

Figure 36: Indication (V3) Example

```
<entry typeCode="DRIV">
  <substanceAdministration classCode="SBADM" moodCode="EVN">
    <templateId root="2.16.840.1.113883.10.20.22.4.16" extension="2014-06-09" />
    <!-- ** MEDICATION ACTIVITY -->
    <id root="cdbd33f0-6cde-11db-9fe1-0800200c9a66" />
    <text>
      <reference value="#Med1" /> 0.09 MG/ACTUAT inhalant solution, 2 puffs QID PRN
wheezing
    </text>
    ...
    <!-- Indication snippet inside a Medication Activity -->
    <entryRelationship typeCode="RSON">
      <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.10.20.22.4.19" extension="2023-05-01"
/>
      <!-- Note that this id equals the problem observation/id -->
      <id root="db734647-fc99-424c-a864-7e3cda82e703" />
      <code codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
code="404684003" displayName="Finding"/>
      <statusCode code="completed" />
      <value xsi:type="CD" code="32398004" displayName="Bronchitis"
codeSystem="2.16.840.1.113883.6.96" />
      </observation>
    </entryRelationship>
    ...
  </substanceAdministration>
</entry>

<!-- Points to a problem on the problem list -->
<!-- Problem observation template
<templateId root="2.16.840.1.113883.10.20.22.4.4"/>
Note that this id equals the Indication observation/id
<id root="db734647-fc99-424c-a864-7e3cda82e703"/> -->
```

3.14 Medication Dispense (V3)

```
[supply: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2023-05-01
(open)]
```

This template records the act of supplying medications (i.e., dispensing). The moodCode equaling "EVN" (Event), signals that the "supply" has occurred and thus has been dispensed.

Table 53: Medication Dispense (V3) Constraints Overview

XPath	Card.	Verb	Data Type	CONF#	Value
supply (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2023-05-01)					
@classCode	1..1	SHALL		4537-7451	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = SPLY
@moodCode	1..1	SHALL		4537-7452	urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN
templateId	1..1	SHALL		4537-7453	
@root	1..1	SHALL		4537-10505	2.16.840.1.113883.10.20.22.4.18
@extension	1..1	SHALL		4537-32580	2023-05-01
id	1..*	SHALL		4537-7454	
code	1..1	SHALL		4537-32974	urn:oid:2.16.840.1.113883.4.642.3.1312 (MedicationDispense Status Codes)
statusCode	1..1	SHALL		4537-7455	
@code	1..1	SHALL		4537-32361	urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed
effectiveTime	0..1	SHOULD		4537-7456	
repeatNumber	0..1	SHOULD		4537-7457	
quantity	0..1	SHOULD		4537-7458	
product	0..1	MAY		4537-7459	
manufacturedProduct	1..1	SHALL		4537-15607	Medication Information (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09)
product	0..1	MAY		4537-9331	
manufacturedProduct	1..1	SHALL		4537-31696	Immunization Medication Information (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09)
performer	0..1	MAY		4537-7461	
assignedEntity	1..1	SHALL		4537-7467	
addr	0..1	SHOULD		4537-7468	US Realm Address (AD.US.FIELDDED) (identifier:

XPath	Card.	Verb	Data Type	CONF#	Value
					urn:oid:2.16.840.1.113883.10.20.22.5.2
entryRelationship	0..1	MAY		4537-7473	
@typeCode	1..1	SHALL		4537-7474	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
supply	1..1	SHALL		4537-15606	Medication Supply Order (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09

1. **SHALL** contain exactly one [1..1] **@classCode**="SPLY" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:4537-7451).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:4537-7452).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:4537-7453) such that it
 - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.18" (CONF:4537-10505).
 - b. **SHALL** contain exactly one [1..1] **@extension**="2023-05-01" (CONF:4537-32580).
4. **SHALL** contain at least one [1..*] **id** (CONF:4537-7454).

The MedicationDispense Status Codes value set is the same value set used in the FHIR Dispense Resource, is broader than and has more meaningful codes for the act of dispensing than are permitted at actStatus in CDA, thus actStatus code is fixed to "completed". Comments are welcome as to if this will confuse the industry and instead there should not be constraints on Supply/actCode, and instead we should bind actStatus to the closest codes available in the [HL7 v3 Code System ActStatus](#) and provide a mapping to the FHIR set.

5. **SHALL** contain exactly one [1..1] **code**, which **SHALL** be selected from ValueSet [MedicationDispense Status Codes](#) urn:oid:2.16.840.1.113883.4.642.3.1312 **DYNAMIC** (CONF:4537-32974).
 6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:4537-7455).
 - a. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:4537-32361).
 7. **SHOULD** contain zero or one [0..1] **effectiveTime** (CONF:4537-7456).
- In "EVN" (event) mood, the repeatNumber is the number of dispenses. For example, a repeatNumber of "3" indicates the third dispense.
8. **SHOULD** contain zero or one [0..1] **repeatNumber** (CONF:4537-7457).
 9. **SHOULD** contain zero or one [0..1] **quantity** (CONF:4537-7458).
 10. **MAY** contain zero or one [0..1] **product** (CONF:4537-7459) such that it

- a. **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:4537-15607).
- 11. **MAY** contain zero or one [0..1] **product** (CONF:4537-9331) such that it
 - a. **SHALL** contain exactly one [1..1] Immunization Medication Information (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09) (CONF:4537-31696).
- 12. **MAY** contain zero or one [0..1] **performer** (CONF:4537-7461).
 - a. The performer, if present, **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:4537-7467).
 - i. This assignedEntity **SHOULD** contain zero or one [0..1] US Realm Address (AD.US.FIELDDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:4537-7468).
 - 1. The content of addr **SHALL** be a conformant US Realm Address (AD.US.FIELDDED) (2.16.840.1.113883.10.20.22.5.2) (CONF:4537-10565).
- 13. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:4537-7473) 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:4537-7474).
 - 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:4537-15606).
- 14. A supply act **SHALL** contain one product/Medication Information *OR* one product/Immunization Medication Information template (CONF:4537-9333).

Table 54: MedicationDispense Status Codes

Value Set: MedicationDispense Status Codes urn:oid:2.16.840.1.113883.4.642.3.1312 A FHIR value set reflecting the possible stages of a medication dispensation. Value Set Source: http://hl7.org/fhir/R4/valueset-medicationdispense-status.html			
Code	Code System	Code System OID	Print Name
preparation	MedicationDispense Status Codes	urn:oid:2.16.840.1.113883.4.642.4.1313	Preparation
in-progress	MedicationDispense Status Codes	urn:oid:2.16.840.1.113883.4.642.4.1313	In-Progress
cancelled	MedicationDispense Status Codes	urn:oid:2.16.840.1.113883.4.642.4.1313	Cancelled
completed	MedicationDispense Status Codes	urn:oid:2.16.840.1.113883.4.642.4.1313	Completed
entered-in-error	MedicationDispense Status Codes	urn:oid:2.16.840.1.113883.4.642.4.1313	Entered in Error
stopped	MedicationDispense Status Codes	urn:oid:2.16.840.1.113883.4.642.4.1313	Stopped
declined	MedicationDispense Status Codes	urn:oid:2.16.840.1.113883.4.642.4.1313	Declined
unknown	MedicationDispense Status Codes	urn:oid:2.16.840.1.113883.4.642.4.1313	Unknown
...			

Figure 37: Medication Dispense (V3) Example

```
<supply classCode="SPLY" moodCode="EVN">
  <!-- ** Medication dispense (v3) ** -->
  <templateId root="2.16.840.1.113883.10.20.22.4.18"
    extension="2023-05-01"/>

  <id root="1.2.3.4.56789.1"
    extension="cb734647-fc99-424c-a864-7e3cda82e704"/>

  <!-- Medication Dispense Status -->
  <code code="in-progress" codeSystem="2.16.840.1.113883.4.642.4.1971"
codeSystemName="medicationdispense-status" displayName="In Progress"/>
  <!-- Fixed to completed -->
  <statusCode code="completed"/>
  <effectiveTime value="201208151450-0800"/>
  <repeatNumber value="1"/>
  <quantity value="75"/>
  <product>
    <manufacturedProduct classCode="MANU">
      <!-- ** Medication information ** -->
      <templateId root="2.16.840.1.113883.10.20.22.4.23"
        extension="2014-06-09"/>

      <templateId root="2.16.840.1.113883.10.20.22.4.23"/>
      <id root="2a620155-9d11-439e-92b3-5d9815ff4ee8"/>
      <manufacturedMaterial>
        <code code="573621"
          codeSystem="2.16.840.1.113883.6.88"
          displayName="Proventil 0.09 MG/ACTUAT
inhalant solution"
        />
      </manufacturedMaterial>
      <manufacturerOrganization>
        <name>Medication Factory Inc.</name>
      </manufacturerOrganization>
    </manufacturedProduct>
  </product>
  <performer>
    <assignedEntity>
      <id extension="333222222" root="2.16.840.1.113883.4.6"/>
      <addr>
        <streetAddressLine>1016 Health
          Drive</streetAddressLine>

        <city>Portland</city>
        <state>OR</state>
        <postalCode>99123</postalCode>
        <country>US</country>
      </addr>
      <telecom use="WP" value="tel:+1(555)555-1016"/>
      <assignedPerson>
        <name>
          <given>Susan</given>
          <family>Script</family>
          <suffix qualifier="AC">Pharm.D.</suffix>
        </name>
      </assignedPerson>
      <representedOrganization>
        <name>People's Pharmacy</name>
      </representedOrganization>
    </assignedEntity>
  </performer>
</supply>
```

```

        </representedOrganization>
    </assignedEntity>
</performer>
</supply>

```

3.15 Note Activity

```

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.202:2016-11-01
(open) ]

```

Table 55: Note Activity Contexts

Contained By:	Contains:
Notes Section (required) Care Team Member Act (V2) (optional) Care Team Organizer (V2) (optional)	

The Note Activity represents a clinical note. Notes require authorship, authentication, timing information, and references to other discrete data such as encounters. Similar to the Comment Activity, the Note Activity permits a more specific code to characterize the type of information available in the note. The Note Activity template SHOULD NOT be used in place of a more specific C-CDA entry. Note information included needs to be relevant and pertinent to the information being communicated in the document.

When the note information augments data represented in a more specific entry template, the Note Activity can be used in an entryRelationship to the associated standard C-CDA entry. For example, a Procedure Note added as an entryRelationship to a Procedure Activity Procedure entry).

The Note Activity template can be used as a standalone entry within a standard C-CDA section (e.g., a note about various procedures which have occurred during a visit as an entry in the Procedures Section) when it does not augment another standard entry. It may also be used to provide additional data about the source of a currently narrative-only section, such as Hospital Course.

Finally, if the type of data in the note is not known or no single C-CDA section is appropriate enough, the Note Activity should be placed in a Notes Section. (e.g., a free-text consultation note or a note which includes subjective, objective, assessment, and plan information combined).

An alternative is to place the Note Activity as an entryRelationship to an Encounter Activity entry in the Encounters Section, but implementers may wish to group notes categorically into a separate location in CDA documents rather than overloading the Encounters Section.