-- Health Concern Problem: Respiratory insufficiency -->

<entryRelationship typeCode="REFR">

<!-- Problem Observation (V2) -->

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2015-08-01" />

...

</observation>

</entryRelationship>

<!-- Health Concern Diagnosis: Pneumonia -->

<entryRelationship typeCode="REFR">

<!-- Problem Observation (V2) -->

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2015-08-01" />

...

</observation>

</entryRelationship>

<!--

This is an entry relationship of the SPRT (support) type which shows

that the productive cough supports the Health Concern (Problem: Respiratory

Insufficiency and Diagnosis: Pneumonia

This entryRelationship represents the relationship:

Health Concern HAS SUPPORT Observation

-->

<entryRelationship typeCode="SPRT">

<!-- Problem Observation (V2) -->

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2015-08-01" />

...

</observation>

</entryRelationship>

<!-- Priority Preference -->

<entryRelationship typeCode="RSON">

<!-- Priority Preference - this is the preference that the patient

(specified by the Author Participation template)

places on the Health Concern -->

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.143" />

...

</observation>

</entryRelationship>

<!-- Priority Preference - this is the preference that the provider

(specified by the Author Participation template)

places on the Health Concern -->

<entryRelationship typeCode="RSON">

<!-- Priority Preference -->

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.143" />

...

</observation>

</entryRelationship>

</act>

Figure 18: Health Concern Act wrapping Social Determinant of Health Problem Observation Example

<!-- The Health Concern act -->

<act classCode="ACT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.132"/>

<templateId root="2.16.840.1.113883.10.20.22.4.132"

extension="2015-08-01"/>

<templateId root="2.16.840.1.113883.10.20.22.4.132"

extension="2022-06-01"/>

<id root="1.3.6.1.4.1.22812.4.222.334.4.32" extension="1148128"/>

<code code="75310-3" displayName="Health concerns Document"

codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>

<statusCode code="active"/>

<entryRelationship typeCode="REFR">

<!-- The Health Concern's (SDOH) Problem Observation wrapped by the Health Concern act -->

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.4"

extension="2015-08-01"/>

<templateId root="2.16.840.1.113883.10.20.22.4.4"/>

<id extension="1148128"

root="1.3.6.1.4.1.22812.4.222.334.4.1.2.1"/>

<code code="404684003"

displayName="Clinical Finding (finding)"

codeSystem="2.16.840.1.113883.6.96"

codeSystemName="SNOMED CT">

<translation code="75321-0"

displayName="Clinical Finding"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"/>

</code>

<text>

<reference

value="#\_de1ab32d-dd06-40c0-b7c2-5fed94e4ecd6"/>

</text>

<statusCode code="completed"/>

<effectiveTime xsi:type="IVL\_TS">

<low value="20180701"/>

<!-- The high value has a nullFlavor of "NI" (No Information) because it is an ongoing finding -->

<high nullFlavor="NI"/>

</effectiveTime>

<value xsi:type="CD" code="733423003"

displayName="Food insecurity (finding)"

codeSystem="2.16.840.1.113883.6.96"

codeSystemName="SNOMED CT">

<originalText>

<reference value="#\_HealthConcern1"/>

</originalText>

</value>

</observation>

</entryRelationship>

</act>

Note Activity

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

Table 21: Note Activity Contexts

| Contained By: | Contains: |
| --- | --- |
| [Notes Section](#S_Notes_Section) (required)  [Care Team Member Act (V2)](#E_Care_Team_Member_Act_V2) (optional)  [Care Team Organizer (V2)](#E_Care_Team_Organizer_V2) (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 22: 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 19: 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 20: 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 21: 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>

Planned Procedure (V3)

[procedure: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2022-06-01 (open)]

This template represents planned alterations of the patient's physical condition. Examples of such procedures are tracheostomy, knee replacement, and craniectomy. The priority of the procedure to the patient and provider is communicated through Priority Preference. The effectiveTime indicates the time when the procedure is intended to take place and authorTime indicates when the documentation of the plan occurred. The Planned Procedure Template may also indicate the potential insurance coverage for the procedure.

Planned Procedure V3 Usage Note: Common practice in the industry has shown that Planned Procedure is the usually implemented CDA template for any type of intervention or procedure regardless of if the "immediate and primary outcome (post-condition) is the alteration of the physical condition of the patient", or not. As a result, it is recommended to use Planned Procedure when sending procedures also thought of as "interventions" such as "Home Environment Evaluation" or "Assessment of nutritional status".

Table 23: Planned Procedure (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| procedure (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2022-06-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [4515-8568](#C_4515-8568) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = PROC |
| @moodCode | 1..1 | SHALL |  | [4515-8569](#C_4515-8569) | urn:oid:2.16.840.1.113883.11.20.9.23 (Planned moodCode (Act/Encounter/Procedure)) |
| templateId | 1..1 | SHALL |  | [4515-30444](#C_4515-30444) |  |
| @root | 1..1 | SHALL |  | [4515-30445](#C_4515-30445) | 2.16.840.1.113883.10.20.22.4.41 |
| @extension | 1..1 | SHALL |  | [4515-32554](#C_4515-32554) | 2014-06-09 |
| id | 1..\* | SHALL |  | [4515-8571](#C_4515-8571) |  |
| code | 1..1 | SHALL |  | [4515-31976](#C_4515-31976) |  |
| statusCode | 1..1 | SHALL |  | [4515-30446](#C_4515-30446) |  |
| @code | 1..1 | SHALL |  | [4515-31978](#C_4515-31978) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = active |
| effectiveTime | 0..1 | SHOULD |  | [4515-30447](#C_4515-30447) |  |
| methodCode | 0..\* | MAY |  | [4515-31980](#C_4515-31980) |  |
| targetSiteCode | 0..\* | MAY |  | [4515-31981](#C_4515-31981) | urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 (Body Site Value Set) |
| performer | 0..\* | MAY |  | [4515-30449](#C_4515-30449) |  |
| author | 0..1 | SHOULD |  | [4515-31979](#C_4515-31979) | Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119 |
| entryRelationship | 0..\* | MAY |  | [4515-31079](#C_4515-31079) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31080](#C_4515-31080) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-31081](#C_4515-31081) | Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143 |
| entryRelationship | 0..\* | MAY |  | [4515-31982](#C_4515-31982) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31983](#C_4515-31983) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [4515-31984](#C_4515-31984) | Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09 |
| entryRelationship | 0..\* | MAY |  | [4515-31985](#C_4515-31985) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31986](#C_4515-31986) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| @inversionInd | 1..1 | SHALL |  | [4515-31987](#C_4515-31987) | true |
| act | 1..1 | SHALL |  | [4515-31989](#C_4515-31989) | Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09 |
| entryRelationship | 0..\* | MAY |  | [4515-31990](#C_4515-31990) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31991](#C_4515-31991) | COMP |
| act | 1..1 | SHALL |  | [4515-31992](#C_4515-31992) | Planned Coverage (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.129 |
| entryRelationship | 0..\* | MAY |  | [4515-32994](#C_4515-32994) |  |
| @typeCode | 1..1 | SHALL |  | [4515-32998](#C_4515-32998) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [4515-32995](#C_4515-32995) | Assessment Scale Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69 |
| entryRelationship | 0..\* | MAY |  | [4515-32996](#C_4515-32996) |  |
| @typeCode | 1..1 | SHALL |  | [4515-32999](#C_4515-32999) | RSON |
| act | 1..1 | SHALL |  | [4515-32997](#C_4515-32997) | Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122 |

1. SHALL contain exactly one [1..1] @classCode="PROC" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:4515-8568).
2. SHALL contain exactly one [1..1] @moodCode, which SHALL be selected from ValueSet [Planned moodCode (Act/Encounter/Procedure)](#Planned_moodCode_ActEncounterProcedure) urn:oid:2.16.840.1.113883.11.20.9.23 STATIC 2011-09-30 (CONF:4515-8569).
3. SHALL contain exactly one [1..1] templateId (CONF:4515-30444) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.41" (CONF:4515-30445).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:4515-32554).
4. SHALL contain at least one [1..\*] id (CONF:4515-8571).
5. SHALL contain exactly one [1..1] code (CONF:4515-31976).
   1. The procedure/code in a planned procedure SHOULD be selected from LOINC (codeSystem 2.16.840.1.113883.6.1) *OR* SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96), and MAY be selected from CPT-4 (CodeSystem: 2.16.840.1.113883.6.12) **OR** ICD10 PCS (CodeSystem: 2.16.840.1.113883.6.4) **OR** HCPCS (Code System: 2.16.840.1.113762.1.4.1247.9) (CONF:4515-31977).
   2. If the Planned Intervention Procedure is a Social Determinant of Health Planned Intervention Procedure, the procedure code SHOULD be selected from ValueSet [Social Determinant of Health Service Request](https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1196.790/expansion/)DYNAMIC (CONF:4515-32993).
6. SHALL contain exactly one [1..1] statusCode (CONF:4515-30446).
   1. This statusCode SHALL contain exactly one [1..1] @code="active" Active (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:4515-31978).

The effectiveTime in a planned procedure represents the time that the procedure should occur.

1. SHOULD contain zero or one [0..1] effectiveTime (CONF:4515-30447).

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

MethodCode *SHALL NOT* conflict with the method inherent in Procedure / code.

1. MAY contain zero or more [0..\*] methodCode (CONF:4515-31980).

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

1. MAY contain zero or more [0..\*] targetSiteCode, which SHALL be selected from ValueSet [Body Site Value Set](#Body_Site_Value_Set) urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 DYNAMIC (CONF:4515-31981).

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

1. MAY contain zero or more [0..\*] performer (CONF:4515-30449).

The author in a planned procedure represents the clinician who is requesting or planning the procedure.

1. SHOULD contain zero or one [0..1] Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:4515-31979).

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

1. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31079) 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:4515-31080).
   2. SHALL contain exactly one [1..1] Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:4515-31081).

The following entryRelationship represents the indication for the procedure.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31982) such that it
   1. SHALL contain exactly one [1..1] @typeCode="RSON" Has Reason (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4515-31983).
   2. SHALL contain exactly one [1..1] Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09) (CONF:4515-31984).

The following entryRelationship captures any instructions associated with the planned procedure.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31985) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has Subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4515-31986).
   2. SHALL contain exactly one [1..1] @inversionInd="true" True (CONF:4515-31987).
   3. SHALL contain exactly one [1..1] Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:4515-31989).

The following entryRelationship represents the insurance coverage the patient may have for the procedure.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31990) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" Has component (CONF:4515-31991).
   2. SHALL contain exactly one [1..1] Planned Coverage (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.129) (CONF:4515-31992).

When an Assessment Scale Observation is contained in a Procedure Template instance that is a Social Determinant of Health procedure, that Assessment scale MAY contain Assessment Scale observations that represent LOINC question and answer pairs from SDOH screening instruments.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-32994) such that it
   1. SHALL contain exactly one [1..1] @typeCode="RSON" Has reason (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4515-32998).
   2. SHALL contain exactly one [1..1] Assessment Scale Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69) (CONF:4515-32995).

When an Entry Reference Template is contained in a Procedure Template instance that is a Social Determinant of Health procedure, that Entry Reference MAY refer to Assessment Scale Observation in the same document that represent LOINC question and answer pairs from SDOH screening instruments.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-32996) such that it
   1. SHALL contain exactly one [1..1] @typeCode="RSON" Has reason (CONF:4515-32999).
   2. SHALL contain exactly one [1..1] Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:4515-32997).

Figure 22: Planned Procedure Example

<entry>

<procedure moodCode="RQO" classCode="PROC">

<!-- \*\*Planned Procedure template \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.41" />

<templateId root="2.16.840.1.113883.10.20.22.4.41" extension="2014-06-09" />

<templateId root="2.16.840.1.113883.10.20.22.4.41" extension="2022-06-01" />

<!-- \*\*Planned Procedure template \*\* -->

<id root="9a6d1bac-17d3-4195-89c4-1121bc809b5a" />

<code code="73761001" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Colonoscopy" />

<statusCode code="active" />

<effectiveTime value="20130613" />

<!-- Author Participation -->

<author typeCode="AUT">

...

</author>

<entryRelationship typeCode="REFR">

<observation classCode="OBS" moodCode="EVN">

<!-- Patient Priority Preference-->

<templateId root="2.16.840.1.113883.10.20.22.4.142" />

...

</observation>

</entryRelationship>

<entryRelationship typeCode="REFR">

<observation classCode="OBS" moodCode="EVN">

<!-- Provider Priority Preference-->

<templateId root="2.16.840.1.113883.10.20.22.4.143" />

...

</observation>

</entryRelationship>

<entryRelationship typeCode="RSON">

<observation classCode="OBS" moodCode="EVN">

<!-- Indication-->

<templateId root="2.16.840.1.113883.10.20.22.4.19" extension="2014-06-09" />

...

</observation>

</entryRelationship>

<entryRelationship typeCode="SUBJ">

<act classCode="ACT" moodCode="INT">

<!-- Instruction-->

<templateId root="2.16.840.1.113883.10.20.22.4.20" extension="2014-06-09" />

...

</act>

</entryRelationship>

<entryRelationship typeCode="COMP">

<observation classCode="ACT" moodCode="INT">

<!-- Planned Coverage -->

<templateId root="2.16.840.1.113883.10.20.22.4.129" />

...

</observation>

</entryRelationship>

</procedure>

</entry>

Figure 23: Social Determinant of Health Planned Procedure Example

<entry>

<procedure classCode="PROC" moodCode="RQO">

<templateId root="2.16.840.1.113883.10.20.22.4.41"/>

<templateId root="2.16.840.1.113883.10.20.22.4.41" extension="2014-06-09"/>

<templateId root="2.16.840.1.113883.10.20.22.4.41" extension="2022-06-01"/>

<id extension="2448483" root="1.2.840.114350.1.13.5552.1.7.2.798268"/>

<code code="464171000124102" codeSystem="2.16.840.1.113883.6.96" displayName="Referral to Senior Farmers' Market Nutrition Program (procedure)" codeSystemName="SNOMED-CT">

<originalText>

<reference value="#Procedure1name"/>

</originalText>

</code>

<text>

<reference value="#Procedure1"/>

</text>

<statusCode code="completed"/>

<effectiveTime value="20160413"/>

</procedure>

</entry>

Problem Observation (V4)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2022-06-01 (open)]

Table 24: Problem Observation (V4) Contexts

| Contained By: | Contains: |
| --- | --- |
|  | [Date of Diagnosis Act](#E_Date_of_Diagnosis_Act) (optional) |

This template reflects a discrete observation about a patient's problem. Because it is a discrete observation, it will have a statusCode of "completed". The effectiveTime, also referred to as the “clinically relevant time” is the time at which the observation holds for the patient. For a provider seeing a patient in the clinic today, observing a history of heart attack that occurred five years ago, the effectiveTime is five years ago.

The effectiveTime of the Problem Observation is the definitive indication of whether or not the underlying condition is resolved. If the problem is known to be resolved, then an effectiveTime/high would be present. If the date of resolution is not known, then effectiveTime/high will be present with a nullFlavor of "UNK".

Table 25: Problem Observation (V4) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2022-06-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [4515-9041](#C_4515-9041) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [4515-9042](#C_4515-9042) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| @negationInd | 0..1 | MAY |  | [4515-10139](#C_4515-10139) |  |
| templateId | 1..1 | SHALL |  | [4515-14926](#C_4515-14926) |  |
| @root | 1..1 | SHALL |  | [4515-14927](#C_4515-14927) | 2.16.840.1.113883.10.20.22.4.4 |
| @extension | 1..1 | SHALL |  | [4515-32508](#C_4515-32508) | 2022-06-01 |
| id | 1..\* | SHALL |  | [4515-9043](#C_4515-9043) |  |
| code | 1..1 | SHALL |  | [4515-9045](#C_4515-9045) | urn:oid:2.16.840.1.113883.3.88.12.3221.7.2 (Problem Type (SNOMEDCT)) |
| statusCode | 1..1 | SHALL |  | [4515-9049](#C_4515-9049) |  |
| @code | 1..1 | SHALL |  | [4515-19112](#C_4515-19112) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [4515-9050](#C_4515-9050) |  |
| low | 1..1 | SHALL |  | [4515-15603](#C_4515-15603) |  |
| high | 0..1 | MAY |  | [4515-15604](#C_4515-15604) |  |
| value | 1..1 | SHALL | CD | [4515-9058](#C_4515-9058) | urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 (Problem) |
| @code | 0..1 | MAY |  | [4515-31871](#C_4515-31871) |  |
| qualifier | 0..\* | MAY |  | [4515-31870](#C_4515-31870) |  |
| translation | 0..\* | MAY |  | [4515-16749](#C_4515-16749) |  |
| @code | 0..1 | MAY |  | [4515-16750](#C_4515-16750) | urn:oid:2.16.840.1.113883.6.90 (ICD-10-CM) |
| author | 0..\* | SHOULD |  | [4515-31147](#C_4515-31147) | Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119 |
| entryRelationship | 0..1 | MAY |  | [4515-9059](#C_4515-9059) |  |
| @typeCode | 1..1 | SHALL |  | [4515-9060](#C_4515-9060) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| @inversionInd | 1..1 | SHALL |  | [4515-9069](#C_4515-9069) | true |
| observation | 1..1 | SHALL |  | [4515-15590](#C_4515-15590) | Age Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.31 |
| entryRelationship | 0..1 | MAY |  | [4515-29951](#C_4515-29951) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31531](#C_4515-31531) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-29952](#C_4515-29952) | Prognosis Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.113 |
| entryRelationship | 0..\* | MAY |  | [4515-31063](#C_4515-31063) |  |
| @typeCode | 1..1 | SHALL |  | [4515-31532](#C_4515-31532) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-31064](#C_4515-31064) | Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143 |
| entryRelationship | 0..1 | MAY |  | [4515-9063](#C_4515-9063) |  |
| @typeCode | 1..1 | SHALL |  | [4515-9068](#C_4515-9068) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [4515-15591](#C_4515-15591) | Problem Status (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.6:2019-06-20 |
| entryRelationship | 0..\* | MAY |  | [4515-32965](#C_4515-32965) |  |
| @typeCode | 1..1 | SHALL |  | [4515-32968](#C_4515-32968) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SPRT |
| act | 1..1 | SHALL |  | [4515-32966](#C_4515-32966) | Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122 |
| entryRelationship | 0..\* | MAY |  | [4515-32953](#C_4515-32953) |  |
| @typeCode | 1..1 | SHALL |  | [4515-32955](#C_4515-32955) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SPRT |
| observation | 1..1 | SHALL |  | [4515-32954](#C_4515-32954) | Assessment Scale Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69 |
| entryRelationship | 0..\* | MAY |  | [4515-33012](#C_4515-33012) |  |
| @typeCode | 1..1 | SHALL |  | [4515-33014](#C_4515-33014) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| act | 1..1 | SHALL |  | [4515-33013](#C_4515-33013) | [Date of Diagnosis Act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.502:2022-06-01](#E_Date_of_Diagnosis_Act) |

1. Conforms to Problem Observation (V3) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01).
2. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:4515-9041).
3. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:4515-9042).

The negationInd is used to indicate the absence of the condition in observation/value. A negationInd of "true" coupled with an observation/value of SNOMED code 64572001 "Disease (disorder)" indicates that the patient has no known conditions.

1. MAY contain zero or one [0..1] @negationInd (CONF:4515-10139).
2. SHALL contain exactly one [1..1] templateId (CONF:4515-14926) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.4" (CONF:4515-14927).
   2. SHALL contain exactly one [1..1] @extension="2022-06-01" (CONF:4515-32508).
3. SHALL contain at least one [1..\*] id (CONF:4515-9043).
4. SHALL contain exactly one [1..1] code, which SHOULD be selected from ValueSet [Problem Type (SNOMEDCT)](#Problem_Type_SNOMEDCT) urn:oid:2.16.840.1.113883.3.88.12.3221.7.2 DYNAMIC (CONF:4515-9045).
   1. If code is selected from ValueSet Problem Type (SNOMEDCT) urn:oid:2.16.840.1.113883.3.88.12.3221.7.2 DYNAMIC, then it SHALL have at least one [1..\*] translation, which SHOULD be selected from ValueSet Problem Type (LOINC) urn:oid:2.16.840.1.113762.1.4.1099.28 DYNAMIC (CONF:1198-32950) (CONF:4515-32950).
5. SHALL contain exactly one [1..1] statusCode (CONF:4515-9049).
   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:4515-19112).

If the problem is known to be resolved, but the date of resolution is not known, then the high element SHALL be present, and the nullFlavor attribute SHALL be set to 'UNK'. Therefore, the existence of a high element within a problem does indicate that the problem has been resolved.

1. SHALL contain exactly one [1..1] effectiveTime (CONF:4515-9050).

The effectiveTime/low (a.k.a. "onset date") asserts when the condition became clinically active.

* 1. This effectiveTime SHALL contain exactly one [1..1] low (CONF:4515-15603).

The effectiveTime/high (a.k.a. "resolution date") asserts when the condition became clinically resolved.

* 1. This effectiveTime MAY contain zero or one [0..1] high (CONF:4515-15604).
  2. When an observation/value code concept name has a temporal aspect, ensure that observation/effectiveTime/value aligns with the temporal aspect of the code. Most often, a single time is appropriate, rather than low and high values. An example SNOMED CT code is 714093000 | Sexually active in last six months (finding) (CONF:4515-32964).

1. SHALL contain exactly one [1..1] value with @xsi:type="CD", where the code SHOULD be selected from ValueSet [Problem](#Problem) urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 DYNAMIC (CONF:4515-9058).

A negationInd of "true" coupled with an observation/value/@code of SNOMED code 64572001 "Disease (disorder)" indicates that the patient has no known conditions.

* 1. This value MAY contain zero or one [0..1] @code (CONF:4515-31871).
     1. When the Problem is Social Determinant of Health Observation, the observation/value SHOULD be a SNOMED code selected from ValueSet [Social Determinant of Health Conditions 2.16.840.1.113762.1.4.1196.788](https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1196.788/expansion)DYNAMIC (CONF:4515-32951).

The observation/value and all the qualifiers together (often referred to as a post-coordinated expression) make up one concept. Qualifiers constrain the meaning of the primary code, and cannot negate it or change its meaning. Qualifiers can only be used according to well-defined rules of post-coordination and only if the underlying code system defines the use of such qualifiers or if there is a third code system that specifies how other code systems may be combined.

For example, SNOMED CT allows constructing concepts as a combination of multiple codes. SNOMED CT defines a concept "pneumonia (disorder)" (233604007) an attribute "finding site" (363698007) and another concept "left lower lobe of lung (body structure)" (41224006). In this example the observation value would contain "pneumonia (disorder)" (233604007), the qualifier name would contain "finding site" (363698007), and the qualifier value would contain "left lower lobe of lung (body structure)" (41224006). For more information on SNOMED CT expressions, see: <https://confluence.ihtsdotools.org/display/DOCSTART/7.+SNOMED+CT+Expressions>.

* 1. This value MAY contain zero or more [0..\*] qualifier (CONF:4515-31870).
  2. This value MAY contain zero or more [0..\*] translation (CONF:4515-16749) such that it
     1. MAY contain zero or one [0..1] @code (CodeSystem: ICD-10-CM urn:oid:2.16.840.1.113883.6.90 STATIC) (CONF:4515-16750).
        1. When the Problem is Social Determinant of Health Observation, the observation/value/translation SHOULD be an ICD10 code selected from ValueSet Social Determinant of Health Conditions 2.16.840.1.113762.1.4.1196.788 DYNAMIC (CONF:4515-32952).

1. SHOULD contain zero or more [0..\*] Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:4515-31147).
2. MAY contain zero or one [0..1] entryRelationship (CONF:4515-9059) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:4515-9060).
   2. SHALL contain exactly one [1..1] @inversionInd="true" True (CONF:4515-9069).
   3. SHALL contain exactly one [1..1] Age Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.31) (CONF:4515-15590).
3. MAY contain zero or one [0..1] entryRelationship (CONF:4515-29951) 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:4515-31531).
   2. SHALL contain exactly one [1..1] Prognosis Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.113) (CONF:4515-29952).
4. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-31063) 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:4515-31532).
   2. SHALL contain exactly one [1..1] Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:4515-31064).
5. MAY contain zero or one [0..1] entryRelationship (CONF:4515-9063) 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:4515-9068).
   2. SHALL contain exactly one [1..1] Problem Status (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.6:2019-06-20) (CONF:4515-15591).

When an Entry Reference template is contained in a Problem Template instance that is a Social Determinant of Health problem, that Entry Reference MAY reference an Assessment Scale Observation elsewhere in the document. That Assessment Scale MAY contain assessment scale observations that represent LOINC question and answer pairs from SDOH screening instruments.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-32965) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SPRT" Has support (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4515-32968).
   2. SHALL contain exactly one [1..1] Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:4515-32966).

When an Assessment Scale Observation is contained in a Problem Template instance that is a Social Determinant of Health problem, that Assessment scale MAY contain assessment scale observations that represent LOINC question and answer pairs from SDOH screening instruments.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-32953) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SPRT" Has support (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4515-32955).
   2. SHALL contain exactly one [1..1] Assessment Scale Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69) (CONF:4515-32954).
2. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-33012) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" has Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4515-33014).
   2. SHALL contain exactly one [1..1] [Date of Diagnosis Act](#E_Date_of_Diagnosis_Act) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.502:2022-06-01) (CONF:4515-33013).

Figure 24: Problem Observation Example

<observation classCode="OBS" moodCode="EVN">

<!-- \*\* Problem Observation \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.4" />

<templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2015-08-01" />

<templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2022-06-01" />

<id root="ab1791b0-5c71-11db-b0de-0800200c9a66" />

<code code="64572001" displayName="Condition"

codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT">

<translation code="75323-6"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="Condition"/>

</code>

<!-- The statusCode reflects the status of the observation itself -->

<statusCode code="completed" />

<effectiveTime>

<!-- The low value reflects the date of onset -->

<!-- Based on patient symptoms, presumed onset is July 3, 2013 -->

<low value="20130703" />

<!-- The high value reflects when the problem was known to be resolved -->

<!-- Based on signs and symptoms, appears to be resolved on Aug 14, 2013 -->

<high value="20080814" />

</effectiveTime>

<value xsi:type="CD"

code="233604007"

codeSystem="2.16.840.1.113883.6.96"

displayName="Pneumonia" />

<author typeCode="AUT">

<templateId root="2.16.840.1.113883.10.20.22.4.119" />

<time value="200808141030-0800" />

<assignedAuthor>

<id extension="555555555" root="2.16.840.1.113883.4.6" />

<code code="207QA0505X"

displayName="Adult Medicine"

codeSystem="2.16.840.1.113883.6.101"

codeSystemName="Healthcare Provider Taxonomy (HIPAA)" />

</assignedAuthor>

</author>

</observation>

Figure 25: Social Determinant of Health Problem Observation Example

<!-- SDOH Problem -->

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.4"/>

<templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2015-08-01"/>

<templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2022-06-01"/>

<id extension="68993"

root="1.2.840.114350.1.13.6289.1.7.2.768076"/>

<id root="093A5380-00CE-11E6-B4C5-0050568B000B" extension="1.1"/>

<code code="55607006" codeSystem="2.16.840.1.113883.6.96"

codeSystemName="SNOMED CT" displayName="Problem">

<originalText>

<reference value="#ProblemObs\_1\_PT1"/>

</originalText>

<translation code="75326-9"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="Problem"/>

</code>

<text>

<reference value="#ProblemObs1"/>

</text>

<statusCode code="completed"/>

<effectiveTime>

<low value="20140909"/>

</effectiveTime>

<value xsi:type="CD" code="445281000124101" displayName="Nutrition impaired due to limited access to healthful foods (finding)" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT">

<translation code="Z59.48" codeSystem="2.16.840.1.113883.6.90" codeSystemName="ICD-10-CM" displayName="Other specified lack of adequate food"/>

</value>

</observation>

Procedure Activity Procedure (V3)

[procedure: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2022-06-01 (open)]

The common notion of "procedure" is broader than that specified by the HL7 Version 3 Reference Information Model (RIM). Therefore procedure templates can be represented with various RIM classes: act (e.g., dressing change), observation (e.g., EEG), procedure (e.g., splenectomy).  
This template represents procedures whose immediate and primary outcome (post-condition) is the alteration of the physical condition of the patient. Examples of these procedures are an appendectomy, hip replacement, and a creation of a gastrostomy.  
This template can be used with a contained Product Instance template to represent a device in or on a patient. In this case, targetSiteCode is used to record the location of the device in or on the patient's body. Equipment supplied to the patient (e.g., pumps, inhalers, wheelchairs) is represented by the Non-Medicinal Supply Activity (V2) template.  
Procedure Activity Procedure V3 Usage Note: Common practice in the industry has shown that Procedure Activity Procedure is the usually implemented CDA template for any type of intervention or procedure regardless of if the "immediate and primary outcome (post-condition) is the alteration of the physical condition of the patient" or not. As a result, it is recommended to use Procedure Activity Procedure when sending procedures also thought of as "interventions" such as "Home Environment Evaluation" or "Assessment of nutritional status".

Table 26: Procedure Activity Procedure (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| procedure (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2022-06-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [4515-7652](#C_4515-7652) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = PROC |
| @moodCode | 1..1 | SHALL |  | [4515-7653](#C_4515-7653) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [4515-7654](#C_4515-7654) |  |
| @root | 1..1 | SHALL |  | [4515-10521](#C_4515-10521) | 2.16.840.1.113883.10.20.22.4.14 |
| @extension | 1..1 | SHALL |  | [4515-32506](#C_4515-32506) | 2022-06-01 |
| id | 1..\* | SHALL |  | [4515-7655](#C_4515-7655) |  |
| code | 1..1 | SHALL |  | [4515-7656](#C_4515-7656) |  |
| originalText | 0..1 | SHOULD |  | [4515-19203](#C_4515-19203) |  |
| reference | 0..1 | SHOULD |  | [4515-19204](#C_4515-19204) |  |
| @value | 0..1 | SHOULD |  | [4515-19205](#C_4515-19205) |  |
| statusCode | 1..1 | SHALL |  | [4515-7661](#C_4515-7661) |  |
| @code | 1..1 | SHALL |  | [4515-32366](#C_4515-32366) | urn:oid:2.16.840.1.113883.11.20.9.22 (ProcedureAct statusCode) |
| effectiveTime | 0..1 | SHOULD |  | [4515-7662](#C_4515-7662) |  |
| priorityCode | 0..1 | MAY |  | [4515-7668](#C_4515-7668) | urn:oid:2.16.840.1.113883.1.11.16866 (ActPriority) |
| methodCode | 0..1 | MAY |  | [4515-7670](#C_4515-7670) |  |
| targetSiteCode | 0..\* | SHOULD |  | [4515-7683](#C_4515-7683) | urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 (Body Site Value Set) |
| specimen | 0..\* | MAY |  | [4515-7697](#C_4515-7697) |  |
| specimenRole | 1..1 | SHALL |  | [4515-7704](#C_4515-7704) |  |
| id | 0..\* | SHOULD |  | [4515-7716](#C_4515-7716) |  |
| performer | 0..\* | SHOULD |  | [4515-7718](#C_4515-7718) |  |
| assignedEntity | 1..1 | SHALL |  | [4515-7720](#C_4515-7720) |  |
| id | 1..\* | SHALL |  | [4515-7722](#C_4515-7722) |  |
| addr | 1..\* | SHALL |  | [4515-7731](#C_4515-7731) |  |
| telecom | 1..\* | SHALL |  | [4515-7732](#C_4515-7732) |  |
| representedOrganization | 0..1 | SHOULD |  | [4515-7733](#C_4515-7733) |  |
| id | 0..\* | SHOULD |  | [4515-7734](#C_4515-7734) |  |
| name | 0..\* | MAY |  | [4515-7735](#C_4515-7735) |  |
| telecom | 1..1 | SHALL |  | [4515-7737](#C_4515-7737) |  |
| addr | 1..1 | SHALL |  | [4515-7736](#C_4515-7736) |  |
| author | 0..\* | SHOULD |  | [4515-32479](#C_4515-32479) | Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119 |
| participant | 0..\* | MAY |  | [4515-7751](#C_4515-7751) |  |
| @typeCode | 1..1 | SHALL |  | [4515-7752](#C_4515-7752) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = DEV |
| participantRole | 1..1 | SHALL |  | [4515-15911](#C_4515-15911) | Product Instance (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.37 |
| participant | 0..\* | MAY |  | [4515-7765](#C_4515-7765) |  |
| @typeCode | 1..1 | SHALL |  | [4515-7766](#C_4515-7766) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = LOC |
| participantRole | 1..1 | SHALL |  | [4515-15912](#C_4515-15912) | Service Delivery Location (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32 |
| entryRelationship | 0..\* | MAY |  | [4515-7768](#C_4515-7768) |  |
| @typeCode | 1..1 | SHALL |  | [4515-7769](#C_4515-7769) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| @inversionInd | 1..1 | SHALL |  | [4515-8009](#C_4515-8009) | true |
| encounter | 1..1 | SHALL |  | [4515-7770](#C_4515-7770) |  |
| @classCode | 1..1 | SHALL |  | [4515-7771](#C_4515-7771) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ENC |
| @moodCode | 1..1 | SHALL |  | [4515-7772](#C_4515-7772) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| id | 1..1 | SHALL |  | [4515-7773](#C_4515-7773) |  |
| entryRelationship | 0..1 | MAY |  | [4515-7775](#C_4515-7775) |  |
| @typeCode | 1..1 | SHALL |  | [4515-7776](#C_4515-7776) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| @inversionInd | 1..1 | SHALL |  | [4515-7777](#C_4515-7777) | true |
| act | 1..1 | SHALL |  | [4515-31395](#C_4515-31395) | Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09 |
| entryRelationship | 0..\* | MAY |  | [4515-7779](#C_4515-7779) |  |
| @typeCode | 1..1 | SHALL |  | [4515-7780](#C_4515-7780) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [4515-15914](#C_4515-15914) | Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09 |
| entryRelationship | 0..\* | MAY |  | [4515-7886](#C_4515-7886) |  |
| @typeCode | 1..1 | SHALL |  | [4515-7887](#C_4515-7887) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| substanceAdministration | 1..1 | SHALL |  | [4515-15915](#C_4515-15915) | Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09 |
| entryRelationship | 0..\* | MAY |  | [4515-32473](#C_4515-32473) |  |
| @typeCode | 1..1 | SHALL |  | [4515-32474](#C_4515-32474) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| observation | 1..1 | SHALL |  | [4515-32475](#C_4515-32475) | Reaction Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09 |
| entryRelationship | 0..\* | MAY |  | [4515-32985](#C_4515-32985) |  |
| @typeCode | 1..1 | SHALL |  | [4515-32987](#C_4515-32987) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [4515-32986](#C_4515-32986) | Assessment Scale Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69 |
| entryRelationship | 0..\* | MAY |  | [4515-32988](#C_4515-32988) |  |
| @typeCode | 1..1 | SHALL |  | [4515-32990](#C_4515-32990) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| act | 1..1 | SHALL |  | [4515-32989](#C_4515-32989) | Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122 |

1. SHALL contain exactly one [1..1] @classCode="PROC" Procedure (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:4515-7652).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:4515-7653).
3. SHALL contain exactly one [1..1] templateId (CONF:4515-7654) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.14" (CONF:4515-10521).
   2. SHALL contain exactly one [1..1] @extension="2022-06-01" (CONF:4515-32506).
4. SHALL contain at least one [1..\*] id (CONF:4515-7655).
5. SHALL contain exactly one [1..1] code (CONF:4515-7656).
   1. This code SHOULD contain zero or one [0..1] originalText (CONF:4515-19203).
      1. The originalText, if present, SHOULD contain zero or one [0..1] reference (CONF:4515-19204).
         1. The reference, if present, SHOULD contain zero or one [0..1] @value (CONF:4515-19205).
            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:4515-19206).
   2. This @code SHOULD be selected from LOINC (CodeSystem: 2.16.840.1.113883.6.1) or SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96), and MAY be selected from CPT-4 (CodeSystem: 2.16.840.1.113883.6.12) or ICD10 PCS (CodeSystem: 2.16.840.1.113883.6.4) or HCPCS (Code System: 2.16.840.1.113762.1.4.1247.9) or CDT-2 (Code System: 2.16.840.1.113883.6.13) (CONF:4515-19207).
   3. If the Intervention Procedure is a Social Determinant of Health Intervention, the procedure code SHOULD be selected from ValueSet [Social Determinant of Health Procedures](https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1196.789/expansion)DYNAMIC (CONF:4515-32984).
6. SHALL contain exactly one [1..1] statusCode (CONF:4515-7661).
   1. This statusCode SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [ProcedureAct statusCode](#ProcedureAct_statusCode) urn:oid:2.16.840.1.113883.11.20.9.22 STATIC 2014-04-23 (CONF:4515-32366).
7. SHOULD contain zero or one [0..1] effectiveTime (CONF:4515-7662).
8. MAY contain zero or one [0..1] priorityCode, which SHALL be selected from ValueSet [ActPriority](#ActPriority) urn:oid:2.16.840.1.113883.1.11.16866 DYNAMIC (CONF:4515-7668).
9. MAY contain zero or one [0..1] methodCode (CONF:4515-7670).
   1. MethodCode SHALL NOT conflict with the method inherent in Procedure / code (CONF:4515-7890).

In the case of an implanted medical device, targetSiteCode is used to record the location of the device, in or on the patient's body.

1. SHOULD contain zero or more [0..\*] targetSiteCode, which SHALL be selected from ValueSet [Body Site Value Set](#Body_Site_Value_Set) urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 DYNAMIC (CONF:4515-7683).
2. MAY contain zero or more [0..\*] specimen (CONF:4515-7697).
   1. The specimen, if present, SHALL contain exactly one [1..1] specimenRole (CONF:4515-7704).
      1. This specimenRole SHOULD contain zero or more [0..\*] id (CONF:4515-7716).
         1. If you want to indicate that the Procedure and the Results are referring to the same specimen, the Procedure/specimen/specimenRole/id SHOULD be set to equal an Organizer/specimen/ specimenRole/id (CONF:4515-29744).
   2. This specimen is for representing specimens obtained from a procedure (CONF:4515-16842).
3. SHOULD contain zero or more [0..\*] performer (CONF:4515-7718) such that it
   1. SHALL contain exactly one [1..1] assignedEntity (CONF:4515-7720).
      1. This assignedEntity SHALL contain at least one [1..\*] id (CONF:4515-7722).
      2. This assignedEntity SHALL contain at least one [1..\*] addr (CONF:4515-7731).
      3. This assignedEntity SHALL contain at least one [1..\*] telecom (CONF:4515-7732).
      4. This assignedEntity SHOULD contain zero or one [0..1] representedOrganization (CONF:4515-7733).
         1. The representedOrganization, if present, SHOULD contain zero or more [0..\*] id (CONF:4515-7734).
         2. The representedOrganization, if present, MAY contain zero or more [0..\*] name (CONF:4515-7735).
         3. The representedOrganization, if present, SHALL contain exactly one [1..1] telecom (CONF:4515-7737).
         4. The representedOrganization, if present, SHALL contain exactly one [1..1] addr (CONF:4515-7736).
4. SHOULD contain zero or more [0..\*] Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:4515-32479).
5. MAY contain zero or more [0..\*] participant (CONF:4515-7751) such that it
   1. SHALL contain exactly one [1..1] @typeCode="DEV" Device (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:4515-7752).
   2. SHALL contain exactly one [1..1] Product Instance (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.37) (CONF:4515-15911).
6. MAY contain zero or more [0..\*] participant (CONF:4515-7765) such that it
   1. SHALL contain exactly one [1..1] @typeCode="LOC" Location (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 STATIC) (CONF:4515-7766).
   2. SHALL contain exactly one [1..1] Service Delivery Location (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32) (CONF:4515-15912).
7. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-7768) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" Has Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:4515-7769).
   2. SHALL contain exactly one [1..1] @inversionInd="true" true (CONF:4515-8009).
   3. SHALL contain exactly one [1..1] encounter (CONF:4515-7770).
      1. This encounter SHALL contain exactly one [1..1] @classCode="ENC" Encounter (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:4515-7771).
      2. This encounter SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:4515-7772).
      3. This encounter SHALL contain exactly one [1..1] id (CONF:4515-7773).
         1. Set the encounter ID to the ID of an encounter in another section to signify they are the same encounter (CONF:4515-16843).
8. MAY contain zero or one [0..1] entryRelationship (CONF:4515-7775) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has Subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:4515-7776).
   2. SHALL contain exactly one [1..1] @inversionInd="true" true (CONF:4515-7777).
   3. SHALL contain exactly one [1..1] Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:4515-31395).
9. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-7779) such that it
   1. SHALL contain exactly one [1..1] @typeCode="RSON" Has Reason (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:4515-7780).
   2. SHALL contain exactly one [1..1] Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09) (CONF:4515-15914).
10. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-7886) such that it
    1. SHALL contain exactly one [1..1] @typeCode="COMP" Has Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:4515-7887).
    2. SHALL contain exactly one [1..1] Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09) (CONF:4515-15915).
11. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-32473) such that it
    1. SHALL contain exactly one [1..1] @typeCode="COMP" Has Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4515-32474).
    2. SHALL contain exactly one [1..1] Reaction Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09) (CONF:4515-32475).

When an Assessment Scale Observation is contained in a Procedure Template instance that is a Social Determinant of Health intervention procedure, that Assessment scale MAY contain Assessment Scale observations that represent LOINC question and answer pairs from SDOH screening instruments.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-32985) such that it
   1. SHALL contain exactly one [1..1] @typeCode="RSON" Has reason (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4515-32987).
   2. SHALL contain exactly one [1..1] Assessment Scale Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69) (CONF:4515-32986).

When an Entry Reference Template is contained in a Procedure Template instance that is a Social Determinant of Health procedure, that Entry Reference MAY refer to Assessment Scale Observation in the same document that represent LOINC question and answer pairs from SDOH screening instruments.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-32988) such that it
   1. SHALL contain exactly one [1..1] @typeCode="RSON" Has reason (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4515-32990).
   2. SHALL contain exactly one [1..1] Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:4515-32989).

Figure 26: Procedure Activity Procedure Example

<procedure classCode="PROC" moodCode="EVN">

<!-- Procedure Activity Procedure -->

<templateId root="2.16.840.1.113883.10.20.22.4.14" />

<templateId root="2.16.840.1.113883.10.20.22.4.14" extension="2014-06-09" />

<templateId root="2.16.840.1.113883.10.20.22.4.14" extension="2022-06-01" />

<id root="d5b614bd-01ce-410d-8726-e1fd01dcc72a" />

<code code="103716009" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Stent Placement">

<originalText>

<reference value="#Proc1" />

</originalText>

</code>

<statusCode code="completed" />

<effectiveTime value="20130512" />

<targetSiteCode code="28273000" displayName="bile duct" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" />

<specimen typeCode="SPC">

<specimenRole classCode="SPEC">

<id root="a6d7b927-2b70-43c7-bdf3-0e7c4133062c" />

<specimenPlayingEntity>

<code code="57259009" codeSystem="2.16.840.1.113883.6.96" displayName="gallbladder bile" />

</specimenPlayingEntity>

</specimenRole>

</specimen>

<performer>

...

</performer>

</procedure>

Figure 27: Procedure Activity Procedure Social Determinant of Health Intervention Example

<procedure classCode="PROC" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.14"/>

<templateId root="2.16.840.1.113883.10.20.22.4.14"

extension="2014-06-09"/>

<templateId root="2.16.840.1.113883.10.20.22.4.14"

extension="2022-06-01"/>

<id extension="2448483" root="1.2.840.114350.1.13.5552.1.7.2.798268"/>

<code code="61310001" codeSystem="2.16.840.1.113883.6.96"

displayName="Nutrition education" codeSystemName="SNOMED-CT">

<originalText>

<reference value="#ProcedureDesc3"/>

</originalText>

<translation code="97802" codeSystem="2.16.840.1.113883.6.12"

displayName="Medical nutrition therapy; initial"

codeSystemName="CPT"/>

<translation code="S9470" codeSystem="2.16.840.1.113883.6.13"

displayName="Nutritional counseling, diet"

codeSystemName="HCPCS"/>

</code>

<text>

<reference value="#Procedure1"/>

</text>

<statusCode code="completed"/>

<effectiveTime value="20160413"/>

</procedure>

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 27: 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 28: 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>

Sexual Orientation Observation

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.501:2022-06-01 (open)]

This observation represents the sexual orientation of the patient, defined as:

A person’s identification of their emotional, romantic, sexual, or affectional attraction to another person.

This template was informed by the HL7 Gender Harmony project.

This observation is not appropriate for recording patient gender (administrativeGender), Gender Identity (Gender Identity Observation), or birth sex (Birth Sex Observation).

Table 28: Sexual Orientation Observation Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.501:2022-06-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [4515-193](#C_4515-193) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [4515-194](#C_4515-194) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [4515-185](#C_4515-185) |  |
| @root | 1..1 | SHALL |  | [4515-188](#C_4515-188) | 2.16.840.1.113883.10.20.22.4.501 |
| @extension | 1..1 | SHALL |  | [4515-189](#C_4515-189) | 2022-06-01 |
| code | 1..1 | SHALL |  | [4515-186](#C_4515-186) |  |
| @code | 1..1 | SHALL |  | [4515-190](#C_4515-190) | 76690-7 |
| @codeSystem | 1..1 | SHALL |  | [4515-191](#C_4515-191) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [4515-32881](#C_4515-32881) |  |
| @code | 1..1 | SHALL |  | [4515-32883](#C_4515-32883) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [4515-32882](#C_4515-32882) |  |
| low | 1..1 | SHALL |  | [4515-32884](#C_4515-32884) |  |
| high | 0..1 | MAY |  | [4515-32885](#C_4515-32885) |  |
| value | 1..1 | SHALL | CD | [4515-187](#C_4515-187) | urn:oid:2.16.840.1.113762.1.4.1021.33 (Sexual Orientation) |
| @nullFlavor | 0..1 | MAY |  | [4515-192](#C_4515-192) | urn:oid:2.16.840.1.113762.1.4.1021.103 (Other or unknown or refused to answer) |

1. Conforms to Social History Observation (V3) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2015-08-01).
2. SHALL contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:4515-193).
3. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:4515-194).
4. SHALL contain exactly one [1..1] templateId (CONF:4515-185) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.501" (CONF:4515-188).
   2. SHALL contain exactly one [1..1] @extension="2022-06-01" (CONF:4515-189).
5. SHALL contain exactly one [1..1] code (CONF:4515-186).
   1. This code SHALL contain exactly one [1..1] @code="76690-7" Sexual Orientation (CONF:4515-190).
   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:4515-191).
6. SHALL contain exactly one [1..1] statusCode (CONF:4515-32881).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:4515-32883).
7. SHALL contain exactly one [1..1] effectiveTime (CONF:4515-32882).

The effectiveTime represents the relevant time of the observation. A patient's "sexual orientation" may change and using effectiveTime/low and effectiveTime/high defines the time during which the patient had identified their emotional, romantic, sexual, or affectional attraction to another person.

* 1. This effectiveTime SHALL contain exactly one [1..1] low (CONF:4515-32884).
  2. This effectiveTime MAY contain zero or one [0..1] high (CONF:4515-32885).

1. SHALL contain exactly one [1..1] value with @xsi:type="CD", where the code SHALL be selected from ValueSet [Sexual Orientation](#Sexual_Orientation) urn:oid:2.16.840.1.113762.1.4.1021.33 DYNAMIC (CONF:4515-187).

To represent additional orientations, set nullFlavor="OTH". To represent "choose not to disclose", set nullFlavor="ASKU". To represent "Don't know", set nullFlavor="UNK"

* 1. This value MAY contain zero or one [0..1] @nullFlavor, which SHOULD be selected from ValueSet [Other or unknown or refused to answer](#Other_or_unknown_or_refused_to_answer) urn:oid:2.16.840.1.113762.1.4.1021.103 DYNAMIC (CONF:4515-192).

Figure 29: Sexual Orientation Observation Example

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.501" extension="2022-06-01"/>

<id root="7919e027-592e-4f22-9344-12460ec8c368" />

<code code="76690-7"

displayName="Sexual Orientation"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" />

<statusCode code="completed" />

<effectiveTime>

<low value="201211" />

</effectiveTime>

<value xsi:type="CD" code="20430005"

displayName="Heterosexual state"

codeSystem="2.16.840.1.113883.6.96"

codeSystemName="SNOMED CT" />

</observation>

Social History Observation (V4)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2022-06-01 (open)]

This template represents a patient's occupations, lifestyle, and environmental health risk factors. Demographic data (e.g., marital status, race, ethnicity, religious affiliation) are captured in the header. Though tobacco use and exposure may be represented with a Social History Observation, it is recommended to use the Current Smoking Status template or the Tobacco Use template instead, to represent smoking or tobacco habits.  
There are supplemental templates and guidance for observations of [occupational data](http://https://www.hl7.org/implement/standards/product_brief.cfm?product_id=522), [nutrition](http://https://www.hl7.org/implement/standards/product_brief.cfm?product_id=478) and [pregnancy](http://https://www.hl7.org/implement/standards/product_brief.cfm?product_id=494) that could be captured in the Social History Observation, and implementers may want to consider using those more specific templates in the Social History section.

Table 29: Social History Observation (V4) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2022-06-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [4515-8548](#C_4515-8548) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [4515-8549](#C_4515-8549) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [4515-8550](#C_4515-8550) |  |
| @root | 1..1 | SHALL |  | [4515-10526](#C_4515-10526) | 2.16.840.1.113883.10.20.22.4.38 |
| @extension | 1..1 | SHALL |  | [4515-32495](#C_4515-32495) | 2022-06-01 |
| id | 1..\* | SHALL |  | [4515-8551](#C_4515-8551) |  |
| code | 1..1 | SHALL |  | [4515-8558](#C_4515-8558) | urn:oid:2.16.840.1.113883.3.88.12.80.60 (Social History Type) |
| statusCode | 1..1 | SHALL |  | [4515-8553](#C_4515-8553) |  |
| @code | 1..1 | SHALL |  | [4515-19117](#C_4515-19117) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [4515-31868](#C_4515-31868) |  |
| value | 0..1 | SHOULD |  | [4515-8559](#C_4515-8559) |  |
| author | 0..\* | SHOULD |  | [4515-31869](#C_4515-31869) | Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119 |
| entryRelationship | 0..\* | MAY |  | [4515-32958](#C_4515-32958) |  |
| @typeCode | 1..1 | SHALL |  | [4515-32960](#C_4515-32960) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SPRT |
| observation | 1..1 | SHALL |  | [4515-32959](#C_4515-32959) | Assessment Scale Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69 |
| entryRelationship | 0..\* | MAY |  | [4515-32969](#C_4515-32969) |  |
| @typeCode | 1..1 | SHALL |  | [4515-32971](#C_4515-32971) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SPRT |
| act | 1..1 | SHALL |  | [4515-32970](#C_4515-32970) | Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122 |

1. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:4515-8548).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:4515-8549).
3. SHALL contain exactly one [1..1] templateId (CONF:4515-8550) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.38" (CONF:4515-10526).
   2. SHALL contain exactly one [1..1] @extension="2022-06-01" (CONF:4515-32495).
4. SHALL contain at least one [1..\*] id (CONF:4515-8551).
5. SHALL contain exactly one [1..1] code, which SHOULD be selected from ValueSet [Social History Type](#Social_History_Type) urn:oid:2.16.840.1.113883.3.88.12.80.60 DYNAMIC (CONF:4515-8558).
   1. If @codeSystem is not LOINC, then this code SHALL contain at least one [1..\*] translation, which SHOULD be selected from CodeSystem LOINC (urn:oid:2.16.840.1.113883.6.1) (CONF:4515-32956).
6. SHALL contain exactly one [1..1] statusCode (CONF:4515-8553).
   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:4515-19117).
7. SHALL contain exactly one [1..1] effectiveTime (CONF:4515-31868).
8. SHOULD contain zero or one [0..1] value (CONF:4515-8559).
   1. If Observation/value is a physical quantity (xsi:type="PQ"), the unit of measure SHALL be selected from ValueSet UnitsOfMeasureCaseSensitive (2.16.840.1.113883.1.11.12839) *DYNAMIC* (CONF:4515-8555).
   2. If the Social History Observation is a Social Determinant of Health Observation, the observation/value code SHOULD be selected from ValueSet [Social Determinant of Health Conditions 2.16.840.1.113762.1.4.1196.788](https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1196.788/expansion)DYNAMIC (CONF:4515-32957).
9. SHOULD contain zero or more [0..\*] Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:4515-31869).

When an Assessment Scale Observation is contained in a Social History Observation instance that is a Social Determinant of Health Social History Observation, that Assessment Scale Observation MAY contain Assessment Scale Supporting Observations that contain LOINC question and answer pairs from SDOH screening instruments.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-32958) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SPRT" Has support (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4515-32960).
   2. SHALL contain exactly one [1..1] Assessment Scale Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69) (CONF:4515-32959).

When an Entry Reference is contained in a Social History Template instance that is a Social Determinant of Health Social History, that Entry Reference MAY reference an Assessment Scale Observation elsewhere in the document that represent LOINC question and answer pairs from SDOH screening instruments.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:4515-32969) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SPRT" Has support (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4515-32971).
   2. SHALL contain exactly one [1..1] Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:4515-32970).

Figure 30: Social History Observation Example

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.38"/>

<templateId root="2.16.840.1.113883.10.20.22.4.38"

extension="2015-08-01"/>

<templateId root="2.16.840.1.113883.10.20.22.4.38"

extension="2022-06-01"/>

<id root="37f76c51-6411-4e1d-8a37-957fd49d2cef"/>

<code code="160573003" displayName="Alcohol intake"

codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT">

<translation code="74013-4" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="Alcoholic drinks per day"/>

</code>

<statusCode code="completed"/>

<effectiveTime>

<low value="20120215"/>

</effectiveTime>

<value xsi:type="PQ" value="12" unit="/d"/>

</observation>

Figure 31: Social Determinant of Health Social History Observation Example

<!-- SDOH Social History Observation -->

<entry>

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.38"/>

<templateId root="2.16.840.1.113883.10.20.22.4.38" extension="2015-08-01"/>

<templateId root="2.16.840.1.113883.10.20.22.4.38" extension="2022-06-01"/>

<id extension="64020-Z9311" root="1.2.840.114350.1.13.6289.1.7.1.1040.1"/>

<code code="160476009" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMEDCT" displayName="Social / personal history observable (observable entity)">

<translation code="8689-2" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="History of Social function"/>

</code>

<text>

<reference value="#SocialHistory\_3"/>

</text>

<statusCode code="completed"/>

<effectiveTime value="20160412"/>

<value xsi:type="CD" code="706875005" displayName="Insufficient food supply (finding)"

codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMEDCT">

<originalText>

<reference value="#SH3\_SO"/>

</originalText>

</value>

<author>

<time value="20160412"/>

<assignedAuthor>

<id extension="10.1" root="1.2.840.114350.1.1"/>

</assignedAuthor>

</author>

</observation>

</entry>

# unspecified

Provenance - Author Participation (V2)

[author: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.5.6:2019-10-01 (open)]

This template represents the key information to record Provenance in an Author Participation.

This Participation is appropriate at any place CDA allows an author. For example, at the CDA Header, CDA Section, CDA Entry, or within a CDA entry (e.g. Organizer and contained Observation(s)).

This template is consistent with the C-CDA Author Participation, however, it doesn’t use a formal ‘conforms to’ relationship. All constraints for conformance are defined in this template which specializes the Author Participation (2.16.840.1.113883.10.20.22.4.119).

This template is used to identify primary authorship for an entry. An entry may have many authors, but recipients need a single authoritative point of contact for resolving issues. This is typically the last provider to make substantive changes to the entry If two providers are simultaneously involved in that activity, the implementer must choose one, ideally in a repeatable way.

The assignedAuthor/id may be set equal to (a pointer to) an id on a participant elsewhere in the document (header or entries) or a new author participant can be described here.

Note: The Provenance template title includes a version 2 to support moving from the 'Basic Provenance' guide to the this Companion Guide, so the templateId has not changed.

Table 30: Provenance - Author Participation (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| author (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.5.6:2019-10-01) | | | | | |
| templateId | 1..1 | SHALL |  | [4515-32980](#C_4515-32980) |  |
| @root | 1..1 | SHALL |  | [4515-15](#C_4515-15) | 2.16.840.1.113883.10.20.22.5.6 |
| @extension | 1..1 | SHALL |  | [4515-36](#C_4515-36) | 2019-10-01 |
| time | 1..1 | SHALL |  | [4515-32983](#C_4515-32983) |  |
| assignedAuthor | 1..1 | SHALL |  | [4515-32975](#C_4515-32975) |  |
| id | 1..\* | SHALL |  | [4515-2](#C_4515-2) |  |
| id | 1..1 | SHALL |  | [4515-20](#C_4515-20) |  |
| @nullFlavor | 0..1 | MAY |  | [4515-21](#C_4515-21) | urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = UNK |
| @root | 1..1 | SHALL |  | [4515-22](#C_4515-22) | 2.16.840.1.113883.4.6 |
| @extension | 0..1 | SHOULD |  | [4515-23](#C_4515-23) |  |
| code | 0..1 | SHOULD |  | [4515-32979](#C_4515-32979) |  |
| assignedPerson | 0..1 | SHOULD |  | [4515-32976](#C_4515-32976) |  |
| name | 1..\* | SHALL |  | [4515-32977](#C_4515-32977) |  |
| family | 1..1 | SHALL |  | [4515-17](#C_4515-17) |  |
| given | 0..\* | SHOULD |  | [4515-18](#C_4515-18) |  |
| assignedAuthoringDevice | 0..1 | MAY |  | [4515-32](#C_4515-32) |  |
| representedOrganization | 0..1 | MAY |  | [4515-32978](#C_4515-32978) |  |
| @nullFlavor | 0..1 | MAY |  | [4515-35](#C_4515-35) |  |
| id | 1..\* | SHALL |  | [4515-32981](#C_4515-32981) |  |
| id | 1..1 | SHALL |  | [4515-24](#C_4515-24) |  |
| @nullFlavor | 0..1 | MAY |  | [4515-25](#C_4515-25) | urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = UNK |
| @root | 1..1 | SHALL |  | [4515-26](#C_4515-26) | 2.16.840.1.113883.4.2 |
| @extension | 0..1 | SHOULD |  | [4515-32982](#C_4515-32982) |  |
| id | 1..1 | SHALL |  | [4515-28](#C_4515-28) |  |
| @nullFlavor | 0..1 | MAY |  | [4515-29](#C_4515-29) | urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = UNK |
| @root | 1..1 | SHALL |  | [4515-30](#C_4515-30) | 2.16.840.1.113883.4.6 |
| @extension | 0..1 | SHOULD |  | [4515-31](#C_4515-31) |  |
| name | 1..1 | SHALL |  | [4515-11](#C_4515-11) |  |
| telecom | 0..\* | SHOULD |  | [4515-12](#C_4515-12) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:4515-32980) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.5.6" (CONF:4515-15).
   2. SHALL contain exactly one [1..1] @extension="2019-10-01" (CONF:4515-36).
2. SHALL contain exactly one [1..1] time (CONF:4515-32983).
3. SHALL contain exactly one [1..1] assignedAuthor (CONF:4515-32975).
   1. This assignedAuthor SHALL contain at least one [1..\*] id (CONF:4515-2).
      1. If the assignedAuthor/id is not referencing a Provenance Author described elsewhere in the document with a representedOrganization populated, this assignedAuthor SHALL contain exactly one [1..1] representedOrganization (CONF:4515-64).
   2. This assignedAuthor SHALL contain exactly one [1..1] id (CONF:4515-20) such that it

If id with @root="2.16.840.1.113883.4.6" National Provider Identifier is unknown then

* + 1. MAY contain zero or one [0..1] @nullFlavor="UNK" Unknown (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:4515-21).
    2. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.4.6" National Provider Identifier (CONF:4515-22).
    3. SHOULD contain zero or one [0..1] @extension (CONF:4515-23).

When the author is a person who is not acting in the role of a clinician, this code encodes the personal or legal relationship between author and the patient.

* 1. This assignedAuthor SHOULD contain zero or one [0..1] code (CONF:4515-32979).
     1. If the content is provider authored, the code SHOULD be selected from ValueSet Healthcare Provider Taxonomy urn:oid:2.16.840.1.114222.4.11.1066 DYNAMIC (CONF:4515-56).
     2. If the author is a person who is not acting in the role of a clinician, the code SHOULD be selected from ValueSet Personal And Legal Relationship Role Type urn:oid:2.16.840.1.113883.11.20.12.1 DYNAMIC (CONF:4515-57).
  2. This assignedAuthor SHOULD contain zero or one [0..1] assignedPerson (CONF:4515-32976).
     1. The assignedPerson, if present, SHALL contain at least one [1..\*] name (CONF:4515-32977).
        1. Such names SHALL contain exactly one [1..1] family (CONF:4515-17).
        2. Such names SHOULD contain zero or more [0..\*] given (CONF:4515-18).
  3. This assignedAuthor MAY contain zero or one [0..1] assignedAuthoringDevice (CONF:4515-32).

If the assignedAuthor/id is not referencing a Provenance Author described elsewhere in the document with a representedOrganization populated, this assignedAuthor SHALL contain exactly one [1..1] representedOrganization (See - CONF:4440-64).

* 1. This assignedAuthor MAY contain zero or one [0..1] representedOrganization (CONF:4515-32978).

A nullFlavor of "NA" is allowed If the assignedAuthor is not a clinician

* + 1. The representedOrganization, if present, MAY contain zero or one [0..1] @nullFlavor (CONF:4515-35).
    2. The representedOrganization, if present, SHALL contain at least one [1..\*] id (CONF:4515-32981).
    3. The representedOrganization, if present, SHALL contain exactly one [1..1] id (CONF:4515-24) such that it

If id with @root="2.16.840.1.113883.4.2" Tax ID Number is unknown then

* + - 1. MAY contain zero or one [0..1] @nullFlavor="UNK" Unknown (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:4515-25).
      2. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.4.2" Tax ID Number (CONF:4515-26).
      3. SHOULD contain zero or one [0..1] @extension (CONF:4515-32982).
    1. The representedOrganization, if present, SHALL contain exactly one [1..1] id (CONF:4515-28) such that it

If id with @root="2.16.840.1.113883.4.6" National Provider Identifier is unknown then

* + - 1. MAY contain zero or one [0..1] @nullFlavor="UNK" Unknown (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:4515-29).
      2. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.4.6" National Provider Identifier  (CONF:4515-30).
      3. SHOULD contain zero or one [0..1] @extension (CONF:4515-31).
    1. The representedOrganization, if present, SHALL contain exactly one [1..1] name (CONF:4515-11).
    2. The representedOrganization, if present, SHOULD contain zero or more [0..\*] telecom (CONF:4515-12).

Figure 32: Provenance - Author Participation Example

<author>

<!-- Provenance - Author Participation -->

<templateId root="2.16.840.1.113883.10.20.22.5.6" extension="2019-10-01"/>

<time value="201308011235-0800"/>

<assignedAuthor>

<!-- NPI of Author (example) -->

<id root="2.16.840.1.113883.4.6" extension="1234567"/>

<assignedPerson>

<name>

<given>Nurse</given>

<family>Nightingale</family>

<suffix>RN</suffix>

</name>

</assignedPerson>

<representedOrganization>

<!-- Tax Identifier of Organization is Unknown -->

<id root="2.16.840.1.113883.5.1008" nullFlavor="UNK"/>

<!-- NPI of Organization -->

<id root="2.16.840.1.113883.4.6" extension="1104145838"/>

<name>Good Health Hospital</name>

<telecom value="tel:+1(555)867-5309"/>

</representedOrganization>

</assignedAuthor>

</author>

# Template Ids in This Guide

Table 31: Template List

| Template Title | Template Type | templateId |
| --- | --- | --- |
| [Provenance - Assembler Participation (V2)](#D_Provenance__Assembler_Participation_V) | document | urn:hl7ii:2.16.840.1.113883.10.20.22.5.7:2020-05-19 |
| [Care Teams Section (V2)](#S_Care_Teams_Section_V2) | section | urn:hl7ii:2.16.840.1.113883.10.20.22.2.500:2022-06-01 |
| [Notes Section](#S_Notes_Section) | section | urn:hl7ii:2.16.840.1.113883.10.20.22.2.65:2016-11-01 |
| [Assessment Scale Observation (V2)](#E_Assessment_Scale_Observation_V2) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.69:2022-06-01 |
| [Assessment Scale Supporting Observation (V2)](#E_Assessment_Supporting_Observation_V2) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.86:2022-06-01 |
| [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 (V2)](#E_Care_Team_Member_Act_V2) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.1:2022-06-01 |
| [Care Team Member Schedule Observation (V2)](#E_CareTeam_Member_Schedule_ObservationV2) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.3:2022-06-01 |
| [Care Team Organizer (V2)](#E_Care_Team_Organizer_V2) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.500:2022-06-01 |
| [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 |
| [Date of Diagnosis Act](#E_Date_of_Diagnosis_Act) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.502:2022-06-01 |
| [Gender Identity Observation (V3)](#E_Gender_Identity_Observation_V3) | entry | urn:hl7ii:2.16.840.1.113883.10.20.34.3.45:2022-06-01 |
| [Goal Observation (V2)](#E_Goal_Observation_V2) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.121:2022-06-01 |
| [Health Concern Act (V3)](#E_Health_Concern_Act_V3) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.132:2022-06-01 |
| [Note Activity](#E_Note_Activity) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01 |
| [Planned Procedure (V3)](#E_Planned_Procedure_V3) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2022-06-01 |
| [Problem Observation (V4)](#E_Problem_Observation_V4) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2022-06-01 |
| [Procedure Activity Procedure (V3)](#E_Procedure_Activity_Procedure_V3) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2022-06-01 |
| [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 |
| [Sexual Orientation Observation](#E_Sexual_Orientation_Observation) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.501:2022-06-01 |
| [Social History Observation (V4)](#E_Social_History_Observation_V4) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2022-06-01 |
| [Provenance - Author Participation (V2)](#U_Provenance__Author_Participation_V2) | unspecified | urn:hl7ii:2.16.840.1.113883.10.20.22.5.6:2019-10-01 |

Table 32: Template Containments

| Template Title | Template Type | templateId |
| --- | --- | --- |
| [Provenance - Assembler Participation (V2)](#D_Provenance__Assembler_Participation_V) | document | urn:hl7ii:2.16.840.1.113883.10.20.22.5.7:2020-05-19 |
| [Assessment Scale Observation (V2)](#E_Assessment_Scale_Observation_V2) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.69:2022-06-01 |
| [Assessment Scale Supporting Observation (V2)](#E_Assessment_Supporting_Observation_V2) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.86:2022-06-01 |
| [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 Schedule Observation (V2)](#E_CareTeam_Member_Schedule_ObservationV2) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.3:2022-06-01 |
| [Gender Identity Observation (V3)](#E_Gender_Identity_Observation_V3) | entry | urn:hl7ii:2.16.840.1.113883.10.20.34.3.45:2022-06-01 |
| [Goal Observation (V2)](#E_Goal_Observation_V2) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.121:2022-06-01 |
| [Health Concern Act (V3)](#E_Health_Concern_Act_V3) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.132:2022-06-01 |
| [Planned Procedure (V3)](#E_Planned_Procedure_V3) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2022-06-01 |
| [Problem Observation (V4)](#E_Problem_Observation_V4) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2022-06-01 |
| [Date of Diagnosis Act](#E_Date_of_Diagnosis_Act) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.502:2022-06-01 |
| [Procedure Activity Procedure (V3)](#E_Procedure_Activity_Procedure_V3) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2022-06-01 |
| [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 |
| [Sexual Orientation Observation](#E_Sexual_Orientation_Observation) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.501:2022-06-01 |
| [Social History Observation (V4)](#E_Social_History_Observation_V4) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2022-06-01 |
| [Care Teams Section (V2)](#S_Care_Teams_Section_V2) | section | urn:hl7ii:2.16.840.1.113883.10.20.22.2.500:2022-06-01 |
| [Care Team Organizer (V2)](#E_Care_Team_Organizer_V2) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.500:2022-06-01 |
| [Note Activity](#E_Note_Activity) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01 |
| [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 |
| [Care Team Member Act (V2)](#E_Care_Team_Member_Act_V2) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.500.1:2022-06-01 |
| [Note Activity](#E_Note_Activity) | entry | urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01 |
| [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 |
| [Provenance - Author Participation (V2)](#U_Provenance__Author_Participation_V2) | unspecified | urn:hl7ii:2.16.840.1.113883.10.20.22.5.6:2019-10-01 |

# Value Sets In This Guide

Table 33: 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 34: 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 35: 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 36: 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 37: 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 38: Gender Identity USCDI core

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Gender Identity USCDI core urn:oid:2.16.840.1.113762.1.4.1021.101  (Clinical Focus: Concepts that are used to describe a person's socially acknowledged gender that are used, at a minimum, in the USA. This is the gender they identify as. These are not concepts used to describe a person's sexual orientation (who they are attracted to).),(Data Element Scope: gender identity),(Inclusion Criteria: Concepts that can represent a type of gender that as used in the USA. This is not restricted to male and female.),(Exclusion Criteria: Concepts that are improper to use in the USA for gender identity. Concepts used to describe a person's sexual orientation. Concepts that are used to represent when data is absent or not represented in the provided list.)  This value set was imported on 3/16/2022 with a version of Latest.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1021.101/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 407376001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Male-to-female transsexual (finding) |
| 407377005 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Female-to-male transsexual (finding) |
| 446131000124102 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Identifies as non-conforming gender (finding) |
| 446141000124107 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Identifies as female gender (finding) |
| 446151000124109 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Identifies as male gender (finding) |

Table 39: Asked but Unknown and Other

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Asked but Unknown and Other urn:oid:2.16.840.1.113762.1.4.1114.17  (Clinical Focus: Data absent reasons specific for representing only asked but unknown and other),(Data Element Scope: any data representation that supports inclusion of data absent reasons),(Inclusion Criteria: Asked but no answer known and Other meant to mean data not available for selection),(Exclusion Criteria: all other codes)  This value set was imported on 3/16/2022 with a version of Latest.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1114.17/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| ... | | | |

Table 40: ProblemAct statusCode

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: ProblemAct statusCode urn:oid:2.16.840.1.113883.11.20.9.19  A ValueSet of HL7 actStatus codes for use on the concern act  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.19/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| completed | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | Completed |
| aborted | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | Aborted |
| active | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | Active |
| suspended | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | Suspended |

Table 41: 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 |

Table 42: Planned moodCode (Act/Encounter/Procedure)

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Planned moodCode (Act/Encounter/Procedure) urn:oid:2.16.840.1.113883.11.20.9.23  This value set is used to restrict the moodCode on an act, an encounter or a procedure to future moods  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.23/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| INT | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Intent |
| ARQ | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Appointment Request |
| PRMS | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Promise |
| PRP | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Proposal |
| RQO | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Request |
| APT | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Appointment |

Table 43: Body Site Value Set

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Body Site Value Set urn:oid:2.16.840.1.113883.3.88.12.3221.8.9  (Clinical Focus: All SNOMED CT anatomic structures, locations, abnormal structures that can be considered to describe an anatomical site.),(Data Element Scope: data element describing body location),(Inclusion Criteria: SNOMED CT concepts descending from the Anatomical Structure (91723000) or Acquired body structure (body structure) (280115004) or Anatomical site notations for tumor staging (body structure) (258331007) or Body structure, altered from its original anatomical structure (morphologic abnormality) (118956008) or Physical anatomical entity (body structure) (91722005)),(Exclusion Criteria: none)  This value set was imported on 6/24/2019 with a version of 20190420.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.3221.8.9/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 10013000 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Lateral meniscus structure (body structure) |
| 10024003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Structure of base of lung (body structure) |
| 10025002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Structure of base of phalanx of index finger (body structure) |
| 10026001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Structure of ventral spinocerebellar tract of pons (body structure) |
| 10036009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Structure of nucleus pulposus of intervertebral disc of eighth thoracic vertebra (body structure) |
| 10042008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Structure of intervertebral foramen of fifth thoracic vertebra (body structure) |
| 10047002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Structure of transplanted lung (body structure) |
| 1005009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Entire diaphragmatic lymph node (body structure) |
| 10052007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Male structure (body structure) |
| 10056005 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Structure of ophthalmic nerve (body structure) |
| ... | | | |

Table 44: Problem

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Problem urn:oid:2.16.840.1.113883.3.88.12.3221.7.4  (Clinical Focus: A pathology or disorder identified in a patient),(Data Element Scope: Observations),(Inclusion Criteria: Limited to terms descending from the Clinical Findings (404684003) or Situation with Explicit Context (243796009) hierarchies.),(Exclusion Criteria: any concept not in the hierarchies specified)  This value set was imported on 6/26/2019 with a version of 20190426.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.3221.7.4/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 10000006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Radiating chest pain (finding) |
| 10001005 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Bacterial sepsis (disorder) |
| 10007009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Coffin-Siris syndrome (disorder) |
| 1001000119102 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Pulmonary embolism with pulmonary infarction (disorder) |
| 1001000124104 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Normal left ventricular systolic function (finding) |
| 10017004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Occlusal wear of teeth (disorder) |
| 100191000119105 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Asymmetry of prostate (finding) |
| 100211000119106 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Muscle spasm of thoracic back (disorder) |
| 100231000119101 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Acquired pericardial cyst (disorder) |
| 10028000 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Uncomplicated sedative, hypnotic AND/OR anxiolytic withdrawal (disorder) |
| ... | | | |

Table 45: Problem Type (SNOMEDCT)

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Problem Type (SNOMEDCT) urn:oid:2.16.840.1.113883.3.88.12.3221.7.2  (Clinical Focus: A problem observation categorization of the condition as represented in the SNOMED CT code system.),(Data Element Scope: Problem Observation),(Inclusion Criteria: High level condition types as selected for use.),(Exclusion Criteria: Only the codes selected.)  This value set was imported on 6/20/2019 with a version of 20190319.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.3221.7.2/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 248536006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Finding of functional performance and activity (finding) |
| 282291009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Diagnosis interpretation (observable entity) |
| 373930000 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Cognitive function finding (finding) |
| 404684003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Clinical finding (finding) |
| 409586006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Complaint (finding) |
| 418799008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Finding reported by subject or history provider (finding) |
| 55607006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Problem (finding) |
| 64572001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Disease (disorder) |

Table 46: Problem Type (LOINC)

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Problem Type (LOINC) urn:hl7ii:2.16.840.1.113883.3.88.12.3221.7.2:2014-09-02  This value set indicates the level of medical judgment used to determine the existence of a problem using selected concepts from LOINC.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.3221.7.2/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 75326-9 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Problem HL7.CCDAR2 |
| 75325-1 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Symptom HL7.CCDAR2 |
| 75324-4 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Functional performance HL7.CCDAR2 |
| 75323-6 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Condition HL7.CCDAR2 |
| 29308-4 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Diagnosis |
| 75322-8 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Complaint HL7.CCDAR2 |
| 75321-0 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Clinical finding HL7.CCDAR2 |
| 75319-4 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Cognitive function family member HL7.CCDAR2 |
| 75318-6 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Problem family member HL7.CCDAR2 |
| 75317-8 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Symptom family member HL7.CCDAR2 |
| ... | | | |

Table 47: ProcedureAct statusCode

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: ProcedureAct statusCode urn:oid:2.16.840.1.113883.11.20.9.22  (Clinical Focus: Status of a procedure activity),(Data Element Scope: ),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 4/24/2019 with a version of 20190103.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.22/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 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 |

Table 48: ActPriority

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: ActPriority urn:oid:2.16.840.1.113883.1.11.16866  (Clinical Focus: The urgency under which the Act happened, can happen, is happening, is intended to happen, or is requested/demanded to happen.),(Data Element Scope: ),(Inclusion Criteria: All members of system 2.16.840.1.113883.5.7),(Exclusion Criteria: )  This value set was imported on 6/24/2019 with a version of 20190425.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.16866/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| A | HL7ActPriority | urn:oid:2.16.840.1.113883.5.7 | ASAP |
| CR | HL7ActPriority | urn:oid:2.16.840.1.113883.5.7 | callback results |
| CS | HL7ActPriority | urn:oid:2.16.840.1.113883.5.7 | callback for scheduling |
| CSP | HL7ActPriority | urn:oid:2.16.840.1.113883.5.7 | callback placer for scheduling |
| CSR | HL7ActPriority | urn:oid:2.16.840.1.113883.5.7 | contact recipient for scheduling |
| EL | HL7ActPriority | urn:oid:2.16.840.1.113883.5.7 | elective |
| EM | HL7ActPriority | urn:oid:2.16.840.1.113883.5.7 | emergency |
| P | HL7ActPriority | urn:oid:2.16.840.1.113883.5.7 | preop |
| PRN | HL7ActPriority | urn:oid:2.16.840.1.113883.5.7 | as needed |
| R | HL7ActPriority | urn:oid:2.16.840.1.113883.5.7 | routine |
| ... | | | |

Table 49: Sexual Orientation

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Sexual Orientation urn:oid:2.16.840.1.113762.1.4.1021.33  (Clinical Focus: Concepts used to describe how a person characterizes their emotional and sexual attraction to others.),(Data Element Scope: Sexual orientation),(Inclusion Criteria: Concepts that can describe the type of interpersonal relationship the person tends to desire.),(Exclusion Criteria: Concepts that describe gender identity.)  This value set was imported on 11/23/2021 with a version of Latest.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1021.33/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| ... | | | |

Table 50: Other or unknown or refused to answer

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Other or unknown or refused to answer urn:oid:2.16.840.1.113762.1.4.1021.103  (Clinical Focus: Concepts that represent general ideas of a choice other that those provided, or the value is unknown by the data enterer, or the informant refused to answer),(Data Element Scope: ),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 11/16/2021 with a version of Latest.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1021.103/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| ... | | | |

Table 51: Social History Type

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Social History Type urn:oid:2.16.840.1.113883.3.88.12.80.60  (Clinical Focus: Classification of questions bearing on a patient's behavior, achievement, and exogenous health factors),(Data Element Scope: ),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 6/9/2021 with a version of Latest.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.80.60/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 102487004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Environmental risk factor (observable entity) |
| 105421008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Educational achievement (observable entity) |
| 228272008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Health-related behavior (observable entity) |
| 229819007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Tobacco use and exposure (observable entity) |
| 256235009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Exercise (observable entity) |
| 302160007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Household, family and support network detail (observable entity) |
| 363908000 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Details of drug misuse behavior (observable entity) |
| 364393001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Nutritional observable (observable entity) |
| 364703007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Employment detail (observable entity) |
| 423514004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Community resource details (observable entity) |
| ... | | | |

Table 52: UnitsOfMeasureCaseSensitive

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: UnitsOfMeasureCaseSensitive urn:oid:2.16.840.1.113883.1.11.12839  (Clinical Focus: Common UCUM units. This value set is based on the Common UCUM set.),(Data Element Scope: unit of measure),(Inclusion Criteria: all valid UCUM units case sensitive),(Exclusion Criteria: )  This value set was imported on 6/29/2019 with a version of 20180509.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.12839/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| % | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | percent |
| %{Hb} | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | percent hemoglobin |
| %{RBCs} | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | percent of red blood cells |
| %{WBCs} | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | percent of white blood cells |
| %{abnormal} | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | percent abnormal |
| %{activity} | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | percent activity |
| %{aggregation} | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | percent aggregation |
| %{at\_60\_min} | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | percent at 60 minute |
| %{bacteria} | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | percent of bacteria |
| %{basal\_activity} | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | percent basal activity |
| ... | | | |

Table 53: Healthcare Provider Taxonomy

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Healthcare Provider Taxonomy urn:oid:2.16.840.1.114222.4.11.1066  (Clinical Focus: Represent the "type" of health care provider individual or organization using the National Uniform Claims Committee (NUCC) code system),(Data Element Scope: The assignedEntity attribute),(Inclusion Criteria: All codes in the NUCC Provider Taxonomy code system),(Exclusion Criteria: None)  This value set was imported on 6/24/2019 with a version of 20190521.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.1066/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 10 | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.113883.6.101 | Provider has a medical condition that impairs or limits him/her to practice |
| 101Y00000X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.113883.6.101 | Behavioral Health & Social Service Providers; Counselor |
| 101YA0400X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.113883.6.101 | Behavioral Health & Social Service Providers; Counselor, Addiction (Substance Use Disorder) |
| 101YM0800X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.113883.6.101 | Behavioral Health & Social Service Providers; Counselor, Mental Health |
| 101YP1600X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.113883.6.101 | Behavioral Health & Social Service Providers; Counselor, Pastoral |
| 101YP2500X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.113883.6.101 | Behavioral Health & Social Service Providers; Counselor, Professional |
| 101YS0200X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.113883.6.101 | Behavioral Health & Social Service Providers; Counselor, School |
| 102L00000X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.113883.6.101 | Behavioral Health & Social Service Providers; Psychoanalyst |
| 102X00000X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.113883.6.101 | Behavioral Health & Social Service Providers; Poetry Therapist |
| 103G00000X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.113883.6.101 | Behavioral Health & Social Service Providers; Clinical Neuropsychologist |
| ... | | | |

Table 54: Personal And Legal Relationship Role Type

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Personal And Legal Relationship Role Type urn:oid:2.16.840.1.113883.11.20.12.1  (Clinical Focus: A personal or legal relationship records the role of a person in relation to another person, or a person to himself or herself. This value set is to be used when recording relationships based on personal or family ties or through legal assignment of responsibility.),(Data Element Scope: C-CDA v2.1 Any person role such as Guardian and associatedEntity. Many @code references.),(Inclusion Criteria: Union of: (Descendants of \_PersonalRelationshipRoleType  OR Descendants of RESPRSN)),(Exclusion Criteria: not in the inclusion criteria)  This value set was imported on 6/26/2019 with a version of 20190425.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.12.1/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| ADOPTF | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | adoptive father |
| ADOPTM | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | adoptive mother |
| ADOPTP | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | adoptive parent |
| AUNT | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | aunt |
| BRO | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | brother |
| BROINLAW | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | brother-in-law |
| CHILD | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | child |
| CHLDADOPT | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | adopted child |
| CHLDFOST | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | foster child |
| CHLDINLAW | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | child-in-law |
| ... | | | |

# Code Systems in This Guide

Table 55: Code Systems

| Name | OID |
| --- | --- |
| Administrative Gender | urn:oid:2.16.840.1.113883.5.1 |
| Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.113883.6.101 |
| HL7ActClass | urn:oid:2.16.840.1.113883.5.6 |
| HL7ActCode | urn:oid:2.16.840.1.113883.5.4 |
| HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 |
| HL7ActPriority | urn:oid:2.16.840.1.113883.5.7 |
| 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 |
| HL7NullFlavor | urn:oid:2.16.840.1.113883.5.1008 |
| HL7ParticipationFunction | urn:oid:2.16.840.1.113883.5.88 |
| HL7ParticipationType | urn:oid:2.16.840.1.113883.5.90 |
| HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 |
| ICD-10-CM | urn:oid:2.16.840.1.113883.6.90 |
| LOINC | urn:oid:2.16.840.1.113883.6.1 |
| Media Type | urn:oid:2.16.840.1.113883.5.79 |
| ProvenanceParticipantType | urn:oid:2.16.840.1.113883.4.642.4.1131 |
| SNOMED CT | urn:oid:2.16.840.1.113883.6.96 |
| UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 |