

```

        codeSystem="2.16.840.1.113883.6.101"
        codeSystemName="Healthcare Provider Taxonomy (HIPAA)" />
      </assignedAuthor>
    </author>
  </observation>
</entryRelationship>
</act>

```

### 3.79 Problem Observation (V3)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01  
(open) ]

**Table 423: Problem Observation (V3) Contexts**

Contained By:	Contains:
<a href="#">Health Concern Act (V2)</a> (optional) <a href="#">Complications Section (V3)</a> (optional) <a href="#">Deceased Observation (V3)</a> (optional) <a href="#">Hospital Discharge Diagnosis (V3)</a> (required) <a href="#">Encounter Diagnosis (V3)</a> (required) <a href="#">Past Medical History (V3)</a> (optional) <a href="#">Hospital Admission Diagnosis (V3)</a> (required) <a href="#">Risk Concern Act (V2)</a> (optional) <a href="#">Procedure Findings Section (V3)</a> (optional) <a href="#">Problem Concern Act (V3)</a> (required) <a href="#">Preoperative Diagnosis (V3)</a> (required) <a href="#">Postprocedure Diagnosis (V3)</a> (required)	<a href="#">Age Observation</a> (optional) <a href="#">Prognosis Observation</a> (optional) <a href="#">Priority Preference</a> (optional) <a href="#">Author Participation</a> (optional) <a href="#">Problem Status</a> (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 424: Problem Observation (V3) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01)					
@classCode	1..1	SHALL		<a href="#">1198-9041</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1198-9042</a>	urn:oid:2.16.840.1.113883.5.1 001 (HL7ActMood) = EVN

XPath	Card.	Verb	Data Type	CONF#	Value
@negationInd	0..1	MAY		<a href="#">1198-10139</a>	
templateId	1..1	SHALL		<a href="#">1198-14926</a>	
@root	1..1	SHALL		<a href="#">1198-14927</a>	2.16.840.1.113883.10.20.22.4.4
@extension	1..1	SHALL		<a href="#">1198-32508</a>	2015-08-01
id	1..*	SHALL		<a href="#">1198-9043</a>	
code	1..1	SHALL		<a href="#">1198-9045</a>	urn:oid:2.16.840.1.113883.3.88.12.3221.7.2 (Problem Type (SNOMEDCT))
statusCode	1..1	SHALL		<a href="#">1198-9049</a>	
@code	1..1	SHALL		<a href="#">1198-19112</a>	urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed
effectiveTime	1..1	SHALL		<a href="#">1198-9050</a>	
low	1..1	SHALL		<a href="#">1198-15603</a>	
high	0..1	MAY		<a href="#">1198-15604</a>	
value	1..1	SHALL	CD	<a href="#">1198-9058</a>	urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 (Problem)
@code	0..1	MAY		<a href="#">1198-31871</a>	
qualifier	0..*	MAY		<a href="#">1198-31870</a>	
translation	0..*	MAY		<a href="#">1198-16749</a>	
@code	0..1	MAY		<a href="#">1198-16750</a>	urn:oid:2.16.840.1.113883.6.90 (ICD-10-CM)
author	0..*	SHOULD		<a href="#">1198-31147</a>	<a href="#">Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)</a>
entryRelationship	0..1	MAY		<a href="#">1198-9059</a>	
@typeCode	1..1	SHALL		<a href="#">1198-9060</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
@inversionInd	1..1	SHALL		<a href="#">1198-9069</a>	true
observation	1..1	SHALL		<a href="#">1198-15590</a>	<a href="#">Age Observation (identifier: urn:oid:2.16.840.1.113883.10.</a>

XPath	Card.	Verb	Data Type	CONF#	Value
					<a href="#">20.22.4.31</a>
entryRelationship	0..1	MAY		<a href="#">1198-29951</a>	
@typeCode	1..1	SHALL		<a href="#">1198-31531</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">1198-29952</a>	<a href="#">Prognosis Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.113)</a>
entryRelationship	0..*	MAY		<a href="#">1198-31063</a>	
@typeCode	1..1	SHALL		<a href="#">1198-31532</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">1198-31064</a>	<a href="#">Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143)</a>
entryRelationship	0..1	MAY		<a href="#">1198-9063</a>	
@typeCode	1..1	SHALL		<a href="#">1198-9068</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">1198-15591</a>	<a href="#">Problem Status (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.6:2019-06-20)</a>

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1198-9041).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1198-9042).

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.

3. **MAY** contain zero or one [0..1] **@negationInd** (CONF:1198-10139).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:1198-14926) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.4" (CONF:1198-14927).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2015-08-01" (CONF:1198-32508).
5. **SHALL** contain at least one [1..\*] **id** (CONF:1198-9043).
6. **SHALL** contain exactly one [1..1] **code**, which **SHOULD** be selected from ValueSet [Problem Type \(SNOMEDCT\)](#) urn:oid:2.16.840.1.113883.3.88.12.3221.7.2 **DYNAMIC** (CONF:1198-9045).

- a. 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:1198-32950).
- 7. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1198-9049).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code="completed"** Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1198-19112).

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.

- 8. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1198-9050).

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

- a. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:1198-15603).

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

- b. This effectiveTime **MAY** contain zero or one [0..1] **high** (CONF:1198-15604).
- 9. **SHALL** contain exactly one [1..1] **value** with **@xsi:type="CD"**, where the code **SHOULD** be selected from ValueSet Problem urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 **DYNAMIC** (CONF:1198-9058).

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

- a. This value **MAY** contain zero or one [0..1] **@code** (CONF:1198-31871).

The observation/value and all the qualifiers together (often referred to as a post-coordinated expression) make up one concept. Qualifiers constrain, or provide greater specificity to, 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, in cases where SNOMED CT does not have a precoordinated code that would be appropriate for the problem list, concept post coordination may be used in CDA following the principles outlined in [HL7 Version 3 Implementation Guide: TermInfo - Using SNOMED CT in CDA R2 Models, Release 1 | [https://www.hl7.org/documentcenter/public/standards/dstu/V3\\_IG\\_SNOMED\\_R1\\_DSTU\\_2015DEC.pdf](https://www.hl7.org/documentcenter/public/standards/dstu/V3_IG_SNOMED_R1_DSTU_2015DEC.pdf)] using the V3 CD Data type 1 style. This is shown in the Problem Observation (V3) Post-coordinated Problem Example. This example represents a family history condition that was also elevated to the problem list to avoid missing pertinent data that may or may not be present in the Family History Section.

- b. This value **MAY** contain zero or more [0..\*] **qualifier** (CONF:1198-31870).
- c. This value **MAY** contain zero or more [0..\*] **translation** (CONF:1198-16749) such that it

- i. **MAY** contain zero or one [0..1] **@code** (CodeSystem: ICD-10-CM urn:oid:2.16.840.1.113883.6.90 **STATIC**) (CONF:1198-16750).
- 10. **SHOULD** contain zero or more [0..\*] **Author Participation** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1198-31147).
- 11. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1198-9059) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="SUBJ"** Has subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 **STATIC**) (CONF:1198-9060).
  - b. **SHALL** contain exactly one [1..1] **@inversionInd="true"** True (CONF:1198-9069).
  - c. **SHALL** contain exactly one [1..1] **Age Observation** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.31) (CONF:1198-15590).
- 12. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1198-29951) 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:1198-31531).
  - b. **SHALL** contain exactly one [1..1] **Prognosis Observation** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.113) (CONF:1198-29952).
- 13. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1198-31063) 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:1198-31532).
  - b. **SHALL** contain exactly one [1..1] **Priority Preference** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:1198-31064).
- 14. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1198-9063) 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:1198-9068).
  - b. **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:1198-15591).

**Figure 198: Problem Observation (V3) Example**

```
<observation classCode="OBS" moodCode="EVN">
  <!-- ** Problem Observation (V3) ** -->
  <templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2015-08-01" />
  <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 199: Problem Observation (V3) Post-Coordinated Problem Example**

```
<!-- Name/value pair problem example -->
<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.4"
    extension="2015-08-01"/>
  <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="#ProblemConcern_1_PT1"/>
    </originalText>
    <translation code="75326-9" codeSystem="2.16.840.1.113883.6.1"
      codeSystemName="LOINC" displayName="Problem"/>
    </code>
    <text>
      <reference value="#ProblemConcern_1"/>
    </text>
    <statusCode code="completed"/>
    <effectiveTime>
      <low value="20140909"/>
    </effectiveTime>
    <!-- Example of a problem from problem list, that is not present in SNOMED CT as a
precoordinated concept -->
    <value xsi:type="CD" code="281666001" codeSystem="2.16.840.1.113883.6.96"
      displayName="Family history of disorder">
      <qualifier>
        <name code="246090004" displayName="Associated finding"/>
        <value code="254167000" displayName="Bullous ichthyosiform erythroderma"/>
      </qualifier>
    </value>
    <author>
      <time value="20160412161448+0000"/>
      <assignedAuthor>
        <id extension="1" root="1.2.840.114350.1.13.6289.1.7.2.697780"/>
        <addr>
          <streetAddressLine>123 Anywhere
            St.</streetAddressLine>
          <city>Verona</city>
          <state>WI</state>
          <postalCode>53753</postalCode>
        </addr>
        <telecom use="WP" value="tel:555-5555"/>
        <assignedPerson>
          <name>
            <given>Andrew</given>
            <family>Moreland</family>
          </name>
        </assignedPerson>
      </assignedAuthor>
    </author>
  </observation>
```

### 3.79.1 Longitudinal Care Wound Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.114:2015-08-01 (open)]

**Table 425: Longitudinal Care Wound Observation (V2) Contexts**

Contained By:	Contains:
<a href="#">Health Concern Act (V2)</a> (optional) <a href="#">Risk Concern Act (V2)</a> (optional) <a href="#">Physical Exam Section (V3)</a> (optional)	<a href="#">Highest Pressure Ulcer Stage</a> (optional) <a href="#">Wound Measurement Observation</a> (optional) <a href="#">Wound Characteristic</a> (optional) <a href="#">Author Participation</a> (optional) <a href="#">Number of Pressure Ulcers Observation (V3)</a> (optional)

This template represents acquired or surgical wounds and is not intended to encompass all wound types. The template applies to wounds such as pressure ulcers, surgical incisions, and deep tissue injury wounds. Information in this template may include information about the wound measurements characteristics.

**Table 426: Longitudinal Care Wound Observation (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.114:2015-08-01)					
@classCode	1..1	SHALL		<a href="#">1198-31012</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1198-31013</a>	urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1198-32947</a>	
@root	1..1	SHALL		<a href="#">1198-29474</a>	2.16.840.1.113883.10.20.22.4.114
@extension	1..1	SHALL		<a href="#">1198-32913</a>	2015-08-01
code	1..1	SHALL		<a href="#">1198-29476</a>	
@code	1..1	SHALL		<a href="#">1198-29477</a>	ASSERTION
@codeSystem	1..1	SHALL		<a href="#">1198-31010</a>	urn:oid:2.16.840.1.113883.5.4 (HL7ActCode) = 2.16.840.1.113883.5.4
value	1..1	SHALL	CD	<a href="#">1198-29485</a>	urn:oid:2.16.840.1.113883.1.11.20.2.6 (Wound Type)
targetSiteCode	0..1	SHOULD		<a href="#">1198-29488</a>	urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 (Body Site Value Set)
qualifier	0..*	MAY		<a href="#">1198-29490</a>	
name	1..1	SHALL		<a href="#">1198-</a>	