

- a. This text **SHALL** contain exactly one [1..1] **reference** (CONF:81-32755).
  - i. This reference **SHOULD** contain zero or one [0..1] **@value** (CONF:81-32756).
    1. This reference/**@value** **SHALL** begin with a '#' and **SHALL** point to its corresponding narrative (using the approach defined in CDA Release 2, section 4.3.5.1) (CONF:81-32774).
6. **SHALL** contain exactly one [1..1] **consumable** (CONF:81-32776).
  - a. This consumable **SHALL** contain exactly one [1..1] **manufacturedProduct** (CONF:81-32777).
    - i. This **manufacturedProduct** **SHALL** contain exactly one [1..1] **manufacturedLabeledDrug** (CONF:81-32778).
      1. This **manufacturedLabeledDrug** **SHALL** contain exactly one [1..1] **@nullFlavor="NA"** Not Applicable (CONF:81-32779).

**Figure 171: Medication Free Text Sig Example**

```
<!-- moodCode matches the parent substanceAdministration EVN or INT -->
<substanceAdministration classCode="SBADM" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.147"/>
  <code code="76662-6"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC"
    displayName="Medication Instructions"/>
  <text>
    <!-- Reference into the section.text to a tag that ONLY contains free text SIG -->
    <reference value="#AD1"/>
  </text>
  <consumable>
    <manufacturedProduct>
      <manufacturedLabeledDrug nullFlavor="NA"/>
    </manufacturedProduct>
  </consumable>
</substanceAdministration>
```

### 3.51 Medication Information (V2)

[manufacturedProduct: identifier  
urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09 (open)]

**Table 346: Medication Information (V2) Contexts**

Contained By:	Contains:
<a href="#">Medication Activity (V2)</a> (required) <a href="#">Planned Supply (V2)</a> (optional) <a href="#">Planned Medication Activity (V2)</a> (required) <a href="#">Medication Supply Order (V2)</a> (optional) <a href="#">Medication Dispense (V2)</a> (optional)	

A medication should be recorded as a pre-coordinated ingredient + strength + dose form (e.g., “metoprolol 25mg tablet”, “amoxicillin 400mg/5mL suspension”) where possible. This includes RxNorm codes whose Term Type is SCD (semantic clinical drug), SBD (semantic brand drug), GPCK (generic pack), BPCCK (brand pack).

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. 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 347: Medication Information (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
manufacturedProduct (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-7408</a>	urn:oid:2.16.840.1.113883.5.110 (HL7RoleClass) = MANU
templateId	1..1	SHALL		<a href="#">1098-7409</a>	
@root	1..1	SHALL		<a href="#">1098-10506</a>	2.16.840.1.113883.10.20.22.4.23
@extension	1..1	SHALL		<a href="#">1098-32579</a>	2014-06-09
id	0..*	MAY		<a href="#">1098-7410</a>	
manufacturedMaterial	1..1	SHALL		<a href="#">1098-7411</a>	
code	1..1	SHALL		<a href="#">1098-7412</a>	urn:oid:2.16.840.1.113762.1.4.1010.4 (Medication Clinical Drug)
translation	0..*	MAY		<a href="#">1098-31884</a>	urn:oid:2.16.840.1.113762.1.4.1010.2 (Clinical Substance)
manufacturerOrganization	0..1	MAY		<a href="#">1098-7416</a>	

1. **SHALL** contain exactly one [1..1] **@classCode**="MANU" (CodeSystem: HL7RoleClass urn:oid:2.16.840.1.113883.5.110 **STATIC**) (CONF:1098-7408).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7409) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.23" (CONF:1098-10506).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32579).
3. **MAY** contain zero or more [0..\*] **id** (CONF:1098-7410).
4. **SHALL** contain exactly one [1..1] **manufacturedMaterial** (CONF:1098-7411).  
 Note: A medication should be recorded as a pre-coordinated ingredient + strength + dose form (e.g., “metoprolol 25mg tablet”, “amoxicillin 400mg/5mL suspension”) where possible. This includes RxNorm codes whose Term Type is SCD (semantic clinical drug), SBD (semantic brand drug), GPCK (generic pack), BPCCK (brand pack).

- a. This manufacturedMaterial **SHALL** contain exactly one [1..1] **code**, which **SHALL** be selected from ValueSet [Medication Clinical Drug](#)  
urn:oid:2.16.840.1.113762.1.4.1010.4 **DYNAMIC** (CONF:1098-7412).
  - i. This code **MAY** contain zero or more [0..\*] **translation**, which **MAY** be selected from ValueSet [Clinical Substance](#)  
urn:oid:2.16.840.1.113762.1.4.1010.2 **DYNAMIC** (CONF:1098-31884).
- 5. **MAY** contain zero or one [0..1] **manufacturerOrganization** (CONF:1098-7416).

**Table 348: Medication Clinical Drug**

Value Set: Medication Clinical Drug urn:oid:2.16.840.1.113762.1.4.1010.4

(Clinical Focus: All prescribable medication formulations represented using either a "generic" or "brand-specific" concept developed to support HL7 C-CDA R2 October 2013 ballot.),(Data Element Scope: Medication orderable),(Inclusion Criteria: GROUPING value set made up of:

UNION(

Value set: Medication Clinical General Drug

OID: 2.16.840.1.113883.3.88.12.80.17

Value set: Medication Clinical Brand-specific Drug

OID: 2.16.840.1.113762.1.4.1010.5

).),(Exclusion Criteria: none)

This value set was imported on 6/25/2019 with a version of 20190620.

Value Set Source:

<https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1010.4/expansion>

Code	Code System	Code System OID	Print Name
1000000	RxNorm	urn:oid:2.16.840.1.113883.6.88	Amlodipine 5 MG / Hydrochlorothiazide 12.5 MG / Olmesartan medoxomil 40 MG Oral Tablet [Tribenzor]
1000001	RxNorm	urn:oid:2.16.840.1.113883.6.88	Amlodipine 5 MG / Hydrochlorothiazide 25 MG / Olmesartan medoxomil 40 MG Oral Tablet
1000003	RxNorm	urn:oid:2.16.840.1.113883.6.88	Amlodipine 5 MG / Hydrochlorothiazide 25 MG / Olmesartan medoxomil 40 MG [Tribenzor]
1000005	RxNorm	urn:oid:2.16.840.1.113883.6.88	Amlodipine 5 MG / Hydrochlorothiazide 25 MG / Olmesartan medoxomil 40 MG Oral Tablet [Tribenzor]
1000009	RxNorm	urn:oid:2.16.840.1.113883.6.88	dimethicone 100 MG/ML / Miconazole Nitrate 20 MG/ML / Zinc Oxide 100 MG/ML Topical Spray
1000012	RxNorm	urn:oid:2.16.840.1.113883.6.88	whole wheat allergenic extract 50 MG/ML
1000013	RxNorm	urn:oid:2.16.840.1.113883.6.88	whole wheat allergenic extract 50 MG/ML Injectable Solution
1000014	RxNorm	urn:oid:2.16.840.1.113883.6.88	western wheatgrass pollen extract 10000 UNT/ML
1000015	RxNorm	urn:oid:2.16.840.1.113883.6.88	western wheatgrass pollen extract 10000 UNT/ML Injectable Solution

1000023	RxNorm	urn:oid:2.16.840.1.113883.6.88	methenamine mandelate 100 MG/ML
...			

**Table 349: Clinical Substance**

Value Set: Clinical Substance urn:oid:2.16.840.1.113762.1.4.1010.2

(Clinical Focus: Any substance that can be ordered or is included in a clinical record. This is not restricted to medications.),(Data Element Scope: Clinical Substance ManufacturedProduct/manufacturedMaterial/code/translation/),(Inclusion Criteria: As defined in grouped value sets),(Exclusion Criteria: No drug classes)

This value set was imported on 6/24/2019 with a version of 20190620.

Value Set Source:

<https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1010.2/expansion>

Code	Code System	Code System OID	Print Name
1000000	RxNorm	urn:oid:2.16.840.1.113883.6.88	Amlodipine 5 MG / Hydrochlorothiazide 12.5 MG / Olmesartan medoxomil 40 MG Oral Tablet [Tribenzor]
1000001	RxNorm	urn:oid:2.16.840.1.113883.6.88	Amlodipine 5 MG / Hydrochlorothiazide 25 MG / Olmesartan medoxomil 40 MG Oral Tablet
1000003	RxNorm	urn:oid:2.16.840.1.113883.6.88	Amlodipine 5 MG / Hydrochlorothiazide 25 MG / Olmesartan medoxomil 40 MG [Tribenzor]
1000005	RxNorm	urn:oid:2.16.840.1.113883.6.88	Amlodipine 5 MG / Hydrochlorothiazide 25 MG / Olmesartan medoxomil 40 MG Oral Tablet [Tribenzor]
1000009	RxNorm	urn:oid:2.16.840.1.113883.6.88	dimethicone 100 MG/ML / Miconazole Nitrate 20 MG/ML / Zinc Oxide 100 MG/ML Topical Spray
1000012	RxNorm	urn:oid:2.16.840.1.113883.6.88	whole wheat allergenic extract 50 MG/ML
1000013	RxNorm	urn:oid:2.16.840.1.113883.6.88	whole wheat allergenic extract 50 MG/ML Injectable Solution
1000014	RxNorm	urn:oid:2.16.840.1.113883.6.88	western wheatgrass pollen extract 10000 UNT/ML
1000015	RxNorm	urn:oid:2.16.840.1.113883.6.88	western wheatgrass pollen extract 10000 UNT/ML Injectable Solution
1000023	RxNorm	urn:oid:2.16.840.1.113883.6.88	methenamine mandelate 100 MG/ML
...			



**Figure 172: Medication Information (V2) Example**

```
<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="745679" displayName="200 ACTUAT Albuterol 0.09 MG/ACTUAT Metered Dose Inhaler" codeSystem="2.16.840.1.113883.6.88" codeSystemName="RxNorm" />
  </manufacturedMaterial>
  <manufacturerOrganization>
    <name>Medication Factory Inc.</name>
  </manufacturerOrganization>
</manufacturedProduct>
```

### 3.52 Medication Supply Order (V2)

[supply: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09  
(open) ]

**Table 350: Medication Supply Order (V2) Contexts**

Contained By:	Contains:
<a href="#">Medication Activity (V2)</a> (optional)	<a href="#">Medication Information (V2)</a> (optional)
<a href="#">Medication Dispense (V2)</a> (optional)	<a href="#">Instruction (V2)</a> (optional)
<a href="#">Immunization Activity (V3)</a> (optional)	<a href="#">Immunization Medication Information (V2)</a> (optional)

This template records the intent to supply a patient with medications.

**Table 351: Medication Supply Order (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
supply (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-7427</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = SPLY
@moodCode	1..1	SHALL		<a href="#">1098-7428</a>	urn:oid:2.16.840.1.113883.5.1 001 (HL7ActMood) = INT
templateId	1..1	SHALL		<a href="#">1098-7429</a>	
@root	1..1	SHALL		<a href="#">1098-10507</a>	2.16.840.1.113883.10.20.22.4 .17
@extension	1..1	SHALL		<a href="#">1098-32578</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-7430</a>	
statusCode	1..1	SHALL		<a href="#">1098-7432</a>	
@code	1..1	SHALL		<a href="#">1098-</a>	urn:oid:2.16.840.1.113883.1.1