

```

        </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="69859-7"
                displayName="Do you have serious difficulty walking
or climbing stairs?"
                codeSystem="2.16.840.1.113883.6.1"
                codeSystemName="LOINC"/>
            <statusCode code="completed"/>
            <value xsi:type="CD" code="LA33-6" displayName="Yes"
                codeSystem="2.16.840.1.113883.6.1"/>
        </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="69860-5"
                displayName="Do you have difficulty dressing or
bathing?"
                codeSystem="2.16.840.1.113883.6.1"
                codeSystemName="LOINC"/>
            <statusCode code="completed"/>
            <value xsi:type="CD" code="LA33-6" displayName="Yes"
                codeSystem="2.16.840.1.113883.6.1"/>
        </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="69861-3"
                displayName="Because of a physical, mental, or
emotional condition, do you have difficulty doing errands alone such as visiting a
physician's office or shopping?"
                codeSystem="2.16.840.1.113883.6.1"
                codeSystemName="LOINC"/>
            <statusCode code="completed"/>
            <value xsi:type="CD" code="LA33-6" displayName="Yes"
                codeSystem="2.16.840.1.113883.6.1"/>
        </observation>
    </entryRelationship>
</observation>

```

### 3.11 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 47: 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		<a href="#">4515-30418</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">4515-30419</a>	urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = GOL
templateId	1..1	SHALL		<a href="#">4515-8583</a>	
@root	1..1	SHALL		<a href="#">4515-10512</a>	2.16.840.1.113883.10.20.22.4.121
@extension	1..1	SHALL		<a href="#">4515-32886</a>	2022-06-01
id	1..*	SHALL		<a href="#">4515-32332</a>	
code	1..1	SHALL		<a href="#">4515-30784</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC)
statusCode	1..1	SHALL		<a href="#">4515-32333</a>	
@code	1..1	SHALL		<a href="#">4515-32334</a>	urn:oid:2.16.840.1.113883.1.11.15933 (ActStatus)
effectiveTime	0..1	SHOULD		<a href="#">4515-32335</a>	
value	0..1	MAY		<a href="#">4515-32743</a>	
author	0..*	SHOULD		<a href="#">4515-30995</a>	Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)
entryRelationship	0..*	MAY		<a href="#">4515-30701</a>	
@typeCode	1..1	SHALL		<a href="#">4515-30702</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
act	1..1	SHALL		<a href="#">4515-30703</a>	Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122)
entryRelationship	0..*	MAY		<a href="#">4515-30704</a>	
@typeCode	1..1	SHALL		<a href="#">4515-30705</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
act	1..1	SHALL		<a href="#">4515-32879</a>	Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122)
entryRelationship	0..1	SHOULD		<a href="#">4515-30785</a>	

XPath	Card.	Verb	Data Type	CONF#	Value
@typeCode	1..1	SHALL		<a href="#">4515-30786</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">4515-30787</a>	Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143
entryRelationship	0..*	MAY		<a href="#">4515-31448</a>	
@typeCode	1..1	SHALL		<a href="#">4515-31449</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
observation	1..1	SHALL		<a href="#">4515-32880</a>	Goal Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.121
entryRelationship	0..*	MAY		<a href="#">4515-31559</a>	
@typeCode	1..1	SHALL		<a href="#">4515-31560</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
act	1..1	SHALL		<a href="#">4515-31588</a>	Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122
reference	0..*	MAY		<a href="#">4515-32754</a>	
@typeCode	1..1	SHALL		<a href="#">4515-32755</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
externalDocument	1..1	SHALL		<a href="#">4515-32756</a>	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
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.121" (CONF:4515-10512).
  - b. **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).
  - a. 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).
  - a. This statusCode **SHALL** contain exactly one [1..1] @code, which **SHALL** be selected from ValueSet ActStatus urn:oid:2.16.840.1.113883.1.11.15933 **STATIC** (CONF: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).
  - a. When the Goal is Social Determinant of Health Goal, the observation/value **SHOULD** be selected from ValueSet Social Determinant of Health Goals**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.

9. **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.

10. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:4515-30701) such that it
  - a. **SHALL** contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4515-30702).
  - b. **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.

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

12. **SHOULD** contain zero or one [0..1] **entryRelationship** (CONF:4515-30785) such that it

- a. **SHALL** contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4515-30786).
- b. **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.

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

- 14. **MAY** contain zero or more [0..\*] entryRelationship (CONF:4515-31559) such that it
  - a. **SHALL** contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4515-31560).
  - b. **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.

- 15. **MAY** contain zero or more [0..\*] reference (CONF:4515-32754).
  - a. 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).
  - b. The reference, if present, **SHALL** contain exactly one [1..1] External Document Reference (identifier: urn:h17ii:2.16.840.1.113883.10.20.22.4.115:2014-06-09) (CONF:4515-32756).

**Figure 31: 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 32: 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 33: 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>
```

### 3.12 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.