Table 390: Planned Intervention moodCode

Value Set: Planned Intervention moodCode urn:oid:2.16.840.1.113883.11.20.9.54			
Contains all the moodCode values it is possible to have for a Planned Intervention.			
Value Set Source:			
http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html			
Code	**Code System**	**Code System OID**	**Print Name**
APT	HL7ActMood	urn:oid:2.16.840.1.113883.5.1001	Appointment
ARQ	HL7ActMood	urn:oid:2.16.840.1.113883.5.1001	Appointment Request
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

3.67 *Planned Medication Activity (V2)*

```
[substanceAdministration: identifier
urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09 (open)]
```

Table 391: Planned Medication Activity (V2) Contexts

Contained By:	**Contains:**
Plan of Treatment Section (V2) (optional)	Indication (V2) (optional)
Nutrition Recommendation (optional)	Medication Information (V2) (required)
Planned Intervention Act (V2) (optional)	Priority Preference (optional)
	Instruction (V2) (optional)
	Author Participation (optional)
	Precondition for Substance Administration (V2) (optional)

This template represents planned medication activities. The priority of the medication activity to the patient and provider is communicated through Priority Preference. The effectiveTime indicates the time when the medication activity is intended to take place. The authorTime indicates when the documentation of the plan occurred.

Table 392: Planned Medication Activity (V2) Constraints Overview

XPath	Card.	Verb	Data Type	CONF#	Value
substanceAdministration (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09)					
@classCode	1..1	SHALL		1098-	urn:oid:2.16.840.1.113883.5.6

XPath	Card.	Verb	Data Type	CONF#	Value
				8572	(HL7ActClass) = SBADM
@moodCode	1..1	SHALL		1098-8573	urn:oid:2.16.840.1.113883.11.20.9.24 (Planned moodCode (SubstanceAdministration/Supply))
templateId	1..1	SHALL		1098-30465	
@root	1..1	SHALL		1098-30466	2.16.840.1.113883.10.20.22.4.42
@extension	1..1	SHALL		1098-32557	2014-06-09
id	1..*	SHALL		1098-8575	
statusCode	1..1	SHALL		1098-32087	
@code	1..1	SHALL		1098-32088	urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = active
effectiveTime	1..1	SHALL	IVL_TS	1098-30468	
@value	0..1	SHOULD		1098-32944	
low	0..1	SHOULD		1098-32948	
high	0..1	MAY		1098-32949	
effectiveTime	0..1	SHOULD		1098-32943	
@operator	1..1	SHALL		1098-32945	A
repeatNumber	0..1	MAY		1098-32066	
routeCode	0..1	MAY		1098-32067	urn:oid:2.16.840.1.113883.3.88.12.3221.8.7 (SPL Drug Route of Administration Terminology)
translation	0..*	SHOULD		1098-32952	urn:oid:2.16.840.1.113762.1.4.1099.12 (Medication Route)
approachSiteCode	0..*	MAY		1098-32078	urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 (Body Site Value Set)
doseQuantity	0..1	MAY		1098-32068	
@unit	0..1	SHOULD		1098-32133	urn:oid:2.16.840.1.113883.1.11.12839 (UnitsOfMeasureCaseSensitive)

XPath	Card.	Verb	Data Type	CONF#	Value
rateQuantity	0..1	MAY		1098-32079	
@unit	0..1	SHOULD		1098-32134	urn:oid:2.16.840.1.113883.1.11.12839 (UnitsOfMeasureCaseSensitive)
maxDoseQuantity	0..1	MAY		1098-32080	
administrationUnitCode	0..1	MAY		1098-32081	urn:oid:2.16.840.1.113762.1.4.1021.30 (AdministrationUnitDoseForm)
consumable	1..1	SHALL		1098-32082	
manufacturedProduct	1..1	SHALL		1098-32083	Medication Information (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
performer	0..*	MAY		1098-30470	
author	0..1	SHOULD		1098-32046	Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119
entryRelationship	0..*	MAY		1098-31104	
@typeCode	1..1	SHALL		1098-31105	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		1098-31106	Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143
entryRelationship	0..*	MAY		1098-32069	
@typeCode	1..1	SHALL		1098-32070	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON
observation	1..1	SHALL		1098-32071	Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
entryRelationship	0..*	MAY		1098-32072	
@typeCode	1..1	SHALL		1098-32073	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
act	1..1	SHALL		1098-32074	Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09

XPath	Card.	Verb	Data Type	CONF#	Value
precondition	0..*	MAY		1098-32084	
@typeCode	1..1	SHALL		1098-32085	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = PRCN
criterion	1..1	SHALL		1098-32086	Precondition for Substance Administration (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09

1. **SHALL** contain exactly one [1..1] **@classCode**="SBADM" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-8572).
2. **SHALL** contain exactly one [1..1] **@moodCode**, which **SHALL** be selected from ValueSet **Planned moodCode (SubstanceAdministration/Supply)** urn:oid:2.16.840.1.113883.11.20.9.24 **STATIC** 2011-09-30 (CONF:1098-8573).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-30465) such that it
   a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.42" (CONF:1098-30466).
   b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32557).
4. **SHALL** contain at least one [1..*] **id** (CONF:1098-8575).
5. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-32087).
   a. This statusCode **SHALL** contain exactly one [1..1] **@code**="active" Active (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-32088).

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

6. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1098-30468) such that it
   Note: This effectiveTime represents either the medication duration (i.e., the time the medication should be started and stopped) or the timestamp when the single-administration should occur.
   a. **SHOULD** contain zero or one [0..1] **@value** (CONF:1098-32944).
      Note: indicates a single-administration timestamp
   b. **SHOULD** contain zero or one [0..1] **low** (CONF:1098-32948).
      Note: indicates when medication started
   c. **MAY** contain zero or one [0..1] **high** (CONF:1098-32949).
      Note: indicates when medication stopped
   d. This effectiveTime **SHALL** contain either a low or a @value but not both (CONF:1098-32947).

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

7. **SHOULD** contain zero or one [0..1] **effectiveTime** (CONF:1098-32943) such that it
   a. **SHALL** contain exactly one [1..1] **@operator**="A" (CONF:1098-32945).

b. **SHALL** contain exactly one [1..1] @xsi:type="PIVL_TS" or "EIVL_TS" (CONF:1098-32946).

In a Planned Medication Activity, repeatNumber defines the number of allowed administrations. For example, a repeatNumber of "3" means that the substance can be administered up to 3 times.

8. **MAY** contain zero or one [0..1] **repeatNumber** (CONF:1098-32066).

9. **MAY** contain zero or one [0..1] **routeCode**, which **SHALL** be selected from ValueSet **SPL Drug Route of Administration Terminology** urn:oid:2.16.840.1.113883.3.88.12.3221.8.7 **DYNAMIC** (CONF:1098-32067).

    a. The routeCode, if present, **SHOULD** contain zero or more [0..*] **translation**, which **SHALL** be selected from ValueSet **Medication Route** urn:oid:2.16.840.1.113762.1.4.1099.12 **DYNAMIC** (CONF:1098-32952).

10. **MAY** contain zero or more [0..*] **approachSiteCode**, 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:1098-32078).

11. **MAY** contain zero or one [0..1] **doseQuantity** (CONF:1098-32068).

NOTE: The base CDA R2.0 standard requires @unit to be drawn from UCUM, and best practice is to use case sensitive UCUM units

    a. The doseQuantity, if present, **SHOULD** contain zero or one [0..1] **@unit**, which **SHOULD** be selected from ValueSet **UnitsOfMeasureCaseSensitive** urn:oid:2.16.840.1.113883.1.11.12839 **DYNAMIC** (CONF:1098-32133).

12. **MAY** contain zero or one [0..1] **rateQuantity** (CONF:1098-32079).

NOTE: The base CDA R2.0 standard requires @unit to be drawn from UCUM, and best practice is to use case sensitive UCUM units

    a. The rateQuantity, if present, **SHOULD** contain zero or one [0..1] **@unit**, which **SHOULD** be selected from ValueSet **UnitsOfMeasureCaseSensitive** urn:oid:2.16.840.1.113883.1.11.12839 **DYNAMIC** (CONF:1098-32134).

13. **MAY** contain zero or one [0..1] **maxDoseQuantity** (CONF:1098-32080).

14. **MAY** contain zero or one [0..1] **administrationUnitCode**, which **SHALL** be selected from ValueSet **AdministrationUnitDoseForm** urn:oid:2.16.840.1.113762.1.4.1021.30 **DYNAMIC** (CONF:1098-32081).

15. **SHALL** contain exactly one [1..1] **consumable** (CONF:1098-32082).

    a. This consumable **SHALL** contain exactly one [1..1] **Medication Information (V2)** (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09) (CONF:1098-32083).

The clinician who is expected to perform the medication activity could be identified using substanceAdministration/performer.

16. **MAY** contain zero or more [0..*] **performer** (CONF:1098-30470).

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

17. **SHOULD** contain zero or one [0..1] **Author Participation** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-32046).

The following entryRelationship represents the priority that a patient or a provider places on the planned medication activity.

18. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:1098-31104) 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:1098-31105).
    b. **SHALL** contain exactly one [1..1] **Priority Preference** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:1098-31106).

The following entryRelationship represents the indication for the planned medication activity.

19. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:1098-32069) such that it
    a. **SHALL** contain exactly one [1..1] **@typeCode**="RSON" Has Reason (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32070).
    b. **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:1098-32071).

The following entryRelationship captures any instructions associated with the planned medication activity.

20. **MAY** contain zero or more [0..*] **entryRelationship** (CONF:1098-32072) 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) (CONF:1098-32073).
    b. **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:1098-32074).

21. **MAY** contain zero or more [0..*] **precondition** (CONF:1098-32084).
    a. The precondition, if present, **SHALL** contain exactly one [1..1] **@typeCode**="PRCN" Precondition (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32085).
    b. The precondition, if present, **SHALL** contain exactly one [1..1] **Precondition for Substance Administration (V2)** (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09) (CONF:1098-32086).

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="cdbd33f0-6cde-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 393: Planned Observation (V2) Contexts

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