

Figure 187: Planned Medication Activity (V2) Example

```
<substanceAdministration moodCode="INT" classCode="SBADM">
  <templateId root="2.16.840.1.113883.10.20.22.4.42" extension="2014-06-09" />
  <!-- Planned Medication Activity (V2)-->
  <id root="cdbc33f0-6cde-11db-9fe1-0800200c9a66" />
  <text>Heparin 0.25 ml Prefilled Syringe</text>
  <statusCode code="active" />
  <!-- The effectiveTime in a planned medication activity
    represents the time that the medication activity should occur. -->
  <effectiveTime value="20130905" />
  <consumable>
    <manufacturedProduct classCode="MANU">
      <!-- Medication Information (V2) -->
      ...
    </manufacturedProduct>
  </consumable>
  <entryRelationship typeCode="REFR">
    <observation classCode="OBS" moodCode="EVN">
      <!-- Patient Priority Preference-->
      ...
    </observation>
  </entryRelationship>
  <entryRelationship typeCode="REFR">
    <observation classCode="OBS" moodCode="EVN">
      <!-- Provider Priority Preference-->
      ...
    </observation>
  </entryRelationship>
  <entryRelationship typeCode="RSON">
    <!-- Indication (V2) -->
    ...
  </entryRelationship>
  <entryRelationship typeCode="SUBJ">
    <!-- Instruction (V2) -->
    ...
  </entryRelationship>
</substanceAdministration>
```

3.68 Planned Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.44:2014-06-09
(open)]

Table 392: Planned Observation (V2) Contexts

Contained By:	Contains:
Plan of Treatment Section (V2) (optional) Nutrition Recommendation (optional) Planned Intervention Act (V2) (optional)	Indication (V2) (optional) Priority Preference (optional) Instruction (V2) (optional) Author Participation (optional) Planned Coverage (optional)

This template represents planned observations that result in new information about the patient which cannot be classified as a procedure according to the HL7 RIM, i.e., procedures alter the patient's body. Examples of these observations are laboratory tests, diagnostic imaging tests, EEGs, and EKGs.

The importance of the planned observation to the patient and provider is communicated through Priority Preference. The effectiveTime indicates the time when the observation is intended to take place and authorTime indicates when the documentation of the plan occurred.

The Planned Observation template may also indicate the potential insurance coverage for the observation.

Table 393: Planned Observation (V2) Constraints Overview

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.44:2014-06-09)					
@classCode	1..1	SHALL		1098-8581	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		1098-8582	urn:oid:2.16.840.1.113883.11.20.9.25 (Planned moodCode (Observation))
templateId	1..1	SHALL		1098-30451	
@root	1..1	SHALL		1098-30452	2.16.840.1.113883.10.20.22.4.44
@extension	1..1	SHALL		1098-32555	2014-06-09
id	1..*	SHALL		1098-8584	
code	1..1	SHALL		1098-31030	urn:oid:2.16.840.1.113883.6.1 (LOINC)
statusCode	1..1	SHALL		1098-30453	
@code	1..1	SHALL		1098-32032	urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = active
effectiveTime	0..1	SHOULD		1098-30454	
value	0..1	MAY		1098-31031	
methodCode	0..1	MAY		1098-32043	
targetSiteCode	0..*	SHOULD		1098-32044	urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 (Body Site Value Set)
performer	0..*	MAY		1098-30456	
author	0..*	SHOULD		1098-32033	Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)
entryRelationship	0..*	MAY		1098-31073	
@typeCode	1..1	SHALL		1098-31074	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		1098-31075	Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143)
entryRelationship	0..*	MAY		1098-32034	

XPath	Card.	Verb	Data Type	CONF#	Value
@typeCode	1..1	SHALL		1098-32035	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON
observation	1..1	SHALL		1098-32036	Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09)
entryRelationship	0..*	MAY		1098-32037	
@typeCode	1..1	SHALL		1098-32038	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
act	1..1	SHALL		1098-32039	Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09)
entryRelationship	0..*	MAY		1098-32040	
@typeCode	1..1	SHALL		1098-32041	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
act	1..1	SHALL		1098-32042	Planned Coverage (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.129)

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-8581).
2. **SHALL** contain exactly one [1..1] **@moodCode**, which **SHALL** be selected from ValueSet [Planned moodCode \(Observation\)](#) urn:oid:2.16.840.1.113883.11.20.9.25 **STATIC** 2011-09-30 (CONF:1098-8582).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-30451) such that it
 - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.44" (CONF:1098-30452).
 - b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32555).
4. **SHALL** contain at least one [1..*] **id** (CONF:1098-8584).
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:1098-31030).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-30453).
 - a. This statusCode **SHALL** contain exactly one [1..1] **@code**="active" Active (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-32032).

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

7. **SHOULD** contain zero or one [0..1] **effectiveTime** (CONF:1098-30454).
8. **MAY** contain zero or one [0..1] **value** (CONF:1098-31031).

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

9. **MAY** contain zero or one [0..1] **methodCode** (CONF:1098-32043).

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

10. **SHOULD** contain zero or more [0..*] **targetSiteCode**, which **SHALL** be selected from ValueSet [Body Site Value Set](#) urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 **DYNAMIC** (CONF:1098-32044).

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

11. **MAY** contain zero or more [0..*] **performer** (CONF:1098-30456).

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

12. **SHOULD** contain zero or more [0..*] [Author Participation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-32033).

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

13. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:1098-31073) such that it
- SHALL** contain exactly one [1..1] **@typeCode="REFR"** Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-31074).
 - SHALL** contain exactly one [1..1] [Priority Preference](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:1098-31075).

The following entryRelationship represents the indication for the observation.

14. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:1098-32034) such that it
- SHALL** contain exactly one [1..1] **@typeCode="RSON"** Has Reason (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32035).
 - 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:1098-32036).

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

15. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:1098-32037) such that it
- SHALL** contain exactly one [1..1] **@typeCode="SUBJ"** Has subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32038).
 - 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:1098-32039).

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

16. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:1098-32040) 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:1098-32041).
- b. **SHALL** contain exactly one [1..1] **Planned Coverage** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.129) (CONF:1098-32042).

Table 394: Planned moodCode (Observation)

Value Set: Planned moodCode (Observation) urn:oid:2.16.840.1.113883.11.20.9.25 This value set is used to restrict the moodCode on an Observation to future moods. Value Set Source: https://vsac.nlm.nih.gov/			
Code	Code System	Code System OID	Print Name
INT	HL7ActMood	urn:oid:2.16.840.1.113883.5.1001	Intent
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

Figure 188: Planned Observation (V2) Example

```
<observation classCode="OBS" moodCode="INT">
  <templateId root="2.16.840.1.113883.10.20.22.4.44"
    extension="2014-06-09" />
  <id root="b52bee94-c34b-4e2c-8c15-5ad9d6def205" />
  <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="20130903" />
  <author typeCode="AUT">
    <!-- Author Participation -->
  </author>
  <entryRelationship typeCode="REFR">
    <!-- Priority Preference -->
    ...
  </entryRelationship>
  <entryRelationship typeCode="RSON">
    <!-- Indication (V2) -->
    ...
  </entryRelationship>
  <entryRelationship typeCode="SUBJ">
    <!-- Instruction (V2) -->
    ...
  </entryRelationship>
  <entryRelationship typeCode="COMP">
    <!-- Planned Coverage -->
    ...
  </entryRelationship>
</observation>
```

3.69 Planned Procedure (V2)

[procedure: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2014-06-09
(open)]

Table 395: Planned Procedure (V2) Contexts

Contained By:	Contains:
Plan of Treatment Section (V2) (optional) Nutrition Recommendation (optional) Planned Procedure Section (V2) (optional) Planned Intervention Act (V2) (optional)	Indication (V2) (optional) Priority Preference (optional) Instruction (V2) (optional) Author Participation (optional) Planned Coverage (optional)

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