

### 3.48 Medication Activity (V2)

[substanceAdministration: identifier  
urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09 (open)]

**Table 338: Medication Activity (V2) Contexts**

Contained By:	Contains:
<a href="#">Medications Section (entries required) (V2)</a> (required) <a href="#">Medications Section (entries optional) (V2)</a> (optional) <a href="#">Reaction Observation (V2)</a> (optional) <a href="#">Procedure Activity Act (V2)</a> (optional) <a href="#">Procedure Activity Procedure (V2)</a> (optional) <a href="#">Procedure Activity Observation (V2)</a> (optional) <a href="#">Admission Medication (V2)</a> (required) <a href="#">Medications Administered Section (V2)</a> (optional) <a href="#">Anesthesia Section (V2)</a> (optional) <a href="#">Planned Intervention Act (V2)</a> (optional) <a href="#">Intervention Act (V2)</a> (optional) <a href="#">Discharge Medication (V3)</a> (required)	<a href="#">Drug Vehicle</a> (optional) <a href="#">Drug Monitoring Act</a> (optional) <a href="#">Reaction Observation (V2)</a> (optional) <a href="#">Indication (V2)</a> (optional) <a href="#">Medication Supply Order (V2)</a> (optional) <a href="#">Medication Information (V2)</a> (required) <a href="#">Medication Dispense (V2)</a> (optional) <a href="#">Instruction (V2)</a> (optional) <a href="#">Author Participation</a> (optional) <a href="#">Substance Administered Act</a> (optional) <a href="#">Precondition for Substance Administration (V2)</a> (optional) <a href="#">Medication Free Text Sig</a> (optional)

A Medication Activity describes substance administrations that have actually occurred (e.g., pills ingested or injections given) or are intended to occur (e.g., "take 2 tablets twice a day for the next 10 days"). Medication activities in "INT" mood are reflections of what a clinician intends a patient to be taking. For example, a clinician may intend that a patient be administered Lisinopril 20 mg PO for blood pressure control. If what was actually administered was Lisinopril 10 mg., then the Medication activities in the "EVN" mood would reflect actual use.

A moodCode of INT is allowed, but it is recommended that the Planned Medication Activity (V2) template be used for moodCodes other than EVN if the document type contains a section that includes Planned Medication Activity (V2) (for example a Care Plan document with Plan of Treatment, Intervention, or Goal sections).

At a minimum, a Medication Activity shall include an effectiveTime indicating the duration of the administration (or single-administration timestamp). Ambulatory medication lists generally provide a summary of use for a given medication over time - a medication activity in event mood with the duration reflecting when the medication started and stopped. Ongoing medications will not have a stop date (or will have a stop date with a suitable NULL value). Ambulatory medication lists will generally also have a frequency (e.g., a medication is being taken twice a day). Inpatient medications generally record each administration as a separate act.

The dose (doseQuantity) represents how many of the consumables are to be administered at each administration event. As a result, the dose is always relative to the consumable and the interval of administration. Thus, a patient consuming a single "metoprolol 25mg tablet" per administration will have a doseQuantity of "1", whereas a patient consuming "metoprolol" will have a dose of "25 mg".

**Table 339: Medication Activity (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
substanceAdministration (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09)					

XPath	Card.	Verb	Data Type	CONF#	Value
@classCode	1..1	SHALL		<a href="#">1098-7496</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = SBADM
@moodCode	1..1	SHALL		<a href="#">1098-7497</a>	urn:oid:2.16.840.1.113883.11.20.9.18 (MoodCodeEvnInt)
templateId	1..1	SHALL		<a href="#">1098-7499</a>	
@root	1..1	SHALL		<a href="#">1098-10504</a>	2.16.840.1.113883.10.20.22.4.16
@extension	1..1	SHALL		<a href="#">1098-32498</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-7500</a>	
code	0..1	MAY		<a href="#">1098-7506</a>	
statusCode	1..1	SHALL		<a href="#">1098-7507</a>	
@code	1..1	SHALL		<a href="#">1098-32360</a>	urn:oid:2.16.840.1.113762.1.4.1099.11 (Medication Status)
effectiveTime	1..1	SHALL		<a href="#">1098-7508</a>	
@value	0..1	SHOULD		<a href="#">1098-32775</a>	
low	0..1	SHOULD		<a href="#">1098-32776</a>	
high	0..1	MAY		<a href="#">1098-32777</a>	
effectiveTime	0..1	SHOULD		<a href="#">1098-7513</a>	
@operator	1..1	SHALL		<a href="#">1098-9106</a>	A
repeatNumber	0..1	MAY		<a href="#">1098-7555</a>	
routeCode	0..1	SHOULD		<a href="#">1098-7514</a>	urn:oid:2.16.840.1.113883.3.8.8.12.3221.8.7 (SPL Drug Route of Administration Terminology)
translation	0..*	SHOULD		<a href="#">1098-32950</a>	urn:oid:2.16.840.1.113762.1.4.1099.12 (Medication Route)
approachSiteCode	0..1	MAY	SET<CD>	<a href="#">1098-7515</a>	urn:oid:2.16.840.1.113883.3.8.8.12.3221.8.9 (Body Site Value Set)
doseQuantity	1..1	SHALL		<a href="#">1098-7516</a>	
@unit	0..1	SHOULD		<a href="#">1098-7526</a>	urn:oid:2.16.840.1.113883.1.1.1.12839 (UnitsOfMeasureCaseSensitive)

XPath	Card.	Verb	Data Type	CONF#	Value
					)
rateQuantity	0..1	MAY		<a href="#">1098-7517</a>	
@unit	1..1	SHALL		<a href="#">1098-7525</a>	urn:oid:2.16.840.1.113883.1.11.12839 (UnitsOfMeasureCaseSensitive)
maxDoseQuantity	0..1	MAY	RTO<P Q, PQ>	<a href="#">1098-7518</a>	
administrationUnitCode	0..1	MAY		<a href="#">1098-7519</a>	urn:oid:2.16.840.1.113762.1.4.1021.30 (AdministrationUnitDoseForm)
consumable	1..1	SHALL		<a href="#">1098-7520</a>	
manufacturedProduct	1..1	SHALL		<a href="#">1098-16085</a>	<a href="#">Medication Information (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09)</a>
performer	0..1	MAY		<a href="#">1098-7522</a>	
author	0..*	SHOULD		<a href="#">1098-31150</a>	<a href="#">Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)</a>
participant	0..*	MAY		<a href="#">1098-7523</a>	
@typeCode	1..1	SHALL		<a href="#">1098-7524</a>	urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = CSM
participantRole	1..1	SHALL		<a href="#">1098-16086</a>	<a href="#">Drug Vehicle (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.24)</a>
entryRelationship	0..*	MAY		<a href="#">1098-7536</a>	
@typeCode	1..1	SHALL		<a href="#">1098-7537</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON
observation	1..1	SHALL		<a href="#">1098-16087</a>	<a href="#">Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09)</a>
entryRelationship	0..1	MAY		<a href="#">1098-7539</a>	
@typeCode	1..1	SHALL		<a href="#">1098-7540</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
@inversionInd	1..1	SHALL		<a href="#">1098-7542</a>	true

XPath	Card.	Verb	Data Type	CONF#	Value
act	1..1	SHALL		<a href="#">1098-31387</a>	<a href="#">Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09)</a>
entryRelationship	0..1	MAY		<a href="#">1098-7543</a>	
@typeCode	1..1	SHALL		<a href="#">1098-7547</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
supply	1..1	SHALL		<a href="#">1098-16089</a>	<a href="#">Medication Supply Order (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09)</a>
entryRelationship	0..*	MAY		<a href="#">1098-7549</a>	
@typeCode	1..1	SHALL		<a href="#">1098-7553</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
supply	1..1	SHALL		<a href="#">1098-16090</a>	<a href="#">Medication Dispense (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2014-06-09)</a>
entryRelationship	0..*	MAY		<a href="#">1098-7552</a>	
@typeCode	1..1	SHALL		<a href="#">1098-7544</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = CAUS
observation	1..1	SHALL		<a href="#">1098-16091</a>	<a href="#">Reaction Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09)</a>
entryRelationship	0..1	MAY		<a href="#">1098-30820</a>	
@typeCode	1..1	SHALL		<a href="#">1098-30821</a>	COMP
act	1..1	SHALL		<a href="#">1098-30822</a>	<a href="#">Drug Monitoring Act (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.123)</a>
entryRelationship	0..*	MAY		<a href="#">1098-31515</a>	
@typeCode	1..1	SHALL		<a href="#">1098-31516</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
@inversionInd	1..1	SHALL		<a href="#">1098-31517</a>	true
sequenceNumber	0..1	MAY		<a href="#">1098-31518</a>	

XPath	Card.	Verb	Data Type	CONF#	Value
act	1..1	SHALL		<a href="#">1098-31519</a>	<a href="#">Substance Administered Act (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.118)</a>
entryRelationship	0..*	MAY		<a href="#">1098-32907</a>	
@typeCode	1..1	SHALL		<a href="#">1098-32908</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
substanceAdministration	1..1	SHALL		<a href="#">1098-32909</a>	<a href="#">Medication Free Text Sig (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.147)</a>
precondition	0..*	MAY		<a href="#">1098-31520</a>	
@typeCode	1..1	SHALL		<a href="#">1098-31882</a>	PRCN
criterion	1..1	SHALL		<a href="#">1098-31883</a>	<a href="#">Precondition for Substance Administration (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09)</a>

1. **SHALL** contain exactly one [1..1] **@classCode="SBADM"** (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-7496).
2. **SHALL** contain exactly one [1..1] **@moodCode**, which **SHALL** be selected from ValueSet [MoodCodeEvnInt](#) urn:oid:2.16.840.1.113883.11.20.9.18 **STATIC** 2011-04-03 (CONF:1098-7497).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7499) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.22.4.16"** (CONF:1098-10504).
  - b. **SHALL** contain exactly one [1..1] **@extension="2014-06-09"** (CONF:1098-32498).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1098-7500).
5. **MAY** contain zero or one [0..1] **code** (CONF:1098-7506).  
 Note: SubstanceAdministration.code is an optional field. Per HL7 Pharmacy Committee, "this is intended to further specify the nature of the substance administration act. To date the committee has made no use of this attribute". Because the type of substance administration is generally implicit in the routeCode, in the consumable participant, etc., the field is generally not used, and there is no defined value set.
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-7507).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [Medication Status](#) urn:oid:2.16.840.1.113762.1.4.1099.11 **DYNAMIC** (CONF:1098-32360).

The substance administration effectiveTime field can repeat, in order to represent varying levels of complex dosing. effectiveTime can be used to represent the duration of administration (e.g., "10 days"), the frequency of administration (e.g., "every 8 hours"), and more. Here, we require

that there **SHALL** be an effectiveTime documentation of the duration (or single-administration timestamp), and that there **SHOULD** be an effectiveTime documentation of the frequency. Other timing nuances, supported by the base CDA R2 standard, may also be included.

7. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1098-7508) such that it  
 Note: This effectiveTime represents either the medication duration (i.e., the time the medication was started and stopped) or the single-administration timestamp.
  - a. **SHOULD** contain zero or one [0..1] **@value** (CONF:1098-32775).  
 Note: indicates a single-administration timestamp
  - b. **SHOULD** contain zero or one [0..1] **low** (CONF:1098-32776).  
 Note: indicates when medication started
  - c. **MAY** contain zero or one [0..1] **high** (CONF:1098-32777).  
 Note: indicates when medication stopped
  - d. This effectiveTime **SHALL** contain either a low or a @value but not both (CONF:1098-32890).
8. **SHOULD** contain zero or one [0..1] **effectiveTime** (CONF:1098-7513) such that it  
 Note: This effectiveTime represents the medication frequency (e.g., administration times per day).
  - a. **SHALL** contain exactly one [1..1] **@operator="A"** (CONF:1098-9106).
  - b. **SHALL** contain exactly one [1..1] **@xsi:type="PIVL\_TS" or "EIVL\_TS"** (CONF:1098-28499).

In "INT" (intent) mood, the repeatNumber defines the number of allowed administrations. For example, a repeatNumber of "3" means that the substance can be administered up to 3 times. In "EVN" (event) mood, the repeatNumber is the number of occurrences. For example, a repeatNumber of "3" in a substance administration event means that the current administration is the 3rd in a series.

9. **MAY** contain zero or one [0..1] **repeatNumber** (CONF:1098-7555).
10. **SHOULD** 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:1098-7514).
  - 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:1098-32950).
11. **MAY** contain zero or one [0..1] **approachSiteCode**, where the code **SHALL** be selected from ValueSet [Body Site Value Set](#) urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 **DYNAMIC** (CONF:1098-7515).
12. **SHALL** contain exactly one [1..1] **doseQuantity** (CONF:1098-7516).

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. This doseQuantity **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:1098-7526).
- b. Pre-coordinated consumable: If the consumable code is a pre-coordinated unit dose (e.g., "metoprolol 25mg tablet") then doseQuantity is a unitless number that

indicates the number of products given per administration (e.g., "2", meaning 2 x "metoprolol 25mg tablet" per administration) (CONF:1098-16878).

- c. Not pre-coordinated consumable: If the consumable code is not pre-coordinated (e.g., is simply "metoprolol"), then doseQuantity must represent a physical quantity with @unit, e.g., "25" and "mg", specifying the amount of product given per administration (CONF:1098-16879).

13. **MAY** contain zero or one [0..1] **rateQuantity** (CONF:1098-7517).

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, **SHALL** contain exactly one [1..1] @unit, which **SHOULD** be selected from ValueSet [UnitsOfMeasureCaseSensitive](#) urn:oid:2.16.840.1.113883.1.11.12839 **DYNAMIC** (CONF:1098-7525).

14. **MAY** contain zero or one [0..1] **maxDoseQuantity** (CONF:1098-7518).

administrationUnitCode@code describes the units of medication administration for an item using a code that is pre-coordinated to include a physical unit form (ointment, powder, solution, etc.) which differs from the units used in administering the consumable (capful, spray, drop, etc.). For example when recording medication administrations, "metric drop (C48491)" would be appropriate to accompany the RxNorm code of 198283 (Timolol 0.25% Ophthalmic Solution) where the number of drops would be specified in doseQuantity@value.

15. **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:1098-7519).

16. **SHALL** contain exactly one [1..1] **consumable** (CONF:1098-7520).

- 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:1098-16085).

17. **MAY** contain zero or one [0..1] **performer** (CONF:1098-7522).

18. **SHOULD** contain zero or more [0..\*] [Author Participation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31150).

19. **MAY** contain zero or more [0..\*] **participant** (CONF:1098-7523) such that it

- a. **SHALL** contain exactly one [1..1] @typeCode="CSM" (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 **STATIC**) (CONF:1098-7524).
- b. **SHALL** contain exactly one [1..1] [Drug Vehicle](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.24) (CONF:1098-16086).

20. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-7536) such that it

- a. **SHALL** contain exactly one [1..1] @typeCode="RSON" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 **STATIC**) (CONF:1098-7537).
- 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:1098-16087).

21. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1098-7539) such that it



- a. **SHALL** contain exactly one [1..1] @typeCode="SUBJ" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 **STATIC**) (CONF:1098-7540).
  - b. **SHALL** contain exactly one [1..1] @inversionInd="true" True (CONF:1098-7542).
  - c. **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:1098-31387).
22. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1098-7543) such that it
- a. **SHALL** contain exactly one [1..1] @typeCode="REFR" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 **STATIC**) (CONF:1098-7547).
  - b. **SHALL** contain exactly one [1..1] [Medication Supply Order \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09) (CONF:1098-16089).
23. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-7549) such that it
- a. **SHALL** contain exactly one [1..1] @typeCode="REFR" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 **STATIC**) (CONF:1098-7553).
  - b. **SHALL** contain exactly one [1..1] [Medication Dispense \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2014-06-09) (CONF:1098-16090).
24. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-7552) such that it
- a. **SHALL** contain exactly one [1..1] @typeCode="CAUS" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 **STATIC**) (CONF:1098-7544).
  - 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:1098-16091).
25. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1098-30820) such that it
- a. **SHALL** contain exactly one [1..1] @typeCode="COMP" Has component (CONF:1098-30821).
  - b. **SHALL** contain exactly one [1..1] [Drug Monitoring Act](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.123) (CONF:1098-30822).

The following entryRelationship is used to indicate a given medication's order in a series. The nested Substance Administered Act identifies an administration in the series. The entryRelationship/sequenceNumber shows the order of this particular administration in that series.

26. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-31515) such that it
- a. **SHALL** contain exactly one [1..1] @typeCode="COMP" Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-31516).
  - b. **SHALL** contain exactly one [1..1] @inversionInd="true" (CONF:1098-31517).
  - c. **MAY** contain zero or one [0..1] **sequenceNumber** (CONF:1098-31518).
  - d. **SHALL** contain exactly one [1..1] [Substance Administered Act](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.118) (CONF:1098-31519).



27. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-32907) such that it
- SHALL** contain exactly one [1..1] **@typeCode="COMP"** Has component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32908).
  - SHALL** contain exactly one [1..1] **Medication Free Text Sig** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.147) (CONF:1098-32909).
28. **MAY** contain zero or more [0..\*] **precondition** (CONF:1098-31520).
- The precondition, if present, **SHALL** contain exactly one [1..1] **@typeCode="PRCN"** (CONF:1098-31882).
  - 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:1098-31883).
29. Medication Activity **SHOULD** include doseQuantity **OR** rateQuantity (CONF:1098-30800).

**Table 340: Medication Status**

Value Set: Medication Status urn:oid:2.16.840.1.113762.1.4.1099.11 (Clinical Focus: A coded concept indicating the current status of a Medication administration or fulfillment.),(Data Element Scope: ),(Inclusion Criteria: ),(Exclusion Criteria: All concepts are subsumed by the selected concepts.)  This value set was imported on 9/21/2017 with a version of 20170914. Value Set Source: <a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1099.11/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1099.11/expansion</a>			
Code	Code System	Code System OID	Print Name
aborted	HL7ActStatus	urn:oid:2.16.840.1.113883.5.14	aborted
active	HL7ActStatus	urn:oid:2.16.840.1.113883.5.14	active
completed	HL7ActStatus	urn:oid:2.16.840.1.113883.5.14	completed
nullified	HL7ActStatus	urn:oid:2.16.840.1.113883.5.14	nullified
suspended	HL7ActStatus	urn:oid:2.16.840.1.113883.5.14	suspended

**Figure 168: Medication Activity (V2) Example**

```
<substanceAdministration classCode="SBADM" moodCode="EVN">
  <!-- ** Medication Activity (V2) ** -->
  <templateId root="2.16.840.1.113883.10.20.22.4.16"
    extension="2014-06-09"/>
  <id root="6c844c75-aa34-411c-b7bd-5e4a9f206e29"/>
  <statusCode code="active"/>
  <effectiveTime xsi:type="IVL_TS">
    <low value="20120318"/>
  </effectiveTime>
  <effectiveTime xsi:type="PIVL_TS" institutionSpecified="true" operator="A">
    <period value="12" unit="h"/>
  </effectiveTime>
  <routeCode code="C38288"
    codeSystem="2.16.840.1.113883.3.26.1.1"
    codeSystemName="NCI Thesaurus"
    displayName="ORAL"/>
  <doseQuantity value="1"/>
  <consumable>
    <manufacturedProduct classCode="MANU">
      <!-- ** Medication information ** -->
      <templateId root="2.16.840.1.113883.10.20.22.4.23"
        extension="2014-06-09"/>
      <id root="2a620155-9d11-439e-92b3-5d9815ff4ee8"/>
      <manufacturedMaterial>
        <code code="197380"
          displayName="Atenolol 25 MG Oral Tablet"
          codeSystem="2.16.840.1.113883.6.88" codeSystemName="RxNorm"/>
      </manufacturedMaterial>
    </manufacturedProduct>
  </consumable>
  <entryRelationship typeCode="RSON">
    <observation classCode="OBS" moodCode="EVN">
      <!-- ** Indication ** -->
      <templateId root="2.16.840.1.113883.10.20.22.4.19"
        extension="2014-06-09"/>
      <id root="e63166c7-6482-4a44-83a1-37ccdbde725b"/>
      <code code="75321-0"
        codeSystem="2.16.840.1.113883.6.1"
        codeSystemName="LOINC"
        displayName="Clinical finding"/>
      <statusCode code="completed"/>
      <value xsi:type="CD"
        code="38341003"
        displayName="Hypertension"
        codeSystem="2.16.840.1.113883.6.96"/>
    </observation>
  </entryRelationship>
</substanceAdministration>
```

**Figure 169: No Known Medications Example**

```
<substanceAdministration classCode="SBADM" moodCode="EVN" negationInd="true">
  <!-- ** Medication activity ** -->
  <templateId root="2.16.840.1.113883.10.20.22.4.16" extension="2014-06-09" />
  <id root="072f00fc-4f9d-4516-8d6f-ed00ed523fe0" />
  <statusCode code="active" />
  <effectiveTime xsi:type="IVL_TS">
    <low value="20110103" />
  </effectiveTime>
  <consumable>
    <manufacturedProduct classCode="MANU">
      <!-- ** Medication information ** -->
      <templateId root="2.16.840.1.113883.10.20.22.4.23" extension="2014-06-09" />
      <manufacturedMaterial>
        <code nullFlavor="OTH" codeSystem="2.16.840.1.113883.6.88">
          <translation code="410942007" displayName="drug or medication"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" />
        </code>
      </manufacturedMaterial>
    </manufacturedProduct>
  </consumable>
</substanceAdministration>
```

### 3.49 Medication Dispense (V2)

[supply: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2014-06-09  
(open) ]

**Table 341: Medication Dispense (V2) Contexts**

Contained By:	Contains:
<a href="#">Medication Activity (V2)</a> (optional) <a href="#">Immunization Activity (V3)</a> (optional)	<a href="#">US Realm Address (AD.US.FIELDDED)</a> (optional) <a href="#">Medication Supply Order (V2)</a> (optional) <a href="#">Medication Information (V2)</a> (optional) <a href="#">Immunization Medication Information (V2)</a> (optional)

This template records the act of supplying medications (i.e., dispensing).

**Table 342: Medication Dispense (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
supply (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-7451</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = SPLY
@moodCode	1..1	SHALL		<a href="#">1098-7452</a>	urn:oid:2.16.840.1.113883.5.1 001 (HL7ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-7453</a>	
@root	1..1	SHALL		<a href="#">1098-</a>	2.16.840.1.113883.10.20.22.4