

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>
```

3.11 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	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT
@moodCode	1..1	SHALL		4515-30751	urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN
templateId	1..1	SHALL		4515-30752	
@root	1..1	SHALL		4515-30753	2.16.840.1.113883.10.20.22.4.132
@extension	1..1	SHALL		4515-32861	2022-06-01
id	1..*	SHALL		4515-30754	
code	1..1	SHALL		4515-32310	
@code	1..1	SHALL		4515-32311	75310-3
@codeSystem	1..1	SHALL		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	
@code	1..1	SHALL		4515-32313	urn:oid:2.16.840.1.113883.11.20.9.19 (ProblemAct statusCode)
effectiveTime	0..1	MAY		4515-30759	
author	0..*	SHOULD		4515-31546	Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)
entryRelationship	0..*	MAY		4515-30761	
@typeCode	1..1	SHALL		4515-30762	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		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	
@typeCode	1..1	SHALL		4515-31008	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR

XPath	Card.	Verb	Data Type	CONF#	Value
observation	1..1	SHALL		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	
@typeCode	1..1	SHALL		4515-31158	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
act	1..1	SHALL		4515-32106	Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122)
entryRelationship	0..*	MAY		4515-31160	
@typeCode	1..1	SHALL		4515-31161	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
act	1..1	SHALL		4515-32107	Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122)
entryRelationship	0..*	MAY		4515-31190	
@typeCode	1..1	SHALL		4515-31191	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		4515-31192	Assessment Scale Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69)
entryRelationship	0..*	MAY		4515-31232	
@typeCode	1..1	SHALL		4515-31264	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		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	
@typeCode	1..1	SHALL		4515-31268	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		4515-31273	Mental Status Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.74:2015-08-01)

XPath	Card.	Verb	Data Type	CONF#	Value
entryRelationship	0..*	MAY		4515-31235	
@typeCode	1..1	SHALL		4515-31269	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		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	
@typeCode	1..1	SHALL		4515-31270	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
act	1..1	SHALL		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	
@typeCode	1..1	SHALL		4515-31279	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
organizer	1..1	SHALL		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	
@typeCode	1..1	SHALL		4515-31282	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		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	
@typeCode	1..1	SHALL		4515-31291	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
act	1..1	SHALL		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	

XPath	Card.	Verb	Data Type	CONF#	Value
@typeCode	1..1	SHALL		4515-31300	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		4515-31301	Nutrition Assessment (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.138
entryRelationship	0..*	MAY		4515-31246	
@typeCode	1..1	SHALL		4515-31306	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
act	1..1	SHALL		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	
@typeCode	1..1	SHALL		4515-31309	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		4515-31310	Pregnancy Observation (identifier: urn:oid:2.16.840.1.113883.10.20.15.3.8
entryRelationship	0..*	MAY		4515-31248	
@typeCode	1..1	SHALL		4515-31312	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
act	1..1	SHALL		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	
@typeCode	1..1	SHALL		4515-31318	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		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	
@typeCode	1..1	SHALL		4515-31321	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR

XPath	Card.	Verb	Data Type	CONF#	Value
observation	1..1	SHALL		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	
@typeCode	1..1	SHALL		4515-31324	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		4515-31325	Sensory Status (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.127)
entryRelationship	0..*	MAY		4515-31253	
@typeCode	1..1	SHALL		4515-31327	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		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	
@typeCode	1..1	SHALL		4515-32961	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		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	
@typeCode	1..1	SHALL		4515-31333	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		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	
@typeCode	1..1	SHALL		4515-31336	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		4515-31337	Vital Sign Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.27:2014-06-09)

XPath	Card.	Verb	Data Type	CONF#	Value
entryRelationship	0..*	MAY		4515-31257	
@typeCode	1..1	SHALL		4515-31339	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		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	
@typeCode	1..1	SHALL		4515-31366	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SPRT
observation	1..1	SHALL		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	
@typeCode	1..1	SHALL		4515-31369	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		4515-31370	Caregiver Characteristics (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.72
entryRelationship	0..*	MAY		4515-31371	
@typeCode	1..1	SHALL		4515-31372	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		4515-31373	Cultural and Religious Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.111
entryRelationship	0..*	MAY		4515-31374	
@typeCode	1..1	SHALL		4515-31375	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		4515-31376	Characteristics of Home Environment (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.109
entryRelationship	0..*	MAY		4515-31377	

XPath	Card.	Verb	Data Type	CONF#	Value
@typeCode	1..1	SHALL		4515-31378	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		4515-31379	Nutritional Status Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.124
entryRelationship	0..*	MAY		4515-31380	
@typeCode	1..1	SHALL		4515-31381	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
organizer	1..1	SHALL		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	
@typeCode	1..1	SHALL		4515-31443	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		4515-31444	Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143
entryRelationship	0..*	MAY		4515-31549	
@typeCode	1..1	SHALL		4515-31550	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
act	1..1	SHALL		4515-31551	Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122
reference	0..*	MAY		4515-32757	
@typeCode	1..1	SHALL		4515-32758	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
externalDocument	1..1	SHALL		4515-32759	External Document Reference (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.115:2014-06-09

111. **SHALL** contain exactly one [1..1] @classCode="ACT" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:4515-30750).
112. **SHALL** contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:4515-30751).
113. **SHALL** contain exactly one [1..1] templateId (CONF:4515-30752) such that it

- a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.132" (CONF:4515-30753).
- b. **SHALL** contain exactly one [1..1] @extension="2022-06-01" (CONF:4515-32861).
- 114. **SHALL** contain at least one [1..*] id (CONF:4515-30754).
- 115. **SHALL** contain exactly one [1..1] code (CONF:4515-32310).
 - a. This code **SHALL** contain exactly one [1..1] @code="75310-3" Health Concern (CONF:4515-32311).
 - b. This code **SHALL** contain exactly one [1..1] @codeSystem="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:4515-32312).
- 116. **SHALL** contain exactly one [1..1] statusCode (CONF:4515-30758).
 - a. This statusCode **SHALL** contain exactly one [1..1] @code, which **SHALL** be selected from ValueSet [ProblemAct statusCode](#) urn:oid:2.16.840.1.113883.11.20.9.19 **STATIC** (CONF:4515-32313).
- 117. **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.

- 118. **SHOULD** contain zero or more [0..*] Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:4515-31546).
- 119. **MAY** contain zero or more [0..*] entryRelationship (CONF:4515-30761) 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:4515-30762).
 - b. **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).
- 120. **MAY** contain zero or more [0..*] entryRelationship (CONF:4515-31007) 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:4515-31008).
 - b. **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.

- 121. **MAY** contain zero or more [0..*] entryRelationship (CONF:4515-31157) 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:4515-31158).
- b. **SHALL** contain exactly one [1..1] Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:4515-32106).
 - i. 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.

- 122. **MAY** contain zero or more [0..*] entryRelationship (CONF:4515-31160) 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:4515-31161).
 - b. **SHALL** contain exactly one [1..1] Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:4515-32107).
 - i. The Entry Reference template **SHALL** contain an id that references a Health Concern Act (CONF:4515-32745).
- 123. **MAY** contain zero or more [0..*] entryRelationship (CONF:4515-31190) 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:4515-31191).
 - b. **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).
- 124. **MAY** contain zero or more [0..*] entryRelationship (CONF:4515-31232) 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:4515-31264).
 - b. **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).
- 125. **MAY** contain zero or more [0..*] entryRelationship (CONF:4515-31234) 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:4515-31268).
 - b. **SHALL** contain exactly one [1..1] Mental Status Observation (V3) (identifier: urn:h17ii:2.16.840.1.113883.10.20.22.4.74:2015-08-01) (CONF:4515-31273).
- 126. **MAY** contain zero or more [0..*] entryRelationship (CONF:4515-31235) 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:4515-31269).
 - b. **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).
- 127. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4515-31236) 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:4515-31270).
 - b. **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).
- 128. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4515-31237) 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:4515-31279).
 - b. **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).
- 129. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4515-31238) 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:4515-31282).
 - b. **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).
- 130. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4515-31241) 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:4515-31291).
 - b. **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).
- 131. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4515-31244) 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:4515-31300).
 - b. **SHALL** contain exactly one [1..1] Nutrition Assessment (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.138) (CONF:4515-31301).
- 132. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4515-31246) 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:4515-31306).

- b. **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).
- 133. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4515-31247) 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:4515-31309).
 - b. **SHALL** contain exactly one [1..1] Pregnancy Observation (identifier: urn:oid:2.16.840.1.113883.10.20.15.3.8) (CONF:4515-31310).
- 134. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4515-31248) 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:4515-31312).
 - b. **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).
- 135. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4515-31250) 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:4515-31318).
 - b. **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).
- 136. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4515-31251) 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:4515-31321).
 - b. **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).
- 137. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4515-31252) 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:4515-31324).
 - b. **SHALL** contain exactly one [1..1] Sensory Status (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.127) (CONF:4515-31325).
- 138. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4515-31253) 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:4515-31327).
 - b. **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).
- 139. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4515-31254) 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:4515-32961).
 - b. **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).
140. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4515-31255) 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:4515-31333).
 - b. **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).
141. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4515-31256) 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:4515-31336).
 - b. **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).
142. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4515-31257) 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:4515-31339).
 - b. **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.

143. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4515-31365) such that it
- a. **SHALL** contain exactly one [1..1] @typeCode="SPRT" Has support (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:4515-31366).
 - b. **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).
144. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4515-31368) 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:4515-31369).
 - b. **SHALL** contain exactly one [1..1] Caregiver Characteristics (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.72) (CONF:4515-31370).
145. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4515-31371) 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:4515-31372).
 - b. **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).
146. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4515-31374) 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:4515-31375).
 - b. **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).
147. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4515-31377) 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:4515-31378).
 - b. **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).
148. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4515-31380) 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:4515-31381).
 - b. **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.

149. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4515-31442) 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:4515-31443).
 - b. **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.

150. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:4515-31549) 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:4515-31550).
 - b. **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.

151. **MAY** contain zero or more [0..*] **reference** (CONF:4515-32757).
- 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:4515-32758).
 - b. 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).
152. 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="#_delab32d-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>

```