```
<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.143" />
  <id root="7d66f448-ba82-4291-a9da-9e5db5e58803" />
  <code code="225773000"
        codeSystem="2.16.840.1.113883.6.96"
        codeSystemName="SNOMED CT"
        displayName="preference" />
  <value xsi:type="CD"
         code="394849002"
         codeSystem="2.16.840.1.113883.6.96"
         codeSystemName="SNOMED"
         displayName="High priority" />
  <!--
      Author Participation Template
      In this case, the author is the same as a participant already described in the
header.
      However, the author could be a the record target (patient), a different provider –
      someone else in the header, or a new provider not elsewhere specified.
  -->
  <author>
    <templateId root="2.16.840.1.113883.10.20.22.4.119" />
    <time value="20130801" />
    <assignedAuthor>
      <!-- This id points back to a participant in the header -->
      <id root="20cf14fb-b65c-4c8c-a54d-b0cca834c18c" />
    </assignedAuthor>
  </author>
</observation>
```

3.78 Problem Concern Act (V3)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.3:2015-08-01 (open)]

Table 420: Problem Concern Act (V3) Contexts

Contained By:	Contains:
Health Concern Act (V2) (optional)	Priority Preference (optional)
Risk Concern Act (V2) (optional)	Author Participation (optional)
Problem Section (entries optional) (V3) (optional)	Problem Observation (V3) (required)
Problem Section (entries required) (V3) (required)	

This template reflects an ongoing concern on behalf of the provider that placed the concern on a patient's problem list. So long as the underlying condition is of concern to the provider (i.e., as long as the condition, whether active or resolved, is of ongoing concern and interest to the provider), 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, the clinician may remain concerned about a prior heart attack).

The statusCode of the Problem Concern Act is the definitive indication of the status of the concern, whereas the effectiveTime of the nested Problem Observation is the definitive indication of whether or not the underlying condition is resolved.

The effectiveTime/low of the Problem Concern Act asserts when the concern became active. The effectiveTime/high asserts when the concern was completed (e.g., when the clinician deemed there is no longer any need to track the underlying condition).

A Problem Concern Act can contain many Problem Observations (templateId 2.16.840.1.113883.10.20.22.4.4). Each Problem Observation is a discrete observation of a condition, and therefore will have a statusCode of "completed". The many Problem Observations nested under a Problem Concern Act reflect the change in the clinical understanding of a condition over time. For instance, a Concern may initially contain a Problem Observation of "chest pain":

- Problem Concern 1
  --- Problem Observation: Chest Pain
  Later, a new Problem Observation of "esophagitis" will be added, reflecting a better understanding of the nature of the chest pain. The later problem observation will have a more recent author time stamp.

- Problem Concern 1
  --- Problem Observation (author/time Jan 3, 2012): Chest Pain
  --- Problem Observation (author/time Jan 6, 2012): Esophagitis
  Many systems display the nested Problem Observation with the most recent author time stamp, and provide a mechanism for viewing prior observations.

Table 421: Problem Concern Act (V3) Constraints Overview

XPath	Card.	Verb	Data Type	CONF#	Value
act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.3:2015-08-01)					
@classCode	1..1	SHALL		1198-9024	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT
@moodCode	1..1	SHALL		1198-9025	urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN
templateId	1..1	SHALL		1198-16772	
@root	1..1	SHALL		1198-16773	2.16.840.1.113883.10.20.22.4.3
@extension	1..1	SHALL		1198-32509	2015-08-01
id	1..*	SHALL		1198-9026	
code	1..1	SHALL		1198-9027	
@code	1..1	SHALL		1198-19184	CONC
@codeSystem	1..1	SHALL		1198-32168	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = 2.16.840.1.113883.5.6
statusCode	1..1	SHALL		1198-9029	
@code	1..1	SHALL		1198-31525	urn:oid:2.16.840.1.113883.11.20.9.19 (ProblemAct statusCode)
effectiveTime	1..1	SHALL		1198-9030	
low	1..1	SHALL		1198-9032	
high	0..1	MAY		1198-9033	
author	0..*	SHOULD		1198-31146	Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119
entryRelationship	1..*	SHALL		1198-9034	
@typeCode	1..1	SHALL		1198-9035	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
observation	1..1	SHALL		1198-15980	Problem Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01
entryRelationship	0..*	MAY		1198-31638	

XPath	Card.	Verb	Data Type	CONF#	Value
@typeCode	1..1	SHALL		[1198-31639](#)	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		[1198-31640](#)	Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143

1. **SHALL** contain exactly one [1..1] **@classCode**="ACT" Act (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1198-9024).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1198-9025).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1198-16772) such that it
   a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.3" (CONF:1198-16773).
   b. **SHALL** contain exactly one [1..1] **@extension**="2015-08-01" (CONF:1198-32509).
4. **SHALL** contain at least one [1..*] **id** (CONF:1198-9026).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1198-9027).
   a. This code **SHALL** contain exactly one [1..1] **@code**="CONC" Concern (CONF:1198-19184).
   b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.5.6" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1198-32168).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1198-9029).

The statusCode of the Problem Concern Act is the definitive indication of the status of the concern, whereas the effectiveTime of the nested Problem Observation is the definitive indication of whether or not the underlying condition is resolved.

   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:1198-31525).
7. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1198-9030).
   a. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:1198-9032).
      Note: The effectiveTime/low of the Problem Concern Act asserts when the concern became active.
   b. This effectiveTime **MAY** contain zero or one [0..1] **high** (CONF:1198-9033).
      Note: The effectiveTime/high asserts when the concern was completed (e.g., when the clinician deemed there is no longer any need to track the underlying condition).
8. **SHOULD** contain zero or more [0..*] **Author Participation** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1198-31146).
9. **SHALL** contain at least one [1..*] **entryRelationship** (CONF:1198-9034) 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:1198-9035).

  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:1198-15980).

The following entryRelationship represents the importance of the concern to a provider.

10. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:1198-31638) 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:1198-31639).

  b. **SHALL** contain exactly one [1..1] **Priority Preference** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:1198-31640).

```
<act classCode="ACT" moodCode="EVN">
    <!-- ** Problem Concern Act (V3) ** -->
    <templateId root="2.16.840.1.113883.10.20.22.4.3"
         extension="2015-08-01" />
    <id root="ec8a6ff8-ed4b-4f7e-82c3-e98e58b45de7" />
    <code code="CONC" codeSystem="2.16.840.1.113883.5.6" displayName="Concern" />
    <!-- The statusCode represents the need to continue tracking the problem -->
    <!-- This is of ongoing concern to the provider -->
    <statusCode code="active" />
    <effectiveTime>
        <!-- The low value represents when the problem was first recorded in the patient's
chart -->
        <!-- Concern was documented on July 6, 2013 -->
        <low value="201307061145-0800" />
    </effectiveTime>
    <author typeCode="AUT">
        <templateId root="2.16.840.1.113883.10.20.22.4.119" />
        <!-- Same as Concern effectiveTime/low -->
        <time value="201307061145-0800" />
        <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>
    <entryRelationship typeCode="SUBJ">
        <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="75323-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
displayName="Condition" />
            <!-- 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>
    </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)]

<div align="center">

Table 422: Problem Observation (V3) Contexts

</div>

Contained By:	Contains:
Health Concern Act (V2) (optional)	Age Observation (optional)
Complications Section (V3) (optional)	Prognosis Observation (optional)
Deceased Observation (V3) (optional)	Priority Preference (optional)
Hospital Discharge Diagnosis (V3) (required)	Author Participation (optional)
Encounter Diagnosis (V3) (required)	Problem Status (optional)
Past Medical History (V3) (optional)	
Hospital Admission Diagnosis (V3) (required)	
Risk Concern Act (V2) (optional)	
Procedure Findings Section (V3) (optional)	
Problem Concern Act (V3) (required)	
Preoperative Diagnosis (V3) (required)	
Postprocedure Diagnosis (V3) (required)	

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 "biologically 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".