



**HL7 CDA® R2 Implementation Guide:  
National Health Care Surveys Release 1,  
DSTU Release 1.2 –  
US Realm**

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# 1 DOCUMENT-LEVEL TEMPLATES

Document-level templates describe the purpose and rules for constructing a conforming CDA document. Document templates include constraints on the CDA header and indicate contained section-level templates.

Each document-level template contains the following information:

- Scope and intended use of the document type
- Description and explanatory narrative
- Template metadata (e.g., templateId, etc.)
- Header constraints (e.g., document type, template id, participants)
- Required and optional section-level templates

## 1.1 US Realm Header (V2)

[ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2014-06-09 (open)]

Published as part of Consolidated CDA Templates for Clinical Notes (US Realm)  
DSTU R2

**Table 1: US Realm Header (V2) Contexts**

Contained By:	Contains:
	<a href="#">US Realm Address (AD.US.FIELDED)</a> <a href="#">US Realm Date and Time (DTM.US.FIELDED)</a> <a href="#">US Realm Person Name (PN.US.FIELDED)</a>

This template defines constraints that represent common administrative and demographic concepts for US Realm CDA documents. Further specification, such as ClinicalDocument/code, are provided in document templates that conform to this template.

**Table 2: US Realm Header (V2) Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
ClinicalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2014-06-09)					
realmCode	1..1	SHALL		<a href="#">1098-16791</a>	US
typeId	1..1	SHALL		<a href="#">1098-5361</a>	
@root	1..1	SHALL		<a href="#">1098-5250</a>	2.16.840.1.113883.1.3
@extension	1..1	SHALL		<a href="#">1098-5251</a>	POCD_HD000040
templateId	1..1	SHALL		<a href="#">1098-5252</a>	
@root	1..1	SHALL		<a href="#">1098-10036</a>	2.16.840.1.113883.10.20.22.1.1
@extension	1..1	SHALL		<a href="#">1098-32503</a>	2014-06-09
id	1..1	SHALL		<a href="#">1098-5363</a>	
code	1..1	SHALL		<a href="#">1098-5253</a>	
title	1..1	SHALL		<a href="#">1098-5254</a>	
effectiveTime	1..1	SHALL		<a href="#">1098-5256</a>	<a href="#">US Realm Date and Time (DTM.US.FIELDDED)</a> (identifier: <a href="#">urn:oid:2.16.840.1.113883.10.20.22.5.4</a> )
confidentialityCode	1..1	SHALL		<a href="#">1098-5259</a>	urn:oid:2.16.840.1.113883.1.11.16926 (HL7 BasicConfidentialityKind)
languageCode	1..1	SHALL		<a href="#">1098-5372</a>	urn:oid:2.16.840.1.113883.1.11.11526 (Language)
setId	0..1	MAY		<a href="#">1098-5261</a>	
versionNumber	0..1	MAY		<a href="#">1098-5264</a>	
recordTarget	1..*	SHALL		<a href="#">1098-5266</a>	
patientRole	1..1	SHALL		<a href="#">1098-5267</a>	
id	1..*	SHALL		<a href="#">1098-5268</a>	
addr	1..*	SHALL		<a href="#">1098-5271</a>	<a href="#">US Realm Address (AD.US.FIELDDED)</a> (identifier: <a href="#">urn:oid:2.16.840.1.113883.10.20.22.5.2</a> )

telecom	1..*	SHALL		<a href="#">1098-5280</a>	
@use	0..1	SHOULD		<a href="#">1098-5375</a>	urn:oid:2.16.840.1.113883.11.20.9.20 (Telecom Use (US Realm Header))
patient	1..1	SHALL		<a href="#">1098-5283</a>	
name	1..*	SHALL		<a href="#">1098-5284</a>	<a href="#">US Realm Person Name (PN.US.FIELDDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1)</a>
administrativeGenderCode	1..1	SHALL		<a href="#">1098-6394</a>	urn:oid:2.16.840.1.113883.1.11.1 (Administrative Gender (HL7 V3))
birthTime	1..1	SHALL		<a href="#">1098-5298</a>	
maritalStatusCode	0..1	SHOULD		<a href="#">1098-5303</a>	urn:oid:2.16.840.1.113883.1.11.1.2212 (Marital Status)
religiousAffiliationCode	0..1	MAY		<a href="#">1098-5317</a>	urn:oid:2.16.840.1.113883.1.11.1.9185 (Religious Affiliation)
raceCode	1..1	SHALL		<a href="#">1098-5322</a>	urn:oid:2.16.840.1.113883.3.2074.1.1.3 (Race Category Excluding Nulls)
sdtc:raceCode	0..*	MAY		<a href="#">1098-7263</a>	urn:oid:2.16.840.1.113883.1.11.1.4914 (Race)
ethnicGroupCode	1..1	SHALL		<a href="#">1098-5323</a>	urn:oid:2.16.840.1.114222.4.11.837 (Ethnicity)
sdtc:ethnicGroupCode	0..*	MAY		<a href="#">1098-32901</a>	urn:oid:2.16.840.1.114222.4.11.877 (Detailed Ethnicity)
guardian	0..*	MAY		<a href="#">1098-5325</a>	
code	0..1	SHOULD		<a href="#">1098-5326</a>	urn:oid:2.16.840.1.113883.11.20.12.1 (Personal And Legal Relationship Role Type)
addr	0..*	SHOULD		<a href="#">1098-5359</a>	<a href="#">US Realm Address (AD.US.FIELDDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2)</a>
telecom	0..*	SHOULD		<a href="#">1098-5382</a>	
@use	0..1	SHOULD		<a href="#">1098-7993</a>	urn:oid:2.16.840.1.113883.11.20.9.20 (Telecom Use (US Realm Header))
guardianPerson	1..1	SHALL		<a href="#">1098-5385</a>	
name	1..*	SHALL		<a href="#">1098-5386</a>	<a href="#">US Realm Person Name (PN.US.FIELDDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1)</a>
birthplace	0..1	MAY		<a href="#">1098-</a>	



				<a href="#">5395</a>	
place	1..1	SHALL		<a href="#">1098-5396</a>	
addr	1..1	SHALL		<a href="#">1098-5397</a>	
country	0..1	SHOULD		<a href="#">1098-5404</a>	urn:oid:2.16.840.1.113883.3.88.12.80.63 (Country)
postalCode	0..1	MAY		<a href="#">1098-5403</a>	urn:oid:2.16.840.1.113883.3.88.12.80.2 (PostalCode)
languageCommunication	1..*	SHALL		<a href="#">1098-5406</a>	
languageCode	1..1	SHALL		<a href="#">1098-5407</a>	urn:oid:2.16.840.1.113883.11.20.9.64 (PatientLanguage)
modeCode	0..1	MAY		<a href="#">1098-5409</a>	urn:oid:2.16.840.1.113883.1.11.12249 (LanguageAbilityMode)
proficiencyLevelCode	0..1	SHOULD		<a href="#">1098-9965</a>	urn:oid:2.16.840.1.113883.1.11.12199 (LanguageAbilityProficiency)
preferenceInd	0..1	SHOULD		<a href="#">1098-5414</a>	
providerOrganization	0..1	MAY		<a href="#">1098-5416</a>	
id	1..*	SHALL		<a href="#">1098-5417</a>	
@root	0..1	SHOULD		<a href="#">1098-16820</a>	2.16.840.1.113883.4.6
name	1..*	SHALL		<a href="#">1098-5419</a>	
telecom	1..*	SHALL		<a href="#">1098-5420</a>	
@use	0..1	SHOULD		<a href="#">1098-7994</a>	urn:oid:2.16.840.1.113883.11.20.9.20 (Telecom Use (US Realm Header))
addr	1..*	SHALL		<a href="#">1098-5422</a>	<a href="#">US Realm Address (AD.US.FIELDDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2)</a>
author	1..*	SHALL		<a href="#">1098-5444</a>	
time	1..1	SHALL		<a href="#">1098-5445</a>	<a href="#">US Realm Date and Time (DTM.US.FIELDDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.4)</a>
assignedAuthor	1..1	SHALL		<a href="#">1098-5448</a>	
id	1..*	SHALL		<a href="#">1098-5449</a>	
id	0..1	SHOULD		<a href="#">1098-32882</a>	

@nullFlavor	0..1	MAY		<a href="#">1098-32883</a>	urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = UNK
@root	1..1	SHALL		<a href="#">1098-32884</a>	2.16.840.1.113883.4.6
@extension	0..1	SHOULD		<a href="#">1098-32885</a>	
code	0..1	SHOULD		<a href="#">1098-16787</a>	
@code	1..1	SHALL		<a href="#">1098-16788</a>	urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy (HIPAA))
addr	1..*	SHALL		<a href="#">1098-5452</a>	<a href="#">US Realm Address (AD.US.FIELDDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2)</a>
telecom	1..*	SHALL		<a href="#">1098-5428</a>	
@use	0..1	SHOULD		<a href="#">1098-7995</a>	urn:oid:2.16.840.1.113883.11.20.9.20 (Telecom Use (US Realm Header))
assignedPerson	0..1	SHOULD		<a href="#">1098-5430</a>	
name	1..*	SHALL		<a href="#">1098-16789</a>	<a href="#">US Realm Person Name (PN.US.FIELDDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1)</a>
assignedAuthoringDevice	0..1	SHOULD		<a href="#">1098-16783</a>	
manufacturerModelName	1..1	SHALL		<a href="#">1098-16784</a>	
softwareName	1..1	SHALL		<a href="#">1098-16785</a>	
dataEnterer	0..1	MAY		<a href="#">1098-5441</a>	
assignedEntity	1..1	SHALL		<a href="#">1098-5442</a>	
id	1..*	SHALL		<a href="#">1098-5443</a>	
@root	0..1	SHOULD		<a href="#">1098-16821</a>	2.16.840.1.113883.4.6
code	0..1	MAY		<a href="#">1098-32173</a>	urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy (HIPAA))
addr	1..*	SHALL		<a href="#">1098-5460</a>	<a href="#">US Realm Address (AD.US.FIELDDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2)</a>
telecom	1..*	SHALL		<a href="#">1098-5466</a>	

@use	0..1	SHOULD		<a href="#">1098-7996</a>	urn:oid:2.16.840.1.113883.11.20.9.20 (Telecom Use (US Realm Header))
assignedPerson	1..1	SHALL		<a href="#">1098-5469</a>	
name	1..*	SHALL		<a href="#">1098-5470</a>	<a href="#">US Realm Person Name (PN.US.FIELDED)</a> (identifier: <a href="#">urn:oid:2.16.840.1.113883.10.20.22.5.1.1</a> )
informant	0..*	MAY		<a href="#">1098-8001</a>	
assignedEntity	1..1	SHALL		<a href="#">1098-8002</a>	
id	1..*	SHALL		<a href="#">1098-9945</a>	
code	0..1	MAY		<a href="#">1098-32174</a>	urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy (HIPAA))
addr	1..*	SHALL		<a href="#">1098-8220</a>	<a href="#">US Realm Address (AD.US.FIELDED)</a> (identifier: <a href="#">urn:oid:2.16.840.1.113883.10.20.22.5.2</a> )
assignedPerson	1..1	SHALL		<a href="#">1098-8221</a>	
name	1..*	SHALL		<a href="#">1098-8222</a>	<a href="#">US Realm Person Name (PN.US.FIELDED)</a> (identifier: <a href="#">urn:oid:2.16.840.1.113883.10.20.22.5.1.1</a> )
informant	0..*	MAY		<a href="#">1098-31355</a>	
relatedEntity	1..1	SHALL		<a href="#">1098-31356</a>	
custodian	1..1	SHALL		<a href="#">1098-5519</a>	
assignedCustodian	1..1	SHALL		<a href="#">1098-5520</a>	
representedCustodianOrganization	1..1	SHALL		<a href="#">1098-5521</a>	
id	1..*	SHALL		<a href="#">1098-5522</a>	
@root	0..1	SHOULD		<a href="#">1098-16822</a>	2.16.840.1.113883.4.6
name	1..1	SHALL		<a href="#">1098-5524</a>	
telecom	1..1	SHALL		<a href="#">1098-5525</a>	
@use	0..1	SHOULD		<a href="#">1098-7998</a>	urn:oid:2.16.840.1.113883.11.20.9.20 (Telecom Use (US Realm Header))

addr	1..1	SHALL		<a href="#">1098-5559</a>	<a href="#">US Realm Address (AD.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2)</a>
informationRecipient	0..*	MAY		<a href="#">1098-5565</a>	
intendedRecipient	1..1	SHALL		<a href="#">1098-5566</a>	
id	0..*	MAY		<a href="#">1098-32399</a>	
informationRecipient	0..1	MAY		<a href="#">1098-5567</a>	
name	1..*	SHALL		<a href="#">1098-5568</a>	<a href="#">US Realm Person Name (PN.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1)</a>
receivedOrganization	0..1	MAY		<a href="#">1098-5577</a>	
name	1..1	SHALL		<a href="#">1098-5578</a>	
legalAuthenticator	0..1	SHOULD		<a href="#">1098-5579</a>	
time	1..1	SHALL		<a href="#">1098-5580</a>	<a href="#">US Realm Date and Time (DTM.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.4)</a>
signatureCode	1..1	SHALL		<a href="#">1098-5583</a>	
@code	1..1	SHALL		<a href="#">1098-5584</a>	urn:oid:2.16.840.1.113883.5.89 (Participationsignature) = S
sdtc:signatureText	0..1	MAY		<a href="#">1098-30810</a>	
assignedEntity	1..1	SHALL		<a href="#">1098-5585</a>	
id	1..*	SHALL		<a href="#">1098-5586</a>	
@root	0..1	MAY		<a href="#">1098-16823</a>	2.16.840.1.113883.4.6
code	0..1	MAY		<a href="#">1098-17000</a>	urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy (HIPAA))
addr	1..*	SHALL		<a href="#">1098-5589</a>	<a href="#">US Realm Address (AD.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2)</a>
telecom	1..*	SHALL		<a href="#">1098-5595</a>	
@use	0..1	SHOULD		<a href="#">1098-7999</a>	urn:oid:2.16.840.1.113883.11.20.9.20 (Telecom Use (US Realm

					Header))
assignedPerson	1..1	SHALL		<a href="#">1098-5597</a>	
name	1..*	SHALL		<a href="#">1098-5598</a>	US Realm Person Name (PN.US.FIELDDED) (identifier: <a href="#">urn:oid:2.16.840.1.113883.10.20.22.5.1.1</a> )
authenticator	0..*	MAY		<a href="#">1098-5607</a>	
time	1..1	SHALL		<a href="#">1098-5608</a>	US Realm Date and Time (DTM.US.FIELDDED) (identifier: <a href="#">urn:oid:2.16.840.1.113883.10.20.22.5.4</a> )
signatureCode	1..1	SHALL		<a href="#">1098-5610</a>	
@code	1..1	SHALL		<a href="#">1098-5611</a>	urn:oid:2.16.840.1.113883.5.89 (Participationsignature) = S
sdtc:signatureText	0..1	MAY		<a href="#">1098-30811</a>	
assignedEntity	1..1	SHALL		<a href="#">1098-5612</a>	
id	1..*	SHALL		<a href="#">1098-5613</a>	
@root	0..1	SHOULD		<a href="#">1098-16824</a>	2.16.840.1.113883.4.6
code	0..1	MAY		<a href="#">1098-16825</a>	
@code	0..1	MAY		<a href="#">1098-16826</a>	urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy (HIPAA))
addr	1..*	SHALL		<a href="#">1098-5616</a>	US Realm Address (AD.US.FIELDDED) (identifier: <a href="#">urn:oid:2.16.840.1.113883.10.20.22.5.2</a> )
telecom	1..*	SHALL		<a href="#">1098-5622</a>	
@use	0..1	SHOULD		<a href="#">1098-8000</a>	urn:oid:2.16.840.1.113883.11.20.9.20 (Telecom Use (US Realm Header))
assignedPerson	1..1	SHALL		<a href="#">1098-5624</a>	
name	1..*	SHALL		<a href="#">1098-5625</a>	US Realm Person Name (PN.US.FIELDDED) (identifier: <a href="#">urn:oid:2.16.840.1.113883.10.20.22.5.1.1</a> )
participant	0..*	MAY		<a href="#">1098-10003</a>	
time	0..1	MAY		<a href="#">1098-10004</a>	

inFulfillmentOf	0..*	MAY		<a href="#">1098-9952</a>	
order	1..1	SHALL		<a href="#">1098-9953</a>	
id	1..*	SHALL		<a href="#">1098-9954</a>	
documentationOf	0..*	MAY		<a href="#">1098-14835</a>	
serviceEvent	1..1	SHALL		<a href="#">1098-14836</a>	
effectiveTime	1..1	SHALL		<a href="#">1098-14837</a>	
low	1..1	SHALL		<a href="#">1098-14838</a>	
performer	0..*	SHOULD		<a href="#">1098-14839</a>	
@typeCode	1..1	SHALL		<a href="#">1098-14840</a>	urn:oid:2.16.840.1.113883.1.11.19601 (x_ServiceEventPerformer)
functionCode	0..1	MAY		<a href="#">1098-16818</a>	
@code	0..1	SHOULD		<a href="#">1098-32889</a>	urn:oid:2.16.840.1.113883.1.11.10267 (ParticipationFunction)
assignedEntity	1..1	SHALL		<a href="#">1098-14841</a>	
id	1..*	SHALL		<a href="#">1098-14846</a>	
@root	0..1	SHOULD		<a href="#">1098-14847</a>	2.16.840.1.113883.4.6
code	0..1	SHOULD		<a href="#">1098-14842</a>	urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy (HIPAA))
authorization	0..*	MAY		<a href="#">1098-16792</a>	
consent	1..1	SHALL		<a href="#">1098-16793</a>	
id	0..*	MAY		<a href="#">1098-16794</a>	
code	0..1	MAY		<a href="#">1098-16795</a>	
statusCode	1..1	SHALL		<a href="#">1098-16797</a>	
@code	1..1	SHALL		<a href="#">1098-16798</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = completed
componentOf	0..1	MAY		<a href="#">1098-9955</a>	
encompassingEncounter	1..1	SHALL		<a href="#">1098-9956</a>	

id	1..*	SHALL		<a href="#">1098-9959</a>	
effectiveTime	1..1	SHALL		<a href="#">1098-9958</a>	

## 1.1.1 Properties

### 1.1.1.1 realmCode

1. **SHALL** contain exactly one [1..1] **realmCode**="US" (CONF:1098-16791).

**Figure 1: US Realm Header (V2) Example**

```
<ClinicalDocument>
  <realmCode code="US" />
  <typeId extension="POCD_HD000040" root="2.16.840.1.113883.1.3" />
  <!-- CCD template -->
  <templateId root="2.16.840.1.113883.10.20.22.1.1" extension="2014-06-09" />
  <!-- Globally unique identifier for the document -->
  <id extension="TT988" root="2.16.840.1.113883.19.5.99999.1" />
  <code code="34133-9" displayName="Summarization of Episode Note"
codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
  <!-- Title of the document -->
  <title>Patient Chart Summary</title>
  <effectiveTime value="201209151030-0800" />
  <confidentialityCode code="N" displayName="normal" codeSystem="2.16.840.1.113883.5.25"
codeSystemName="Confidentiality" />
  <languageCode code="en-US" />
  <setId extension="sTT988" root="2.16.840.1.113883.19.5.99999.19" />
  <!-- Version of the document -->
  <versionNumber value="1" />
  . . .
</ClinicalDocument>
```

2. **SHALL** contain exactly one [1..1] **typeId** (CONF:1098-5361).
  - a. This typeId **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.1.3" (CONF:1098-5250).
  - b. This typeId **SHALL** contain exactly one [1..1] **@extension**="POCD\_HD000040" (CONF:1098-5251).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-5252) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.1.1" (CONF:1098-10036).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32503).
4. **SHALL** contain exactly one [1..1] **id** (CONF:1098-5363).
  - a. This id **SHALL** be a globally unique identifier for the document (CONF:1098-9991).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1098-5253).
  - a. This code **SHALL** specify the particular kind of document (e.g., History and Physical, Discharge Summary, Progress Note) (CONF:1098-9992).

6. **SHALL** contain exactly one [1..1] **title** (CONF:1098-5254).  
Note: The title can either be a locally defined name or the displayName corresponding to clinicalDocument/code
7. **SHALL** contain exactly one [1..1] **US Realm Date and Time (DTM.US.FIELDDED)** (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.4) (CONF:1098-5256).
8. **SHALL** contain exactly one [1..1] **confidentialityCode**, which **SHOULD** be selected from ValueSet **HL7 BasicConfidentialityKind** urn:oid:2.16.840.1.113883.1.11.16926 **STATIC** 2010-04-21 (CONF:1098-5259).
9. **SHALL** contain exactly one [1..1] **languageCode**, which **SHALL** be selected from ValueSet **Language** urn:oid:2.16.840.1.113883.1.11.11526 **DYNAMIC** (CONF:1098-5372).
10. **MAY** contain zero or one [0..1] **setId** (CONF:1098-5261).
  - a. If setId is present versionNumber **SHALL** be present (CONF:1098-6380).
11. **MAY** contain zero or one [0..1] **versionNumber** (CONF:1098-5264).
  - a. If versionNumber is present setId **SHALL** be present (CONF:1098-6387).

#### 1.1.1.2 recordTarget

The recordTarget records the administrative and demographic data of the patient whose health information is described by the clinical document; each recordTarget must contain at least one patientRole element

12. **SHALL** contain at least one [1..\*] **recordTarget** (CONF:1098-5266).
  - a. Such recordTargets **SHALL** contain exactly one [1..1] **patientRole** (CONF:1098-5267).
    - i. This patientRole **SHALL** contain at least one [1..\*] **id** (CONF:1098-5268).
    - ii. This patientRole **SHALL** contain at least one [1..\*] **US Realm Address (AD.US.FIELDDED)** (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1098-5271).
    - iii. This patientRole **SHALL** contain at least one [1..\*] **telecom** (CONF:1098-5280).
      1. Such telecoms **SHOULD** contain zero or one [0..1] **@use**, which **SHALL** be selected from ValueSet **Telecom Use (US Realm Header)** urn:oid:2.16.840.1.113883.11.20.9.20 **DYNAMIC** (CONF:1098-5375).
    - iv. This patientRole **SHALL** contain exactly one [1..1] **patient** (CONF:1098-5283).
      1. This patient **SHALL** contain at least one [1..\*] **US Realm Person Name (PN.US.FIELDDED)** (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1098-5284).
      2. This patient **SHALL** contain exactly one [1..1] **administrativeGenderCode**, which **SHALL** be selected from ValueSet **Administrative Gender (HL7 V3)** urn:oid:2.16.840.1.113883.1.11.1 **DYNAMIC** (CONF:1098-6394).
      3. This patient **SHALL** contain exactly one [1..1] **birthTime** (CONF:1098-5298).



- a. **SHALL** be precise to year (CONF:1098-5299).
- b. **SHOULD** be precise to day (CONF:1098-5300).

For cases where information about newborn's time of birth needs to be captured.

- c. **MAY** be precise to the minute (CONF:1098-32418).
4. This patient **SHOULD** contain zero or one [0..1] **maritalStatusCode**, which **SHALL** be selected from ValueSet [Marital Status](#) urn:oid:2.16.840.1.113883.1.11.12212 **DYNAMIC** (CONF:1098-5303).
  5. This patient **MAY** contain zero or one [0..1] **religiousAffiliationCode**, which **SHALL** be selected from ValueSet [Religious Affiliation](#) urn:oid:2.16.840.1.113883.1.11.19185 **DYNAMIC** (CONF:1098-5317).
  6. This patient **SHALL** contain exactly one [1..1] **raceCode**, which **SHALL** be selected from ValueSet [Race Category Excluding Nulls](#) urn:oid:2.16.840.1.113883.3.2074.1.1.3 **DYNAMIC** (CONF:1098-5322).
  7. This patient **MAY** contain zero or more [0..\*] **sdtc:raceCode**, which **SHALL** be selected from ValueSet [Race](#) urn:oid:2.16.840.1.113883.1.11.14914 **DYNAMIC** (CONF:1098-7263).  
 Note: The sdtc:raceCode is only used to record additional values when the patient has indicated multiple races or additional race detail beyond the five categories required for Meaningful Use Stage 2. The prefix sdtc: SHALL be bound to the namespace “urn:hl7-org:sdtc”. The use of the namespace provides a necessary extension to CDA R2 for the use of the additional raceCode elements.
    - a. If sdtc:raceCode is present, then the patient **SHALL** contain [1..1] raceCode (CONF:1098-31347).
  8. This patient **SHALL** contain exactly one [1..1] **ethnicGroupCode**, which **SHALL** be selected from ValueSet [Ethnicity](#) urn:oid:2.16.840.1.114222.4.11.837 **DYNAMIC** (CONF:1098-5323).
  9. This patient **MAY** contain zero or more [0..\*] **sdtc:ethnicGroupCode**, which **SHALL** be selected from ValueSet [Detailed Ethnicity](#) urn:oid:2.16.840.1.114222.4.11.877 **DYNAMIC** (CONF:1098-32901).
  10. This patient **MAY** contain zero or more [0..\*] **guardian** (CONF:1098-5325).
    - a. The guardian, if present, **SHOULD** contain zero or one [0..1] **code**, which **SHALL** be selected from ValueSet [Personal And Legal Relationship Role Type](#) urn:oid:2.16.840.1.113883.11.20.12.1 **DYNAMIC** (CONF:1098-5326).

- b. The guardian, if present, **SHOULD** contain zero or more [0..\*] [US Realm Address \(AD.US.FIELDDED\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1098-5359).
  - c. The guardian, if present, **SHOULD** contain zero or more [0..\*] **telecom** (CONF:1098-5382).
    - i. The telecom, if present, **SHOULD** contain zero or one [0..1] **@use**, which **SHALL** be selected from ValueSet [Telecom Use \(US Realm Header\)](#) (identifier: urn:oid:2.16.840.1.113883.11.20.9.20 **DYNAMIC** (CONF:1098-7993).
  - d. The guardian, if present, **SHALL** contain exactly one [1..1] **guardianPerson** (CONF:1098-5385).
    - i. This guardianPerson **SHALL** contain at least one [1..\*] [US Realm Person Name \(PN.US.FIELDDED\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1098-5386).
11. This patient **MAY** contain zero or one [0..1] **birthplace** (CONF:1098-5395).
- a. The birthplace, if present, **SHALL** contain exactly one [1..1] **place** (CONF:1098-5396).
    - i. This place **SHALL** contain exactly one [1..1] **addr** (CONF:1098-5397).
      - 1. This addr **SHOULD** contain zero or one [0..1] **country**, which **SHALL** be selected from ValueSet [Country](#) (identifier: urn:oid:2.16.840.1.113883.3.88.12.80.63 **DYNAMIC** (CONF:1098-5404).
      - 2. This addr **MAY** contain zero or one [0..1] **postalCode**, which **SHALL** be selected from ValueSet [PostalCode](#) (identifier: urn:oid:2.16.840.1.113883.3.88.12.80.2 **DYNAMIC** (CONF:1098-5403).
      - 3. If country is US, this addr **SHOULD** contain zero to one [0..1] **state**, which **SHALL** be selected from ValueSet [StateValueSet](#) (identifier: 2.16.840.1.113883.3.88.12.80.1 **DYNAMIC** (CONF:1098-5402).
12. This patient **SHALL** contain at least one [1..\*] **languageCommunication** (CONF:1098-5406).
- a. Such languageCommunications **SHALL** contain exactly one [1..1] **languageCode**, which **SHALL** be selected from ValueSet [PatientLanguage](#) (identifier: urn:oid:2.16.840.1.113883.11.20.9.64 **DYNAMIC** (CONF:1098-5407).
  - b. Such languageCommunications **MAY** contain zero or one [0..1] **modeCode**, which **SHALL** be selected from ValueSet

LanguageAbilityMode

urn:oid:2.16.840.1.113883.1.11.12249 **DYNAMIC**  
(CONF:1098-5409).

- c. Such languageCommunications **SHOULD** contain zero or one [0..1] **proficiencyLevelCode**, which **SHALL** be selected from ValueSet LanguageAbilityProficiency  
urn:oid:2.16.840.1.113883.1.11.12199 **DYNAMIC**  
(CONF:1098-9965).
  - d. Such languageCommunications **SHOULD** contain zero or one [0..1] **preferenceInd** (CONF:1098-5414).
- v. This patientRole **MAY** contain zero or one [0..1] **providerOrganization** (CONF:1098-5416).
1. The providerOrganization, if present, **SHALL** contain at least one [1..\*] **id** (CONF:1098-5417).
    - a. Such ids **SHOULD** contain zero or one [0..1] **@root="2.16.840.1.113883.4.6" National Provider Identifier** (CONF:1098-16820).
  2. The providerOrganization, if present, **SHALL** contain at least one [1..\*] **name** (CONF:1098-5419).
  3. The providerOrganization, if present, **SHALL** contain at least one [1..\*] **telecom** (CONF:1098-5420).
    - a. Such telecoms **SHOULD** contain zero or one [0..1] **@use**, which **SHALL** be selected from ValueSet Telecom Use (US Realm Header) urn:oid:2.16.840.1.113883.11.20.9.20 **DYNAMIC** (CONF:1098-7994).
  4. The providerOrganization, if present, **SHALL** contain at least one [1..\*] US Realm Address (AD.US.FIELDDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1098-5422).

**Figure 2: recordTarget Example**

```

<recordTarget>
  <patientRole>
    <id extension="444-22-2222" root="2.16.840.1.113883.4.1" />
    <!-- Example Social Security Number using the actual SSN OID. -->
    <addr use="HP">
      <!-- HP is "primary home" from codeSystem 2.16.840.1.113883.5.1119 -->
      <streetAddressLine>2222 Home Street</streetAddressLine>
      <city>Beaverton</city>
      <state>OR</state>
      <postalCode>97867</postalCode>
      <country>US</country>
      <!-- US is "United States" from ISO 3166-1 Country Codes: 1.0.3166.1 -->
    </addr>
    <telecom value="tel:+1(555)555-2003" use="HP" />
    <!-- HP is "primary home" from HL7 AddressUse 2.16.840.1.113883.5.1119 -->
    <patient>
      <!-- The first name element represents what the patient is known as -->
      <name use="L">
        <given>Eve</given>
        <!-- The "SP" is "Spouse" from
              HL7 Code System EntityNamePartQualifier 2.16.840.1.113883.5.43 -->
        <family qualifier="SP">Betterhalf</family>
      </name>
      <!-- The second name element represents another name
            associated with the patient -->
      <name>
        <given>Eve</given>
        <!-- The "BR" is "Birth" from
              HL7 Code System EntityNamePartQualifier 2.16.840.1.113883.5.43 -->
        <family qualifier="BR">Everywoman</family>
      </name>
      <administrativeGenderCode code="F" displayName="Female"
codeSystem="2.16.840.1.113883.5.1" codeSystemName="AdministrativeGender" />
      <!-- Date of birth need only be precise to the day -->
      <birthTime value="19750501" />
      <maritalStatusCode code="M" displayName="Married"
codeSystem="2.16.840.1.113883.5.2" codeSystemName="MaritalStatusCode" />
      <religiousAffiliationCode code="1013" displayName="Christian (non-Catholic,
non-specific)" codeSystem="2.16.840.1.113883.5.1076" codeSystemName="HL7 Religious
Affiliation" />
      <!-- CDC Race and Ethnicity code set contains the five minimum
            race and ethnicity categories defined by OMB Standards -->
      <raceCode code="2106-3" displayName="White"
codeSystem="2.16.840.1.113883.6.238" codeSystemName="Race & Ethnicity - CDC" />
      <!-- The raceCode extension is only used if raceCode is valued -->
      <sdtc:raceCode code="2076-8" displayName="Hawaiian or Other Pacific Islander"
codeSystem="2.16.840.1.113883.6.238" codeSystemName="Race & Ethnicity - CDC" />
      <ethnicGroupCode code="2186-5" displayName="Not Hispanic or Latino"
codeSystem="2.16.840.1.113883.6.238" codeSystemName="Race & Ethnicity - CDC" />
      <guardian>
        <code code="POWATT" displayName="Power of Attorney"
codeSystem="2.16.840.1.113883.1.11.19830" codeSystemName="ResponsibleParty" />
      <addr use="HP">
        <streetAddressLine>2222 Home Street</streetAddressLine>
        <city>Beaverton</city>

```

```

        <state>OR</state>
        <postalCode>97867</postalCode>
        <country>US</country>
    </addr>
    <telecom value="tel:+1(555)555-2008" use="MC" />
    <guardianPerson>
        <name>
            <given>Boris</given>
            <given qualifier="CL">Bo</given>
            <family>Betterhalf</family>
        </name>
    </guardianPerson>
</guardian>
<birthplace>
    <place>
        <addr>
            <streetAddressLine>4444 Home Street</streetAddressLine>
            <city>Beaverton</city>
            <state>OR</state>
            <postalCode>97867</postalCode>
            <country>US</country>
        </addr>
    </place>
</birthplace>
<languageCommunication>
    <languageCode code="eng" />
    <!-- "eng" is ISO 639-2 alpha-3 code for "English" -->
    <modeCode code="ESP" displayName="Expressed spoken"
codeSystem="2.16.840.1.113883.5.60" codeSystemName="LanguageAbilityMode" />
    <proficiencyLevelCode code="G" displayName="Good"
codeSystem="2.16.840.1.113883.5.61" codeSystemName="LanguageAbilityProficiency" />
    <!-- Patient's preferred language -->
    <preferenceInd value="true" />
</languageCommunication>
</patient>
<providerOrganization>
    <id extension="219BX" root="1.1.1.1.1.1.1.2" />
    <name>The DoctorsTogether Physician Group</name>
    <telecom use="WP" value="tel: +(555)-555-5000" />
    <addr>
        <streetAddressLine>1007 Health Drive</streetAddressLine>
        <city>Portland</city>
        <state>OR</state>
        <postalCode>99123</postalCode>
        <country>US</country>
    </addr>
</providerOrganization>
</patientRole>
</recordTarget>

```

### 1.1.1.3 author

The author element represents the creator of the clinical document. The author may be a device or a person.

13. **SHALL** contain at least one [1..\*] **author** (CONF:1098-5444).
- a. Such authors **SHALL** contain exactly one [1..1] **US Realm Date and Time (DTM.US.FIELDDED)** (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.4) (CONF:1098-5445).
  - b. Such authors **SHALL** contain exactly one [1..1] **assignedAuthor** (CONF:1098-5448).
    - i. This assignedAuthor **SHALL** contain at least one [1..\*] **id** (CONF:1098-5449).

If this assignedAuthor is an assignedPerson

- ii. This assignedAuthor **SHOULD** contain zero or one [0..1] **id** (CONF:1098-32882) such that it

If id with @root="2.16.840.1.113883.4.6" National Provider Identifier is unknown then

1. **MAY** contain zero or one [0..1] **@nullFlavor="UNK"** Unknown (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:1098-32883).
2. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.4.6"** National Provider Identifier (CONF:1098-32884).
3. **SHOULD** contain zero or one [0..1] **@extension** (CONF:1098-32885).

Only if this assignedAuthor is an assignedPerson should the assignedAuthor contain a code.

- iii. This assignedAuthor **SHOULD** contain zero or one [0..1] **code** (CONF:1098-16787).
  1. The code, if present, **SHALL** contain exactly one [1..1] **@code**, which **SHOULD** be selected from ValueSet **Healthcare Provider Taxonomy (HIPAA)** urn:oid:2.16.840.1.114222.4.11.1066 **DYNAMIC** (CONF:1098-16788).
- iv. This assignedAuthor **SHALL** contain at least one [1..\*] **US Realm Address (AD.US.FIELDDED)** (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1098-5452).
- v. This assignedAuthor **SHALL** contain at least one [1..\*] **telecom** (CONF:1098-5428).
  1. Such telecoms **SHOULD** contain zero or one [0..1] **@use**, which **SHALL** be selected from ValueSet **Telecom Use (US Realm Header)** urn:oid:2.16.840.1.113883.11.20.9.20 **DYNAMIC** (CONF:1098-7995).
- vi. This assignedAuthor **SHOULD** contain zero or one [0..1] **assignedPerson** (CONF:1098-5430).
  1. The assignedPerson, if present, **SHALL** contain at least one [1..\*] **US Realm Person Name (PN.US.FIELDDED)** (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1098-16789).
- vii. This assignedAuthor **SHOULD** contain zero or one [0..1] **assignedAuthoringDevice** (CONF:1098-16783).
  1. The assignedAuthoringDevice, if present, **SHALL** contain exactly one [1..1] **manufacturerModelName** (CONF:1098-16784).

2. The assignedAuthoringDevice, if present, **SHALL** contain exactly one [1..1] **softwareName** (CONF:1098-16785).
- viii. There **SHALL** be exactly one assignedAuthor/assignedPerson or exactly one assignedAuthor/assignedAuthoringDevice (CONF:1098-16790).

**Figure 3: author Example**

```

<author>
  <time value="201209151030-0800" />
  <assignedAuthor>
    <id extension="5555555555" root="2.16.840.1.113883.4.6" />
    <code code="163W00000X" displayName="Registered nurse"
codeSystem="2.16.840.1.113883.5.53" codeSystemName="Health Care Provider Taxonomy" />
    <addr>
      <streetAddressLine>1004 Healthcare Drive </streetAddressLine>
      <city>Portland</city>
      <state>OR</state>
      <postalCode>99123</postalCode>
      <country>US</country>
    </addr>
    <telecom use="WP" value="tel:+1(555)555-1004" />
    <assignedPerson>
      <name>
        <given>Patricia</given>
        <given qualifier="CL">Patty</given>
        <family>Primary</family>
        <suffix qualifier="AC">M.D.</suffix>
      </name>
    </assignedPerson>
  </assignedAuthor>
</author>

```

#### 1.1.1.4 dataEnterer

The dataEnterer element represents the person who transferred the content, written or dictated, into the clinical document. To clarify, an author provides the content found within the header or body of a document, subject to their own interpretation; a dataEnterer adds an author's information to the electronic system.

14. **MAY** contain zero or one [0..1] **dataEnterer** (CONF:1098-5441).
- a. The dataEnterer, if present, **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:1098-5442).
    - i. This assignedEntity **SHALL** contain at least one [1..\*] **id** (CONF:1098-5443).
      1. Such ids **SHOULD** contain zero or one [0..1] **@root="2.16.840.1.113883.4.6" National Provider Identifier** (CONF:1098-16821).
    - ii. This assignedEntity **MAY** contain zero or one [0..1] **code**, which **SHOULD** be selected from ValueSet [Healthcare Provider Taxonomy \(HIPAA\)](#) urn:oid:2.16.840.1.114222.4.11.1066 **DYNAMIC** (CONF:1098-32173).

- iii. This assignedEntity **SHALL** contain at least one [1..\*] US Realm Address (AD.US.FIELDDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1098-5460).
- iv. This assignedEntity **SHALL** contain at least one [1..\*] **telecom** (CONF:1098-5466).
  - 1. Such telecoms **SHOULD** contain zero or one [0..1] @use, which **SHALL** be selected from ValueSet Telecom Use (US Realm Header) urn:oid:2.16.840.1.113883.11.20.9.20 **DYNAMIC** (CONF:1098-7996).
- v. This assignedEntity **SHALL** contain exactly one [1..1] **assignedPerson** (CONF:1098-5469).
  - 1. This assignedPerson **SHALL** contain at least one [1..\*] US Realm Person Name (PN.US.FIELDDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1098-5470).

**Figure 4: dateEnterer Example**

```

<dataEnterer>
  <assignedEntity>
    <id extension="333777777" root="2.16.840.1.113883.4.6" />
    <addr>
      <streetAddressLine>1007 Healthcare Drive</streetAddressLine>
      <city>Portland</city>
      <state>OR</state>
      <postalCode>99123</postalCode>
      <country>US</country>
    </addr>
    <telecom use="WP" value="tel:+1(555)555-1050" />
    <assignedPerson>
      <name>
        <given>Ellen</given>
        <family>Enter</family>
      </name>
    </assignedPerson>
  </assignedEntity>
</dataEnterer>

```

#### 1.1.1.5 informant

The informant element describes an information source for any content within the clinical document. This informant is constrained for use when the source of information is an assigned health care provider for the patient.

- 15. **MAY** contain zero or more [0..\*] **informant** (CONF:1098-8001) such that it
  - a. **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:1098-8002).
    - i. This assignedEntity **SHALL** contain at least one [1..\*] **id** (CONF:1098-9945).
      - 1. If assignedEntity/id is a provider then this id, **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:1098-9946).



- ii. This assignedEntity **MAY** contain zero or one [0..1] **code**, which **SHOULD** be selected from ValueSet Healthcare Provider Taxonomy (HIPAA) urn:oid:2.16.840.1.114222.4.11.1066 **DYNAMIC** (CONF:1098-32174).
- iii. This assignedEntity **SHALL** contain at least one [1..\*] US Realm Address (AD.US.FIELDDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1098-8220).
- iv. This assignedEntity **SHALL** contain exactly one [1..1] **assignedPerson** (CONF:1098-8221).
  - 1. This assignedPerson **SHALL** contain at least one [1..\*] US Realm Person Name (PN.US.FIELDDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1098-8222).

**Figure 5: Assigned Health Care Provider informant Example**

```

<informant>
  <assignedEntity>
    <id extension="8888888888" root="1.1.1.1.1.1.1.3" />
    <addr>
      <streetAddressLine>1007 Healthcare Drive</streetAddressLine>
      <city>Portland</city>
      <state>OR</state>
      <postalCode>99123</postalCode>
      <country>US</country>
    </addr>
    <telecom use="WP" value="tel:+1(555)555-1003" />
    <assignedPerson>
      <name>
        <given>Harold</given>
        <family>Hippocrates</family>
        <suffix qualifier="AC">M.D.</suffix>
      </name>
    </assignedPerson>
    <representedOrganization>
      <name>The DoctorsApart Physician Group</name>
    </representedOrganization>
  </assignedEntity>
</informant>

```

#### 1.1.1.6 informant

The informant element describes an information source (who is not a provider) for any content within the clinical document. This informant would be used when the source of information has a personal relationship with the patient or is the patient.

- 16. **MAY** contain zero or more [0..\*] **informant** (CONF:1098-31355) such that it
  - a. **SHALL** contain exactly one [1..1] **relatedEntity** (CONF:1098-31356).

**Figure 6: Personal Relation informant Example**

```

<informant>
  <relatedEntity classCode="PRS">
    <!-- classCode "PRS" represents a person with personal relationship with the patient -->
    <code code="SPS" displayName="SPOUSE" codeSystem="2.16.840.1.113883.1.11.19563"
codeSystemName="Personal Relationship Role Type Value Set" />
    <relatedPerson>
      <name>
        <given>Boris</given>
        <given qualifier="CL">Bo</given>
        <family>Betterhalf</family>
      </name>
    </relatedPerson>
  </relatedEntity>
</informant>

```

### 1.1.1.7 custodian

The custodian element represents the organization that is in charge of maintaining and is entrusted with the care of the document.

There is only one custodian per CDA document. Allowing that a CDA document may not represent the original form of the authenticated document, the custodian represents the steward of the original source document. The custodian may be the document originator, a health information exchange, or other responsible party.

17. **SHALL** contain exactly one [1..1] **custodian** (CONF:1098-5519).

- a. This custodian **SHALL** contain exactly one [1..1] **assignedCustodian** (CONF:1098-5520).
  - i. This assignedCustodian **SHALL** contain exactly one [1..1] **representedCustodianOrganization** (CONF:1098-5521).
    1. This representedCustodianOrganization **SHALL** contain at least one [1..\*] **id** (CONF:1098-5522).
      - a. Such ids **SHOULD** contain zero or one [0..1] **@root="2.16.840.1.113883.4.6" National Provider Identifier** (CONF:1098-16822).
    2. This representedCustodianOrganization **SHALL** contain exactly one [1..1] **name** (CONF:1098-5524).
    3. This representedCustodianOrganization **SHALL** contain exactly one [1..1] **telecom** (CONF:1098-5525).
      - a. This telecom **SHOULD** contain zero or one [0..1] **@use**, which **SHALL** be selected from ValueSet [Telecom Use \(US Realm Header\)](#) urn:oid:2.16.840.1.113883.11.20.9.20 **DYNAMIC** (CONF:1098-7998).
    4. This representedCustodianOrganization **SHALL** contain exactly one [1..1] **US Realm Address (AD.US.FIELDDED)** (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1098-5559).

**Figure 7: custodian Example**

```

<custodian>
  <assignedCustodian>
    <representedCustodianOrganization>
      <id extension="321CX" root="1.1.1.1.1.1.1.1.3" />
      <name>Good Health HIE</name>
      <telecom use="WP" value="tel:+1(555)555-1009" />
      <addr use="WP">
        <streetAddressLine>1009 Healthcare Drive </streetAddressLine>
        <city>Portland</city>
        <state>OR</state>
        <postalCode>99123</postalCode>
        <country>US</country>
      </addr>
    </representedCustodianOrganization>
  </assignedCustodian>
</custodian>

```

### 1.1.1.8 informationRecipient

The informationRecipient element records the intended recipient of the information at the time the document was created. In cases where the intended recipient of the document is the patient's health chart, set the receivedOrganization to the scoping organization for that chart.

18. **MAY** contain zero or more [0..\*] **informationRecipient** (CONF:1098-5565).
  - a. The informationRecipient, if present, **SHALL** contain exactly one [1..1] **intendedRecipient** (CONF:1098-5566).
    - i. This intendedRecipient **MAY** contain zero or more [0..\*] **id** (CONF:1098-32399).
    - ii. This intendedRecipient **MAY** contain zero or one [0..1] **informationRecipient** (CONF:1098-5567).
      1. The informationRecipient, if present, **SHALL** contain at least one [1..\*] **US Realm Person Name (PN.US.FIELDDED)** (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1098-5568).
    - iii. This intendedRecipient **MAY** contain zero or one [0..1] **receivedOrganization** (CONF:1098-5577).
      1. The receivedOrganization, if present, **SHALL** contain exactly one [1..1] **name** (CONF:1098-5578).

**Figure 8: informationRecipient Example**

```

<informationRecipient>
  <intendedRecipient>
    <informationRecipient>
      <name>
        <given>Sara</given>
        <family>Specialize</family>
        <suffix qualifier="AC">M.D.</suffix>
      </name>
    </informationRecipient>
  <receivedOrganization>
    <name>The DoctorsApart Physician Group</name>
  </receivedOrganization>
</intendedRecipient>
</informationRecipient>

```

### 1.1.1.9 legalAuthenticator

The legalAuthenticator identifies the single person legally responsible for the document and must be present if the document has been legally authenticated. A clinical document that does not contain this element has not been legally authenticated.

The act of legal authentication requires a certain privilege be granted to the legal authenticator depending upon local policy. Based on local practice, clinical documents may be released before legal authentication.

All clinical documents have the potential for legal authentication, given the appropriate credentials.

Local policies MAY choose to delegate the function of legal authentication to a device or system that generates the clinical document. In these cases, the legal authenticator is a person accepting responsibility for the document, not the generating device or system.

Note that the legal authenticator, if present, must be a person.

19. **SHOULD** contain zero or one [0..1] **legalAuthenticator** (CONF:1098-5579).

- a. The legalAuthenticator, if present, **SHALL** contain exactly one [1..1] **US Realm Date and Time (DTM.US.FIELDDED)** (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.4) (CONF:1098-5580).
- b. The legalAuthenticator, if present, **SHALL** contain exactly one [1..1] **signatureCode** (CONF:1098-5583).
  - i. This signatureCode **SHALL** contain exactly one [1..1] **@code="S"** (CodeSystem: Participationsignature urn:oid:2.16.840.1.113883.5.89 **STATIC**) (CONF:1098-5584).

### 1.1.1.10 sdtc:signatureText

The sdtc:signatureText extension provides a location in CDA for a textual or multimedia depiction of the signature by which the participant endorses and accepts responsibility for his or her participation in the Act as specified in the Participation.typeCode. Details of what goes in the field are described in the HL7 CDA Digital Signature Standard balloted in Fall of 2013.

- c. The legalAuthenticator, if present, **MAY** contain zero or one [0..1] **sdtc:signatureText** (CONF:1098-30810).

Note: The signature can be represented either inline or by reference according to the ED data type. Typical cases for CDA are:

- 1) Electronic signature: this attribute can represent virtually any electronic signature scheme.
- 2) Digital signature: this attribute can represent digital signatures by reference to a signature data block that is constructed in accordance to a digital signature standard, such as XML-DSIG, PKCS#7, PGP, etc.

**Figure 9: Digital signature Example**

```
<sdtc:signatureText mediaType="text/xml"
representation="B64">omSJUEdmde9j44zmMir6edjzMMIjdMDSsWdIJdksIJR3373jeu83
6edjzMMIjdMDSsWdIJdksIJR3373jeu83MNYD83jmMdomSJUEdmde9j44zmMir
... MNYD83jmMdomSJUEdmde9j44zmMir6edjzMMIjdMDSsWdIJdksIJR3373jeu83
4zmMir6edjzMMIjdMDSsWdIJdksIJR3373jeu83==</sdtc:signatureText>
```

- d. The legalAuthenticator, if present, **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:1098-5585).
- i. This assignedEntity **SHALL** contain at least one [1..\*] **id** (CONF:1098-5586).
    1. Such ids **MAY** contain zero or one [0..1] **@root**="2.16.840.1.113883.4.6" National Provider Identifier (CONF:1098-16823).
  - ii. This assignedEntity **MAY** contain zero or one [0..1] **code**, which **SHOULD** be selected from ValueSet [Healthcare Provider Taxonomy \(HIPAA\)](#) urn:oid:2.16.840.1.114222.4.11.1066 **DYNAMIC** (CONF:1098-17000).
  - iii. This assignedEntity **SHALL** contain at least one [1..\*] [US Realm Address \(AD.US.FIELDDED\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1098-5589).
  - iv. This assignedEntity **SHALL** contain at least one [1..\*] **telecom** (CONF:1098-5595).
    1. Such telecoms **SHOULD** contain zero or one [0..1] **@use**, which **SHALL** be selected from ValueSet [Telecom Use \(US Realm Header\)](#) urn:oid:2.16.840.1.113883.11.20.9.20 **DYNAMIC** (CONF:1098-7999).
  - v. This assignedEntity **SHALL** contain exactly one [1..1] **assignedPerson** (CONF:1098-5597).
    1. This assignedPerson **SHALL** contain at least one [1..\*] [US Realm Person Name \(PN.US.FIELDDED\)](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1098-5598).

**Figure 10: legalAuthenticator Example**

```

<legalAuthenticator>
  <time value="20120915223615-0800" />
  <signatureCode code="S" />
  <assignedEntity>
    <id extension="5555555555" root="2.16.840.1.113883.4.6" />
    <code code="207QA0505X" displayName="Adult Medicine"
codeSystem="2.16.840.1.113883.5.53" codeSystemName="Health Care Provider Taxonomy" />
    <addr>
      <streetAddressLine>1004 Healthcare Drive </streetAddressLine>
      <city>Portland</city>
      <state>OR</state>
      <postalCode>99123</postalCode>
      <country>US</country>
    </addr>
    <telecom use="WP" value="tel:+1(555)555-1004" />
    <assignedPerson>
      <name>
        <given>Patricia</given>
        <given qualifier="CL">Patty</given>
        <family>Primary</family>
        <suffix qualifier="AC">M.D.</suffix>
      </name>
    </assignedPerson>
  </assignedEntity>
</legalAuthenticator>

```

#### 1.1.1.11 authenticator

The authenticator identifies a participant or participants who attest to the accuracy of the information in the document.

20. **MAY** contain zero or more [0..\*] **authenticator** (CONF:1098-5607) such that it
- SHALL** contain exactly one [1..1] **US Realm Date and Time (DTM.US.FIELDDED)** (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.4) (CONF:1098-5608).
  - SHALL** contain exactly one [1..1] **signatureCode** (CONF:1098-5610).
    - This signatureCode **SHALL** contain exactly one [1..1] **@code="S"** (CodeSystem: Participationsignature urn:oid:2.16.840.1.113883.5.89 **STATIC**) (CONF:1098-5611).

The sdtc:signatureText extension provides a location in CDA for a textual or multimedia depiction of the signature by which the participant endorses and accepts responsibility for his or her participation in the Act as specified in the Participation.typeCode. Details of what goes in the field are described in the HL7 CDA Digital Signature Standard balloted in Fall of 2013.

- MAY** contain zero or one [0..1] **sdtc:signatureText** (CONF:1098-30811).

Note: The signature can be represented either inline or by reference according to the ED data type. Typical cases for CDA are:

  - Electronic signature: this attribute can represent virtually any electronic signature scheme.
  - Digital signature: this attribute can represent digital signatures by reference to a

signature data block that is constructed in accordance to a digital signature standard, such as XML-DSIG, PKCS#7, PGP, etc.

- d. **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:1098-5612).
  - i. This **assignedEntity** **SHALL** contain at least one [1..\*] **id** (CONF:1098-5613).
    - 1. Such **ids** **SHOULD** contain zero or one [0..1] **@root="2.16.840.1.113883.4.6"** National Provider Identifier (CONF:1098-16824).
  - ii. This **assignedEntity** **MAY** contain zero or one [0..1] **code** (CONF:1098-16825).
    - 1. The code, if present, **MAY** contain zero or one [0..1] **@code**, which **SHOULD** be selected from ValueSet Healthcare Provider Taxonomy (HIPAA) urn:oid:2.16.840.1.114222.4.11.1066 **STATIC** (CONF:1098-16826).
  - iii. This **assignedEntity** **SHALL** contain at least one [1..\*] US Realm Address (AD.US.FIELDDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1098-5616).
  - iv. This **assignedEntity** **SHALL** contain at least one [1..\*] **telecom** (CONF:1098-5622).
    - 1. Such **telecoms** **SHOULD** contain zero or one [0..1] **@use**, which **SHALL** be selected from ValueSet Telecom Use (US Realm Header) urn:oid:2.16.840.1.113883.11.20.9.20 **DYNAMIC** (CONF:1098-8000).
  - v. This **assignedEntity** **SHALL** contain exactly one [1..1] **assignedPerson** (CONF:1098-5624).
    - 1. This **assignedPerson** **SHALL** contain at least one [1..\*] US Realm Person Name (PN.US.FIELDDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1098-5625).

**Figure 11: authenticator Example**

```

<authenticator>
  <time value="201209151030-0800" />
  <signatureCode code="S" />
  <assignedEntity>
    <id extension="5555555555" root="2.16.840.1.113883.4.6" />
    <code code="207QA0505X" displayName="Adult Medicine"
codeSystem="2.16.840.1.113883.5.53" codeSystemName="Health Care Provider Taxonomy" />
    <addr>
      <streetAddressLine>1004 Healthcare Drive</streetAddressLine>
      <city>Portland</city>
      <state>OR</state>
      <postalCode>99123</postalCode>
      <country>US</country>
    </addr>
    <telecom use="WP" value="tel:+1(555)555-1004" />
    <assignedPerson>
      <name>
        <given>Patricia</given>
        <given qualifier="CL">Patty</given>
        <family>Primary</family>
        <suffix qualifier="AC">M.D.</suffix>
      </name>
    </assignedPerson>
  </assignedEntity>
</authenticator>

```

### 1.1.1.12 participant

The participant element identifies supporting entities, including parents, relatives, caregivers, insurance policyholders, guarantors, and others related in some way to the patient.

A supporting person or organization is an individual or an organization with a relationship to the patient. A supporting person who is playing multiple roles would be recorded in multiple participants (e.g., emergency contact and next-of-kin).

21. **MAY** contain zero or more [0..\*] **participant** (CONF:1098-10003) such that it
  - a. **MAY** contain zero or one [0..1] **time** (CONF:1098-10004).
  - b. **SHALL** contain associatedEntity/associatedPerson **AND/OR** associatedEntity/scopingOrganization (CONF:1098-10006).
  - c. When participant/@typeCode is **IND**, associatedEntity/@classCode **SHOULD** be selected from ValueSet 2.16.840.1.113883.11.20.9.33 INDRoleclassCodes **STATIC 2011-09-30** (CONF:1098-10007).



**Figure 12: Supporting Person participant Example**

```

<participant typeCode="IND">
  <!-- typeCode "IND" represents an individual -->
  <associatedEntity classCode="NOK">
    <!-- classCode "NOK" represents the patient's next of kin-->
    <addr use="HP">
      <streetAddressLine>2222 Home Street</streetAddressLine>
      <city>Beaverton</city>
      <state>OR</state>
      <postalCode>97867</postalCode>
      <country>US</country>
    </addr>
    <telecom value="tel:+1(555)555-2008" use="MC" />
    <associatedPerson>
      <name>
        <given>Boris</given>
        <given qualifier="CL">Bo</given>
        <family>Betterhalf</family>
      </name>
    </associatedPerson>
  </associatedEntity>
</participant>
<!-- Entities playing multiple roles are recorded in multiple participants -->
<participant typeCode="IND">
  <associatedEntity classCode="ECON">
    <!-- classCode "ECON" represents an emergency contact -->
    <addr use="HP">
      <streetAddressLine>2222 Home Street</streetAddressLine>
      <city>Beaverton</city>
      <state>OR</state>
      <postalCode>97867</postalCode>
      <country>US</country>
    </addr>
    <telecom value="tel:+1(555)555-2008" use="MC" />
    <associatedPerson>
      <name>
        <given>Boris</given>
        <given qualifier="CL">Bo</given>
        <family>Betterhalf</family>
      </name>
    </associatedPerson>
  </associatedEntity>
</participant>

```

#### 1.1.1.13 inFulfillmentOf

The inFulfillmentOf element represents orders that are fulfilled by this document such as a radiologists' report of an x-ray.

22. **MAY** contain zero or more [0..\*] inFulfillmentOf (CONF:1098-9952).

- a. The inFulfillmentOf, if present, **SHALL** contain exactly one [1..1] **order** (CONF:1098-9953).
  - i. This order **SHALL** contain at least one [1..\*] **id** (CONF:1098-9954).

**Figure 13: inFulfillmentOf Example**

```

<inFulfillmentOf typeCode="FLFS">
  <order classCode="ACT" moodCode="RQO">
    <id root="2.16.840.1.113883.6.96" extension="1298989898" />
    <code code="388975008" displayName="Weight Reduction Consultation"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="CPT4" />
  </order>
</inFulfillmentOf>

```

#### 1.1.1.14 documentationOf

23. **MAY** contain zero or more [0..\*] **documentationOf** (CONF:1098-14835).

A serviceEvent represents the main act being documented, such as a colonoscopy or a cardiac stress study. In a provision of healthcare serviceEvent, the care providers, PCP, or other longitudinal providers, are recorded within the serviceEvent. If the document is about a single encounter, the providers associated can be recorded in the componentOf/encompassingEncounter template.

- a. The documentationOf, if present, **SHALL** contain exactly one [1..1] **serviceEvent** (CONF:1098-14836).
  - i. This serviceEvent **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1098-14837).
    1. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:1098-14838).

#### 1.1.1.15 performer

The performer participant represents clinicians who actually and principally carry out the serviceEvent. In a transfer of care this represents the healthcare providers involved in the current or pertinent historical care of the patient. Preferably, the patient's key healthcare care team members would be listed, particularly their primary physician and any active consulting physicians, therapists, and counselors.

- ii. This serviceEvent **SHOULD** contain zero or more [0..\*] **performer** (CONF:1098-14839).
  1. The performer, if present, **SHALL** contain exactly one [1..1] **@typeCode**, which **SHALL** be selected from ValueSet [x ServiceEventPerformer](#) urn:oid:2.16.840.1.113883.1.11.19601 **STATIC** 2014-09-01 (CONF:1098-14840).
  2. The performer, if present, **MAY** contain zero or one [0..1] **functionCode** (CONF:1098-16818).
    - a. The functionCode, if present, **SHOULD** contain zero or one [0..1] **@code**, which **SHOULD** be selected from ValueSet [ParticipationFunction](#) urn:oid:2.16.840.1.113883.1.11.10267 **STATIC** 2014-09-01 (CONF:1098-32889).

3. The performer, if present, **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:1098-14841).
  - a. This assignedEntity **SHALL** contain at least one [1..\*] **id** (CONF:1098-14846).
    - i. Such ids **SHOULD** contain zero or one [0..1] **@root="2.16.840.1.113883.4.6"** National Provider Identifier (CONF:1098-14847).
  - b. This assignedEntity **SHOULD** contain zero or one [0..1] **code**, which **SHOULD** be selected from ValueSet [Healthcare Provider Taxonomy \(HIPAA\)](#) **urn:oid:2.16.840.1.114222.4.11.1066 DYNAMIC** (CONF:1098-14842).

**Figure 14: performer Example**

```

<performer typeCode="PRF">
  <functionCode code="PCP"
    displayName="Primary Care Provider"
    codeSystem="2.16.840.1.113883.5.88"
    codeSystemName="ParticipationFunction">
    <originalText>Primary Care Provider</originalText>
  </functionCode>
  <assignedEntity>
    <id extension="5555555555" root="2.16.840.1.113883.4.6" />
    <code code="207QA0505X" displayName="Adult Medicine"
codeSystem="2.16.840.1.113883.5.53" codeSystemName="Health Care Provider Taxonomy" />
    <addr>
      <streetAddressLine>1004 Healthcare Drive </streetAddressLine>
      <city>Portland</city>
      <state>OR</state>
      <postalCode>99123</postalCode>
      <country>US</country>
    </addr>
    <telecom use="WP" value="tel:+1(555)555-1004" />
    <assignedPerson>
      <name>
        <given>Patricia</given>
        <given qualifier="CL">Patty</given>
        <family>Primary</family>
        <suffix qualifier="AC">M.D.</suffix>
      </name>
    </assignedPerson>
    <representedOrganization>
      <id extension="219BX" root="1.1.1.1.1.1.1.2" />
      <name>The DoctorsTogether Physician Group</name>
      <telecom use="WP" value="tel: +(555)-555-5000" />
      <addr>
        <streetAddressLine>1004 Health Drive</streetAddressLine>
        <city>Portland</city>
        <state>OR</state>
        <postalCode>99123</postalCode>
        <country>US</country>
      </addr>
    </representedOrganization>
  </assignedEntity>
</performer>

```

**Figure 15: documentationOf Example**

```

<documentationOf>
  <serviceEvent classCode="PCPR">
    <!-- The effectiveTime reflects the provision of care summarized in the document.
    In this scenario, the provision of care summarized is the lifetime for the patient -->
    <effectiveTime>
      <low value="19750501" />
      <!-- The low value represents when the summarized provision of care began.
      In this scenario, the patient's date of birth -->
      <high value="20120915" />
      <!-- The high value represents when the summarized provision of care being ended.
      In this scenario, when chart summary was created -->
    </effectiveTime>
    <performer typeCode="PRF">
      <functionCode code="PCP"
                    displayName="Primary Care Provider"
                    codeSystem="2.16.840.1.113883.5.88"
                    codeSystemName="ParticipationFunction">
        <originalText>Primary Care Provider</originalText>
      </functionCode>
      <assignedEntity>
        <id extension="5555555555" root="2.16.840.1.113883.4.6" />
        <code code="207QA0505X" displayName="Adult Medicine"
              codeSystem="2.16.840.1.113883.5.53" codeSystemName="Health Care Provider Taxonomy" />
        <addr>
          <streetAddressLine>1004 Healthcare Drive </streetAddressLine>
          <city>Portland</city>
          <state>OR</state>
          <postalCode>99123</postalCode>
          <country>US</country>
        </addr>
        <telecom use="WP" value="tel:+1(555)555-1004" />
        <assignedPerson>
          <name>
            <given>Patricia</given>
            <given qualifier="CL">Patty</given>
            <family>Primary</family>
            <suffix qualifier="AC">M.D.</suffix>
          </name>
        </assignedPerson>
        <representedOrganization>
          <id extension="219BX" root="1.1.1.1.1.1.1.1.2" />
          <name>The DoctorsTogether Physician Group</name>
          <telecom use="WP" value="tel: +(555)-555-5000" />
          <addr>
            <streetAddressLine>1004 Health Drive</streetAddressLine>
            <city>Portland</city>
            <state>OR</state>
            <postalCode>99123</postalCode>
            <country>US</country>
          </addr>
        </representedOrganization>
      </assignedEntity>
    </performer>
  </serviceEvent>
</documentationOf>

```

### 1.1.1.16 authorization

The authorization element represents information about the patient's consent.

The type of consent is conveyed in consent/code. Consents in the header have been finalized (consent/statusCode must equal Completed) and should be on file. This specification does not address how 'Privacy Consent' is represented, but does not preclude the inclusion of 'Privacy Consent'.

The authorization consent is used for referring to consents that are documented elsewhere in the EHR or medical record for a health condition and/or treatment that is described in the CDA document.

24. **MAY** contain zero or more [0..\*] **authorization** (CONF:1098-16792) such that it
- a. **SHALL** contain exactly one [1..1] **consent** (CONF:1098-16793).
    - i. This consent **MAY** contain zero or more [0..\*] **id** (CONF:1098-16794).
    - ii. This consent **MAY** contain zero or one [0..1] **code** (CONF:1098-16795).  
Note: The type of consent (e.g., a consent to perform the related serviceEvent) is conveyed in consent/code.
    - iii. This consent **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-16797).
      1. This statusCode **SHALL** contain exactly one [1..1] **@code="completed" Completed (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6)** (CONF:1098-16798).

**Figure 16: authorization Example**

```
<authorization typeCode="AUTH">
  <consent classCode="CONS" moodCode="EVN">
    <id root="629deb70-5306-11df-9879-0800200c9a66" />
    <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" code="64293-4"
displayName="Procedure consent" />
    <statusCode code="completed" />
  </consent>
</authorization>
```

### 1.1.1.17 componentOf

The encompassing encounter represents the setting of the clinical encounter during which the document act(s) or ServiceEvent(s) occurred.

In order to represent providers associated with a specific encounter, they are recorded within the encompassingEncounter as participants.

In a CCD, the encompassingEncounter may be used when documenting a specific encounter and its participants. All relevant encounters in a CCD may be listed in the encounters section.

25. **MAY** contain zero or one [0..1] **componentOf** (CONF:1098-9955).

- a. The componentOf, if present, **SHALL** contain exactly one [1..1] **encompassingEncounter** (CONF:1098-9956).
- i. This encompassingEncounter **SHALL** contain at least one [1..\*] **id** (CONF:1098-9959).
  - ii. This encompassingEncounter **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1098-9958).

**Table 3: HL7 BasicConfidentialityKind**

Value Set: HL7 BasicConfidentialityKind urn:oid:2.16.840.1.113883.1.11.16926			
A value set of HL7 Code indication the level of confidentiality an act.			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
N	ConfidentialityCode	urn:oid:2.16.840.1.113883.5.25	normal
R	ConfidentialityCode	urn:oid:2.16.840.1.113883.5.25	restricted
V	ConfidentialityCode	urn:oid:2.16.840.1.113883.5.25	very restricted

**Table 4: Language**

Value Set: Language urn:oid:2.16.840.1.113883.1.11.11526			
A value set of codes defined by Internet RFC 4646 (replacing RFC 3066). Please see ISO 639 language code set maintained by Library of Congress for enumeration of language codes.			
Value Set Source: <a href="http://www.loc.gov/standards/iso639-2/php/code_list.php">http://www.loc.gov/standards/iso639-2/php/code_list.php</a>			
Code	Code System	Code System OID	Print Name
aa	Language	urn:oid:2.16.840.1.113883.6.121	Afar
ab	Language	urn:oid:2.16.840.1.113883.6.121	Abkhazian
ace	Language	urn:oid:2.16.840.1.113883.6.121	Achinese
ach	Language	urn:oid:2.16.840.1.113883.6.121	Acoli
ada	Language	urn:oid:2.16.840.1.113883.6.121	Adangme
ady	Language	urn:oid:2.16.840.1.113883.6.121	Adyghe; Adygei
ae	Language	urn:oid:2.16.840.1.113883.6.121	Avestan
af	Language	urn:oid:2.16.840.1.113883.6.121	Afrikaans
afa	Language	urn:oid:2.16.840.1.113883.6.121	Afro-Asiatic (Other)
afh	Language	urn:oid:2.16.840.1.113883.6.121	Afrihili
...			

**Table 5: Telecom Use (US Realm Header)**

Value Set: Telecom Use (US Realm Header) urn:oid:2.16.840.1.113883.11.20.9.20			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
HP	AddressUse	urn:oid:2.16.840.1.113883.5.1119	Primary home
HV	AddressUse	urn:oid:2.16.840.1.113883.5.1119	Vacation home
WP	AddressUse	urn:oid:2.16.840.1.113883.5.1119	Work place
MC	AddressUse	urn:oid:2.16.840.1.113883.5.1119	Mobile contact



**Table 6: Administrative Gender (HL7 V3)**

Value Set: Administrative Gender (HL7 V3) urn:oid:2.16.840.1.113883.1.11.1			
Administrative Gender based upon HL7 V3 vocabulary. This value set contains only male, female and undifferentiated concepts.			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
F	AdministrativeGender	urn:oid:2.16.840.1.113883.5.1	Female
M	AdministrativeGender	urn:oid:2.16.840.1.113883.5.1	Male
UN	AdministrativeGender	urn:oid:2.16.840.1.113883.5.1	Undifferentiated

**Table 7: Marital Status**

Value Set: Marital Status urn:oid:2.16.840.1.113883.1.11.12212			
Marital Status is the domestic partnership status of a person.			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
A	MaritalStatus	urn:oid:2.16.840.1.113883.5.2	Annulled
D	MaritalStatus	urn:oid:2.16.840.1.113883.5.2	Divorced
T	MaritalStatus	urn:oid:2.16.840.1.113883.5.2	Domestic partner
I	MaritalStatus	urn:oid:2.16.840.1.113883.5.2	Interlocutory
L	MaritalStatus	urn:oid:2.16.840.1.113883.5.2	Legally Separated
M	MaritalStatus	urn:oid:2.16.840.1.113883.5.2	Married
S	MaritalStatus	urn:oid:2.16.840.1.113883.5.2	Never Married
P	MaritalStatus	urn:oid:2.16.840.1.113883.5.2	Polygamous
W	MaritalStatus	urn:oid:2.16.840.1.113883.5.2	Widowed

**Table 8: Religious Affiliation**

Value Set: Religious Affiliation urn:oid:2.16.840.1.113883.1.11.19185 A value set of codes that reflect spiritual faith affiliation. Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
1001	ReligiousAffiliation	urn:oid:2.16.840.1.113883.5.1076	Adventist
1002	ReligiousAffiliation	urn:oid:2.16.840.1.113883.5.1076	African Religions
1003	ReligiousAffiliation	urn:oid:2.16.840.1.113883.5.1076	Afro-Caribbean Religions
1004	ReligiousAffiliation	urn:oid:2.16.840.1.113883.5.1076	Agnosticism
1005	ReligiousAffiliation	urn:oid:2.16.840.1.113883.5.1076	Anglican
1006	ReligiousAffiliation	urn:oid:2.16.840.1.113883.5.1076	Animism
1007	ReligiousAffiliation	urn:oid:2.16.840.1.113883.5.1076	Atheism
1008	ReligiousAffiliation	urn:oid:2.16.840.1.113883.5.1076	Babi & Baha'I faiths
1009	ReligiousAffiliation	urn:oid:2.16.840.1.113883.5.1076	Baptist
1010	ReligiousAffiliation	urn:oid:2.16.840.1.113883.5.1076	Bon
...			

**Table 9: Race Category Excluding Nulls**

Value Set: Race Category Excluding Nulls urn:oid:2.16.840.1.113883.3.2074.1.1.3 Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
1002-5	Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238	American Indian or Alaska Native
2028-9	Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238	Asian
2054-5	Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238	Black or African American
2076-8	Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238	Native Hawaiian or Other Pacific Islander
2106-3	Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238	White

**Table 10: Ethnicity**

Value Set: Ethnicity urn:oid:2.16.840.1.114222.4.11.837			
Code System: Race & Ethnicity - CDC 2.16.840.1.113883.6.238			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
2135-2	Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238	Hispanic or Latino
2186-5	Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238	Not Hispanic or Latino

**Table 11: Personal And Legal Relationship Role Type**

Value Set: Personal And Legal Relationship Role Type urn:oid:2.16.840.1.113883.11.20.12.1			
A personal or legal relationship records the role of a person in relation to another person, or a person to himself or herself. This value set is to be used when recording relationships based on personal or family ties or through legal assignment of responsibility.			
Value Set Source: <a href="https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.11.20.12.1">https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.11.20.12.1</a>			
Code	Code System	Code System OID	Print Name
SELF	RoleCode	urn:oid:2.16.840.1.113883.5.111	self
MTH	RoleCode	urn:oid:2.16.840.1.113883.5.111	mother
FTH	RoleCode	urn:oid:2.16.840.1.113883.5.111	father
DAU	RoleCode	urn:oid:2.16.840.1.113883.5.111	natural daughter
SON	RoleCode	urn:oid:2.16.840.1.113883.5.111	natural son
DAUINLAW	RoleCode	urn:oid:2.16.840.1.113883.5.111	daughter in-law
SONINLAW	RoleCode	urn:oid:2.16.840.1.113883.5.111	son in-law
GUARD	RoleCode	urn:oid:2.16.840.1.113883.5.111	guardian
HPOWATT	RoleCode	urn:oid:2.16.840.1.113883.5.111	healthcare power of attorney
...			

**Table 12: Country**

Value Set: Country urn:oid:2.16.840.1.113883.3.88.12.80.63			
This identifies the codes for the representation of names of countries, territories and areas of geographical interest.			
Value Set Source: <a href="http://www.iso.org/iso/country_codes/iso_3166_code_lists.htm">http://www.iso.org/iso/country_codes/iso_3166_code_lists.htm</a>			
Code	Code System	Code System OID	Print Name
AW	Country	urn:oid:2.16.840.1.113883.3.88.12.80.63	Aruba
IL	Country	urn:oid:2.16.840.1.113883.3.88.12.80.63	Israel
...			

**Table 13: PostalCode**

Value Set: PostalCode urn:oid:2.16.840.1.113883.3.88.12.80.2			
A value set of postal (ZIP) Code of an address in the United States			
Value Set Source: <a href="http://ushik.ahrq.gov/ViewItemDetails?system=mdr&amp;itemKey=86671000">http://ushik.ahrq.gov/ViewItemDetails?system=mdr&amp;itemKey=86671000</a>			
Code	Code System	Code System OID	Print Name
19009	USPostalCodes	urn:oid:2.16.840.1.113883.6.231	Bryn Athyn
92869-1736	USPostalCodes	urn:oid:2.16.840.1.113883.6.231	Orange, CA
32830-8413	USPostalCodes	urn:oid:2.16.840.1.113883.6.231	Lake Buena Vista, FL
...			

**Table 14: PatientLanguage**

Value Set: PatientLanguage urn:oid:2.16.840.1.113883.11.20.9.64			
This value set contains codes for the representation of language names as defined by the Library of Congress, the ISO 639-2 registration authority. This value set contains a subset of the ISO 639-2 alpha-3 code set, limited to those that have a corresponding ISO 639-1 alpha-2 code as required for representing a patient's language under Meaningful Use Stage 2.			
Value Set Source: <a href="http://www.loc.gov/standards/iso639-2/php/code_list.php">http://www.loc.gov/standards/iso639-2/php/code_list.php</a>			
Code	Code System	Code System OID	Print Name
aar	Language	urn:oid:2.16.840.1.113883.6.121	Afar
abk	Language	urn:oid:2.16.840.1.113883.6.121	Abkhazian
afr	Language	urn:oid:2.16.840.1.113883.6.121	Afrikaans
aka	Language	urn:oid:2.16.840.1.113883.6.121	Akan
sqi	Language	urn:oid:2.16.840.1.113883.6.121	Albanian
amh	Language	urn:oid:2.16.840.1.113883.6.121	Amharic
ara	Language	urn:oid:2.16.840.1.113883.6.121	Arabic
arg	Language	urn:oid:2.16.840.1.113883.6.121	Aragonese
hye	Language	urn:oid:2.16.840.1.113883.6.121	Armenian
asm	Language	urn:oid:2.16.840.1.113883.6.121	Assamese
...			

**Table 15: LanguageAbilityMode**

Value Set: LanguageAbilityMode urn:oid:2.16.840.1.113883.1.11.12249			
This identifies the language ability of the individual. A value representing the method of expression of the language.			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
ESGN	LanguageAbilityMode	urn:oid:2.16.840.1.113883.5.60	Expressed signed
ESP	LanguageAbilityMode	urn:oid:2.16.840.1.113883.5.60	Expressed spoken
EWR	LanguageAbilityMode	urn:oid:2.16.840.1.113883.5.60	Expressed written
RSGN	LanguageAbilityMode	urn:oid:2.16.840.1.113883.5.60	Received signed
RSP	LanguageAbilityMode	urn:oid:2.16.840.1.113883.5.60	Received spoken
RWR	LanguageAbilityMode	urn:oid:2.16.840.1.113883.5.60	Received written

**Table 16: LanguageAbilityProficiency**

Value Set: LanguageAbilityProficiency urn:oid:2.16.840.1.113883.1.11.12199			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
E	LanguageAbilityProficiency	urn:oid:2.16.840.1.113883.5.61	Excellent
F	LanguageAbilityProficiency	urn:oid:2.16.840.1.113883.5.61	Fair
G	LanguageAbilityProficiency	urn:oid:2.16.840.1.113883.5.61	Good
P	LanguageAbilityProficiency	urn:oid:2.16.840.1.113883.5.61	Poor

**Table 17: Race**

Value Set: Race urn:oid:2.16.840.1.113883.1.11.14914			
Concepts in the race value set include the 5 minimum categories for race specified by OMB along with a more detailed set of race categories used by the Bureau of Census.			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
1002-5	Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238	American Indian or Alaska Native
2028-9	Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238	Asian
2054-5	Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238	Black or African American
2076-8	Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238	Native Hawaiian or Other Pacific Islander
2106-3	Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238	White
1006-6	Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238	Abenaki
1579-2	Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238	Absentee Shawnee
1490-2	Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238	Acoma
2126-1	Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238	Afghanistani
1740-0	Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238	Ahtna
...			

**Table 18: Healthcare Provider Taxonomy (HIPAA)**

Value Set: Healthcare Provider Taxonomy (HIPAA) urn:oid:2.16.840.1.114222.4.11.1066			
The Health Care Provider Taxonomy value set is a collection of unique alphanumeric codes, ten characters in length. The code set is structured into three distinct Levels including Provider Type, Classification, and Area of Specialization. The Health Care Provider Taxonomy code set allows a single provider (individual, group, or institution) to identify their specialty category. Providers may have one or more than one value associated to them. When determining what value or values to associate with a provider, the user needs to review the requirements of the trading partner with which the value(s) are being used.			
Value Set Source: <a href="https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.1066">https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.1066</a>			
Code	Code System	Code System OID	Print Name
171100000X	Healthcare Provider Taxonomy (HIPAA)	urn:oid:2.16.840.1.11388 3.6.101	Acupuncturist
363LA2100X	Healthcare Provider Taxonomy (HIPAA)	urn:oid:2.16.840.1.11388 3.6.101	Nurse Practitioner - Acute Care
364SA2100X	Healthcare Provider Taxonomy (HIPAA)	urn:oid:2.16.840.1.11388 3.6.101	Clinical Nurse Specialist - Acute Care
101YA0400X	Healthcare Provider Taxonomy (HIPAA)	urn:oid:2.16.840.1.11388 3.6.101	Counselor - Addiction (Substance Use Disorder)
103TA0400X	Healthcare Provider Taxonomy (HIPAA)	urn:oid:2.16.840.1.11388 3.6.101	Psychologist - Addiction (Substance Use Disorder)
163WA0400X	Healthcare Provider Taxonomy (HIPAA)	urn:oid:2.16.840.1.11388 3.6.101	Registered Nurse - Addiction (Substance Use Disorder)
207LA0401X	Healthcare Provider Taxonomy (HIPAA)	urn:oid:2.16.840.1.11388 3.6.101	Anesthesiology - Addiction Medicine
207QA0401X	Healthcare Provider Taxonomy (HIPAA)	urn:oid:2.16.840.1.11388 3.6.101	Family Medicine - Addiction Medicine
207RA0401X	Healthcare Provider Taxonomy (HIPAA)	urn:oid:2.16.840.1.11388 3.6.101	Internal Medicine - Addiction Medicine
2084A0401X	Healthcare Provider Taxonomy (HIPAA)	urn:oid:2.16.840.1.11388 3.6.101	Psychiatry & Neurology - Addiction Medicine
...			



**Table 19: INDRoleclassCodes**

Value Set: INDRoleclassCodes urn:oid:2.16.840.1.113883.11.20.9.33			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
PRS	RoleClass	urn:oid:2.16.840.1.113883.5.110	personal relationship
NOK	RoleClass	urn:oid:2.16.840.1.113883.5.110	next of kin
CAREGIVER	RoleClass	urn:oid:2.16.840.1.113883.5.110	caregiver
AGNT	RoleClass	urn:oid:2.16.840.1.113883.5.110	agent
GUAR	RoleClass	urn:oid:2.16.840.1.113883.5.110	guarantor
ECON	RoleClass	urn:oid:2.16.840.1.113883.5.110	emergency contact

**Table 20: x\_ServiceEventPerformer**

Value Set: x_ServiceEventPerformer urn:oid:2.16.840.1.113883.1.11.19601			
Value Set Source: <a href="http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/in_frastructure/vocabulary/vocabulary.html">http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/in_frastructure/vocabulary/vocabulary.html</a>			
Code	Code System	Code System OID	Print Name
PRF	HL7ParticipationType	urn:oid:2.16.840.1.113883.5.90	performer
SPRF	HL7ParticipationType	urn:oid:2.16.840.1.113883.5.90	secondary performer
PPRF	HL7ParticipationType	urn:oid:2.16.840.1.113883.5.90	primary performer

**Table 21: ParticipationFunction**

Value Set: ParticipationFunction urn:oid:2.16.840.1.113883.1.11.10267			
This HL7-defined value set can be used to specify the exact function an actor had in a service in all necessary detail.			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
SNRS	participationFunction	urn:oid:2.16.840.1.113883.5.88	Scrub nurse
SASST	participationFunction	urn:oid:2.16.840.1.113883.5.88	Second assistant surgeon
...			

**Table 22: Detailed Ethnicity**

Value Set: Detailed Ethnicity urn:oid:2.16.840.1.114222.4.11.877			
List of detailed ethnicity codes reported on a limited basis			
Value Set Source: <a href="http://phinvads.cdc.gov/vads/ViewValueSet.action?id=34D34BBC-617F-DD11-B38D-00188B398520#">http://phinvads.cdc.gov/vads/ViewValueSet.action?id=34D34BBC-617F-DD11-B38D-00188B398520#</a>			
Code	Code System	Code System OID	Print Name
2138-6	Race & Ethnicity - CDC	urn:oid:2.16.840.1.11388 3.6.238	Andalusian
2166-7	Race & Ethnicity - CDC	urn:oid:2.16.840.1.11388 3.6.238	Argentinean
2139-4	Race & Ethnicity - CDC	urn:oid:2.16.840.1.11388 3.6.238	Asturian
2142-8	Race & Ethnicity - CDC	urn:oid:2.16.840.1.11388 3.6.238	Belearic Islander
2167-5	Race & Ethnicity - CDC	urn:oid:2.16.840.1.11388 3.6.238	Bolivian
2163-4	Race & Ethnicity - CDC	urn:oid:2.16.840.1.11388 3.6.238	Canal Zone
2145-1	Race & Ethnicity - CDC	urn:oid:2.16.840.1.11388 3.6.238	Canarian
2140-2	Race & Ethnicity - CDC	urn:oid:2.16.840.1.11388 3.6.238	Castillian
2141-0	Race & Ethnicity - CDC	urn:oid:2.16.840.1.11388 3.6.238	Catalonian
2155-0	Race & Ethnicity - CDC	urn:oid:2.16.840.1.11388 3.6.238	Central American
...			

### 1.1.2 National Health Care Surveys (V2)

[ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.1.1:2015-04-01 (open)]

Published as part of National Health Care Surveys, Release 1, DSTU 1.1 - US Realm

This document-level template describes constraints that apply to three National Health Care Surveys conducted by the Center for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS): the National Ambulatory Medical Care Survey (NAMCS), the National Hospital Ambulatory Medical Care Survey (NHAMCS) and the National Hospital Care Survey (NHCS) These surveys collect data from physicians, ambulatory care centers, and hospitals about visits to inpatient (IP), outpatient (OP), and emergency department (ED) settings. The data collected is analyzed to produce nationally representative statistics to answer key questions about health care utilization, quality, and disparities that are of interest to public health professionals, researchers, and health care policy makers. Data captured include information on patient demographics, symptoms, diagnoses, medications, therapeutic and diagnostic procedures, patient management, and planned future treatments. Given the

similarities of data collected across the surveys, the structured documents specified in this guide are organized by setting of visit rather than by survey. This template is applicable for all three surveys (NAMCS, NHAMCS, and NHCS) and all care settings (ED, IP, and OP).

**Table 23: National Health Care Surveys (V2) Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
ClinicalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.1.1:2015-04-01)					
templateId	1..1	SHALL		<a href="#">1184-1</a>	
@root	1..1	SHALL		<a href="#">1184-2</a>	2.16.840.1.113883.10.20.34.1.1
@extension	1..1	SHALL		<a href="#">1184-877</a>	2015-04-01
code	1..1	SHALL		<a href="#">1184-3</a>	
@code	1..1	SHALL		<a href="#">1184-4</a>	75619-7
@codeSystem	1..1	SHALL		<a href="#">1184-5</a>	2.16.840.1.113883.6.1
recordTarget	1..*	SHALL		<a href="#">1184-6</a>	
patientRole	1..1	SHALL		<a href="#">1184-7</a>	
id	0..1	SHOULD		<a href="#">1184-1164</a>	
id	0..1	SHOULD		<a href="#">1184-1162</a>	
@root	1..1	SHALL		<a href="#">1184-1165</a>	2.16.840.1.113883.4.572
@extension	1..1	SHOULD		<a href="#">1184-1166</a>	
id	0..1	SHOULD		<a href="#">1184-1163</a>	
@root	1..1	SHALL		<a href="#">1184-1167</a>	2.16.840.1.113883.4.1
@extension	1..1	SHOULD		<a href="#">1184-1168</a>	
patient	1..1	SHALL		<a href="#">1184-11</a>	
administrativeGenderCode	1..1	SHALL		<a href="#">1184-12</a>	
@nullFlavor	0..1	MAY		<a href="#">1184-643</a>	OTH
@code	0..1	SHOULD		<a href="#">1184-644</a>	
birthTime	1..1	SHALL		<a href="#">1184-13</a>	
documentationOf	0..*	MAY		<a href="#">1184-20</a>	
serviceEvent	1..1	SHALL		<a href="#">1184-21</a>	
performer	0..*	SHOULD		<a href="#">1184-22</a>	
assignedEntity	1..1	SHALL		<a href="#">1184-53</a>	

code	1..1	SHALL		<a href="#">1184-56</a>	urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy (HIPAA))
componentOf	0..1	MAY		<a href="#">1184-17</a>	
encompassingEncounter	1..1	SHALL		<a href="#">1184-18</a>	
id	0..1	SHOULD		<a href="#">1184-361</a>	
effectiveTime	1..1	SHALL		<a href="#">1184-23</a>	
low	1..1	SHALL		<a href="#">1184-198</a>	
high	1..1	SHALL		<a href="#">1184-1169</a>	
component	1..1	SHALL		<a href="#">1184-24</a>	
structuredBody	1..1	SHALL		<a href="#">1184-25</a>	

### 1.1.3 Properties

1. Conforms to [US Realm Header \(V2\)](#) template (identifier: urn:h17ii:2.16.840.1.113883.10.20.22.1.1:2014-06-09).

#### 1.1.3.1 templateId

2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1184-1) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.1.1" (CONF:1184-2).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2015-04-01" (CONF:1184-877).

**Figure 17: National Health Care Surveys (V2) Example**

```

<ClinicalDocument>
  <realmCode code="US"/>
  <typeId root="2.16.840.1.113883.1.3" extension="POCD_HD000040"/>
  <!-- Conforms to US Realm Header Template -->
  <templateId root="2.16.840.1.113883.10.20.22.1.1" extension="2014-06-09" />
  <!-- Conforms to National Health Care Surveys (V2) Document requirements -->
  <templateId root="2.16.840.1.113883.10.20.34.1.1" extension="2015-04-01" />
  ...
</ClinicalDocument>

```

3. **SHALL** contain exactly one [1..1] **code** (CONF:1184-3).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="75619-7" National healthcare survey panel NAMCS (CONF:1184-4).

- b. This code **SHALL** contain exactly one [1..1]  
@codeSystem="2.16.840.1.113883.6.1" (CONF:1184-5).

### 1.1.3.2 recordTarget

- 4. **SHALL** contain at least one [1..\*] **recordTarget** (CONF:1184-6).
  - a. Such recordTargets **SHALL** contain exactly one [1..1] **patientRole** (CONF:1184-7).
    - i. This patientRole **SHOULD** contain zero or one [0..1] **id** (CONF:1184-1164).  
Note: Patient's Medical Record Number
    - ii. This patientRole **SHOULD** contain zero or one [0..1] **id** (CONF:1184-1162)  
such that it
      - 1. **SHALL** contain exactly one [1..1]  
@root="2.16.840.1.113883.4.572" Medicare HIC number  
(CONF:1184-1165).
      - 2. **SHOULD** contain exactly one [1..1] @extension (CONF:1184-1166).  
Note: Patient's Medicare Number
    - iii. This patientRole **SHOULD** contain zero or one [0..1] **id** (CONF:1184-1163)  
such that it
      - 1. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.4.1"  
SSN (CONF:1184-1167).
      - 2. **SHOULD** contain exactly one [1..1] @extension (CONF:1184-1168).  
Note: Patient's SSN
    - iv. This patientRole **SHALL** contain exactly one [1..1] **patient** (CONF:1184-11).

Use only M (male) or F (female) for administrativeGenderCode. UN (Undifferentiated) is not allowed, in this case use @nullFlavor="OTH".

- 1. This patient **SHALL** contain exactly one [1..1]  
**administrativeGenderCode** (CONF:1184-12).  
Note: Form Element: Sex
  - a. This administrativeGenderCode **MAY** contain zero or one [0..1]  
@nullFlavor="OTH" (CONF:1184-643).
  - b. This administrativeGenderCode **SHOULD** contain zero or one  
[0..1] @code (CONF:1184-644).
    - i. Where code is used it **SHALL** be either M (male) or F  
(female) (CONF:1184-645).

See US Realm Header recordTarget/patientRole/patient/birthTime for further birthTime constraints

- 2. This patient **SHALL** contain exactly one [1..1] **birthTime**  
(CONF:1184-13).  
Note: Form Element: Date of Birth
  - a. **SHOULD** be precise to month if day is not available  
(CONF:1184-773).

**Figure 18: recordTarget Example**

```

<recordTarget>
  <patientRole>
    <!-- The extension is patient-specific whereas the root is organization-specific. -->
    <!-- Patient Medical Record Number -->
    <id root="dc67750c-4926-4c83-af35-9102a8ffc2c0" />
    <!-- Patient's SSN -->
    <id root="2.16.840.1.113883.4.1" extension="444-22-2222" />
    <!-- Patient's Medicare HIC Number -->
    <id root="2.16.840.1.113883.4.572" extension="123456789" />
    <!-- Addr HP is "primary home" from codeSystem 2.16.840.1.113883.5.1119 -->
    <addr use="HP">
      <streetAddressLine>124 Any Street</streetAddressLine>
      <city>Anyville</city>
      <state>CA</state>
      <!-- Form Element: ZIP Code -->
      <postalCode>97812</postalCode>
      <country>US</country>
    </addr>
    <telecom use="HP" value="5551231234" />
  <patient>
    <name>
      <given>Samantha</given>
      <family>Smith</family>
    </name>
    <!-- Form Element: Sex -->
    <administrativeGenderCode code="F" codeSystem="2.16.840.1.113883.5.1"
      displayName="Female" />
    <!-- Form Element: Date of Birth -->
    <birthTime value="07061968" />
    <!-- Form Element: Race -->
    <raceCode code="2028-9" displayName="Asian"
      codeSystem="2.16.840.1.113883.6.238" codeSystemName="Race &
      Ethnicity - CDC" />
    <!-- Form Element: Ethnicity -->
    <ethnicGroupCode code="2186-5" displayName="Not Hispanic or Latino"
      codeSystem="2.16.840.1.113883.6.238" codeSystemName="Race &
      Ethnicity - CDC" />
    <!-- Use languageCommunication/languageCode/@nullFlavor="NA" as
      shown below -->
    <languageCommunication>
      <languageCode nullFlavor="NA" />
    </languageCommunication>
  </patient>
</patientRole>
</recordTarget>

```

5. **MAY** contain zero or more [0..\*] **documentationOf** (CONF:1184-20).

### 1.1.3.3 serviceEvent

- a. The **documentationOf**, if present, **SHALL** contain exactly one [1..1] **serviceEvent** (CONF:1184-21).

## 1.1.3.4 performer

- i. This serviceEvent **SHOULD** contain zero or more [0..\*] **performer** (CONF:1184-22) such that it
  - Note: Type of Care Providers Seen
    - 1. **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:1184-53).
      - a. This assignedEntity **SHALL** contain exactly one [1..1] **code**, which **SHOULD** be selected from ValueSet [Healthcare Provider Taxonomy \(HIPAA\)](#) `urn:oid:2.16.840.1.114222.4.11.1066` **DYNAMIC** (CONF:1184-56).

**Figure 19: performer Example**

```

<performer typeCode="PRF">
  <assignedEntity>
    <!-- Provider's NPI -->
    <id root="2.16.840.1.113883.4.6" extension="123456789" />
    <!-- Provider -->
    <code code="405277009"
      displayName="Resident physician"
      codeSystem="2.16.840.1.113883.6.96"
      codeSystemName="SNOMED CT" />
  </assignedEntity>
</performer>
<performer typeCode="PRF">
  <assignedEntity>
    <id root="2.16.840.1.113883.4.6" extension="777777777" />
    <!-- Providers (seen at this visit) -->
    <code code="449161006"
      displayName="Physician Assistant"
      codeSystem="2.16.840.1.113883.6.96"
      codeSystemName="SNOMED CT" />
  </assignedEntity>
</performer>

```

- 6. **MAY** contain zero or one [0..1] **componentOf** (CONF:1184-17).

## 1.1.3.5 encompassingEncounter

- a. The componentOf, if present, **SHALL** contain exactly one [1..1] **encompassingEncounter** (CONF:1184-18).
  - i. This encompassingEncounter **SHOULD** contain zero or one [0..1] **id** (CONF:1184-361).
    - Note: Encounter Number
  - ii. This encompassingEncounter **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1184-23).
    - 1. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:1184-198).
      - Note: Date/Time of admission/visit/arrival



2. This effectiveTime **SHALL** contain exactly one [1..1] **high** (CONF:1184-1169).

Note: Date/Time of departure/discharge

**Figure 20: encompassingEncounter Example**

```

<encompassingEncounter>
  <!-- Encounter Id -->
  <id root="57edf80c-7114-4dc3-b3f4-abf515d18c90" />
  ...
  <effectiveTime>
    <!-- Date/Time of admission/visit/arrival -->
    <low value="201308150730" />
    <!-- Date/Time of departure/discharge -->
    <high value="201308160920" />
  </effectiveTime>
  ...
</encompassingEncounter>
    
```

7. **SHALL** contain exactly one [1..1] **component** (CONF:1184-24).

#### 1.1.3.6 structuredBody

- a. This component **SHALL** contain exactly one [1..1] **structuredBody** (CONF:1184-25).

#### 1.1.4 Emergency Department Encounter (NHCS-ED, NHAMCS-ED) (V3)

[ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.1.4:2016-07-01 (open)]

Draft as part of National Health Care Surveys Release 1, DSTU Release 1.2 - US Realm

**Table 24: Emergency Department Encounter (NHCS-ED, NHAMCS-ED) (V3) Contexts**

Contained By:	Contains:
	<a href="#">Emergency Department Encounters Section (V2)</a> <a href="#">Immunizations Section</a> <a href="#">Medications Section</a> <a href="#">Patient Information Section (V3)</a> <a href="#">Payment Sources Section</a> <a href="#">Problems Section (V3)</a> <a href="#">Reasons for Visit Section (V2)</a> <a href="#">Results Section (entries optional) (V2)</a> <a href="#">Services and Procedures Section</a> <a href="#">Triage Section</a> <a href="#">Vital Signs Section (entries required) (V2)</a>

This template describes constraints that are specific to the emergency department encounter surveys (NHCS-ED, NHAMCS-ED).

**Table 25: Emergency Department Encounter (NHCS-ED, NHAMCS-ED) (V3) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
ClinicalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.1.4:2016-07-01)					
templateId	1..1	SHALL		<a href="#">3256-570</a>	
@root	1..1	SHALL		<a href="#">3256-583</a>	2.16.840.1.113883.10.20.34.1.4
@extension	1..1	SHALL		<a href="#">3256-866</a>	2016-07-01
documentationOf	0..*	MAY		<a href="#">3256-667</a>	
serviceEvent	1..1	SHALL		<a href="#">3256-668</a>	
performer	0..*	SHOULD		<a href="#">3256-669</a>	
time	1..1	SHALL		<a href="#">3256-670</a>	
low	1..1	SHALL		<a href="#">3256-1170</a>	
assignedEntity	1..1	SHALL		<a href="#">3256-857</a>	
code	1..1	SHALL		<a href="#">3256-858</a>	urn:oid:2.16.840.1.114222.4.11.7419 (Provider ED (NCHS))
@nullFlavor	0..1	MAY		<a href="#">3256-865</a>	OTH
componentOf	1..1	SHALL		<a href="#">3256-671</a>	
encompassingEncounter	1..1	SHALL		<a href="#">3256-672</a>	
code	1..1	SHALL		<a href="#">3256-1057</a>	
@code	1..1	SHALL		<a href="#">3256-1058</a>	EMER
@codeSystem	1..1	SHALL		<a href="#">3256-1059</a>	urn:oid:2.16.840.1.113883.5.4 (ActCode) = 2.16.840.1.113883.5.4
dischargeDispositionCode	1..1	SHALL		<a href="#">3256-863</a>	urn:oid:2.16.840.1.114222.4.11.7437 (Disposition ED (NCHS))
@nullFlavor	0..1	MAY		<a href="#">3256-864</a>	urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = OTH
component	1..1	SHALL		<a href="#">3256-571</a>	
structuredBody	1..1	SHALL		<a href="#">3256-572</a>	
component	1..1	SHALL		<a href="#">3256-573</a>	

section	1..1	SHALL		<a href="#">3256-582</a>	<a href="#">Payment Sources Section (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.4)</a>
component	1..1	SHALL		<a href="#">3256-574</a>	
section	1..1	SHALL		<a href="#">3256-584</a>	<a href="#">Vital Signs Section (entries required) (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2014-06-09)</a>
component	1..1	SHALL		<a href="#">3256-575</a>	
section	1..1	SHALL		<a href="#">3256-585</a>	<a href="#">Reasons for Visit Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.14:2016-07-01)</a>
component	1..1	SHALL		<a href="#">3256-576</a>	
section	1..1	SHALL		<a href="#">3256-586</a>	<a href="#">Problems Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.2:2016-07-01)</a>
component	1..1	SHALL		<a href="#">3256-577</a>	
section	1..1	SHALL		<a href="#">3256-587</a>	<a href="#">Services and Procedures Section (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.3)</a>
component	1..1	SHALL		<a href="#">3256-578</a>	
section	1..1	SHALL		<a href="#">3256-588</a>	<a href="#">Medications Section (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.1)</a>
component	1..1	SHALL		<a href="#">3256-579</a>	
section	1..1	SHALL		<a href="#">3256-589</a>	<a href="#">Immunizations Section (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.7)</a>
component	1..1	SHALL		<a href="#">3256-581</a>	
section	1..1	SHALL		<a href="#">3256-591</a>	<a href="#">Triage Section (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.10)</a>
component	1..1	SHALL		<a href="#">3256-759</a>	
section	1..1	SHALL		<a href="#">3256-760</a>	<a href="#">Emergency Department Encounters Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.13:2016-07-01)</a>
component	1..1	SHALL		<a href="#">3256-</a>	

				<a href="#">809</a>	
section	1..1	SHALL		<a href="#">3256-810</a>	<a href="#">Patient Information Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.5:2016-07-01)</a>
component	1..1	SHALL		<a href="#">3256-1104</a>	
section	1..1	SHALL		<a href="#">3256-1105</a>	<a href="#">Results Section (entries optional) (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3:2014-06-09)</a>

### 1.1.5 Properties

1. Conforms to [National Health Care Surveys \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.1.1:2015-04-01).

#### 1.1.5.1 templateId

2. **SHALL** contain exactly one [1..1] **templateId** (CONF:3256-570) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.1.4" (CONF:3256-583).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2016-07-01" (CONF:3256-866).

**Figure 21: Emergency Department Encounter (NHCS-ED, NHAMCS-ED) (V3) Example**

```

<ClinicalDocument>
  <realmCode code="US" />
  <typeId root="2.16.840.1.113883.1.3" extension="POCD_HD000040" />
  <!-- [C-CDA R2] US Realm Header Template -->
  <templateId root="2.16.840.1.113883.10.20.22.1.1" extension="2014-06-09" />
  <!-- [NHCS R1D1.1] National Health Care Surveys Document (V2) requirements -->
  <templateId root="2.16.840.1.113883.10.20.34.1.1" extension="2015-04-01" />
  <!-- [NHCS R1SDU1.2] Emergency Department Encounter (NHCS-ED, NHAMCS-ED) (V3)
  requirements -->
  <templateId root="2.16.840.1.113883.10.20.34.1.4" extension="2016-07-01" />
  <!-- ID shall be a globally unique identifier -->
  ...
</ClinicalDocument>

```

#### 1.1.5.2 documentationOf

3. **MAY** contain zero or more [0..\*] **documentationOf** (CONF:3256-667).
  - a. The documentationOf, if present, **SHALL** contain exactly one [1..1] **serviceEvent** (CONF:3256-668).

#### 1.1.5.3 performer

See National Health Care Surveys template for other performer elements.

- i. This serviceEvent **SHOULD** contain zero or more [0..\*] **performer** (CONF:3256-669) such that it
 

Note: Type of care provider seen

  1. **SHALL** contain exactly one [1..1] **time** (CONF:3256-670).
    - a. This time **SHALL** contain exactly one [1..1] **low** (CONF:3256-1170).
 

Note: Date/Time of provider contact
  2. **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:3256-857).
    - a. This assignedEntity **SHALL** contain exactly one [1..1] **code**, which **SHOULD** be selected from ValueSet [Provider ED \(NCHS\)](#) urn:oid:2.16.840.1.114222.4.11.7419 **DYNAMIC** (CONF:3256-858).
      - i. This code **MAY** contain zero or one [0..1] **@nullFlavor="OTH"** (CONF:3256-865).

**Figure 22: performer Example**

```

<performer typeCode="PRF">
  <!-- Date time of provider contact -->
  <time>
    <low value="201308151030" />
  </time>
  <assignedEntity>
    <!-- Provider's NPI -->
    <id root="2.16.840.1.113883.4.6" extension="123456789" />
    <!-- Provider -->
    <code code="405277009"
      displayName="Resident physician"
      codeSystem="2.16.840.1.113883.6.96"
      codeSystemName="SNOMED CT" />
  </assignedEntity>
</performer>
<performer typeCode="PRF">
  <!-- Date time of provider contact -->
  <time>
    <low value="201308151045" />
  </time>
  <assignedEntity>
    <!-- Provider's NPI -->
    <id root="2.16.840.1.113883.4.6" extension="22222222" />
    <!-- Providers (seen at this visit) -->
    <code code="449161006"
      displayName="Physician Assistant"
      codeSystem="2.16.840.1.113883.6.96"
      codeSystemName="SNOMED CT" />
  </assignedEntity>
</performer>

```

#### 1.1.5.4 componentOf

4. **SHALL** contain exactly one [1..1] **componentOf** (CONF:3256-671).

See National Health Care Surveys template for other encompassingEncounter elements.

- a. This componentOf **SHALL** contain exactly one [1..1] **encompassingEncounter** (CONF:3256-672).
  - i. This encompassingEncounter **SHALL** contain exactly one [1..1] **code** (CONF:3256-1057).
    1. This code **SHALL** contain exactly one [1..1] **@code="EMER"** Emergency (CONF:3256-1058).
    2. This code **SHALL** contain exactly one [1..1] **@codeSystem="2.16.840.1.113883.5.4"** (CodeSystem: ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:3256-1059).
  - ii. This encompassingEncounter **SHALL** contain exactly one [1..1] **dischargeDispositionCode**, which **SHOULD** be selected from ValueSet **Disposition ED (NCHS)** urn:oid:2.16.840.1.114222.4.11.7437 **DYNAMIC** (CONF:3256-863).
    1. This dischargeDispositionCode **MAY** contain zero or one [0..1] **@nullFlavor="OTH"** Other (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:3256-864).

**Figure 23: componentOf/encompassingEncounter Example**

```

<componentOf>
  <encompassingEncounter>
    <!-- Encounter Id -->
    <id root="57edf80c-7114-4dc3-b3f4-abf515d18c90" />
    <code code="EMER"
      codeSystem="2.16.840.1.113883.5.4"
      displayName="Emergency"
      codeSystemName="ActCode" />
    <effectiveTime>
      <!-- Date/Time of admission/visit/arrival -->
      <low value="201308150730" />
      <!-- Date/Time of departure/discharge -->
      <high value="201308160920" />
    </effectiveTime>
    <!-- Discharge Disposition -->
    <dischargeDispositionCode code="183664005"
      displayName="Return/refer to physician/clinic for follow-up"
      codeSystem="2.16.840.1.113883.6.96"
      codeSystemName="SNOMED CT" />
  </encompassingEncounter>
</componentOf>

```

### 1.1.5.5 component

5. **SHALL** contain exactly one [1..1] **component** (CONF:3256-571).
  - a. This component **SHALL** contain exactly one [1..1] **structuredBody** (CONF:3256-572).
    - i. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-573) such that it

1. **SHALL** contain exactly one [1..1] [Payment Sources Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.4) (CONF:3256-582).
- ii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-574) such that it
  1. **SHALL** contain exactly one [1..1] [Vital Signs Section \(entries required\) \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2014-06-09) (CONF:3256-584).
- iii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-575) such that it
  1. **SHALL** contain exactly one [1..1] [Reasons for Visit Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.14:2016-07-01) (CONF:3256-585).
- iv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-576) such that it
  1. **SHALL** contain exactly one [1..1] [Problems Section \(V3\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.2:2016-07-01) (CONF:3256-586).
- v. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-577) such that it
  1. **SHALL** contain exactly one [1..1] [Services and Procedures Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.3) (CONF:3256-587).
- vi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-578) such that it
  1. **SHALL** contain exactly one [1..1] [Medications Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.1) (CONF:3256-588).
- vii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-579) such that it
  1. **SHALL** contain exactly one [1..1] [Immunizations Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.7) (CONF:3256-589).
- viii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-581) such that it
  1. **SHALL** contain exactly one [1..1] [Triage Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.10) (CONF:3256-591).
- ix. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-759) such that it
  1. **SHALL** contain exactly one [1..1] [Emergency Department Encounters Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.13:2016-07-01) (CONF:3256-760).

- x. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-809) such that it
- SHALL** contain exactly one [1..1] **Patient Information Section (V3)** (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.5:2016-07-01) (CONF:3256-810).
- xi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-1104) such that it
- SHALL** contain exactly one [1..1] **Results Section (entries optional) (V2)** (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3:2014-06-09) (CONF:3256-1105).

**Table 26: Provider ED (NCHS)**

Value Set: Provider ED (NCHS) urn:oid:2.16.840.1.114222.4.11.7419			
Provider types			
Value Set Source: <a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7419">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7419</a>			
Code	Code System	Code System OID	Print Name
405279007	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Attending physician
405277009	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Resident physician
309343006	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Physician
442251000124100	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Licensed Practical Nurse
224535009	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Registered nurse
224571005	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Nurse practitioner
449161006	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Physician assistant
397897005	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Paramedic
310191001	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Clinical psychologist
310190000	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Mental health counselor
...			



**Table 27: Disposition ED (NCHS)**

Value Set: Disposition ED (NCHS) urn:oid:2.16.840.1.114222.4.11.7437			
The final arrangement or transfer of care made when a patient completes and emergency department encounter.			
Value Set Source: <a href="https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7437">https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7437</a>			
Code	Code System	Code System OID	Print Name
442291000124106	SNOMED CT	urn:oid:2.16.840.1.11388 3.6.96	Discharge from observation unit
63238001	SNOMED CT	urn:oid:2.16.840.1.11388 3.6.96	Dead on arrival
445060000	SNOMED CT	urn:oid:2.16.840.1.11388 3.6.96	Left against medical advice
3780001	SNOMED CT	urn:oid:2.16.840.1.11388 3.6.96	No follow-up planned
442271000124105	SNOMED CT	urn:oid:2.16.840.1.11388 3.6.96	Patient transfer to psychiatric hospital
25675004	SNOMED CT	urn:oid:2.16.840.1.11388 3.6.96	Patient transfer to skilled nursing facility (SNF)
223446004	SNOMED CT	urn:oid:2.16.840.1.11388 3.6.96	Return to ED
306227000	SNOMED CT	urn:oid:2.16.840.1.11388 3.6.96	Return/refer to physician/clinic for outpatient mental health treatment
396150002	SNOMED CT	urn:oid:2.16.840.1.11388 3.6.96	Return/refer to physician/clinic for substance abuse treatment
183664005	SNOMED CT	urn:oid:2.16.840.1.11388 3.6.96	Return/refer to physician/clinic for follow-up
...			

### 1.1.6 Inpatient Encounter (NHCS-IP) (V3)

[ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.1.2:2016-07-01 (open)]

Draft as part of National Health Care Surveys Release 1, DSTU Release 1.2 - US Realm

**Table 28: Inpatient Encounter (NHCS-IP) (V3) Contexts**

Contained By:	Contains:
	<a href="#">Immunizations Section</a> <a href="#">Inpatient Encounters Section (V2)</a> <a href="#">Medications Section</a>

<b>Contained By:</b>	<b>Contains:</b>
	<a href="#">Patient Information Section (V3)</a> <a href="#">Payment Sources Section</a> <a href="#">Problems Section (V3)</a> <a href="#">Results Section (entries optional) (V2)</a> <a href="#">Services and Procedures Section</a> <a href="#">Vital Signs Section (entries required) (V2)</a>

This template describes constraints that are specific to the Inpatient Encounter Surveys.

**Table 29: Inpatient Encounter (NHCS-IP) (V3) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
ClinicalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.1.2:2016-07-01)					
templateId	1..1	SHALL		<a href="#">3256-304</a>	
@root	1..1	SHALL		<a href="#">3256-305</a>	2.16.840.1.113883.10.20.34.1.2
@extension	1..1	SHALL		<a href="#">3256-767</a>	2016-07-01
documentationOf	0..*	MAY		<a href="#">3256-422</a>	
serviceEvent	1..1	SHALL		<a href="#">3256-423</a>	
componentOf	1..1	SHALL		<a href="#">3256-250</a>	
encompassingEncounter	1..1	SHALL		<a href="#">3256-251</a>	
code	1..1	SHALL		<a href="#">3256-1040</a>	
@code	1..1	SHALL		<a href="#">3256-1041</a>	IMP
@codeSystem	1..1	SHALL		<a href="#">3256-1042</a>	urn:oid:2.16.840.1.113883.5.4 (ActCode) = 2.16.840.1.113883.5.4
dischargeDispositionCode	1..1	SHALL		<a href="#">3256-1173</a>	urn:oid:2.16.840.1.114222.4.11.7360 (Discharge Disposition IP (NHCS))
@nullFlavor	0..1	MAY		<a href="#">3256-1174</a>	urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = OTH
component	1..1	SHALL		<a href="#">3256-244</a>	
structuredBody	1..1	SHALL		<a href="#">3256-245</a>	
component	1..1	SHALL		<a href="#">3256-246</a>	
section	1..1	SHALL		<a href="#">3256-247</a>	<a href="#">Patient Information Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.5:2016-07-01)</a>
component	1..1	SHALL		<a href="#">3256-248</a>	
section	1..1	SHALL		<a href="#">3256-249</a>	<a href="#">Payment Sources Section (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.4)</a>
component	1..1	SHALL		<a href="#">3256-254</a>	

section	1..1	SHALL		<a href="#">3256-255</a>	<a href="#">Vital Signs Section (entries required) (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2.0.22.2.4.1:2014-06-09)</a>
component	1..1	SHALL		<a href="#">3256-258</a>	
section	1..1	SHALL		<a href="#">3256-259</a>	<a href="#">Inpatient Encounters Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2.0.34.2.12:2016-07-01)</a>
component	1..1	SHALL		<a href="#">3256-260</a>	
section	1..1	SHALL		<a href="#">3256-261</a>	<a href="#">Problems Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.2.0.34.2.2:2016-07-01)</a>
component	1..1	SHALL		<a href="#">3256-262</a>	
section	1..1	SHALL		<a href="#">3256-263</a>	<a href="#">Services and Procedures Section (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.3)</a>
component	1..1	SHALL		<a href="#">3256-264</a>	
section	1..1	SHALL		<a href="#">3256-265</a>	<a href="#">Medications Section (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.1)</a>
component	1..1	SHALL		<a href="#">3256-505</a>	
section	1..1	SHALL		<a href="#">3256-506</a>	<a href="#">Immunizations Section (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.7)</a>
component	1..1	SHALL	Component3	<a href="#">3256-765</a>	
section	1..1	SHALL		<a href="#">3256-766</a>	<a href="#">Results Section (entries optional) (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2.0.22.2.3:2014-06-09)</a>

### 1.1.7 Properties

1. Conforms to [National Health Care Surveys \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.1.1:2015-04-01).

#### 1.1.7.1 templateId

2. **SHALL** contain exactly one [1..1] **templateId** (CONF:3256-304) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.1.2" (CONF:3256-305).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2016-07-01" (CONF:3256-767).

**Figure 24: In-Patient Encounter (NHCS-IP) (V3) Example**

```

<ClinicalDocument>
  <realmCode code="US" />
  <typeId root="2.16.840.1.113883.1.3" extension="POCD_HD000040" />
  <!-- [C-CDA R2] US Realm Header Template -->
  <templateId root="2.16.840.1.113883.10.20.22.1.1" extension="2014-06-09" />
  <!-- [NHCS R1D1.1] National Health Care Surveys Document (V2) requirements -->
  <templateId root="2.16.840.1.113883.10.20.34.1.1" extension="2015-04-01" />
  <!-- [NHCS R1SDU1.2] In-Patient Encounter (NHCS-IP) (V3) requirements -->
  <templateId root="2.16.840.1.113883.10.20.34.1.2" extension="2016-07-01" />
  ...
</ClinicalDocument>

```

### 1.1.7.2 documentationOf

3. **MAY** contain zero or more [0..\*] **documentationOf** (CONF:3256-422).

See National Health Care Surveys template for other serviceEvent elements.

- a. The documentationOf, if present, **SHALL** contain exactly one [1..1] **serviceEvent** (CONF:3256-423).

### 1.1.7.3 componentOf

4. **SHALL** contain exactly one [1..1] **componentOf** (CONF:3256-250).

See National Health Care Surveys template for other encompassingEncounter elements.

- a. This componentOf **SHALL** contain exactly one [1..1] **encompassingEncounter** (CONF:3256-251).

- i. This encompassingEncounter **SHALL** contain exactly one [1..1] **code** (CONF:3256-1040).

1. This code **SHALL** contain exactly one [1..1] **@code="IMP"** Inpatient (CONF:3256-1041).

2. This code **SHALL** contain exactly one [1..1] **@codeSystem="2.16.840.1.113883.5.4"** (CodeSystem: ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:3256-1042).

- ii. This encompassingEncounter **SHALL** contain exactly one [1..1] **dischargeDispositionCode**, which **SHOULD** be selected from ValueSet [Discharge Disposition IP \(NCHS\)](#)

urn:oid:2.16.840.1.114222.4.11.7360 **DYNAMIC** (CONF:3256-1173).

1. This dischargeDispositionCode **MAY** contain zero or one [0..1] **@nullFlavor="OTH"** Other (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:3256-1174).

**Figure 25: componentOf/encompassingEncounter Example**

```

<componentOf>
  <encompassingEncounter>
    <!-- Encounter Id -->
    <id root="57edf80c-7114-4dc3-b3f4-abf515d18c90" />
    <code code="IMP"
      codeSystem="2.16.840.1.113883.5.4"
      displayName="Inpatient"
      codeSystemName="ActCode" />
    <effectiveTime>
      <!-- Date/Time of admission/visit/arrival -->
      <low value="201308150730" />
      <!-- Date/Time of departure/discharge -->
      <high value="201308160920" />
    </effectiveTime>
    <!-- Discharge Disposition -->
    <dischargeDispositionCode code="02"
      displayName="Discharged/transferred to a short-term General Hospital for Inpatient
      Care"
      codeSystem="2.16.840.1.114222.4.11.915"
      codeSystemName="HL7 Discharge Disposition" />
    </encompassingEncounter>
  </componentOf>

```

5. **SHALL** contain exactly one [1..1] **component** (CONF:3256-244).

#### 1.1.7.4 structuredBody

- a. This component **SHALL** contain exactly one [1..1] **structuredBody** (CONF:3256-245).
  - i. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-246) such that it
    1. **SHALL** contain exactly one [1..1] [Patient Information Section \(V3\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.5:2016-07-01) (CONF:3256-247).
  - ii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-248) such that it
    1. **SHALL** contain exactly one [1..1] [Payment Sources Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.4) (CONF:3256-249).
  - iii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-254) such that it
    1. **SHALL** contain exactly one [1..1] [Vital Signs Section \(entries required\) \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2014-06-09) (CONF:3256-255).
  - iv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-258) such that it

1. **SHALL** contain exactly one [1..1] [Inpatient Encounters Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.12:2016-07-01) (CONF:3256-259).
- v. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-260) such that it
  1. **SHALL** contain exactly one [1..1] [Problems Section \(V3\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.2:2016-07-01) (CONF:3256-261).
- vi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-262) such that it
  1. **SHALL** contain exactly one [1..1] [Services and Procedures Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.3) (CONF:3256-263).
- vii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-264) such that it
  1. **SHALL** contain exactly one [1..1] [Medications Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.1) (CONF:3256-265).
- viii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-505) such that it
  1. **SHALL** contain exactly one [1..1] [Immunizations Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.7) (CONF:3256-506).
- ix. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-765) such that it
  1. **SHALL** contain exactly one [1..1] [Results Section \(entries optional\) \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3:2014-06-09) (CONF:3256-766).

**Table 30: Discharge Disposition IP (NCHS)**

Value Set: Discharge Disposition IP (NCHS) urn:oid:2.16.840.1.114222.4.11.7360			
The final arrangement or transfer of care made when a patient is released from an inpatient admission.			
Value Set Source:			
<a href="https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7360">https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7360</a>			
Code	Code System	Code System OID	Print Name
01	HL7 Discharge disposition	urn:oid:2.16.840.1.11388.3.12.112	Discharged to home or self care
02	HL7 Discharge disposition	urn:oid:2.16.840.1.11388.3.12.112	Discharged/transferred to a short-term General Hospital for Inpatient Care
03	HL7 Discharge disposition	urn:oid:2.16.840.1.11388.3.12.112	Discharged /transferred to Skilled Nursing Facility with Medicare Certification in anticipation of skilled care
04	HL7 Discharge disposition	urn:oid:2.16.840.1.11388.3.12.112	Discharged/transferred to a Facility that provides custodial or supportive care
05	HL7 Discharge disposition	urn:oid:2.16.840.1.11388.3.12.112	Discharged to a Designated Cancer Center or Children's Hospital
06	HL7 Discharge disposition	urn:oid:2.16.840.1.11388.3.12.112	Discharged/transferred to home under care of an organized Home Health Service Organization in anticipation of covered skilled care
07	HL7 Discharge disposition	urn:oid:2.16.840.1.11388.3.12.112	Left against Medical advice or discontinued care
20	HL7 Discharge disposition	urn:oid:2.16.840.1.11388.3.12.112	Expired
21	HL7 Discharge disposition	urn:oid:2.16.840.1.11388.3.12.112	Discharged/transferred to Court/Law Enforcement
43	HL7 Discharge disposition	urn:oid:2.16.840.1.11388.3.12.112	Discharged/Transferred to a Federal Healthcare Facility
...			



### 1.1.8 Outpatient Encounter (NHCS-OPD, NAMCS, NHAMCS-OPD) (V3)

[ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.1.3:2016-07-01 (open)]

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**Table 31: Outpatient Encounter (NHCS-OPD, NAMCS, NHAMCS-OPD) (V3) Contexts**

Contained By:	Contains:
	<a href="#">Immunizations Section</a> <a href="#">Medications Section</a> <a href="#">Outpatient Encounters Section (V3)</a> <a href="#">Patient Information Section (V3)</a> <a href="#">Payment Sources Section</a> <a href="#">Problems Section (V3)</a> <a href="#">Reasons for Visit Section (V2)</a> <a href="#">Results Section (entries optional) (V2)</a> <a href="#">Services and Procedures Section</a> <a href="#">Vital Signs Section (entries required) (V2)</a>

This template describes constraints that are specific to the outpatient encounter surveys (NHCS-OPD, NAMCS, NHAMCS-OPD).

**Table 32: Outpatient Encounter (NHCS-OPD, NAMCS, NHAMCS-OPD) (V3) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
ClinicalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.1.3:2016-07-01)					
templateId	1..1	SHALL		<a href="#">3256-306</a>	
@root	1..1	SHALL		<a href="#">3256-307</a>	2.16.840.1.113883.10.20.34.1.3
@extension	1..1	SHALL		<a href="#">3256-768</a>	2016-07-01
documentationOf	0..*	MAY		<a href="#">3256-455</a>	
serviceEvent	1..1	SHALL		<a href="#">3256-456</a>	
performer	0..1	SHOULD		<a href="#">3256-457</a>	
functionCode	1..1	SHALL		<a href="#">3256-458</a>	
@code	1..1	SHALL		<a href="#">3256-459</a>	PP
@codeSystem	1..1	SHALL		<a href="#">3256-460</a>	2.16.840.1.113883.3.88.12.3221.4
componentOf	0..1	MAY		<a href="#">3256-917</a>	
encompassingEncounter	1..1	SHALL		<a href="#">3256-918</a>	
code	1..1	SHALL		<a href="#">3256-1060</a>	
@code	1..1	SHALL		<a href="#">3256-1061</a>	AMB
@codeSystem	1..1	SHALL		<a href="#">3256-1062</a>	urn:oid:2.16.840.1.113883.5.4 (ActCode) = 2.16.840.1.113883.5.4
dischargeDispositionCode	1..1	SHALL		<a href="#">3256-1171</a>	urn:oid:2.16.840.1.114222.4.11.7361 (Disposition OPD (NCHS))
@nullFlavor	0..1	MAY		<a href="#">3256-1172</a>	urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = OTH
location	0..1	MAY		<a href="#">3256-919</a>	
healthCareFacility	1..1	SHALL		<a href="#">3256-920</a>	
code	1..1	SHALL		<a href="#">3256-921</a>	urn:oid:2.16.840.1.114222.4.11.7364 (Type of clinic/location (NCHS))
component	1..1	SHALL		<a href="#">3256-284</a>	
structuredBody	1..1	SHALL		<a href="#">3256-</a>	

				<a href="#">285</a>	
component	1..1	SHALL		<a href="#">3256-286</a>	
section	1..1	SHALL		<a href="#">3256-287</a>	<a href="#">Patient Information Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.5:2016-07-01)</a>
component	1..1	SHALL		<a href="#">3256-288</a>	
section	1..1	SHALL		<a href="#">3256-289</a>	<a href="#">Payment Sources Section (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.4)</a>
component	1..1	SHALL		<a href="#">3256-290</a>	
section	1..1	SHALL		<a href="#">3256-291</a>	<a href="#">Vital Signs Section (entries required) (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2014-06-09)</a>
component	1..1	SHALL		<a href="#">3256-292</a>	
section	1..1	SHALL		<a href="#">3256-293</a>	<a href="#">Reasons for Visit Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.14:2016-07-01)</a>
component	1..1	SHALL		<a href="#">3256-294</a>	
section	1..1	SHALL		<a href="#">3256-295</a>	<a href="#">Outpatient Encounters Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.8:2016-07-01)</a>
component	1..1	SHALL		<a href="#">3256-296</a>	
section	1..1	SHALL		<a href="#">3256-297</a>	<a href="#">Problems Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.2:2016-07-01)</a>
component	1..1	SHALL		<a href="#">3256-298</a>	
section	1..1	SHALL		<a href="#">3256-299</a>	<a href="#">Services and Procedures Section (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.3)</a>
component	1..1	SHALL		<a href="#">3256-300</a>	
section	1..1	SHALL		<a href="#">3256-301</a>	<a href="#">Medications Section (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.1)</a>
component	1..1	SHALL		<a href="#">3256-507</a>	

section	1..1	SHALL		<a href="#">3256-508</a>	<a href="#">Immunizations Section (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.7)</a>
component	1..1	SHALL		<a href="#">3256-763</a>	
section	1..1	SHALL		<a href="#">3256-764</a>	<a href="#">Results Section (entries optional) (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3:2014-06-09)</a>

### 1.1.9 Properties

1. Conforms to [National Health Care Surveys \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.1.1:2015-04-01).

#### 1.1.9.1 templateId

2. **SHALL** contain exactly one [1..1] **templateId** (CONF:3256-306) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.1.3" (CONF:3256-307).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2016-07-01" (CONF:3256-768).

**Figure 26: Out-Patient Encounter (NHCS-OPD, NAMCS, NHAMCS-OPD) (V3) Example**

```
<ClinicalDocument>
  <realmCode code="US" />
  <typeId root="2.16.840.1.113883.1.3" extension="POCD_HD000040" />
  <!-- [C-CDA R2] US Realm Header Template -->
  <templateId root="2.16.840.1.113883.10.20.22.1.1" extension="2014-06-09" />
  <!-- [NHCS R1D1.1] National Health Care Surveys Document (V2) -->
  <templateId root="2.16.840.1.113883.10.20.34.1.1" extension="2015-04-01" />
  <!-- [NHCS R1SDU1.2] Out-Patient Encounter (NHCS-OPD, NAMCS, NHAMCS-OPD) (V3) -->
  <templateId root="2.16.840.1.113883.10.20.34.1.3" extension="2016-07-01" />
  ...
</ClinicalDocument>
```

#### 1.1.9.2 documentationOf

3. **MAY** contain zero or more [0..\*] **documentationOf** (CONF:3256-455).

See National Health Care Surveys template for other serviceEvent elements.

- a. The documentationOf, if present, **SHALL** contain exactly one [1..1] **serviceEvent** (CONF:3256-456).

#### 1.1.9.3 performer

- i. This serviceEvent **SHOULD** contain zero or one [0..1] **performer** (CONF:3256-457) such that it  
Note: Patient's Primary Care Provider

1. **SHALL** contain exactly one [1..1] **functionCode** (CONF:3256-458).  
Note: Form Element: Patient's Primary Care Provider
  - a. This functionCode **SHALL** contain exactly one [1..1] **@code="PP"** Primary Care Provider (CONF:3256-459).
  - b. This functionCode **SHALL** contain exactly one [1..1] **@codeSystem="2.16.840.1.113883.3.88.12.3221.4"** (CONF:3256-460).

**Figure 27: performer Example**

```

<performer typeCode="PRF">
  <!-- Patient's Primary Care Provider -->
  <functionCode code="PP"
    displayName="Primary Care Provider"
    codeSystem="2.16.840.1.113883.12.443"
    codeSystemName="Provider Role" />
  <assignedEntity>
    <!-- Provider's NPI -->
    <id root="2.16.840.1.113883.4.6" extension="111111111" />
  </assignedEntity>
</performer>

```

#### 1.1.9.4 componentOf

4. **MAY** contain zero or one [0..1] **componentOf** (CONF:3256-917).
  - a. The componentOf, if present, **SHALL** contain exactly one [1..1] **encompassingEncounter** (CONF:3256-918).
    - i. This encompassingEncounter **SHALL** contain exactly one [1..1] **code** (CONF:3256-1060).
      1. This code **SHALL** contain exactly one [1..1] **@code="AMB"** Ambulatory (outpatient) (CONF:3256-1061).
      2. This code **SHALL** contain exactly one [1..1] **@codeSystem="2.16.840.1.113883.5.4"** (CodeSystem: ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:3256-1062).
    - ii. This encompassingEncounter **SHALL** contain exactly one [1..1] **dischargeDispositionCode**, which **SHOULD** be selected from ValueSet [Disposition OPD \(NCHS\)](#) urn:oid:2.16.840.1.114222.4.11.7361 **DYNAMIC** (CONF:3256-1171).
      1. This dischargeDispositionCode **MAY** contain zero or one [0..1] **@nullFlavor="OTH"** Other (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:3256-1172).
    - iii. This encompassingEncounter **MAY** contain zero or one [0..1] **location** (CONF:3256-919).  
Note: Type of clinic/location where visit occurred
      1. The location, if present, **SHALL** contain exactly one [1..1] **healthCareFacility** (CONF:3256-920).
        - a. This healthCareFacility **SHALL** contain exactly one [1..1] **code**, which **SHOULD** be selected from ValueSet [Type of](#)

clinic/location (NCHS)

urn:oid:2.16.840.1.114222.4.11.7364 **DYNAMIC**  
(CONF:3256-921).

**Figure 28: componentOf/encompassingEncounter Example**

```

<componentOf>
  <encompassingEncounter>
    <!-- Encounter Id -->
    <id root="57edf80c-7114-4dc3-b3f4-abf515d18c90" />
    <code code="AMB"
      displayName="Ambulatory (outpatient)"
      codeSystem="2.16.840.1.113883.5.4"
      codeSystemName="ActCode" />
    <effectiveTime>
      <!-- Date/Time of admission/visit/arrival -->
      <low value="201308150730" />
      <!-- Date/Time of departure/discharge -->
      <high value="201308160920" />
    </effectiveTime>
    <!-- Discharge Disposition -->
    <dischargeDispositionCode code="449221000124102"
      displayName="Refer to other physician/provider"
      codeSystem="2.16.840.1.113883.6.96"
      codeSystemName="SNOMED CT" />
    <!-- Type of clinic/location where visit occurred -->
    <location>
      <healthCareFacility>
        <code code="1113-0"
          displayName="Cardiology clinic"
          codeSystem="2.16.840.1.113883.6.259"
          codeSystemName="HL7 HealthcareServiceLocation" />
      </healthCareFacility>
    </location>
  </encompassingEncounter>
</componentOf>

```

## 1.1.9.5 component

5. **SHALL** contain exactly one [1..1] **component** (CONF:3256-284).
  - a. This component **SHALL** contain exactly one [1..1] **structuredBody** (CONF:3256-285).
    - i. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-286) such that it
      1. **SHALL** contain exactly one [1..1] Patient Information Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.5:2016-07-01) (CONF:3256-287).
    - ii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-288) such that it

1. **SHALL** contain exactly one [1..1] [Payment Sources Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.4) (CONF:3256-289).
- iii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-290) such that it
  1. **SHALL** contain exactly one [1..1] [Vital Signs Section \(entries required\) \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2014-06-09) (CONF:3256-291).
- iv. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-292) such that it
  1. **SHALL** contain exactly one [1..1] [Reasons for Visit Section \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.14:2016-07-01) (CONF:3256-293).
- v. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-294) such that it
  1. **SHALL** contain exactly one [1..1] [Outpatient Encounters Section \(V3\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.8:2016-07-01) (CONF:3256-295).
- vi. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-296) such that it
  1. **SHALL** contain exactly one [1..1] [Problems Section \(V3\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.2:2016-07-01) (CONF:3256-297).
- vii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-298) such that it
  1. **SHALL** contain exactly one [1..1] [Services and Procedures Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.3) (CONF:3256-299).
- viii. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-300) such that it
  1. **SHALL** contain exactly one [1..1] [Medications Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.1) (CONF:3256-301).
- ix. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-507) such that it
  1. **SHALL** contain exactly one [1..1] [Immunizations Section](#) (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.7) (CONF:3256-508).
- x. This structuredBody **SHALL** contain exactly one [1..1] **component** (CONF:3256-763) such that it
  1. **SHALL** contain exactly one [1..1] [Results Section \(entries optional\) \(V2\)](#) (identifier:

urn:hl7ii:2.16.840.1.113883.10.20.22.2.3:2014-06-09)  
(CONF:3256-764).

**Table 33: Disposition OPD (NCHS)**

Value Set: Disposition OPD (NCHS) urn:oid:2.16.840.1.114222.4.11.7361			
The final arrangement or transfer of care made when a patient completes an outpatient visit.			
Value Set Source:			
<a href="https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7361">https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7361</a>			
Code	Code System	Code System OID	Print Name
PHC1395	PHIN VADS code system	urn:oid:2.16.840.1.11422 2.4.5.274	Return to referring physician/provider
449221000124102	SNOMED CT	urn:oid:2.16.840.1.11388 3.6.96	Refer to other physician/provider
PHC1396	PHIN VADS code system	urn:oid:2.16.840.1.11422 2.4.5.274	Return in less than 1 week
PHC1397	PHIN VADS code system	urn:oid:2.16.840.1.11422 2.4.5.274	Return in 1 week to less than 2 months
PHC1398	PHIN VADS code system	urn:oid:2.16.840.1.11422 2.4.5.274	Return in 2 months or greater
PHC1406	PHIN VADS code system	urn:oid:2.16.840.1.11422 2.4.5.274	Return at unspecified time
91310009	SNOMED CT	urn:oid:2.16.840.1.11388 3.6.96	Return as needed (p.r.n.)
183452005	SNOMED CT	urn:oid:2.16.840.1.11388 3.6.96	Refer to E.R./Admit to hospital
65537008	SNOMED CT	urn:oid:2.16.840.1.11388 3.6.96	Routine discharge to customary residence
PHC1399	SNOMED CT	urn:oid:2.16.840.1.11388 3.6.96	Discharge to observation status
...			



**Table 34: Type of clinic/location (NCHS)**

Value Set: Type of clinic/location (NCHS) urn:oid:2.16.840.1.114222.4.11.7364 The kind of place or hospital department where a procedure, treatment, or service may be performed or provided. Value Set Source: <a href="https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7364">https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7364</a>			
Code	Code System	Code System OID	Print Name
1162-7	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.11388 3.6.259	24-Hour Observation Area
1210-4	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.11388 3.6.259	Adult Mixed Acuity Unit
1099-1	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.11388 3.6.259	Adult Step Down Unit (post-critical care)
1110-6	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.11388 3.6.259	Allergy Clinic
1166-8	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.11388 3.6.259	Ambulatory Surgery Center
1212-0	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.11388 3.6.259	Any Age Mixed Acuity Unit
1106-4	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.11388 3.6.259	Assisted Living Area
1145-2	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.11388 3.6.259	Behavioral Health Clinic
1022-3	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.11388 3.6.259	Bone Marrow Transplant SCA
1026-4	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.11388 3.6.259	Burn Critical Care
...			

## 2 SECTION-LEVEL TEMPLATES

This chapter contains the section-level templates referenced by one or more of the document types of this guide. These templates describe the purpose of each section and the section-level constraints.

Section-level templates are always included in a document. One and only one of each section type is allowed in a given document instance. Please see the document context tables to determine the sections that are contained in a given document type. Please see the conformance verb in the conformance statements to determine if it is required (SHALL), strongly recommended (SHOULD) or optional (MAY).

Each section-level template contains the following:

- Template metadata (e.g., templateId, etc.)
- Description and explanatory narrative
- LOINC section code
- Section title
- Requirements for a text element
- Entry-level template names and Ids for referenced templates (required and optional)

### Narrative Text

The text element within the section stores the narrative to be rendered, as described in the CDA R2 specification, and is referred to as the CDA narrative block.

The content model of the CDA narrative block schema is hand crafted to meet requirements of human readability and rendering. The schema is registered as a MIME type (text/x-hl7-text+xml), which is the fixed media type for the text element.

As noted in the CDA R2 specification, the document originator is responsible for ensuring that the narrative block contains the complete, human readable, attested content of the section. Structured entries support computer processing and computation and are not a replacement for the attestable, human-readable content of the CDA narrative block. The special case of structured entries with an entry relationship of "DRIV" (is derived from) indicates to the receiving application that the source of the narrative block is the structured entries, and that the contents of the two are clinically equivalent.

As for all CDA documents—even when a report consisting entirely of structured entries is transformed into CDA—the encoding application must ensure that the authenticated content (narrative plus multimedia) is a faithful and complete rendering of the clinical content of the structured source data. As a general guideline, a generated narrative block should include the same human readable content that would be available to users viewing that content in the originating system. Although content formatting in the narrative block need not be identical to that in the originating system, the narrative block should use elements from the CDA narrative block schema to provide sufficient formatting to support human readability when rendered according to the rules defined in Section Narrative Block (§ 4.3.5 ) of the CDA R2 specification.

By definition, a receiving application cannot assume that all clinical content in a section (i.e., in the narrative block and multimedia) is contained in the structured entries unless the entries in the section have an entry relationship of "DRIV".

Additional specification information for the CDA narrative block can be found in the CDA R2 specification in sections 1.2.1, 1.2.3, 1.3, 1.3.1, 1.3.2, 4.3.4.2, and 6.

## 2.1 Chief Complaint and Reason for Visit Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.22.2.13 (open)]

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This section records the patient's chief complaint (the patient's own description) and/or the reason for the patient's visit (the provider's description of the reason for visit). Local policy determines whether the information is divided into two sections or recorded in one section serving both purposes.

**Table 35: Chief Complaint and Reason for Visit Section Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.13)					
templateId	1..1	SHALL		<a href="#">81-7840</a>	
@root	1..1	SHALL		<a href="#">81-10383</a>	2.16.840.1.113883.10.20.22.2.13
code	1..1	SHALL		<a href="#">81-15449</a>	
@code	1..1	SHALL		<a href="#">81-15450</a>	46239-0
@codeSystem	1..1	SHALL		<a href="#">81-26473</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
title	1..1	SHALL		<a href="#">81-7842</a>	
text	1..1	SHALL		<a href="#">81-7843</a>	

1. **SHALL** contain exactly one [1..1] **templateId** (CONF:81-7840) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.2.13" (CONF:81-10383).
2. **SHALL** contain exactly one [1..1] **code** (CONF:81-15449).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="46239-0" Chief Complaint and Reason for Visit (CONF:81-15450).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:81-26473).
3. **SHALL** contain exactly one [1..1] **title** (CONF:81-7842).

4. **SHALL** contain exactly one [1..1] **text** (CONF:81-7843).

**Figure 29: Chief Complaint and Reason for Visit Example**

```

<section>
  <templateId root="2.16.840.1.113883.10.20.22.2.13"/>
  <code code="46239-0"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC"
    displayName="CHIEF COMPLAINT AND REASON FOR VISIT"/>
  <title> CHIEF COMPLAINT</title>
  <text>Back Pain</text>
</section>

```

### 2.1.1 Reasons for Visit Section (V2)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.2.14:2016-07-01 (open)]

Draft as part of National Health Care Surveys Release 1, DSTU Release 1.2 - US Realm

**Table 36: Reasons for Visit Section (V2) Contexts**

<b>Contained By:</b>	<b>Contains:</b>
<a href="#">Outpatient Encounter (NHCS-OPD, NAMCS, NHAMCS-OPD) (V3)</a> (required) <a href="#">Emergency Department Encounter (NHCS-ED, NHAMCS-ED) (V3)</a> (required)	<a href="#">Patient's Reason for Visit Observation</a>

This section records the patient's chief complaint (the NHCS calls this the "patient's reason for visit") in the patient's own words and/or the reason for the patient's visit in the provider's words. It can also contain a coded reason for visit in the contained Patient's Reason for Visit Observation.

**Table 37: Reasons for Visit Section (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.14:2016-07-01)					
templateId	1..1	SHALL		<a href="#">3256-1066</a>	
@root	1..1	SHALL		<a href="#">3256-1068</a>	2.16.840.1.113883.10.20.34.2.14
@extension	0..1	MAY		<a href="#">3256-1161</a>	2016-07-01
entry	0..*	MAY		<a href="#">3256-1085</a>	
observation	1..1	SHALL		<a href="#">3256-1086</a>	<a href="#">Patient's Reason for Visit Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.41:2015-04-01)</a>

1. Conforms to [Chief Complaint and Reason for Visit Section](#) template (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.13).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:3256-1066) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.2.14" (CONF:3256-1068).
  - b. **MAY** contain zero or one [0..1] **@extension**="2016-07-01" (CONF:3256-1161).
3. **MAY** contain zero or more [0..\*] **entry** (CONF:3256-1085).
  - a. The entry, if present, **SHALL** contain exactly one [1..1] [Patient's Reason for Visit Observation](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.41:2015-04-01) (CONF:3256-1086).

**Figure 30: Reasons for Visit Section (V2) Example**

```

<section>
  <!-- [NHCS R1D1.2] Reasons for Visit Section (V2) -->
  <templateId root="2.16.840.1.113883.10.20.34.2.14" extension="2016-07-01" />
  <code code="46239-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
  displayName="Chief Complaint and Reason for Visit" />
  <title>Reasons for Visit</title>
  <text>
    <table border="1" width="100%">
      <thead>
        <tr>
          <th>Patient's Reason for Visit (Chief Complaint)</th>
          <th>Providers Reason for Visit</th>
        </tr>
      </thead>
      <tbody>
        <tr>
          <td>Having trouble breathing</td>
          <td>Dyspnea</td>
        </tr>
      </tbody>
    </table>
  </text>
  <entry>
    <observation classCode="OBS" moodCode="EVN">
      <!-- [C-CDA R2] R2 Problem Observation (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2014-06-09" />
      <!-- [NHCS R1D1.1] Patient's Reason for Visit -->
      <templateId root="2.16.840.1.113883.10.20.34.3.41" extension="2015-04-01" />
      ...
    </observation>
  </entry>
</section>

```

## 2.2 Encounters Section (entries optional) (V2)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.22:2014-06-09 (open)]

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DSTU R2

**Table 38: Encounters Section (entries optional) (V2) Contexts**

Contained By:	Contains:
	<a href="#">Encounter Activity (V2)</a>

This section lists and describes any healthcare encounters pertinent to the patient's current health status or historical health history. An encounter is an interaction, regardless of the setting, between a patient and a practitioner who is vested with primary responsibility for diagnosing, evaluating, or treating the patient's condition. It may include visits, appointments, or non-face-to-face interactions. It is also a contact between a patient and a practitioner who

has primary responsibility (exercising independent judgment) for assessing and treating the patient at a given contact. This section may contain all encounters for the time period being summarized, but should include notable encounters.

**Table 39: Encounters Section (entries optional) (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.22:2014-06-09)					
templateId	1..1	SHALL		<a href="#">1098-7940</a>	
@root	1..1	SHALL		<a href="#">1098-10386</a>	2.16.840.1.113883.10.20.22.2.22
@extension	1..1	SHALL		<a href="#">1098-32547</a>	2014-06-09
code	1..1	SHALL		<a href="#">1098-15461</a>	
@code	1..1	SHALL		<a href="#">1098-15462</a>	46240-8
@codeSystem	1..1	SHALL		<a href="#">1098-31136</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
title	1..1	SHALL		<a href="#">1098-7942</a>	
text	1..1	SHALL		<a href="#">1098-7943</a>	
entry	0..*	SHOULD		<a href="#">1098-7951</a>	
encounter	1..1	SHALL		<a href="#">1098-15465</a>	<a href="#">Encounter Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2014-06-09)</a>

1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7940) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.2.22" (CONF:1098-10386).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32547).
2. **SHALL** contain exactly one [1..1] **code** (CONF:1098-15461).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="46240-8" Encounters (CONF:1098-15462).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1098-31136).
3. **SHALL** contain exactly one [1..1] **title** (CONF:1098-7942).
4. **SHALL** contain exactly one [1..1] **text** (CONF:1098-7943).
5. **SHOULD** contain zero or more [0..\*] **entry** (CONF:1098-7951) such that it
  - a. **SHALL** contain exactly one [1..1] [Encounter Activity \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2014-06-09) (CONF:1098-15465).

## 2.2.1 Emergency Department Encounters Section (V2)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.2.13:2016-07-01 (open) ]

Draft as part of National Health Care Surveys Release 1, DSTU Release 1.2 - US Realm

**Table 40: Emergency Department Encounters Section (V2) Contexts**

Contained By:	Contains:
<a href="#">Emergency Department Encounter (NHCS-ED, NHAMCS-ED) (V3)</a> (required)	<a href="#">Current Emergency Department Visit (V2)</a> <a href="#">Hospital Admission Encounter</a> <a href="#">Observation Unit Stay Encounter</a>

This section contains emergency department encounter information such as the current encounter, and any hospital admission or observation unit stays that might occur.

**Table 41: Emergency Department Encounters Section (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.13:2016-07-01)					
templateId	1..1	SHALL		<a href="#">3256-1050</a>	
@root	1..1	SHALL		<a href="#">3256-1052</a>	2.16.840.1.113883.10.20.34.2.13
@extension	1..1	SHALL		<a href="#">3256-1053</a>	2016-07-01
entry	1..1	SHALL		<a href="#">3256-1049</a>	
encounter	1..1	SHALL		<a href="#">3256-1051</a>	<a href="#">Current Emergency Department Visit (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.40:2016-07-01)</a>
entry	0..*	MAY		<a href="#">3256-1111</a>	
encounter	1..1	SHALL		<a href="#">3256-1113</a>	<a href="#">Hospital Admission Encounter (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.18)</a>
entry	0..*	MAY		<a href="#">3256-1112</a>	
encounter	1..1	SHALL		<a href="#">3256-1114</a>	<a href="#">Observation Unit Stay Encounter (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.33)</a>

1. Conforms to [Encounters Section \(entries optional\) \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.22:2014-06-09).



2. **SHALL** contain exactly one [1..1] **templateId** (CONF:3256-1050) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.2.13" (CONF:3256-1052).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2016-07-01" (CONF:3256-1053).
3. **SHALL** contain exactly one [1..1] **entry** (CONF:3256-1049) such that it
  - a. **SHALL** contain exactly one [1..1] Current Emergency Department Visit (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.40:2016-07-01) (CONF:3256-1051).
4. **MAY** contain zero or more [0..\*] **entry** (CONF:3256-1111) such that it
  - a. **SHALL** contain exactly one [1..1] Hospital Admission Encounter (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.18) (CONF:3256-1113).
5. **MAY** contain zero or more [0..\*] **entry** (CONF:3256-1112) such that it
  - a. **SHALL** contain exactly one [1..1] Observation Unit Stay Encounter (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.33) (CONF:3256-1114).

**Figure 31: Emergency Department Encounters Section (V2) Example**

```

<section>
  <!-- [C-CDA R2] Encounters Section (entries optional) (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.2.22" extension="2014-06-09" />
  <!-- [NHCS R1D1.2] Emergency Department Encounters Section (V2) -->
  <templateId root="2.16.840.1.113883.10.20.34.2.13" extension="2016-07-01" />
  <code code="46240-8"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC"
    displayName="History of encounters" />
  <title>Emergency Department Encounters</title>
  <text>...</text>
  <!-- Current Emergency Department Visit -->
  <entry>
    <encounter classCode="ENC" moodCode="EVN">
      <!-- [C-CDA R2] R2 Encounter Activity (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.49" extension="2014-06-09" />
      <!-- [NHCS R1D1.2] Current Emergency Department Visit (V2) -->
      <templateId root="2.16.840.1.113883.10.20.34.3.40" extension="2016-07-01" />
      ...
    </encounter>
  </entry>
</section>

```

## 2.2.2 Inpatient Encounters Section (V2)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.2.12:2016-07-01 (open) ]

Draft as part of National Health Care Surveys Release 1, DSTU Release 1.2 - US Realm

**Table 42: Inpatient Encounters Section (V2) Contexts**

Contained By:	Contains:
<a href="#">Inpatient Encounter (NHCS-IP) (V3)</a> (required)	<a href="#">Current Inpatient Visit</a> <a href="#">Specialty Unit Stay Encounter</a>

This section contains information about the inpatient encounter such as current visit and any specialty unit stay encounters.

**Table 43: Inpatient Encounters Section (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.12:2016-07-01)					
templateId	1..1	SHALL		<a href="#">3256-1044</a>	
@root	1..1	SHALL		<a href="#">3256-1046</a>	2.16.840.1.113883.10.20.34.2.12
@extension	1..1	SHALL		<a href="#">3256-1047</a>	2016-07-01
entry	0..1	SHOULD		<a href="#">3256-1043</a>	
encounter	1..1	SHALL		<a href="#">3256-1045</a>	<a href="#">Current Inpatient Visit (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.39:2015-04-01)</a>
entry	0..*	MAY		<a href="#">3256-1064</a>	
encounter	1..1	SHALL		<a href="#">3256-1065</a>	<a href="#">Specialty Unit Stay Encounter (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.38:2015-04-01)</a>

1. Conforms to [Encounters Section \(entries optional\) \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.22:2014-06-09).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:3256-1044) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.2.12" (CONF:3256-1046).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2016-07-01" (CONF:3256-1047).
3. **SHOULD** contain zero or one [0..1] **entry** (CONF:3256-1043) such that it

- a. **SHALL** contain exactly one [1..1] [Current Inpatient Visit](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.39:2015-04-01) (CONF:3256-1045).
4. **MAY** contain zero or more [0..\*] **entry** (CONF:3256-1064) such that it
  - a. **SHALL** contain exactly one [1..1] [Specialty Unit Stay Encounter](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.38:2015-04-01) (CONF:3256-1065).

**Figure 32: Inpatient Encounters Section (V2) Example**

```

<section>
  <!-- [C-CDA R2] Encounters Section (entries optional) (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.2.22" extension="2014-06-09" />
  <!-- [NHCS R1D1.2] Inpatient Encounters Section (V2) -->
  <templateId root="2.16.840.1.113883.10.20.34.2.12" extension="2016-07-01" />
  <code code="46240-8"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC"
    displayName="History of encounters" />
  <title>Inpatient Encounters Section</title>
  <text>...</text>
  <!-- Current Inpatient Visit -->
  <entry>
    <encounter classCode="ENC" moodCode="EVN">
      <!-- [C-CDA R2] R2 Encounter Activity (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.49" extension="2014-06-09" />
      <!-- [NHCS R1D1.1] Current Inpatient Visit -->
      <templateId root="2.16.840.1.113883.10.20.34.3.39" extension="2015-04-01" />
      ...
    </encounter>
  </entry>
  <entry>
    <encounter classCode="ENC" moodCode="EVN">
      <!-- [C-CDA R2] R2 Encounter Activity (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.49" extension="2014-06-09" />
      <!-- [NHCS R1D1.1] Specialty Unit Stay Encounter -->
      <templateId root="2.16.840.1.113883.10.20.34.3.38" extension="2015-04-01" />
      ...
    </encounter>
  </entry>
  <entry>
    <encounter classCode="ENC" moodCode="EVN">
      <!-- [C-CDA R2] R2 Encounter Activity (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.49" extension="2014-06-09" />
      <!-- [NHCS R1D1.1] Specialty Unit Stay Encounter -->
      <templateId root="2.16.840.1.113883.10.20.34.3.38" extension="2015-04-01" />
      ...
    </encounter>
    ...
  </entry>
</section>

```

### 2.2.3 Outpatient Encounters Section (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.2.8:2016-07-01 (open)]

Draft as part of National Health Care Surveys Release 1, DSTU Release 1.2 - US Realm

**Table 44: Outpatient Encounters Section (V3) Contexts**

Contained By:	Contains:
<a href="#">Outpatient Encounter (NHCS-OPD, NAMCS, NHAMCS-OPD) (V3)</a> (required)	<a href="#">Current Outpatient Visit (V3)</a>

This section contains information about the current outpatient encounter.

**Table 45: Outpatient Encounters Section (V3) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.8:2016-07-01)					
templateId	1..1	SHALL		<a href="#">3256-431</a>	
@root	1..1	SHALL		<a href="#">3256-432</a>	2.16.840.1.113883.10.20.34.2.8
@extension	1..1	SHALL		<a href="#">3256-1048</a>	2016-07-01
entry	1..1	SHALL		<a href="#">3256-439</a>	
encounter	1..1	SHALL		<a href="#">3256-440</a>	<a href="#">Current Outpatient Visit (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.10:2016-07-01)</a>

1. Conforms to [Encounters Section \(entries optional\) \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.22:2014-06-09).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:3256-431) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.2.8" (CONF:3256-432).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2016-07-01" (CONF:3256-1048).
3. **SHALL** contain exactly one [1..1] **entry** (CONF:3256-439) such that it
  - a. **SHALL** contain exactly one [1..1] [Current Outpatient Visit \(V3\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.10:2016-07-01) (CONF:3256-440).

**Figure 33: Outpatient Encounters Section (V3)**

```

<section>
  <!-- [C-CDA R2] Encounters Section (entries optional) (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.2.22" extension="2014-06-09" />
  <!-- [NHCS R1D1.2] Outpatient Encounters Section (V3) -->
  <templateId root="2.16.840.1.113883.10.20.34.2.8" extension="2016-07-01" />
  <code code="46240-8"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC"
    displayName="History of encounters" />
  <title>Outpatient Encounters</title>
  <text>...</text>
  <!-- Current Outpatient Visit -->
  <entry>
    <encounter classCode="ENC" moodCode="EVN">
      <!-- [C-CDA R2] R2 Encounter Activity (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.49" extension="2014-06-09" />
      <!-- [NHCS R1D1.2] Current Outpatient Visit (V3) -->
      <templateId root="2.16.840.1.113883.10.20.34.3.10" extension="2016-07-01" />
      ...
    </encounter>
  </entry>
</section>

```

### 2.3 Medications Section (entries optional) (V2)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.1:2014-06-09 (open)]

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DSTU R2

**Table 46: Medications Section (entries optional) (V2) Contexts**

Contained By:	Contains:
	<a href="#">Medication Activity (V2)</a>

The Medications Section contains a patient's current medications and pertinent medication history. At a minimum, the currently active medications are listed. An entire medication history is an option. The section can describe a patient's prescription and dispense history and information about intended drug monitoring.

**Table 47: Medications Section (entries optional) (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1:2014-06-09)					
templateId	1..1	SHALL		<a href="#">1098-7791</a>	
@root	1..1	SHALL		<a href="#">1098-10432</a>	2.16.840.1.113883.10.20.22.2.1
@extension	1..1	SHALL		<a href="#">1098-32500</a>	2014-06-09
code	1..1	SHALL		<a href="#">1098-15385</a>	
@code	1..1	SHALL		<a href="#">1098-15386</a>	10160-0
@codeSystem	1..1	SHALL		<a href="#">1098-30824</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
title	1..1	SHALL		<a href="#">1098-7793</a>	
text	1..1	SHALL		<a href="#">1098-7794</a>	
entry	0..*	SHOULD		<a href="#">1098-7795</a>	
substanceAdministration	1..1	SHALL		<a href="#">1098-10076</a>	<a href="#">Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09)</a>

1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7791) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.22.2.1"** (CONF:1098-10432).
  - b. **SHALL** contain exactly one [1..1] **@extension="2014-06-09"** (CONF:1098-32500).
2. **SHALL** contain exactly one [1..1] **code** (CONF:1098-15385).
  - a. This code **SHALL** contain exactly one [1..1] **@code="10160-0"** History of medication use (CONF:1098-15386).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem="2.16.840.1.113883.6.1"** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1098-30824).
3. **SHALL** contain exactly one [1..1] **title** (CONF:1098-7793).
4. **SHALL** contain exactly one [1..1] **text** (CONF:1098-7794).
5. **SHOULD** contain zero or more [0..\*] **entry** (CONF:1098-7795) such that it
  - a. **SHALL** contain exactly one [1..1] [Medication Activity \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09) (CONF:1098-10076).

### 2.3.1 Immunizations Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.34.2.7 (open)]

Draft as part of National Health Care Surveys, Release 1, DSTU 1 - US Realm

**Table 48: Immunizations Section Contexts**

Contained By:	Contains:
<a href="#">Inpatient Encounter (NHCS-IP) (V3)</a> (required) <a href="#">Outpatient Encounter (NHCS-OPD, NAMCS, NHAMCS-OPD) (V3)</a> (required) <a href="#">Emergency Department Encounter (NHCS-ED, NHAMCS-ED) (V3)</a> (required)	<a href="#">Immunization Activity (V2)</a> <a href="#">Planned Immunization Activity</a>

This section contains immunizations that were ordered, supplied, administered, or continued during this visit.

A continued immunization has an effectiveTime/low that is less than the encompassingEncounter/effectiveTime/low (date/time of admission/visit/arrival) and a new immunization has an effectiveTime/low that is equal to or greater than the encompassingEncounter/effectiveTime/low.

When recording Immunization Medication Information contained in the Planned Immunization Activity template, if the lot number is not known, use lotNumberText/@nullFlavor="NA".

**Table 49: Immunizations Section Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.7)					
templateId	1..1	SHALL		<a href="#">1106-501</a>	
@root	1..1	SHALL		<a href="#">1106-504</a>	2.16.840.1.113883.10.20.34.2.7
entry	0..*	SHOULD		<a href="#">1106-499</a>	
substanceAdministration	1..1	SHALL		<a href="#">1106-502</a>	<a href="#">Immunization Activity (V2)</a> ( <a href="#">identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.52:2014-06-09</a> )
entry	0..*	SHOULD		<a href="#">1106-500</a>	
substanceAdministration	1..1	SHALL		<a href="#">1106-503</a>	<a href="#">Planned Immunization Activity</a> ( <a href="#">identifier: urn:oid:2.16.840.1.113883.10.20.22.4.120</a> )

1. Conforms to [Medications Section \(entries optional\) \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1:2014-06-09).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-501) such that it

- a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.34.2.7" (CONF:1106-504).
3. **SHOULD** contain zero or more [0..\*] **entry** (CONF:1106-499) such that it
  - a. **SHALL** contain exactly one [1..1] Immunization Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.52:2014-06-09) (CONF:1106-502).
4. **SHOULD** contain zero or more [0..\*] **entry** (CONF:1106-500) such that it
  - a. **SHALL** contain exactly one [1..1] Planned Immunization Activity (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.120) (CONF:1106-503).

**Figure 34: Immunizations Section Example**

```

<section>
  <!-- Conforms to C-CDA Medications Section (entries optional) (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.2.1" extension="2014-06-09" />
  <!-- Immunizations Section -->
  <templateId root="2.16.840.1.113883.10.20.34.2.7" />
  <code code="10160-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
    displayName="HISTORY OF MEDICATION USE" />
  <title>Immunizations</title>
  <text>
    ...
  </text>
  <entry typeCode="DRIV">
    <substanceAdministration classCode="SBADM" moodCode="EVN">
      <!-- C-CDA Immunization Activity (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.52" extension="2014-06-09" />
      ...
    </substanceAdministration>
  </entry>
  <entry typeCode="DRIV">
    <substanceAdministration classCode="SBADM" moodCode="RQO">
      <!-- C-CDA R2 Planned Immunization Activity (NEW) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.120" />
      ...
    </substanceAdministration>
  </entry>
</section>

```



## 2.3.2 Medications Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.34.2.1 (open)]

Published as part of National Health Care Surveys, Release 1, DSTU 1 - US Realm

**Table 50: Medications Section Contexts**

Contained By:	Contains:
<a href="#">Inpatient Encounter (NHCS-IP) (V3)</a> (required) <a href="#">Outpatient Encounter (NHCS-OPD, NAMCS, NHAMCS-OPD) (V3)</a> (required) <a href="#">Emergency Department Encounter (NHCS-ED, NHAMCS-ED) (V3)</a> (required)	<a href="#">Medication Activity (V2)</a> <a href="#">Planned Medication Activity (V2)</a>

This section contains medications (other than immunizations) that were ordered, supplied, administered, or continued during this visit. **It includes Rx and OTC drugs, allergy shots, oxygen, anesthetics, chemotherapy, and dietary supplements.**

A continued medication has an effectiveTime/low that is less than the encompassingEncounter/effectiveTime/low (date/time of admission/visit/arrival) and a new medication has an effectiveTime/low that is equal to or greater than the encompassingEncounter/effectiveTime/low.

**Table 51: Medications Section Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.1)					
templateId	1..1	SHALL		<a href="#">1106-356</a>	
@root	1..1	SHALL		<a href="#">1106-357</a>	2.16.840.1.113883.10.20.34.2.1
entry	0..*	SHOULD		<a href="#">1106-348</a>	
substanceAdministration	1..1	SHALL		<a href="#">1106-349</a>	<a href="#">Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09)</a>
entry	0..*	SHOULD		<a href="#">1106-350</a>	
substanceAdministration	1..1	SHALL		<a href="#">1106-351</a>	<a href="#">Planned Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09)</a>

1. Conforms to [Medications Section \(entries optional\) \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1:2014-06-09).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-356) such that it

- a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.34.2.1" (CONF:1106-357).
- 3. **SHOULD** contain zero or more [0..\*] **entry** (CONF:1106-348) such that it
  - a. **SHALL** contain exactly one [1..1] [Medication Activity \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09) (CONF:1106-349).
- 4. **SHOULD** contain zero or more [0..\*] **entry** (CONF:1106-350) such that it
  - a. **SHALL** contain exactly one [1..1] [Planned Medication Activity \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09) (CONF:1106-351).

**Figure 35: Medications Section Example**

```

<section>
  <!-- Conforms to C-CDA Medications Section (entries optional) (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.2.1" extension="2014-06-09" />
  <!-- Medications Section -->
  <templateId root="2.16.840.1.113883.10.20.34.2.1" />
  <code code="10160-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
    displayName="HISTORY OF MEDICATION USE" />
  <title>Medications</title>
  <text>
    ...
  </text>
  <entry typeCode="DRIV">
    <substanceAdministration classCode="SBADM" moodCode="EVN">
      <!-- C-CDA R2 Medication Activity (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.16" extension="2014-06-09" />
      ...
    </substanceAdministration>
  </entry>
  <entry typeCode="DRIV">
    <substanceAdministration classCode="SBADM" moodCode="RQO">
      <!-- C-CDA R2 Planned Medication Activity (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.42" extension="2014-06-09" />
      ...
    </substanceAdministration>
  </entry>
</section>

```

## 2.4 Payers Section (V2)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2014-06-09 (open) ]

Published as part of Consolidated CDA Templates for Clinical Notes (US Realm) DSTU R2

**Table 52: Payers Section (V2) Contexts**

Contained By:	Contains:
	<a href="#">Coverage Activity (V2)</a>

The Payers Section contains data on the patient's payers, whether "third party" insurance, self-pay, other payer or guarantor, or some combination of payers, and is used to define which entity is the responsible fiduciary for the financial aspects of a patient's care.

Each unique instance of a payer and all the pertinent data needed to contact, bill to, and collect from that payer should be included. Authorization information that can be used to define pertinent referral, authorization tracking number, procedure, therapy, intervention, device, or similar authorizations for the patient or provider, or both should be included. At a minimum, the patient's pertinent current payment sources should be listed.

The sources of payment are represented as a Coverage Activity, which identifies all of the insurance policies or government or other programs that cover some or all of the patient's healthcare expenses. The policies or programs are sequenced by preference. The Coverage Activity has a sequence number that represents the preference order. Each policy or program identifies the covered party with respect to the payer, so that the identifiers can be recorded.

**Table 53: Payers Section (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2014-06-09)					
templateId	1..1	SHALL		<a href="#">1098-7924</a>	
@root	1..1	SHALL		<a href="#">1098-10434</a>	2.16.840.1.113883.10.20.22.2.18
@extension	1..1	SHALL		<a href="#">1098-32597</a>	2014-06-09
code	1..1	SHALL		<a href="#">1098-15395</a>	
@code	1..1	SHALL		<a href="#">1098-15396</a>	48768-6
@codeSystem	1..1	SHALL		<a href="#">1098-32149</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
title	1..1	SHALL		<a href="#">1098-7926</a>	
text	1..1	SHALL		<a href="#">1098-7927</a>	
entry	0..*	SHOULD		<a href="#">1098-7959</a>	
act	1..1	SHALL		<a href="#">1098-15501</a>	<a href="#">Coverage Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.60:2014-06-09)</a>

1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7924) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.22.2.18"** (CONF:1098-10434).
  - b. **SHALL** contain exactly one [1..1] **@extension="2014-06-09"** (CONF:1098-32597).
2. **SHALL** contain exactly one [1..1] **code** (CONF:1098-15395).

- a. This code **SHALL** contain exactly one [1..1] @code="48768-6" Payers (CONF:1098-15396).
- b. This code **SHALL** contain exactly one [1..1] @codeSystem="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1098-32149).
- 3. **SHALL** contain exactly one [1..1] title (CONF:1098-7926).
- 4. **SHALL** contain exactly one [1..1] text (CONF:1098-7927).
- 5. **SHOULD** contain zero or more [0..\*] entry (CONF:1098-7959) such that it
  - a. **SHALL** contain exactly one [1..1] [Coverage Activity \(V2\)](#) (identifier: urn:h17ii:2.16.840.1.113883.10.20.22.4.60:2014-06-09) (CONF:1098-15501).

**Figure 36: Payers Section (V2) Example**

```

<section>
  <templateId root="2.16.840.1.113883.10.20.22.2.18" extension="2014-06-09" />
  <!-- ***** Payers section template ***** -->
  <code code="48768-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
  displayName="Payers" />
  <title>Insurance Providers</title>
  <text>
    . . .
  </text>
  <entry typeCode="DRIV">
    <act classCode="ACT" moodCode="DEF">
      <templateId root="2.16.840.1.113883.10.20.22.4.60" extension="2014-06-09" />
      <!-- **** Coverage entry template **** -->
      ...
    </act>
  </entry>
</section>

```

### 2.4.1 Payment Sources Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.34.2.4 (open)]

Published as part of National Health Care Surveys, Release 1, DSTU 1 - US Realm

**Table 54: Payment Sources Section Contexts**

Contained By:	Contains:
<a href="#">Inpatient Encounter (NHCS-IP) (V3)</a> (required) <a href="#">Outpatient Encounter (NHCS-OPD, NAMCS, NHAMCS-OPD) (V3)</a> (required) <a href="#">Emergency Department Encounter (NHCS-ED, NHAMCS-ED) (V3)</a> (required)	<a href="#">Planned Coverage</a>

This section contains the expected sources of payment for this visit.

**Table 55: Payment Sources Section Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.4)					
templateId	1..1	SHALL		<a href="#">1106-199</a>	
@root	1..1	SHALL		<a href="#">1106-200</a>	2.16.840.1.113883.10.20.34.2.4
entry	0..*	SHOULD		<a href="#">1106-201</a>	
act	1..1	SHALL		<a href="#">1106-202</a>	<a href="#">Planned Coverage (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.129)</a>

1. Conforms to [Payers Section \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2014-06-09).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-199) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.34.2.4"** (CONF:1106-200).
3. **SHOULD** contain zero or more [0..\*] **entry** (CONF:1106-201) such that it
  - a. **SHALL** contain exactly one [1..1] [Planned Coverage](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.129) (CONF:1106-202).

**Figure 37: Payment Sources Section Example**

```

<section>
  <!-- Confirms to C-CDA Payers Section (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.2.18" extension="2014-06-09" />
  <!-- Payment Sources Section -->
  <templateId root="2.16.840.1.113883.10.20.34.2.4" />
  <code code="48768-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
    displayName="Payers" />
  <title>Payment Sources Section</title>
  <text>
    ...
  </text>
  <entry>
    <!-- Form Element: Expected source of payment for this visit -->
    <act classCode="ACT" moodCode="INT">
      <!-- Planned Coverage -->
      <templateId root="2.16.840.1.113883.10.20.22.4.129" />
      ...
    </act>
  </entry>
  <entry>
    <!-- Form Element: Expected source of payment for this visit -->
    <act classCode="ACT" moodCode="INT">
      <!-- Planned Coverage -->
      <templateId root="2.16.840.1.113883.10.20.22.4.129" />
      ...
    </act>
  </entry>
</section>

```

## 2.5 Problems Section (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.2.2:2016-07-01 (open)]

Draft as part of National Health Care Surveys Release 1, DSTU Release 1.2 - US Realm

**Table 56: Problems Section (V3) Contexts**

Contained By:	Contains:
<a href="#">Inpatient Encounter (NHCS-IP) (V3)</a> (required) <a href="#">Outpatient Encounter (NHCS-OPD, NAMCS, NHAMCS-OPD) (V3)</a> (required) <a href="#">Emergency Department Encounter (NHCS-ED, NHAMCS-ED) (V3)</a> (required)	<a href="#">Admission Diagnosis Observation</a> <a href="#">Adverse Effect of Medical Treatment</a> <a href="#">Injury or Poisoning Observation (V2)</a> <a href="#">Primary Diagnosis Observation (V2)</a> <a href="#">Problem/Diagnosis/Symptom/Condition Observation (V2)</a>

This section contains problems, including current diagnoses, chronic conditions and symptoms.

**Table 57: Problems Section (V3) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.2:2016-07-01)					
templateId	1..1	SHALL		<a href="#">3256-67</a>	
@root	1..1	SHALL		<a href="#">3256-68</a>	2.16.840.1.113883.10.20.34.2.2
@extension	0..1	MAY		<a href="#">3256-1175</a>	2016-07-01
code	1..1	SHALL		<a href="#">3256-509</a>	
@code	1..1	SHALL		<a href="#">3256-510</a>	11450-4
@codeSystem	1..1	SHALL		<a href="#">3256-511</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
title	1..1	SHALL		<a href="#">3256-512</a>	
text	1..1	SHALL		<a href="#">3256-513</a>	
entry	1..1	SHALL		<a href="#">3256-74</a>	
observation	1..1	SHALL		<a href="#">3256-75</a>	<a href="#">Primary Diagnosis Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.6:2015-04-01)</a>
entry	0..1	MAY		<a href="#">3256-875</a>	
observation	1..1	SHALL		<a href="#">3256-876</a>	<a href="#">Admission Diagnosis Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.34:2015-04-01)</a>
entry	0..*	SHOULD		<a href="#">3256-332</a>	
observation	1..1	SHALL		<a href="#">3256-333</a>	<a href="#">Problem/Diagnosis/Symptom/Condition Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.1:2015-04-01)</a>
entry	0..*	MAY		<a href="#">3256-415</a>	
observation	1..1	SHALL		<a href="#">3256-416</a>	<a href="#">Injury or Poisoning Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.17:2015-04-01)</a>
entry	0..1	MAY		<a href="#">3256-497</a>	
observation	1..1	SHALL		<a href="#">3256-</a>	<a href="#">Adverse Effect of Medical</a>

				498	<a href="#">Treatment (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.14)</a>
--	--	--	--	-----	---

1. **SHALL** contain exactly one [1..1] **templateId** (CONF:3256-67) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.2.2" (CONF:3256-68).
  - b. **MAY** contain zero or one [0..1] **@extension**="2016-07-01" (CONF:3256-1175).
2. **SHALL** contain exactly one [1..1] **code** (CONF:3256-509).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="11450-4" Problem List (CONF:3256-510).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:3256-511).
3. **SHALL** contain exactly one [1..1] **title** (CONF:3256-512).
4. **SHALL** contain exactly one [1..1] **text** (CONF:3256-513).

If no other means of determination is possible, use first listed diagnosis as the primary diagnosis.

5. **SHALL** contain exactly one [1..1] **entry** (CONF:3256-74) such that it
  - a. **SHALL** contain exactly one [1..1] [Primary Diagnosis Observation \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.6:2015-04-01) (CONF:3256-75).
6. **MAY** contain zero or one [0..1] **entry** (CONF:3256-875) such that it
  - a. **SHALL** contain exactly one [1..1] [Admission Diagnosis Observation](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.34:2015-04-01) (CONF:3256-876).
  - b. If the document is an Inpatient Encounter then this entry **SHALL** be present (CONF:3256-887).
7. **SHOULD** contain zero or more [0..\*] **entry** (CONF:3256-332) such that it
  - a. **SHALL** contain exactly one [1..1] [Problem/Diagnosis/Symptom/Condition Observation \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.1:2015-04-01) (CONF:3256-333).
8. **MAY** contain zero or more [0..\*] **entry** (CONF:3256-415) such that it
  - a. **SHALL** contain exactly one [1..1] [Injury or Poisoning Observation \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.17:2015-04-01) (CONF:3256-416).
    - i. If this is an Outpatient Observation then this entry **MAY** be present (CONF:3256-1110).
9. **MAY** contain zero or one [0..1] **entry** (CONF:3256-497) such that it
  - a. **SHALL** contain exactly one [1..1] [Adverse Effect of Medical Treatment](#) (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.14) (CONF:3256-498).



**Figure 38: Problems Section (V3) Example**

```

<section>
  <!-- [NHCS R1STU1.2] Problems Section (V3) -->
  <templateId root="2.16.840.1.113883.10.20.34.2.2" extension="2016-07-01" />
  <code code="11450-4"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC"
    displayName="PROBLEM LIST" />
  <title>Problems</title>
  <text>...</text>
  <entry>
    <!-- This observation represents the primary diagnosis -->
    <observation classCode="OBS" moodCode="EVN">
      <!-- [C-CDA R2] Problem Observation (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2014-06-09" />
      <!-- [NHCS R1D1] Primary Diagnosis Observation (V2) -->
      <templateId root="2.16.840.1.113883.10.20.34.3.6" extension="2015-04-01" />
      ...
    </observation>
  </entry>
  <entry>
    <!-- This observation represents a diagnosis -->
    <observation classCode="OBS" moodCode="EVN">
      <!-- [C-CDA R2] Problem Observation (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2014-06-09" />
      <!-- [NHCS R1D1] Problem/Diagnosis/Symptom/Condition Observation (V2) -->
      <templateId root="2.16.840.1.113883.10.20.34.3.1" extension="2015-04-01" />
      ...
    </observation>
  </entry>
  <entry>
    <!-- This observation represents a comorbid condition - comorbid
      conditions are now represented in the Problem/Diagnosis/Symptom/Condition
      Observation as the Co-Morbid Condition Observation has been retired-->
    <observation classCode="OBS" moodCode="EVN">
      <!-- [C-CDA R2] R2 Problem Observation (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2014-06-09" />
      <!-- [NHCS R1D1] Problem/Diagnosis/Symptom/Condition Observation (V2) -->
      <templateId root="2.16.840.1.113883.10.20.34.3.1" extension="2015-04-01" />
      ...
    </observation>
  </entry>
  <entry>
    <!-- This observation represents an asthma diagnosis - asthma
      diagnoses are now represented in the Problem/Diagnosis/Symptom/Condition
      Observation as the Asthma Diagnosis Observation has been retired -->
    <observation classCode="OBS" moodCode="EVN">
      <!-- [C-CDA R2] R2 Problem Observation (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2014-06-09" />
      <!-- [NHCS R1D1] Problem/Diagnosis/Symptom/Condition Observation (V2) -->
      <templateId root="2.16.840.1.113883.10.20.34.3.1" extension="2015-04-01" />
      ...
    </observation>
  </entry>
  <!-- This entry represents whether the visit was related to adverse
    effect of medical treatment -->

```

```

<entry>
  <observation classCode="OBS" moodCode="EVN">
    <!-- [C-CDA R2] R2 Problem Observation (V2) -->
    <templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2014-06-09" />
    <!-- [NHCS R1D1] Adverse Effect of Medical Treatment -->
    <templateId root="2.16.840.1.113883.10.20.34.3.14" />
    ...
  </observation>
</entry>
</section>

```

## 2.6 Results Section (entries optional) (V2)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.3:2014-06-09  
(open)]

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DSTU R2

**Table 58: Results Section (entries optional) (V2) Contexts**

Contained By:	Contains:
<a href="#">Inpatient Encounter (NHCS-IP) (V3)</a> (required) <a href="#">Outpatient Encounter (NHCS-OPD, NAMCS, NHAMCS-OPD) (V3)</a> (required) <a href="#">Emergency Department Encounter (NHCS-ED, NHAMCS-ED) (V3)</a> (required)	<a href="#">Result Organizer (V2)</a>

This section contains the results of observations generated by laboratories, imaging and other procedures. The scope includes observations of hematology, chemistry, serology, virology, toxicology, microbiology, plain x-ray, ultrasound, CT, MRI, angiography, echocardiography, nuclear medicine, pathology, and procedure observations.

This section often includes notable results such as abnormal values or relevant trends. It can contain all results for the period of time being documented.

Laboratory results are typically generated by laboratories providing analytic services in areas such as chemistry, hematology, serology, histology, cytology, anatomic pathology, microbiology, and/or virology. These observations are based on analysis of specimens obtained from the patient and submitted to the laboratory.

Imaging results are typically generated by a clinician reviewing the output of an imaging procedure, such as where a cardiologist reports the left ventricular ejection fraction based on the review of a cardiac echocardiogram.

Procedure results are typically generated by a clinician to provide more granular information about component observations made during a procedure, such as where a gastroenterologist reports the size of a polyp observed during a colonoscopy.

**Table 59: Results Section (entries optional) (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3:2014-06-09)					
templateId	1..1	SHALL		<a href="#">1098-7116</a>	
@root	1..1	SHALL		<a href="#">1098-9136</a>	2.16.840.1.113883.10.20.22.2.3
@extension	1..1	SHALL		<a href="#">1098-32591</a>	2014-06-09
code	1..1	SHALL		<a href="#">1098-15431</a>	
@code	1..1	SHALL		<a href="#">1098-15432</a>	30954-2
@codeSystem	1..1	SHALL		<a href="#">1098-31041</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
title	1..1	SHALL		<a href="#">1098-8891</a>	
text	1..1	SHALL		<a href="#">1098-7118</a>	
entry	0..*	SHOULD		<a href="#">1098-7119</a>	
organizer	1..1	SHALL		<a href="#">1098-15515</a>	<a href="#">Result Organizer (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.1:2014-06-09)</a>

1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7116) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.2.3" (CONF:1098-9136).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32591).
2. **SHALL** contain exactly one [1..1] **code** (CONF:1098-15431).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="30954-2" Relevant diagnostic tests and/or laboratory data (CONF:1098-15432).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1098-31041).
3. **SHALL** contain exactly one [1..1] **title** (CONF:1098-8891).
4. **SHALL** contain exactly one [1..1] **text** (CONF:1098-7118).
5. **SHOULD** contain zero or more [0..\*] **entry** (CONF:1098-7119) such that it
  - a. **SHALL** contain exactly one [1..1] [Result Organizer \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.1:2014-06-09) (CONF:1098-15515).

## 2.7 Services and Procedures Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.34.2.3 (open)]

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**Table 60: Services and Procedures Section Contexts**

<b>Contained By:</b>	<b>Contains:</b>
<a href="#">Inpatient Encounter (NHCS-IP) (V3)</a> (required) <a href="#">Outpatient Encounter (NHCS-OPD, NAMCS, NHAMCS-OPD) (V3)</a> (required) <a href="#">Emergency Department Encounter (NHCS-ED, NHAMCS-ED) (V3)</a> (required)	<a href="#">Ordered Service Act</a> <a href="#">Ordered Service Observation</a> <a href="#">Ordered Service Procedure</a> <a href="#">Provided Service Act</a> <a href="#">Provided Service Observation</a> <a href="#">Provided Service Procedure</a>

This section contains services and procedures such as examinations, blood tests, imaging, other tests, non-medication treatment, and health education ordered for or provided to the patient.

**Table 61: Services and Procedures Section Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.3)					
templateId	1..1	SHALL		<a href="#">1106-76</a>	
@root	1..1	SHALL		<a href="#">1106-86</a>	2.16.840.1.113883.10.20.34.2.3
entry	0..*	MAY		<a href="#">1106-82</a>	
act	1..1	SHALL		<a href="#">1106-275</a>	<a href="#">Provided Service Act (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.20)</a>
entry	0..*	MAY		<a href="#">1106-84</a>	
act	1..1	SHALL		<a href="#">1106-85</a>	<a href="#">Ordered Service Act (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.19)</a>
entry	0..*	MAY		<a href="#">1106-276</a>	
observation	1..1	SHALL		<a href="#">1106-277</a>	<a href="#">Provided Service Observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.3)</a>
entry	0..*	MAY		<a href="#">1106-278</a>	
observation	1..1	SHALL		<a href="#">1106-279</a>	<a href="#">Ordered Service Observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.2)</a>
entry	0..*	MAY		<a href="#">1106-280</a>	
procedure	1..1	SHALL		<a href="#">1106-281</a>	<a href="#">Provided Service Procedure (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.12)</a>
entry	0..*	MAY		<a href="#">1106-282</a>	
procedure	1..1	SHALL		<a href="#">1106-283</a>	<a href="#">Ordered Service Procedure (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.11)</a>

1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-76) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.34.2.3"** (CONF:1106-86).
2. **MAY** contain zero or more [0..\*] **entry** (CONF:1106-82) such that it

- a. **SHALL** contain exactly one [1..1] [Provided Service Act](#) (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.20) (CONF:1106-275).  
Note: Form Element Categories (Services): Provided Other Tests and Procedures (except Excision of Tissue), Provided Non-medication treatment, Provided Health Education/Counseling
3. **MAY** contain zero or more [0..\*] **entry** (CONF:1106-84) such that it
  - a. **SHALL** contain exactly one [1..1] [Ordered Service Act](#) (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.19) (CONF:1106-85).  
Note: Form Element Categories (Services): Ordered Other Tests and Procedures (except Excision of Tissue), Ordered Non-medication treatment, Ordered Health Education/Counseling
4. **MAY** contain zero or more [0..\*] **entry** (CONF:1106-276) such that it
  - a. **SHALL** contain exactly one [1..1] [Provided Service Observation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.3) (CONF:1106-277).  
Note: Form Element Categories (Services): Provided Examinations, Provided Blood Tests, Provided Imaging
5. **MAY** contain zero or more [0..\*] **entry** (CONF:1106-278) such that it
  - a. **SHALL** contain exactly one [1..1] [Ordered Service Observation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.2) (CONF:1106-279).  
Note: Form Element Categories (Services): Ordered Examinations, Ordered Blood Tests, Ordered Imaging
6. **MAY** contain zero or more [0..\*] **entry** (CONF:1106-280) such that it
  - a. **SHALL** contain exactly one [1..1] [Provided Service Procedure](#) (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.12) (CONF:1106-281).  
Note: Form Element (Services): Provided Excision of Tissue
7. **MAY** contain zero or more [0..\*] **entry** (CONF:1106-282) such that it
  - a. **SHALL** contain exactly one [1..1] [Ordered Service Procedure](#) (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.11) (CONF:1106-283).  
Note: Form Element (Services): Ordered Excision of Tissue

**Figure 39: Services and Procedures Section Example**

```

<section>
  <!-- Services and Procedures Section -->
  <templateId root="2.16.840.1.113883.10.20.34.2.3" />
  <code code="62387-6" displayName="Interventions Provided"
    codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
  <title>Services and Procedures Section</title>
  <text>
    ...
  </text>
  <!-- This entry represents a service activity that has been ordered,
    but not yet provided -->
  <entry>
    <act classCode="ACT" moodCode="RQO">
      <!-- Confirms to C-CDA R2 Planned Act (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.39" extension="2014-06-09" />
      <!-- Ordered Service Act -->
      <templateId root="2.16.840.1.113883.10.20.34.3.19" />
      ...
    </act>
  </entry>
  <!-- This entry represents a procedure service that has been ordered,
    but not yet provided -->
  <entry>
    <procedure classCode="PROC" moodCode="RQO">
      <!-- Confirms to C-CDA R2 Planned Procedure (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.41" extension="2014-06-09" />
      <!-- Ordered Service Procedure -->
      <templateId root="2.16.840.1.113883.10.20.34.3.11" />
      ...
    </procedure>
  </entry>
  <!-- This entry represents an observation service that has been ordered,
    but not yet provided -->
  <entry>
    <observation classCode="OBS" moodCode="RQO">
      <!-- Confirms to C-CDA R2 Planned Observation (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.44" extension="2014-06-09" />
      <!-- Ordered Service Observation -->
      <templateId root="2.16.840.1.113883.10.20.34.3.2" />
      ...
    </observation>
  </entry>
  <!-- This entry represents a service act that has been provided -->
  <entry>
    <act classCode="ACT" moodCode="EVN">
      <!-- Confirms to C-CDA R2 Procedure Activity Act (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.12" extension="2014-06-09" />
      <!-- Provided Service Act -->
      <templateId root="2.16.840.1.113883.10.20.34.3.20" />
      ...
    </act>
  </entry>
  <!-- This entry represents weight-reducing diet education service act
    that has been provided -->
  <entry>

```

```

<act classCode="ACT" moodCode="EVN">
  <!-- Conforms to C-CDA R2 Procedure Activity Act (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.4.12" extension="2014-06-09" />
  <!-- Provided Service Act -->
  <templateId root="2.16.840.1.113883.10.20.34.3.20" />
  ...
</act>
</entry>
<!-- This entry represents a procedure service that has been provided -->
<entry>
  <procedure classCode="PROC" moodCode="EVN">
    <!-- Conforms to C-CDA R2 Procedure Activity Procedure (V2) -->
    <templateId root="2.16.840.1.113883.10.20.22.4.14" extension="2014-06-09" />
    <!-- Provided Service Procedure -->
    <templateId root="2.16.840.1.113883.10.20.34.3.12" />
    ...
  </procedure>
</entry>
<!-- This entry represents an observation service that has been provided -->
<entry>
  <observation classCode="OBS" moodCode="EVN">
    <!-- Conforms to C-CDA R2 Procedure Activity Observation (V2) -->
    <templateId root="2.16.840.1.113883.10.20.22.4.13" extension="2014-06-09" />
    <!-- Provided Service Observation -->
    <templateId root="2.16.840.1.113883.10.20.34.3.3" />
    ...
  </observation>
</entry>
</section>

```

## 2.8 Social History Section (V2)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2014-06-09 (open)]

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**Table 62: Social History Section (V2) Contexts**

Contained By:	Contains:
	<a href="#">Caregiver Characteristics</a> <a href="#">Characteristics of Home Environment</a> <a href="#">Cultural and Religious Observation</a> <a href="#">Pregnancy Observation</a> <a href="#">Smoking Status - Meaningful Use (V2)</a> <a href="#">Social History Observation (V2)</a> <a href="#">Tobacco Use (V2)</a>

This section contains social history data that influence a patient’s physical, psychological or emotional health (e.g., smoking status, pregnancy). Demographic data, such as marital status, race, ethnicity, and religious affiliation, is captured in the header.



**Table 63: Social History Section (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2014-06-09)					
templateId	1..1	SHALL		<a href="#">1098-7936</a>	
@root	1..1	SHALL		<a href="#">1098-10449</a>	2.16.840.1.113883.10.20.22.2.17
@extension	1..1	SHALL		<a href="#">1098-32494</a>	2014-06-09
code	1..1	SHALL		<a href="#">1098-14819</a>	
@code	1..1	SHALL		<a href="#">1098-14820</a>	29762-2
@codeSystem	1..1	SHALL		<a href="#">1098-30814</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
title	1..1	SHALL		<a href="#">1098-7938</a>	
text	1..1	SHALL		<a href="#">1098-7939</a>	
entry	0..*	MAY		<a href="#">1098-7953</a>	
observation	1..1	SHALL		<a href="#">1098-14821</a>	<a href="#">Social History Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2014-06-09)</a>
entry	0..*	MAY		<a href="#">1098-9132</a>	
observation	1..1	SHALL		<a href="#">1098-14822</a>	<a href="#">Pregnancy Observation (identifier: urn:oid:2.16.840.1.113883.10.20.15.3.8)</a>
entry	0..*	SHOULD		<a href="#">1098-14823</a>	
observation	1..1	SHALL		<a href="#">1098-14824</a>	<a href="#">Smoking Status - Meaningful Use (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09)</a>
entry	0..*	MAY		<a href="#">1098-16816</a>	
observation	1..1	SHALL		<a href="#">1098-16817</a>	<a href="#">Tobacco Use (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09)</a>
entry	0..*	MAY		<a href="#">1098-28361</a>	
observation	1..1	SHALL		<a href="#">1098-28362</a>	<a href="#">Caregiver Characteristics (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.72)</a>

entry	0..*	MAY		<a href="#">1098-28366</a>	
observation	1..1	SHALL		<a href="#">1098-28367</a>	<a href="#">Cultural and Religious Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.111)</a>
entry	0..*	MAY		<a href="#">1098-28825</a>	
observation	1..1	SHALL		<a href="#">1098-28826</a>	<a href="#">Characteristics of Home Environment (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.109)</a>

1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7936) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.2.17" (CONF:1098-10449).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32494).
2. **SHALL** contain exactly one [1..1] **code** (CONF:1098-14819).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="29762-2" Social History (CONF:1098-14820).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1098-30814).
3. **SHALL** contain exactly one [1..1] **title** (CONF:1098-7938).
4. **SHALL** contain exactly one [1..1] **text** (CONF:1098-7939).
5. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-7953) such that it
  - a. **SHALL** contain exactly one [1..1] [Social History Observation \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2014-06-09) (CONF:1098-14821).
6. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-9132) such that it
  - a. **SHALL** contain exactly one [1..1] [Pregnancy Observation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.15.3.8) (CONF:1098-14822).
7. **SHOULD** contain zero or more [0..\*] **entry** (CONF:1098-14823) such that it
  - a. **SHALL** contain exactly one [1..1] [Smoking Status - Meaningful Use \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09) (CONF:1098-14824).
8. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-16816) such that it
  - a. **SHALL** contain exactly one [1..1] [Tobacco Use \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09) (CONF:1098-16817).
9. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-28361) such that it
  - a. **SHALL** contain exactly one [1..1] [Caregiver Characteristics](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.72) (CONF:1098-28362).
10. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-28366) such that it

- a. **SHALL** contain exactly one [1..1] Cultural and Religious Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.111) (CONF:1098-28367).
11. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-28825) such that it
- a. **SHALL** contain exactly one [1..1] Characteristics of Home Environment (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.109) (CONF:1098-28826).

**Figure 40: Social History Section (V2) Example**

```

<section>
  <templateId root="2.16.840.1.113883.10.20.22.2.17"
    extension="2014-06-09" />
  <code code="29762-2"
    codeSystem="2.16.840.1.113883.6.1"
    displayName="Social History" />
  <title>SOCIAL HISTORY</title>
  <text>
    . . .
  </text>
  <entry>
    <observation classCode="OBS" moodCode="EVN">
      <!-- Social History Observation (V2)-->
      <templateId root="2.16.840.1.113883.10.20.22.4.38"
        extension="2014-06-09" />
      ...
    </observation>
  </entry>
  <entry>
    <observation classCode="OBS" moodCode="EVN">
      <!-- Smoking Status - Meaningful Use (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.78"
        extension="2014-06-09" />
      ...
    </observation>
  </entry>
  <entry>
    <observation classCode="OBS" moodCode="EVN">
      <!-- Caregiver Characteristics -->
      <templateId root="2.16.840.1.113883.10.20.22.4.72" />
      ...
    </observation>
  </entry>
  <entry>
    <observation classCode="OBS" moodCode="EVN">
      <!-- **Cultural and Religious Observation**-->
      <templateId root="2.16.840.1.113883.10.20.22.4.111" />
      ...
    </observation>
  </entry>
  <entry>
    <observation classCode="OBS" moodCode="EVN">
      <!-- ** Characteristics of Home Environment** -->
      <templateId root="2.16.840.1.113883.10.20.22.4.109" />
      ...
    </observation>
  </entry>
</section>

```

### 2.8.1 Patient Information Section (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.2.5:2016-07-01 (open) ]

Draft as part of National Health Care Surveys Release 1, DSTU Release 1.2 - US Realm

**Table 64: Patient Information Section (V3) Contexts**

Contained By:	Contains:
<a href="#">Inpatient Encounter (NHCS-IP) (V3)</a> (required) <a href="#">Outpatient Encounter (NHCS-OPD, NAMCS, NHAMCS-OPD) (V3)</a> (required) <a href="#">Emergency Department Encounter (NHCS-ED, NHAMCS-ED) (V3)</a> (required)	<a href="#">Patient Residence Observation</a> <a href="#">Pregnancy Observation</a> <a href="#">Smoking Status - Meaningful Use (V2)</a> <a href="#">Tobacco Use (V2)</a>

This section contains patient information such as tobacco use, pregnancy status, and type of patient residence.

**Table 65: Patient Information Section (V3) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.5:2016-07-01)					
templateId	1..1	SHALL		<a href="#">3256-203</a>	
@root	1..1	SHALL		<a href="#">3256-204</a>	2.16.840.1.113883.10.20.34.2.5
@extension	1..1	SHALL		<a href="#">3256-1108</a>	2016-07-01
entry	0..*	MAY		<a href="#">3256-205</a>	
observation	1..1	SHALL		<a href="#">3256-206</a>	<a href="#">Tobacco Use (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09)</a>
entry	0..1	MAY		<a href="#">3256-1106</a>	
observation	1..1	SHALL		<a href="#">3256-1107</a>	<a href="#">Smoking Status - Meaningful Use (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09)</a>
entry	0..1	MAY		<a href="#">3256-207</a>	
observation	1..1	SHALL		<a href="#">3256-208</a>	<a href="#">Pregnancy Observation (identifier: urn:oid:2.16.840.1.113883.10.20.15.3.8)</a>
entry	0..1	MAY		<a href="#">3256-676</a>	
observation	1..1	SHALL		<a href="#">3256-677</a>	<a href="#">Patient Residence Observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.25)</a>

1. Conforms to [Social History Section \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2014-06-09).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:3256-203) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.2.5" (CONF:3256-204).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2016-07-01" (CONF:3256-1108).
3. **MAY** contain zero or more [0..\*] **entry** (CONF:3256-205) such that it
  - a. **SHALL** contain exactly one [1..1] [Tobacco Use \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09) (CONF:3256-206).
  - b. If the document is an Outpatient Encounter then at least one of this entry **SHALL** be present (CONF:3256-663).
4. **MAY** contain zero or one [0..1] **entry** (CONF:3256-1106) such that it

- a. **SHALL** contain exactly one [1..1] Smoking Status - Meaningful Use (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09) (CONF:3256-1107).
  - i. If the document is an Outpatient Encounter then this entry **SHALL** be present (CONF:3256-1109).
5. **MAY** contain zero or one [0..1] **entry** (CONF:3256-207) such that it
  - a. **SHALL** contain exactly one [1..1] Pregnancy Observation (identifier: urn:oid:2.16.840.1.113883.10.20.15.3.8) (CONF:3256-208).
  - b. If the patient is male, then this section **SHALL NOT** contain this entry. If the document is an Inpatient Encounter or an Outpatient Encounter then this entry **MAY** be present (CONF:3256-514).
6. **MAY** contain zero or one [0..1] **entry** (CONF:3256-676) such that it
  - a. **SHALL** contain exactly one [1..1] Patient Residence Observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.25) (CONF:3256-677).

**Figure 41: Patient Information Section (V2) Example**

```

<section>
  <!-- [C-CDA R2] Social History Section (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.2.17" extension="2014-06-09" />
  <!-- [NHCS R1D1.2] Patient Information Section (V3) -->
  <templateId root="2.16.840.1.113883.10.20.34.2.5" extension="2016-07-01" />
  <code code="29762-2" codeSystem="2.16.840.1.113883.6.1" displayName="Social History" />
  <title>Patient Information</title>
  <text>..</text>
  <entry>
    <observation classCode="OBS" moodCode="EVN">
      <!-- [NHCS R1D1] Patient Residence Observation -->
      <templateId root="2.16.840.1.113883.10.20.34.3.25" />
      ...
    </observation>
  </entry>
  <entry>
    <observation classCode="OBS" moodCode="EVN">
      <!-- [C-CDA R2] Tobacco Use (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.85" extension="2014-06-09" />
      ...
    </observation>
  </entry>
  <entry>
    <observation classCode="OBS" moodCode="EVN">
      <!-- [C-CDA R2] Tobacco Use (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.85" extension="2014-06-09" />
      ...
    </observation>
  </entry>
  <entry>
    <observation classCode="OBS" moodCode="EVN">
      <!-- [C-CDA R2] Tobacco Use (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.85" extension="2014-06-09" />
      ...
    </observation>
  </entry>
  <entry>
    <observation classCode="OBS" moodCode="EVN">
      <!-- [C-CDA R2] Smoking Status - Meaningful Use (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.78" extension="2014-06-09" />
      ...
    </observation>
  </entry>
  <entry>
    <!-- Is Female Patient Pregnant -->
    <observation classCode="OBS" moodCode="EVN">
      <!-- [C-CDA R1.1] Pregnancy Observation -->
      <templateId root="2.16.840.1.113883.10.20.15.3.8" />
      ...
    </observation>
  </entry>
</section>

```



## 2.9 Triage Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.34.2.10 (open)]

Published as part of National Health Care Surveys, Release 1, DSTU 1 - US Realm

**Table 66: Triage Section Contexts**

Contained By:	Contains:
<a href="#">Emergency Department Encounter (NHCS-ED, NHAMCS-ED) (V3)</a> (required)	<a href="#">On Oxygen on Arrival Observation</a> <a href="#">Pain Assessment Scale Observation</a> <a href="#">Triage Level Assigned Observation</a>

This section contains triage information such as triage index, pain scale and whether the patient was on oxygen on arrival.

**Table 67: Triage Section Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:oid:2.16.840.1.113883.10.20.34.2.10)					
templateId	1..1	SHALL		<a href="#">1106-646</a>	
@root	1..1	SHALL		<a href="#">1106-647</a>	2.16.840.1.113883.10.20.34.2.10
code	1..1	SHALL		<a href="#">1106-648</a>	
@code	0..1	MAY		<a href="#">1106-649</a>	54094-8
@codeSystem	0..1	MAY		<a href="#">1106-650</a>	2.16.840.1.113883.6.1
title	1..1	SHALL		<a href="#">1106-651</a>	
text	1..1	SHALL		<a href="#">1106-652</a>	
entry	1..1	SHALL		<a href="#">1106-622</a>	
observation	1..1	SHALL		<a href="#">1106-624</a>	<a href="#">Triage Level Assigned Observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.23)</a>
entry	1..1	SHALL		<a href="#">1106-623</a>	
observation	1..1	SHALL		<a href="#">1106-625</a>	<a href="#">Pain Assessment Scale Observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.22)</a>
entry	1..1	SHALL		<a href="#">1106-716</a>	
observation	1..1	SHALL		<a href="#">1106-717</a>	<a href="#">On Oxygen on Arrival Observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.29)</a>

1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-646) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.2.10" (CONF:1106-647).
2. **SHALL** contain exactly one [1..1] **code** (CONF:1106-648).
  - a. This code **MAY** contain zero or one [0..1] **@code**="54094-8" Triage Note (CONF:1106-649).
  - b. This code **MAY** contain zero or one [0..1] **@codeSystem**="2.16.840.1.113883.6.1" (CONF:1106-650).
3. **SHALL** contain exactly one [1..1] **title** (CONF:1106-651).

4. **SHALL** contain exactly one [1..1] **text** (CONF:1106-652).
5. **SHALL** contain exactly one [1..1] **entry** (CONF:1106-622) such that it
  - a. **SHALL** contain exactly one [1..1] Triage Level Assigned Observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.23) (CONF:1106-624).
6. **SHALL** contain exactly one [1..1] **entry** (CONF:1106-623) such that it
  - a. **SHALL** contain exactly one [1..1] Pain Assessment Scale Observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.22) (CONF:1106-625).
7. **SHALL** contain exactly one [1..1] **entry** (CONF:1106-716) such that it
  - a. **SHALL** contain exactly one [1..1] On Oxygen on Arrival Observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.29) (CONF:1106-717).

**Figure 42: Triage Section Example**

```

<section>
  <!-- Triage Section -->
  <templateId root="2.16.840.1.113883.10.20.34.2.10" />
  <code code="54094-8" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
    displayName="Triage Note" />
  <title>Triage Section</title>
  <text>
    ...
  </text>
  <entry>
    <!-- Triage Level Assigned Observation -->
    <observation classCode="OBS" moodCode="EVN">
      <!-- Conforms to C-CDA R2 Assessment Scale Observation -->
      <templateId root="2.16.840.1.113883.10.20.22.4.69" />
      <!-- Triage Level Assigned Observation -->
      <templateId root="2.16.840.1.113883.10.20.34.3.23" />
      ...
    </observation>
  </entry>
  <entry>
    <!-- Pain Assessment Scale Observation -->
    <observation classCode="OBS" moodCode="EVN">
      <!-- Conforms to C-CDA R2 Assessment Scale Observation -->
      <templateId root="2.16.840.1.113883.10.20.22.4.69" />
      <!-- Pain Assessment Scale Observation -->
      <templateId root="2.16.840.1.113883.10.20.34.3.22" />
      ...
    </observation>
  </entry>
  <entry>
    <!-- On Oxygen on Arrival Observation -->
    <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.34.3.29" />
      ...
    </observation>
  </entry>
</section>

```

## 2.10 Vital Signs Section (entries optional) (V2)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.4:2014-06-09  
(open) ]

Published as part of Consolidated CDA Templates for Clinical Notes (US Realm)  
DSTU R2

**Table 68: Vital Signs Section (entries optional) (V2) Contexts**

Contained By:	Contains:
	<a href="#">Vital Signs Organizer (V2)</a>

The Vital Signs Section contains relevant vital signs for the context and use case of the document type, such as blood pressure, heart rate, respiratory rate, height, weight, body mass index, head circumference, pulse oximetry, temperature, and body surface area. The section should include notable vital signs such as the most recent, maximum and/or minimum, baseline, or relevant trends.

Vital signs are represented in the same way as other results, but are aggregated into their own section to follow clinical conventions.

**Table 69: Vital Signs Section (entries optional) (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4:2014-06-09)					
templateId	1..1	SHALL		<a href="#">1098-7268</a>	
@root	1..1	SHALL		<a href="#">1098-10451</a>	2.16.840.1.113883.10.20.22.2.4
@extension	1..1	SHALL		<a href="#">1098-32584</a>	2014-06-09
code	1..1	SHALL		<a href="#">1098-15242</a>	
@code	1..1	SHALL		<a href="#">1098-15243</a>	8716-3
@codeSystem	1..1	SHALL		<a href="#">1098-30902</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
title	1..1	SHALL		<a href="#">1098-9966</a>	
text	1..1	SHALL		<a href="#">1098-7270</a>	
entry	0..*	SHOULD		<a href="#">1098-7271</a>	
organizer	1..1	SHALL		<a href="#">1098-15517</a>	<a href="#">Vital Signs Organizer (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.26:2014-06-09)</a>

1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7268) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.2.4" (CONF:1098-10451).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32584).
2. **SHALL** contain exactly one [1..1] **code** (CONF:1098-15242).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="8716-3" Vital Signs (CONF:1098-15243).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1098-30902).
3. **SHALL** contain exactly one [1..1] **title** (CONF:1098-9966).
4. **SHALL** contain exactly one [1..1] **text** (CONF:1098-7270).
5. **SHOULD** contain zero or more [0..\*] **entry** (CONF:1098-7271) such that it
  - a. **SHALL** contain exactly one [1..1] **Vital Signs Organizer (V2)** (identifier: urn:h17ii:2.16.840.1.113883.10.20.22.4.26:2014-06-09) (CONF:1098-15517).

### 2.10.1 Vital Signs Section (entries required) (V2)

[section: identifier urn:h17ii:2.16.840.1.113883.10.20.22.2.4.1:2014-06-09 (open)]

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DSTU R2

**Table 70: Vital Signs Section (entries required) (V2) Contexts**

Contained By:	Contains:
<a href="#">Inpatient Encounter (NHCS-IP) (V3)</a> (required) <a href="#">Outpatient Encounter (NHCS-OPD, NAMCS, NHAMCS-OPD) (V3)</a> (required) <a href="#">Emergency Department Encounter (NHCS-ED, NHAMCS-ED) (V3)</a> (required)	<a href="#">Vital Signs Organizer (V2)</a>

The Vital Signs Section contains relevant vital signs for the context and use case of the document type, such as blood pressure, heart rate, respiratory rate, height, weight, body mass index, head circumference, pulse oximetry, temperature, and body surface area. The section should include notable vital signs such as the most recent, maximum and/or minimum, baseline, or relevant trends.

Vital signs are represented in the same way as other results, but are aggregated into their own section to follow clinical conventions.

**Table 71: Vital Signs Section (entries required) (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2014-06-09)					
@nullFlavor	0..1	MAY		<a href="#">1098-32874</a>	urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = NI
templateId	1..1	SHALL		<a href="#">1098-7273</a>	
@root	1..1	SHALL		<a href="#">1098-10452</a>	2.16.840.1.113883.10.20.22.2.4.1
@extension	1..1	SHALL		<a href="#">1098-32585</a>	2014-06-09
code	1..1	SHALL		<a href="#">1098-15962</a>	
@code	1..1	SHALL		<a href="#">1098-15963</a>	8716-3
@codeSystem	1..1	SHALL		<a href="#">1098-30903</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
title	1..1	SHALL		<a href="#">1098-9967</a>	
text	1..1	SHALL		<a href="#">1098-7275</a>	
entry	1..*	SHALL		<a href="#">1098-7276</a>	
organizer	1..1	SHALL		<a href="#">1098-15964</a>	<a href="#">Vital Signs Organizer (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.26:2014-06-09)</a>

1. Conforms to [Vital Signs Section \(entries optional\) \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4:2014-06-09).
2. **MAY** contain zero or one [0..1] **@nullFlavor**="NI" No information (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:1098-32874).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7273) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.2.4.1" (CONF:1098-10452).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32585).
4. **SHALL** contain exactly one [1..1] **code** (CONF:1098-15962).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="8716-3" Vital Signs (CONF:1098-15963).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1098-30903).
5. **SHALL** contain exactly one [1..1] **title** (CONF:1098-9967).
6. **SHALL** contain exactly one [1..1] **text** (CONF:1098-7275).

If section/@nullFlavor is not present:

7. **SHALL** contain at least one [1..\*] **entry** (CONF:1098-7276) such that it
  - a. **SHALL** contain exactly one [1..1] **Vital Signs Organizer (V2)** (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.26:2014-06-09) (CONF:1098-15964).

**Figure 43: Vital Signs Section (entries required) (V2) Example**

```

<component>
  <section>
    <!-- ** Vital Signs section with entries required ** -->
    <templateId root="2.16.840.1.113883.10.20.22.2.4.1"
      extension="2014-06-09" />
    <code code="8716-3" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
      displayName="VITAL SIGNS" />
    <title>VITAL SIGNS</title>
    <text>
      . . .
    </text>
    <entry typeCode="DRIV">
      <organizer classCode="CLUSTER" moodCode="EVN">
        <!-- ** Vital signs organizer ** -->
        <templateId root="2.16.840.1.113883.10.20.22.4.26"
          extension="2014-06-09" />
        . . .
      </organizer>
    </entry>
  </section>
</component>

```

### 3 ENTRY-LEVEL TEMPLATES

This chapter describes the clinical statement entry templates used within the sections of the document. Entry templates contain constraints that are required for conformance.

Entry-level templates are always in sections.

Each entry-level template description contains the following information:

- Key template metadata (e.g., templateId, etc.)
- Description and explanatory narrative.
- Required CDA acts, participants and vocabularies.
- Optional CDA acts, participants and vocabularies.

Several entry-level templates require an effectiveTime:

The effectiveTime of an observation is the time interval over which the observation is known to be true. The low and high values should be as precise as possible, but no more precise than known. While CDA has multiple mechanisms to record this time interval (e.g., by low and high values, low and width, high and width, or center point and width), we constrain most to use only the low/high form. The low value is the earliest point for which the condition is known to have existed. The high value, when present, indicates the time at which the observation was no longer known to be true. The full description of effectiveTime and time intervals is contained in the CDA R2 normative edition.

ID in entry templates:

Entry-level templates may also describe an id element, which is an identifier for that entry. This id may be referenced within the document, or by the system receiving the document. The id assigned must be globally unique.

#### 3.1 Admission Priority Observation

```
[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.3.35:2015-04-01
(open) ]
```

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**Table 72: Admission Priority Observation Contexts**

Contained By:	Contains:
<a href="#">Current Inpatient Visit</a> (optional)	

This template represents the priority of this admission or visit.



**Table 73: Admission Priority Observation Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.35:2015-04-01)					
@classCode	1..1	SHALL		<a href="#">1184-884</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1184-885</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1184-878</a>	
@root	1..1	SHALL		<a href="#">1184-880</a>	2.16.840.1.113883.10.20.34.3.35
@extension	1..1	SHALL		<a href="#">1184-881</a>	2015-04-01
code	1..1	SHALL		<a href="#">1184-879</a>	
@code	1..1	SHALL		<a href="#">1184-882</a>	78020-5
@codeSystem	1..1	SHALL		<a href="#">1184-883</a>	2.16.840.1.113883.6.1
value	1..1	SHALL	CD	<a href="#">1184-886</a>	urn:oid:2.16.840.1.114222.4.11.7365 (Priority (Type) of Admission or Visit (NCHS))

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1184-884).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1184-885).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1184-878) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.35" (CONF:1184-880).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2015-04-01" (CONF:1184-881).
4. **SHALL** contain exactly one [1..1] **code** (CONF:1184-879).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="78020-5" Admission priority (CONF:1184-882).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CONF:1184-883).
5. **SHALL** contain exactly one [1..1] **value** with **@xsi:type**="CD", where the code **SHALL** be selected from ValueSet [Priority \(Type\) of Admission or Visit \(NCHS\)](#) urn:oid:2.16.840.1.114222.4.11.7365 **DYNAMIC** (CONF:1184-886).

**Table 74: Priority (Type) of Admission or Visit (NCHS)**

Value Set: Priority (Type) of Admission or Visit (NCHS) urn:oid:2.16.840.1.114222.4.11.7365 The kind or importance of the process which resulted in the patient's being admitted as an inpatient. Value Set Source: <a href="https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7365">https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7365</a>			
Code	Code System	Code System OID	Print Name
183452005	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Emergency
448381000124100	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Urgent hospital admission
8715000	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Elective
447941000124106	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Hospital admission of newborn
183497001	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Non-urgent Trauma Admission
183463008	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Admit Trauma Emergency
...			

**Figure 44: Admission Priority Observation Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- Admission Priority Observation -->
  <templateId root="2.16.840.1.113883.10.20.34.3.35"
    extension="2015-04-01" />
  <id root="cd691b5e-2464-4fb4-936d-0d9d67ebb8fd" />
  <code code="78020-5"
    displayName="Admission Priority"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC" />
  <statusCode code="completed" />
  <value xsi:type="CD"
    code="183452005"
    displayName="Emergency"
    codeSystem="2.16.840.1.113883.6.96"
    codeSystemName="SNOMED CT" />
</observation>

```

## 3.2 Age Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.31 (open)]

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DSTU R1.1

**Table 75: Age Observation Contexts**

Contained By:	Contains:
<a href="#">Problem Observation (V2)</a> (optional)	

This Age Observation represents the subject's age at onset of an event or observation. The age of a relative in a Family History Observation at the time of that observation could also be inferred by comparing RelatedSubject/subject/birthTime with Observation/effectiveTime. However, a common scenario is that a patient will know the age of a relative when the relative had a certain condition or when the relative died, but will not know the actual year (e.g., "grandpa died of a heart attack at the age of 50"). Often times, neither precise dates nor ages are known (e.g., "cousin died of congenital heart disease as an infant").

**Table 76: Age Observation Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.31)					
@classCode	1..1	SHALL		<a href="#">81-7613</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">81-7614</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">81-7899</a>	
@root	1..1	SHALL		<a href="#">81-10487</a>	2.16.840.1.113883.10.20.22.4.31
code	1..1	SHALL		<a href="#">81-7615</a>	
@code	1..1	SHALL		<a href="#">81-16776</a>	445518008
@codeSystem	1..1	SHALL		<a href="#">81-26499</a>	urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.6.96
statusCode	1..1	SHALL		<a href="#">81-15965</a>	
@code	1..1	SHALL		<a href="#">81-15966</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	PQ	<a href="#">81-7617</a>	
@unit	1..1	SHALL	CS	<a href="#">81-7618</a>	urn:oid:2.16.840.1.113883.11.20.9.21 (AgePQ_UCUM)

1. **SHALL** contain exactly one [1..1] **@classCode="OBS"** Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:81-7613).
2. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:81-7614).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:81-7899) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.22.4.31"** (CONF:81-10487).
4. **SHALL** contain exactly one [1..1] **code** (CONF:81-7615).
  - a. This code **SHALL** contain exactly one [1..1] **@code="445518008"** Age At Onset (CONF:81-16776).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem="2.16.840.1.113883.6.96"** (CodeSystem: SNOMED CT urn:oid:2.16.840.1.113883.6.96) (CONF:81-26499).
5. **SHALL** contain exactly one [1..1] **statusCode** (CONF:81-15965).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code="completed"** Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:81-15966).
6. **SHALL** contain exactly one [1..1] **value** with **@xsi:type="PQ"** (CONF:81-7617).
  - a. This value **SHALL** contain exactly one [1..1] **@unit**, which **SHALL** be selected from ValueSet [AgePQ UCUM](http://unitsofmeasure.org/ucum) urn:oid:2.16.840.1.113883.11.20.9.21 **DYNAMIC** (CONF:81-7618).

**Table 77: AgePQ\_UCUM**

Value Set: AgePQ_UCUM urn:oid:2.16.840.1.113883.11.20.9.21			
A value set of UCUM codes for representing age value units.			
Value Set Source: <a href="http://unitsofmeasure.org/ucum.html">http://unitsofmeasure.org/ucum.html</a>			
Code	Code System	Code System OID	Print Name
min	UCUM	urn:oid:2.16.840.1.113883.3.6.8	Minute
h	UCUM	urn:oid:2.16.840.1.113883.3.6.8	Hour
d	UCUM	urn:oid:2.16.840.1.113883.3.6.8	Day
wk	UCUM	urn:oid:2.16.840.1.113883.3.6.8	Week
mo	UCUM	urn:oid:2.16.840.1.113883.3.6.8	Month
a	UCUM	urn:oid:2.16.840.1.113883.3.6.8	Year

**Figure 45: Age Observation Example**

```

<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.31" />
  <!-- Age observation -->
  <code code="445518008"
        codeSystem="2.16.840.1.113883.6.96"
        displayName="Age At Onset" />
  <statusCode code="completed" />
  <value xsi:type="PQ" value="57" unit="a" />
</observation>

```

### 3.3 Assessment Scale Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.69 (open)]

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DSTU R1.1

**Table 78: Assessment Scale Observation Contexts**

Contained By:	Contains:
	<a href="#">Assessment Scale Supporting Observation</a>

An assessment scale is a collection of observations that together yield a summary evaluation of a particular condition. Examples include the Braden Scale (assesses pressure ulcer risk), APACHE Score (estimates mortality in critically ill patients), Mini-Mental Status Exam (assesses cognitive function), APGAR Score (assesses the health of a newborn), and Glasgow Coma Scale (assesses coma and impaired consciousness).

**Table 79: Assessment Scale Observation Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69)					
@classCode	1..1	SHALL		<a href="#">81-14434</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">81-14435</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">81-14436</a>	
@root	1..1	SHALL		<a href="#">81-14437</a>	2.16.840.1.113883.10.20.22.4.69
id	1..*	SHALL		<a href="#">81-14438</a>	
code	1..1	SHALL		<a href="#">81-14439</a>	
derivationExpr	0..1	MAY		<a href="#">81-14637</a>	
statusCode	1..1	SHALL		<a href="#">81-14444</a>	
@code	1..1	SHALL		<a href="#">81-19088</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
effectiveTime	1..1	SHALL		<a href="#">81-14445</a>	
value	1..1	SHALL		<a href="#">81-14450</a>	
interpretationCode	0..*	MAY		<a href="#">81-14459</a>	
translation	0..*	MAY		<a href="#">81-14888</a>	
author	0..*	MAY		<a href="#">81-14460</a>	
entryRelationship	0..*	SHOULD		<a href="#">81-14451</a>	
@typeCode	1..1	SHALL		<a href="#">81-16741</a>	COMP
observation	1..1	SHALL		<a href="#">81-16742</a>	<a href="#">Assessment Scale Supporting Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.86)</a>
referenceRange	0..*	MAY		<a href="#">81-16799</a>	
observationRange	1..1	SHALL		<a href="#">81-16800</a>	
text	0..1	SHOULD		<a href="#">81-16801</a>	
reference	0..1	SHOULD		<a href="#">81-</a>	

		D		<a href="#">16802</a>	
@value	0..1	MAY		<a href="#">81-16803</a>	

1. **SHALL** contain exactly one [1..1] **@classCode="OBS"** (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:81-14434).
2. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:81-14435).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:81-14436) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.22.4.69"** (CONF:81-14437).
4. **SHALL** contain at least one [1..\*] **id** (CONF:81-14438).
5. **SHALL** contain exactly one [1..1] **code** (CONF:81-14439).
  - a. **SHOULD** be from LOINC (CodeSystem: 2.16.840.1.113883.6.1) or SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) identifying the assessment scale (CONF:81-14440).

Such derivation expression can contain a text calculation of how the components total up to the summed score

6. **MAY** contain zero or one [0..1] **derivationExpr** (CONF:81-14637).
7. **SHALL** contain exactly one [1..1] **statusCode** (CONF:81-14444).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code="completed"** Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:81-19088).

Represents clinically effective time of the measurement, which may be when the measurement was performed (e.g., a BP measurement), or may be when sample was taken (and measured some time afterwards)

8. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:81-14445).
9. **SHALL** contain exactly one [1..1] **value** (CONF:81-14450).
10. **MAY** contain zero or more [0..\*] **interpretationCode** (CONF:81-14459).
  - a. The interpretationCode, if present, **MAY** contain zero or more [0..\*] **translation** (CONF:81-14888).
11. **MAY** contain zero or more [0..\*] **author** (CONF:81-14460).
12. **SHOULD** contain zero or more [0..\*] **entryRelationship** (CONF:81-14451) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="COMP"** has component (CONF:81-16741).
  - b. **SHALL** contain exactly one [1..1] [Assessment Scale Supporting Observation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.86) (CONF:81-16742).

The referenceRange/observationRange/text, if present, **MAY** contain a description of the scale (e.g., for a Pain Scale 1 to 10: 1 to 3 = little pain, 4 to 7= moderate pain, 8 to 10 = severe pain)

13. **MAY** contain zero or more [0..\*] **referenceRange** (CONF:81-16799).
  - a. The referenceRange, if present, **SHALL** contain exactly one [1..1] **observationRange** (CONF:81-16800).

The text may contain a description of the scale (e.g., for a Pain Scale 1 to 10: 1 to 3 = little pain, 4 to 7= moderate pain, 8 to 10 = severe pain)

- i. This observationRange **SHOULD** contain zero or one [0..1] **text** (CONF:81-16801).
  - 1. The text, if present, **SHOULD** contain zero or one [0..1] **reference** (CONF:81-16802).
    - a. The reference, if present, **MAY** contain zero or one [0..1] **@value** (CONF:81-16803).
      - i. 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:81-16804).

**Figure 46: Assessment Scale Observation Example**

```

<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.69"/>
  <id root="c6b5a04b-2bf4-49d1-8336-636a3813df0b"/>
  <code code="54614-3"
        displayName="Brief Interview for Mental Status"
        codeSystem="2.16.840.1.113883.6.1"
        codeSystemName="LOINC"/>
  <derivationExpr>Text description of the calculation</derivationExpr>
  <statusCode code="completed"/>
  <effectiveTime value="20120214"/>
  <!-- Summed score of the component values -->
  <value xsi:type="INT" value="7"/>
  <entryRelationship typeCode="COMP">
    <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.22.4.86"/>
      . . .
    </observation>
  </entryRelationship>
</observation>

```

### 3.3.1 Pain Assessment Scale Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.34.3.22 (open)]

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**Table 80: Pain Assessment Scale Observation Contexts**

Contained By:	Contains:
<a href="#">Triage Section</a> (required)	

This template represents pain severity on a scale of 0 to 10 where 0 is no pain and 10 is the worst pain imaginable. To record "unknown" use nullFlavor="UNK".



**Table 81: Pain Assessment Scale Observation Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.22)					
@classCode	1..1	SHALL		<a href="#">1106-598</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1106-599</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1106-592</a>	
@root	1..1	SHALL		<a href="#">1106-595</a>	2.16.840.1.113883.10.20.34.3.22
code	1..1	SHALL		<a href="#">1106-593</a>	
@code	1..1	SHALL		<a href="#">1106-596</a>	72514-3
@codeSystem	1..1	SHALL		<a href="#">1106-597</a>	2.16.840.1.113883.6.1
value	1..1	SHALL	INT	<a href="#">1106-594</a>	
@nullFlavor	0..1	MAY		<a href="#">1106-653</a>	UNK
@value	0..1	SHOULD		<a href="#">1106-600</a>	

1. Conforms to [Assessment Scale Observation](#) template (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69).
2. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1106-598).
3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1106-599).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-592) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.22" (CONF:1106-595).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1106-593).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="72514-3" Pain severity - 0-10 verbal numeric rating [#] - Reported (CONF:1106-596).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CONF:1106-597).
6. **SHALL** contain exactly one [1..1] **value** with **@xsi:type**="INT" (CONF:1106-594).  
Note: Form element: Pain scale (0-10)
  - a. This value **MAY** contain zero or one [0..1] **@nullFlavor**="UNK" Unknown (CONF:1106-653).
  - b. This value **SHOULD** contain zero or one [0..1] **@value** (CONF:1106-600).
    - i. **SHALL** be >= 0 and **SHALL** be <=10 (CONF:1106-654).

**Figure 47: Pain Assessment Scale Observation Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- C-CDA R2 Assessment Scale Observation -->
  <templateId root="2.16.840.1.113883.10.20.22.4.69" />
  <!-- Pain Assessment Scale Observation -->
  <templateId root="2.16.840.1.113883.10.20.34.3.22" />
  <id root="c6b5a04b-2bf4-49d1-8336-636a3813df0b" />
  <code code="72514-3"
    displayName="Pain severity - 0-10 verbal numeric rating [#]"
    codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
  <statusCode code="completed" />
  <effectiveTime value="20130915" />
  <!-- Form element: Pain scale 0-10 -->
  <value xsi:type="INT" value="7" />
</observation>

```

### 3.3.2 Triage Level Assigned Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.34.3.23 (open)]

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**Table 82: Triage Level Assigned Observation Contexts**

Contained By:	Contains:
<a href="#">Triage Section</a> (required)	

This template represents the triage level assigned by a triage nurse upon arrival at the emergency department (ED). The triage system used is recorded in the code element and the level is recorded in the value element.

If the triage system used is not covered by the list of codes, use code/nullFlavor="OTH". If the triage system is known but the triage level is unknown, use value/nullFlavor="UNK". If the triage system is unknown, use code/nullFlavor="UNK" and value/nullFlavor="UNK".

**Table 83: Triage Level Assigned Observation Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.23)					
@classCode	1..1	SHALL		<a href="#">1106-620</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1106-621</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1106-617</a>	
@root	1..1	SHALL		<a href="#">1106-618</a>	2.16.840.1.113883.10.20.34.3.23
code	1..1	SHALL		<a href="#">1106-655</a>	urn:oid:2.16.840.1.114222.4.11.7401 (Triage System (NCHS))
@nullFlavor	0..1	MAY		<a href="#">1106-854</a>	
value	1..1	SHALL	INT	<a href="#">1106-619</a>	
@nullFlavor	0..1	MAY		<a href="#">1106-657</a>	
@value	1..1	SHOULD		<a href="#">1106-659</a>	

1. Conforms to [Assessment Scale Observation](#) template (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69).
2. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1106-620).
3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1106-621).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-617) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.23" (CONF:1106-618).
5. **SHALL** contain exactly one [1..1] **code**, which **SHOULD** be selected from ValueSet [Triage System \(NCHS\)](#) urn:oid:2.16.840.1.114222.4.11.7401 **DYNAMIC** (CONF:1106-655).
  - a. This code **MAY** contain zero or one [0..1] **@nullFlavor** (CONF:1106-854).
    - i. NullFlavor **SHALL** be "UNK" Unknown or "OTH" Other (CONF:1106-855).
6. **SHALL** contain exactly one [1..1] **value** with **@xsi:type**="INT" (CONF:1106-619).
  - a. This value **MAY** contain zero or one [0..1] **@nullFlavor** (CONF:1106-657).
    - i. NullFlavor **SHALL** be "UNK" Unknown, "OTH" Other, or "NA" Not Applicable (CONF:1106-658).
  - b. This value **SHOULD** contain exactly one [1..1] **@value** (CONF:1106-659).

**Table 84: Triage System (NCHS)**

Value Set: Triage System (NCHS) urn:oid:2.16.840.1.114222.4.11.7401			
These values describe different types of triage systems.			
Value Set Source:			
<a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7401">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7401</a>			
Code	Code System	Code System OID	Print Name
75614-8	LOINC	urn:oid:2.16.840.1.113883.6.1	Three level triage system
75615-5	LOINC	urn:oid:2.16.840.1.113883.6.1	Four level triage system
75616-3	LOINC	urn:oid:2.16.840.1.113883.6.1	Five level triage system
75910-0	LOINC	urn:oid:2.16.840.1.113883.6.1	Canadian triage and acuity scale CTAS
75636-1	LOINC	urn:oid:2.16.840.1.113883.6.1	Emergency severity index
...			

**Figure 48: Triage Level Assigned Observation Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- C-CDA R2 Assessment Scale Observation -->
  <templateId root="2.16.840.1.113883.10.20.22.4.69" />
  <!-- Triage Level Assigned Observation -->
  <templateId root="2.16.840.1.113883.10.20.34.3.23" />
  <id root="c650a89ab-7ce5-428f-8284-e595518b7355" />
  <code code="75616-3" displayName="Five level triage system"
    codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
  <statusCode code="completed" />
  <effectiveTime value="20130915" />
  <!-- Form element: Triage level -->
  <value xsi:type="INT" value="2" />
</observation>

```

### 3.4 Assessment Scale Supporting Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.86 (open)]

Published as part of Consolidated CDA Templates for Clinical Notes (US Realm)  
DSTU R1.1

**Table 85: Assessment Scale Supporting Observation Contexts**

Contained By:	Contains:
<a href="#">Assessment Scale Observation</a> (optional)	

An Assessment Scale Supporting Observation represents the components of a scale used in an Assessment Scale Observation. The individual parts that make up the component may be a group of cognitive or functional status observations.

**Table 86: Assessment Scale Supporting Observation Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.86)					
@classCode	1..1	SHALL		<a href="#">81-16715</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">81-16716</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">81-16722</a>	
@root	1..1	SHALL		<a href="#">81-16723</a>	2.16.840.1.113883.10.20.22.4.86
id	1..*	SHALL		<a href="#">81-16724</a>	
code	1..1	SHALL		<a href="#">81-19178</a>	
@code	1..1	SHALL		<a href="#">81-19179</a>	
statusCode	1..1	SHALL		<a href="#">81-16720</a>	
@code	1..1	SHALL		<a href="#">81-19089</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..*	SHALL		<a href="#">81-16754</a>	

1. **SHALL** contain exactly one [1..1] **@classCode="OBS"** Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:81-16715).
2. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:81-16716).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:81-16722) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.22.4.86"** (CONF:81-16723).
4. **SHALL** contain at least one [1..\*] **id** (CONF:81-16724).
5. **SHALL** contain exactly one [1..1] **code** (CONF:81-19178).
  - a. This code **SHALL** contain exactly one [1..1] **@code** (CONF:81-19179).
    - i. Such that the **@code SHALL** be from LOINC (CodeSystem: 2.16.840.1.113883.6.1) or SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) and represents components of the scale (CONF:81-19180).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:81-16720).

- a. This statusCode **SHALL** contain exactly one [1..1] @code="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:81-19089).
- 7. **SHALL** contain at least one [1..\*] value (CONF:81-16754).
  - a. If xsi:type="CD", **MAY** have a translation code to further specify the source if the instrument has an applicable code system and value set for the integer (CONF:14639) (CONF:81-16755).

**Figure 49: Assessment Scale Supporting Observation Example**

```

<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.86"/>
  <id root="f4dce790-8328-11db-9fe1-0800200c9a44"/>
  <code code="248240001" displayName="motor response"
    codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/>
  <statusCode code="completed"/>
  <value xsi:type="INT" value="3"/>
</observation>
    
```

### 3.5 Asthma Diagnosis Observation (RETIRED)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.3.5:2016-07-01 (open)]

Draft as part of National Health Care Surveys Release 1, DSTU Release 1.2 - US Realm

This template represents a diagnosis of Asthma.

Retired as per STU Comment:

[http://www.hl7.org/dstucomments/showdetail\\_comment.cfm?commentid=925](http://www.hl7.org/dstucomments/showdetail_comment.cfm?commentid=925)

Asthma Diagnoses are now represented using the Problem/Diagnosis/Symptom/Condition Observation.

**Table 87: Asthma Diagnosis Observation (RETIRED) Constraints Overview**

X P a t h	Card.	Verb	Data Type	CONF#	Value
observation	(identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.5:2016-07-01)				

**Figure 50: Asthma Diagnosis Observation (V2) Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- Conforms to C-CDA R2 Problem Observation (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.4.4"
    extension="2014-06-09" />
  <!-- Asthma Diagnosis Observation (V2) -->
  <templateId root="2.16.840.1.113883.10.20.34.3.5"
    extension="2015-04-01" />
  <id root="ac01c12d-8947-4046-845b-8c8ea220f861" />
  <code code="282291009" codeSystem="2.16.840.1.113883.6.96"
    codeSystemName="SNOMED CT" displayName="Diagnosis" />
  <!-- The statusCode reflects the status of the observation itself -->
  <statusCode code="completed" />
  <effectiveTime>
    <!-- The low value reflects the date of onset -->
    <low value="20130703" />
  </effectiveTime>
  <!-- Form Element: Asthma -->
  <value xsi:type="CD" code="195967001"
    codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
    displayName="Asthma" />
  <!-- This entryRelationship represents the asthma control finding -->
  <entryRelationship typeCode="SUBJ" inversionInd="true">
    <observation classCode="OBS" moodCode="EVN">
      <!-- Condition Control Observation -->
      <templateId root="2.16.840.1.113883.10.20.34.3.21" />
      ...
    </observation>
  </entryRelationship>
  <!-- This entryRelationship represents the severity -->
  <entryRelationship typeCode="SUBJ" inversionInd="true">
    <observation classCode="OBS" moodCode="EVN">
      <!-- C-CDA R2 Severity Observation (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.8"
        extension="2014-06-09" />
      ...
    </observation>
  </entryRelationship>
  <!-- This entryRelationship represents whether or not the
    diagnosis was present on admission -->
  <entryRelationship typeCode="SUBJ" inversionInd="true">
    <observation classCode="OBS" moodCode="EVN">
      <!-- Present on Admission Observation -->
      <templateId root="2.16.840.1.113883.10.20.34.3.37"
        extension="2015-04-01" />
      ...
    </observation>
  </entryRelationship>
</observation>

```

### 3.6 Caregiver Characteristics

[observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.72 (open)]

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DSTU R1.1

**Table 88: Caregiver Characteristics Contexts**

Contained By:	Contains:
<a href="#">Social History Section (V2)</a> (optional)	

This clinical statement represents a caregiver’s willingness to provide care and the abilities of that caregiver to provide assistance to a patient in relation to a specific need.



**Table 89: Caregiver Characteristics Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.72)					
@classCode	1..1	SHALL		<a href="#">81-14219</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">81-14220</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">81-14221</a>	
@root	1..1	SHALL		<a href="#">81-14222</a>	2.16.840.1.113883.10.20.22.4.72
id	1..*	SHALL		<a href="#">81-14223</a>	
code	1..1	SHALL		<a href="#">81-14230</a>	
statusCode	1..1	SHALL		<a href="#">81-14233</a>	
@code	1..1	SHALL		<a href="#">81-19090</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	CD	<a href="#">81-14599</a>	
participant	1..*	SHALL		<a href="#">81-14227</a>	
@typeCode	1..1	SHALL		<a href="#">81-26451</a>	IND
time	0..1	MAY		<a href="#">81-14830</a>	
low	1..1	SHALL		<a href="#">81-14831</a>	
high	0..1	MAY		<a href="#">81-14832</a>	
participantRole	1..1	SHALL		<a href="#">81-14228</a>	
@classCode	1..1	SHALL		<a href="#">81-14229</a>	CAREGIVER

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:81-14219).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:81-14220).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:81-14221) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.72" (CONF:81-14222).
4. **SHALL** contain at least one [1..\*] **id** (CONF:81-14223).
5. **SHALL** contain exactly one [1..1] **code** (CONF:81-14230).

- a. This code **MAY** be drawn from LOINC (CodeSystem: LOINC 2.16.840.1.113883.6.1) or **MAY** be bound to ASSERTION (CodeSystem: ActCode 2.16.840.1.113883.5.4 STATIC) (CONF:81-26513).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:81-14233).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code="completed"** Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:81-19090).
7. **SHALL** contain exactly one [1..1] **value** with **@xsi:type="CD"** (CONF:81-14599).
  - a. The code **SHALL** be selected from LOINC (codeSystem: 2.16.840.1.113883.6.1) or SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) (CONF:81-14600).
8. **SHALL** contain at least one [1..\*] **participant** (CONF:81-14227).
  - a. Such participants **SHALL** contain exactly one [1..1] **@typeCode="IND"** (CONF:81-26451).
  - b. Such participants **MAY** contain zero or one [0..1] **time** (CONF:81-14830).
    - i. The time, if present, **SHALL** contain exactly one [1..1] **low** (CONF:81-14831).
    - ii. The time, if present, **MAY** contain zero or one [0..1] **high** (CONF:81-14832).
  - c. Such participants **SHALL** contain exactly one [1..1] **participantRole** (CONF:81-14228).
    - i. This participantRole **SHALL** contain exactly one [1..1] **@classCode="CAREGIVER"** (CONF:81-14229).

**Figure 51: Caregiver Characteristics Example**

```

<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.72"/>
  <id root="c6b5a04b-2bf4-49d1-8336-636a3813df0c"/>
  <code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4"/>
  <statusCode code="completed"/>
  <value xsi:type="CD" code="422615001"
    codeSystem="2.16.840.1.113883.6.96"
    displayName="caregiver difficulty providing
      physical care"/>
  <participant typeCode="IND">
    <participantRole classCode="CAREGIVER">
      <code code="MTH" codeSystem="2.16.840.1.113883.5.111"
        displayName="Mother"/>
    </participantRole>
  </participant>
</observation>

```

### 3.7 Cause of Injury, Poisoning, or Adverse Effect

[observation: identifier urn:oid:2.16.840.1.113883.10.20.34.3.27 (open)]

Published as part of National Health Care Surveys, Release 1, DSTU 1 - US Realm

**Table 90: Cause of Injury, Poisoning, or Adverse Effect Contexts**

Contained By:	Contains:
<a href="#">Adverse Effect of Medical Treatment</a> (optional) <a href="#">Injury or Poisoning Observation (V2)</a> (optional)	

This template represents the cause of injury, poisoning, or adverse effect. The place and events that preceded the injury, poisoning, or adverse effect (e.g., allergy to penicillin, bee sting, pedestrian hit by car driven by drunk driver, spouse beaten with fists by spouse, heroin overdose, infected shunt, etc.) should be described and recorded. Proper names of people or places should not be recorded. For a motor vehicle crash, indicate if it occurred on the street or highway versus a driveway or parking lot.

**Table 91: Cause of Injury, Poisoning, or Adverse Effect Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.27)					
@classCode	1..1	SHALL		<a href="#">1106-626</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1106-627</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1106-628</a>	
@root	1..1	SHALL		<a href="#">1106-629</a>	2.16.840.1.113883.10.20.34.3.27
id	1..*	SHALL		<a href="#">1106-630</a>	
code	1..1	SHALL		<a href="#">1106-631</a>	
@code	1..1	SHALL		<a href="#">1106-632</a>	69543-7
@codeSystem	1..1	SHALL		<a href="#">1106-633</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
statusCode	1..1	SHALL		<a href="#">1106-634</a>	
@code	1..1	SHALL		<a href="#">1106-635</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	CD	<a href="#">1106-636</a>	urn:oid:2.16.840.1.113883.6.3 (ICD10)
@nullFlavor	0..1	MAY		<a href="#">1106-859</a>	OTH
originalText	0..1	MAY		<a href="#">1106-861</a>	

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1106-626).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1106-627).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-628).
  - a. This templateId **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.27" (CONF:1106-629).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1106-630).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1106-631).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="69543-7" Cause of Injury (NCHS) (CONF:1106-632).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1106-633).

6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1106-634).
- This **statusCode** **SHALL** contain exactly one [1..1] **@code="completed"** Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1106-635).

If no code is available use nullFlavor="OTH" and enter the value as free text in code/originalText.

7. **SHALL** contain exactly one [1..1] **value** with **@xsi:type="CD"**, where the code **SHOULD** be selected from CodeSystem ICD10 (urn:oid:2.16.840.1.113883.6.3) (CONF:1106-636).
- This value **MAY** contain zero or one [0..1] **@nullFlavor="OTH"** (CONF:1106-859).
  - This value **MAY** contain zero or one [0..1] **originalText** (CONF:1106-861).
  - Value **MAY** be selected from ICD-9/10/CM (based on the current version in US realm) (CONF:1106-860).

**Figure 52: Cause of Injury, Poisoning, or Adverse Effect (Free Text) Example**

```
<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.34.3.27"/>
  <id root="bleae324-7c21-4ef8-8618-0b4478c65721"/>
  <code code="69543-7" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
    displayName="Cause of Injury"/>
  <statusCode code="completed"/>
  <!-- Form Element: Cause of Injury, Poisoning, or Adverse Effect -->
  <value xsi:type="CD" nullFlavor="OTH">
    <originalText>Husband put arsenic in patient's tea</originalText>
  </value>
</observation>
```

**Figure 53: Cause of Injury, Poisoning, or Adverse Effect (Coded) Example**

```
<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.34.3.27"/>
  <id root="bleae324-7c21-4ef8-8618-0b4478c65721"/>
  <code code="69543-7" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
    displayName="Cause of Injury"/>
  <statusCode code="completed"/>
  <!-- Form Element: Cause of Injury, Poisoning, or Adverse Effect -->
  <value xsi:type="CD"
    code="T42.2X3A"
    displayName="Poisoning by succinimides and oxazolidinediones,
      assault, initial encounter"
    codeSystemName="ICD10CM"
    codeSystem="2.16.840.1.113883.6.90"/>
</observation>
```

### 3.8 Characteristics of Home Environment

[observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.109 (open)]

Published as part of Consolidated CDA Templates for Clinical Notes (US Realm)  
DSTU R2

**Table 92: Characteristics of Home Environment Contexts**

Contained By:	Contains:
<a href="#">Social History Section (V2)</a> (optional)	

This template represents the patient's home environment including, but not limited to, type of residence (trailer, single family home, assisted living), living arrangement (e.g., alone, with parents), and housing status (e.g., evicted, homeless, home owner).

**Table 93: Characteristics of Home Environment Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.109)					
@classCode	1..1	SHALL		<a href="#">1098-27890</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1098-27891</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-27892</a>	
@root	1..1	SHALL		<a href="#">1098-27893</a>	2.16.840.1.113883.10.20.22.4.109
id	1..*	SHALL		<a href="#">1098-27894</a>	
code	1..1	SHALL		<a href="#">1098-31352</a>	
@code	1..1	SHALL		<a href="#">1098-31353</a>	75274-1
@codeSystem	1..1	SHALL		<a href="#">1098-31354</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
statusCode	1..1	SHALL		<a href="#">1098-27901</a>	
@code	1..1	SHALL		<a href="#">1098-27902</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	CD	<a href="#">1098-28823</a>	urn:oid:2.16.840.1.113883.11.20.9.49 (Residence and Accommodation Type)

1. **SHALL** contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-27890).
2. **SHALL** contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-27891).

3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-27892) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.109" (CONF:1098-27893).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1098-27894).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1098-31352).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="75274-1" Characteristics of residence (CONF:1098-31353).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1098-31354).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-27901).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098-27902).
7. **SHALL** contain exactly one [1..1] **value** with **@xsi:type**="CD", where the code **SHOULD** be selected from ValueSet [Residence and Accommodation Type](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.11.20.9.49) urn:oid:2.16.840.1.113883.11.20.9.49 **DYNAMIC** (CONF:1098-28823).

**Table 94: Residence and Accommodation Type**

Value Set: Residence and Accommodation Type urn:oid:2.16.840.1.113883.11.20.9.49			
A value set of SNOMED-CT codes descending from "365508006" "Residence and accommodation circumstances - finding" reflecting type of residence, status of accommodations, living situation and environment.			
Value Set Source: <a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.11.20.9.49">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.11.20.9.49</a>			
Code	Code System	Code System OID	Print Name
424661000	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	cluttered living space (finding)
160708008	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	stairs in house (finding)
160751007	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	eviction from dwelling (finding)
423859003	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	crowded living space (finding)
160720000	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	harassment by landlord (finding)
105529008	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	lives alone (finding)
60585007	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	slum area living (finding)
365508006	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	unsatisfactory living conditions (finding)
422491004	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	housing contains exposed wiring (finding)
...			

**Figure 54: Characteristics of Home Environment Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- ** Characteristics of Home Environment** -->
  <templateId root="2.16.840.1.113883.10.20.22.4.109" />
  <id root="37f76c51-6411-4e1d-8a37-957fd49d2ceg" />
  <code code="75274-1" codeSystem="2.16.840.1.113883.6.1"
    displayName="Characteristics of residence" />
  <statusCode code="completed" />
  <effectiveTime value="20130312" />
  <value xsi:type="CD" code="308899009" displayName="unsatisfactory living conditions
(finding)" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" />
</observation>

```

### 3.9 Clinical Note and External Document Reference

[externalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.3.44:2016-07-01 (open)]

Draft as part of National Health Care Surveys Release 1, DSTU Release 1.2 - US Realm

**Table 95: Clinical Note and External Document Reference Contexts**

Contained By:	Contains:
<a href="#">Current Outpatient Visit (V3)</a> (optional) <a href="#">Current Emergency Department Visit (V2)</a> (optional)	

This template represents relevant clinical (e.g., physicians', nurses', P.A.s', N.P.s' and C.N.M.s') notes for this visit, such as Triage, Intake, History of Present Illness, Clinical Impression and Discharge. If the current visit is the result of a referral, the referral document can be referenced using this template.

These notes or documents can be CDA documents or they can be other types of documents such as PDF.

The following (non-exhaustive) table lists some LOINC code examples for relevant document types:

Document type	LOINC code
History of Present Illness Narrative	10164-2
Evaluation and Plan Note	51847-2
Evaluation Note	51848-0
Hospital Discharge Dx Narrative	11535-2
Reason for Visit Narrative	29299-5
Referral Note	57113-1



**Table 96: Clinical Note and External Document Reference Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
externalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.44:2016-07-01)					
@classCode	1..1	SHALL		<a href="#">3256-1189</a>	
@moodCode	1..1	SHALL		<a href="#">3256-1178</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">3256-1176</a>	
@root	1..1	SHALL		<a href="#">3256-1180</a>	2.16.840.1.113883.10.20.34.3.44
@extension	1..1	SHALL		<a href="#">3256-1181</a>	2016-07-01
id	1..*	SHALL		<a href="#">3256-1182</a>	
code	0..1	MAY		<a href="#">3256-1179</a>	
text	0..1	MAY		<a href="#">3256-1185</a>	
@mediaType	1..1	SHALL		<a href="#">3256-1187</a>	
reference	0..1	MAY		<a href="#">3256-1186</a>	
@value	1..1	SHALL		<a href="#">3256-1188</a>	
setId	0..1	MAY		<a href="#">3256-1183</a>	
versionNumber	0..1	MAY		<a href="#">3256-1184</a>	

If referencing a CDA document use DOCCLIN, otherwise use DOC.

1. **SHALL** contain exactly one [1..1] **@classCode** (CONF:3256-1189).
2. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:3256-1178).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:3256-1176) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.34.3.44"** (CONF:3256-1180).
  - b. **SHALL** contain exactly one [1..1] **@extension="2016-07-01"** (CONF:3256-1181).
4. **SHALL** contain at least one [1..\*] **id** (CONF:3256-1182).

The code represents the type of document. Either a code and/or text description should be used to describe the external document.

5. **MAY** contain zero or one [0..1] **code** (CONF:3256-1179).
6. **MAY** contain zero or one [0..1] **text** (CONF:3256-1185).

- a. The text, if present, **SHALL** contain exactly one [1..1] **@mediaType** (CONF:3256-1187).
- b. The text, if present, **MAY** contain zero or one [0..1] **reference** (CONF:3256-1186).
  - i. The reference, if present, **SHALL** contain exactly one [1..1] **@value** (CONF:3256-1188).
7. **MAY** contain zero or one [0..1] **setId** (CONF:3256-1183).
8. **MAY** contain zero or one [0..1] **versionNumber** (CONF:3256-1184).

**Figure 55: Clinical Note and External Document Reference - Non-CDA Example**

```
<!-- Not a CDA document so use classCode="DOC" -->
<externalDocument classCode="DOC" moodCode="EVN">
  <!-- [NHCS R1D1.2] Clinical Note and External Document Reference -->
  <templateId root="2.16.840.1.113883.10.20.34.3.44" extension="2016-07-01" />
  <id root="10021d19-5b29-4771-bce4-236109943dd4" />
  <code codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC"
    code="51848-0"
    displayName="Evaluation Note" />
  <!-- The media type is pdf -->
  <text mediaType="application/pdf">
    <reference value="EvaluationNote_10021d19-5b29-4771-bce4-236109943dd4.pdf" />
  </text>
</externalDocument>
```

**Figure 56: Clinical Note and External Document Reference - CDA Document (Referral) Example**

```
<!-- This is a reference to a CDA document so use classCode="DOCCLIN" -->
<externalDocument classCode="DOCCLIN" moodCode="EVN">
  <!-- [NHCS R1D1.2] Clinical Note and External Document Reference -->
  <templateId root="2.16.840.1.113883.10.20.34.3.44" extension="2016-07-01" />
  <id root="6f1bd58b-c58f-40b7-b314-caf1294ed98b" />
  <code codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC"
    code="57113-1"
    displayName="Referral Note" />
  <setId extension="sTT988" root="2.16.840.1.113883.19.5.99999.19" />
  <versionNumber value="1" />
</externalDocument>
```

### 3.10 Co-morbid Condition Observation (RETIRED)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.3.4:2016-07-01 (open)]

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This template represents a co-morbid condition.

Retired as per STU Comment:

[http://www.hl7.org/dstucomments/showdetail\\_comment.cfm?commentid=921](http://www.hl7.org/dstucomments/showdetail_comment.cfm?commentid=921)

Co-morbid conditions are now represented using the Problem/Diagnosis/Symptom/Condition Observation.

**Table 97: Co-morbid Condition Observation (RETIRED) Constraints Overview**

X P a t h	Card.	Verb	Data Type	CONF#	Value
					observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.4:2016-07-01)

**Figure 57: Co-morbid Condition Observation (V2) Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- Conforms to C-CDA R2 Problem Observation (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.4.4"
    extension="2014-06-09" />
  <!-- Co-morbid Condition Observation -->
  <templateId root="2.16.840.1.113883.10.20.34.3.4"
    extension="2015-04-01" />
  <id root="b5d36d7f-37ec-48b9-a914-0706dea2a304" />
  <code code="75618-9"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC"
    displayName="Comorbid condition" />
  <!-- The statusCode reflects the status of the observation itself -->
  <statusCode code="completed" />
  <effectiveTime>
    <!-- The low value reflects the date of onset -->
    <low value="20130803" />
  </effectiveTime>
  <value xsi:type="CD"
    code="90688005"
    codeSystemName="SNOMED CT"
    codeSystem="2.16.840.1.113883.6.96"
    displayName="Chronic renal failure" />
  <!-- This entryRelationship represents whether or not the diagnosis was present on
  admission -->
  <entryRelationship typeCode="SUBJ" inversionInd="true">
    <observation classCode="OBS" moodCode="EVN">
      <!-- Present on Admission Observation -->
      <templateId root="2.16.840.1.113883.10.20.34.3.37"
        extension="2015-04-01" />
      ...
    </observation>
  </entryRelationship>
</observation>

```

### 3.11 Condition Control Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.34.3.21 (open)]

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This template represents the degree to which the manifestations of the condition are minimized by therapeutic interventions. Care should be taken to ensure that the identified level of control does not conflict with the SNOMED/ICD diagnosis code.

**Table 98: Condition Control Observation Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.21)					
@classCode	1..1	SHALL		<a href="#">1106-234</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1106-235</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1106-236</a>	
@root	1..1	SHALL		<a href="#">1106-237</a>	2.16.840.1.113883.10.20.34.3.21
id	1..*	SHALL		<a href="#">1106-238</a>	
code	1..1	SHALL		<a href="#">1106-239</a>	
@code	1..1	SHALL		<a href="#">1106-240</a>	urn:oid:2.16.840.1.113883.5.4 (ActCode) = ASSERTION
statusCode	1..1	SHALL		<a href="#">1106-241</a>	
@code	1..1	SHALL		<a href="#">1106-242</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	CD	<a href="#">1106-243</a>	
@code	1..1	SHALL		<a href="#">1106-389</a>	urn:oid:2.16.840.1.114222.4.11.7433 (Condition Control (NCHS))

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1106-234).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1106-235).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-236) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.21" (CONF:1106-237).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1106-238).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1106-239).

- a. This code **SHALL** contain exactly one [1..1] **@code**="ASSERTION" Assertion (CodeSystem: ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:1106-240).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1106-241).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1106-242).
7. **SHALL** contain exactly one [1..1] **value** with **@xsi:type**="CD" (CONF:1106-243).
  - a. This value **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [Condition Control \(NCHS\)](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7433) urn:oid:2.16.840.1.114222.4.11.7433 **DYNAMIC** (CONF:1106-389).

**Table 99: Condition Control (NCHS)**

Value Set: Condition Control (NCHS) urn:oid:2.16.840.1.114222.4.11.7433 Descendants of Disease Condition Finding (371314008) in SNOMED CT Value Set Source: <a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7433">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7433</a>			
Code	Code System	Code System OID	Print Name
67106002	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Condition determination, moderately controlled
12650007	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Condition determination, fairly well controlled
39431006	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Condition determination, slightly controlled
28876000	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Condition determination, uncontrolled
1194003	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Condition determination, well controlled
2761002	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Condition determination, arrested
51231003	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Condition determination, cured

**Figure 58: Condition Control Observation Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- Condition Control Observation -->
  <templateId root="2.16.840.1.113883.10.20.34.3.21" />
  <id root="alfe8200-4925-4679-80c7-11c7d406593d" />
  <code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4"
    codeSystemName="ActCode" />
  <statusCode code="completed" />
  <!-- Form element: Asthma Control -->
  <value xsi:type="CD" code="1194003"
    displayName="Condition determination, well controlled"
    codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" />
</observation>

```

### 3.12 Coverage Activity (V2)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.60:2014-06-09 (open)]

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DSTU R2

**Table 100: Coverage Activity (V2) Contexts**

Contained By:	Contains:
<a href="#">Payers Section (V2)</a> (optional)	<a href="#">Policy Activity (V2)</a>

A Coverage Activity groups the policy and authorization acts within a Payers Section to order the payment sources. A Coverage Activity contains one or more Policy Activities, each of which contains zero or more Authorization Activities. The Coverage Activity id is the ID from the patient's insurance card. The sequenceNumber/@value shows the policy order of preference.

**Table 101: Coverage Activity (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.60:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-8872</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT
@moodCode	1..1	SHALL		<a href="#">1098-8873</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-8897</a>	
@root	1..1	SHALL		<a href="#">1098-10492</a>	2.16.840.1.113883.10.20.22.4.60
@extension	1..1	SHALL		<a href="#">1098-32596</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-8874</a>	
code	1..1	SHALL		<a href="#">1098-8876</a>	
@code	1..1	SHALL		<a href="#">1098-19160</a>	48768-6
@codeSystem	1..1	SHALL		<a href="#">1098-32156</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
statusCode	1..1	SHALL		<a href="#">1098-8875</a>	
@code	1..1	SHALL		<a href="#">1098-19094</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
entryRelationship	1..*	SHALL		<a href="#">1098-8878</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8879</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
sequenceNumber	0..1	MAY		<a href="#">1098-17174</a>	
@value	1..1	SHALL		<a href="#">1098-17175</a>	
act	1..1	SHALL		<a href="#">1098-15528</a>	<a href="#">Policy Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.61:2014-06-09)</a>

1. **SHALL** contain exactly one [1..1] @classCode="ACT" Act (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-8872).
2. **SHALL** contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-8873).
3. **SHALL** contain exactly one [1..1] templateId (CONF:1098-8897) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.60" (CONF:1098-10492).

- b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32596).
- 4. **SHALL** contain at least one [1..\*] **id** (CONF:1098-8874).
- 5. **SHALL** contain exactly one [1..1] **code** (CONF:1098-8876).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="48768-6" Payment sources (CONF:1098-19160).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1098-32156).
- 6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-8875).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098-19094).
- 7. **SHALL** contain at least one [1..\*] **entryRelationship** (CONF:1098-8878) 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 **STATIC**) (CONF:1098-8879).
  - b. **MAY** contain zero or one [0..1] **sequenceNumber** (CONF:1098-17174).
    - i. The sequenceNumber, if present, **SHALL** contain exactly one [1..1] **@value** (CONF:1098-17175).
  - c. **SHALL** contain exactly one [1..1] **Policy Activity (V2)** (identifier: urn:h17ii:2.16.840.1.113883.10.20.22.4.61:2014-06-09) (CONF:1098-15528).

**Figure 59: Coverage Activity (V2) Example**

```

<act classCode="ACT" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.60" extension="2014-06-09" />
  <id root="1fe2cdd0-7aad-11db-9fe1-0800200c9a66" />
  <code code="48768-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
  displayName="Payment sources" />
  <statusCode code="completed" />
  <entryRelationship typeCode="COMP">
    <act classCode="ACT" moodCode="EVN">
      <sequenceNumber value="2" />
      <templateId root="2.16.840.1.113883.10.20.22.4.61" extension="2014-06-09" />
      . . .
    </act>
  </entryRelationship>
</act>

```



### 3.13 Cultural and Religious Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.111 (open)]

Published as part of Consolidated CDA Templates for Clinical Notes (US Realm)  
DSTU R2

**Table 102: Cultural and Religious Observation Contexts**

Contained By:	Contains:
<a href="#">Social History Section (V2)</a> (optional)	

This template represents a patient's spiritual, religious, and cultural belief practices, such as a kosher diet or fasting ritual. religiousAffiliationCode in the document header captures only the patient's religious affiliation.

**Table 103: Cultural and Religious Observation Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.111)					
@classCode	1..1	SHALL		<a href="#">1098-27924</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1098-27925</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-27926</a>	
@root	1..1	SHALL		<a href="#">1098-27927</a>	2.16.840.1.113883.10.20.22.4.111
id	1..*	SHALL		<a href="#">1098-27928</a>	
code	1..1	SHALL		<a href="#">1098-27929</a>	
@code	1..1	SHALL		<a href="#">1098-27930</a>	75281-6
@codeSystem	1..1	SHALL		<a href="#">1098-27931</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
statusCode	1..1	SHALL		<a href="#">1098-27936</a>	
@code	1..1	SHALL		<a href="#">1098-27937</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL		<a href="#">1098-28442</a>	

1. **SHALL** contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-27924).
2. **SHALL** contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-27925).
3. **SHALL** contain exactly one [1..1] templateId (CONF:1098-27926) such that it

- a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.111" (CONF:1098-27927).
- 4. **SHALL** contain at least one [1..\*] **id** (CONF:1098-27928).
- 5. **SHALL** contain exactly one [1..1] **code** (CONF:1098-27929).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="75281-6" Personal belief (CONF:1098-27930).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1098-27931).
- 6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-27936).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098-27937).
- 7. **SHALL** contain exactly one [1..1] **value** (CONF:1098-28442).
  - a. If xsi:type is CD, **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.96" (CodeSystem: SNOMED-CT urn:oid:2.16.840.1.113883.6.96 **STATIC**) (CONF:1098-32487).

**Figure 60: Cultural and Religious Observation Example**

```

<entry>
  <observation classCode="OBS" moodCode="EVN">
    <!-- **Cultural and Religious Observation **-->
    <templateId root="2.16.840.1.113883.10.20.22.4.111" />
    <id root="37f76c51-6411-4e1d-8a37-957fd49d2cef" />
    <code code="75281-6" codeSystem="2.16.840.1.113883.6.1"
      displayName="Personal belief" />
    <statusCode code="completed" />
    <effectiveTime>
      <low value="20130312" />
    </effectiveTime>
    <value xsi:type="ST">Does not accept blood transfusions, or donates, or
      stores blood for transfusion.</value>
  </observation>
</entry>

```

### 3.14 Discharge Status Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.34.3.28 (open)]

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**Table 104: Discharge Status Observation Contexts**

Contained By:	Contains:
<a href="#">Hospital Admission Encounter</a> (required)	

This template represents the patient's status at time of discharge. If the status is unknown use nullFlavor="UNK".

**Table 105: Discharge Status Observation Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.28)					
@classCode	1..1	SHALL		<a href="#">1106-685</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1106-686</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1106-687</a>	
@root	1..1	SHALL		<a href="#">1106-688</a>	2.16.840.1.113883.10.20.34.3.28
id	1..*	SHALL		<a href="#">1106-689</a>	
code	1..1	SHALL		<a href="#">1106-690</a>	
@code	1..1	SHALL		<a href="#">1106-691</a>	75527-2
@codeSystem	1..1	SHALL		<a href="#">1106-692</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
statusCode	1..1	SHALL		<a href="#">1106-693</a>	
@code	1..1	SHALL		<a href="#">1106-694</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	CD	<a href="#">1106-695</a>	urn:oid:2.16.840.1.114222.4.11.7440 (Hospital Discharge Status (NCHS))
@nullFlavor	0..1	MAY		<a href="#">1106-696</a>	UNK

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1106-685).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1106-686).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-687) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.28" (CONF:1106-688).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1106-689).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1106-690).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="75527-2" Vital status at discharge (CONF:1106-691).

- b. This code **SHALL** contain exactly one [1..1] `@codeSystem="2.16.840.1.113883.6.1"` (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1106-692).
- 6. **SHALL** contain exactly one [1..1] `statusCode` (CONF:1106-693).
  - a. This `statusCode` **SHALL** contain exactly one [1..1] `@code="completed"` Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1106-694).
- 7. **SHALL** contain exactly one [1..1] `value` with `@xsi:type="CD"`, where the code **SHOULD** be selected from ValueSet Hospital Discharge Status (NCHS) urn:oid:2.16.840.1.114222.4.11.7440 **DYNAMIC** (CONF:1106-695).
  - a. This value **MAY** contain zero or one [0..1] `@nullFlavor="UNK"` Unknown (CONF:1106-696).

**Table 106: Hospital Discharge Status (NCHS)**

Value Set: Hospital Discharge Status (NCHS) urn:oid:2.16.840.1.114222.4.11.7440			
This value set represents the patient's status at discharge.			
Value Set Source: <a href="https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7440">https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7440</a>			
Code	Code System	Code System OID	Print Name
371827001	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Patient discharged alive
371828006	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Patient deceased during stay (discharge status = dead)
...			

**Figure 61: Discharge Status Observation Example**

```
<observation classCode="OBS" moodCode="EVN">
  <!-- Discharge Status Observation -->
  <templateId root="2.16.840.1.113883.10.20.34.3.28" />
  <id root="b856ca82-2046-4c17-99e3-46fb8a9fdf23" />
  <code code="75527-2" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
    displayName="Vital status at discharge" />
  <statusCode code="completed" />
  <!-- Form Element: Hospital Discharge Status -->
  <value xsi:type="CD" code="371827001" codeSystemName="SNOMED CT"
    codeSystem="2.16.840.1.113883.6.96"
    displayName="Patient discharged alive" />
</observation>
```

### 3.15 Drug Monitoring Act

[act: identifier urn:oid:2.16.840.1.113883.10.20.22.4.123 (open)]

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DSTU R2

**Table 107: Drug Monitoring Act Contexts**

Contained By:	Contains:
<a href="#">Medication Activity (V2)</a> (optional)	<a href="#">US Realm Patient Name (PTN.US.FIELDDED)</a>

This template represents the act of monitoring the patient's medication and includes a participation to record the person responsible for monitoring the medication. The prescriber of the medication is not necessarily the same person or persons monitoring the drug. The effectiveTime indicates the time when the activity is intended to take place.

For example, a cardiologist may prescribe a patient Warfarin. The patient's primary care provider may monitor the patient's INR and adjust the dosing of the Warfarin based on these lab results. Here the person designated to monitor the drug is the primary care provider.

**Table 108: Drug Monitoring Act Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
act (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.123)					
@classCode	1..1	SHALL		<a href="#">1098-30823</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT
@moodCode	1..1	SHALL		<a href="#">1098-28656</a>	INT
templateId	1..1	SHALL		<a href="#">1098-28657</a>	
@root	1..1	SHALL		<a href="#">1098-28658</a>	2.16.840.1.113883.10.20.22.4.123
id	1..*	SHALL		<a href="#">1098-31920</a>	
code	1..1	SHALL		<a href="#">1098-28660</a>	
@code	1..1	SHALL		<a href="#">1098-30818</a>	395170001
@codeSystem	1..1	SHALL		<a href="#">1098-30819</a>	urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.6.96
statusCode	1..1	SHALL		<a href="#">1098-31921</a>	
@code	1..1	SHALL		<a href="#">1098-32358</a>	urn:oid:2.16.840.1.113883.1.11.159331 (ActStatus)
effectiveTime	1..1	SHALL		<a href="#">1098-31922</a>	
participant	1..*	SHALL		<a href="#">1098-28661</a>	
@typeCode	1..1	SHALL		<a href="#">1098-28663</a>	RESP
participantRole	1..1	SHALL		<a href="#">1098-28662</a>	
@classCode	1..1	SHALL		<a href="#">1098-28664</a>	ASSIGNED
id	1..*	SHALL		<a href="#">1098-28665</a>	
playingEntity	1..1	SHALL		<a href="#">1098-28667</a>	
@classCode	1..1	SHALL		<a href="#">1098-28668</a>	PSN
name	1..1	SHALL		<a href="#">1098-28669</a>	<a href="#">US Realm Patient Name (PTN.US.FIELDDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1)</a>

1. **SHALL** contain exactly one [1..1] **@classCode="ACT"** act (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1098-30823).
2. **SHALL** contain exactly one [1..1] **@moodCode="INT"** (CONF:1098-28656).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-28657) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.22.4.123"** (CONF:1098-28658).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1098-31920).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1098-28660).
  - a. This code **SHALL** contain exactly one [1..1] **@code="395170001"** medication monitoring (regime/therapy) (CONF:1098-30818).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem="2.16.840.1.113883.6.96"** (CodeSystem: SNOMED CT urn:oid:2.16.840.1.113883.6.96) (CONF:1098-30819).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-31921).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [ActStatus](#) urn:oid:2.16.840.1.113883.1.11.159331 **DYNAMIC** (CONF:1098-32358).
7. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1098-31922).
8. **SHALL** contain at least one [1..\*] **participant** (CONF:1098-28661) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="RESP"** (CONF:1098-28663).
  - b. **SHALL** contain exactly one [1..1] **participantRole** (CONF:1098-28662).
    - i. This participantRole **SHALL** contain exactly one [1..1] **@classCode="ASSIGNED"** (CONF:1098-28664).
    - ii. This participantRole **SHALL** contain at least one [1..\*] **id** (CONF:1098-28665).
    - iii. This participantRole **SHALL** contain exactly one [1..1] **playingEntity** (CONF:1098-28667).
      1. This playingEntity **SHALL** contain exactly one [1..1] **@classCode="PSN"** (CONF:1098-28668).
      2. This playingEntity **SHALL** contain exactly one [1..1] **US Realm Patient Name (PTN.US.FIELDDED)** (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1) (CONF:1098-28669).

**Table 109: ActStatus**

Value Set: ActStatus urn:oid:2.16.840.1.113883.1.11.159331			
Contains the names (codes) for each of the states in the state-machine of the RIM Act class.			
Value Set Source: <a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.1.11.15933">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.1.11.15933</a>			
Code	Code System	Code System OID	Print Name
normal	ActStatus	urn:oid:2.16.840.1.113883.5.14	normal
aborted	ActStatus	urn:oid:2.16.840.1.113883.5.14	aborted
active	ActStatus	urn:oid:2.16.840.1.113883.5.14	active
cancelled	ActStatus	urn:oid:2.16.840.1.113883.5.14	cancelled
completed	ActStatus	urn:oid:2.16.840.1.113883.5.14	completed
held	ActStatus	urn:oid:2.16.840.1.113883.5.14	held
new	ActStatus	urn:oid:2.16.840.1.113883.5.14	new
suspended	ActStatus	urn:oid:2.16.840.1.113883.5.14	suspended
nullified	ActStatus	urn:oid:2.16.840.1.113883.5.14	nullified
obsolete	ActStatus	urn:oid:2.16.840.1.113883.5.14	obsolete



**Figure 62: Drug Monitoring Act Example**

```

<entryRelationship typeCode="COMP">
  <!-- **DRUG MONITORING ACT **-->
  <act classCode="ACT" moodCode="INT">
    <templateId root="2.16.840.1.113883.10.20.22.4.123" />
    <id root="2a620155-9d11-439e-92b3-5d9815ff4ee8" />
    <code code="395170001" displayName="medication monitoring (regime/therapy"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT" />
    <statusCode code="completed" />
    <effectiveTime xsi:type="IVL_TS">
      <low value="20130615" />
      <high value="20130715" />
    </effectiveTime>
    <participant typeCode="RESP">
      <participantRole classCode="ASSIGNED">
        <id root="2a620155-9d11-439e-92b3-5d9815ff4ee5" />
        <playingEntity classCode="PSN">
          <name>
            <given>Listener</given>
            <family>Larry</family>
            <prefix>DR</prefix>
          </name>
        </playingEntity>
      </participantRole>
    </participant>
  </act>
</entryRelationship>

```

### 3.16 Drug Vehicle

[participantRole: identifier urn:oid:2.16.840.1.113883.10.20.22.4.24 (open)]

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DSTU R1.1

**Table 110: Drug Vehicle Contexts**

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

This template represents the vehicle (e.g., saline, dextrose) for administering a medication.

**Table 111: Drug Vehicle Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
participantRole (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.24)					
@classCode	1..1	SHALL		<a href="#">81-7490</a>	urn:oid:2.16.840.1.113883.5.110 (RoleClass) = MANU
templateId	1..1	SHALL		<a href="#">81-7495</a>	
@root	1..1	SHALL		<a href="#">81-10493</a>	2.16.840.1.113883.10.20.22.4.24
code	1..1	SHALL		<a href="#">81-19137</a>	
@code	1..1	SHALL		<a href="#">81-19138</a>	412307009
@codeSystem	1..1	SHALL		<a href="#">81-26502</a>	urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.6.96
playingEntity	1..1	SHALL		<a href="#">81-7492</a>	
code	1..1	SHALL		<a href="#">81-7493</a>	
name	0..1	MAY		<a href="#">81-7494</a>	

1. **SHALL** contain exactly one [1..1] **@classCode**="MANU" (CodeSystem: RoleClass urn:oid:2.16.840.1.113883.5.110 **STATIC**) (CONF:81-7490).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:81-7495) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.24" (CONF:81-10493).
3. **SHALL** contain exactly one [1..1] **code** (CONF:81-19137).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="412307009" Drug Vehicle (CONF:81-19138).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.96" (CodeSystem: SNOMED CT urn:oid:2.16.840.1.113883.6.96) (CONF:81-26502).
4. **SHALL** contain exactly one [1..1] **playingEntity** (CONF:81-7492).

This playingEntity/code is used to supply a coded term for the drug vehicle.

- a. This playingEntity **SHALL** contain exactly one [1..1] **code** (CONF:81-7493).
- b. This playingEntity **MAY** contain zero or one [0..1] **name** (CONF:81-7494).
  - i. This playingEntity/name **MAY** be used for the vehicle name in text, such as Normal Saline (CONF:81-10087).

**Figure 63: Drug Vehicle Example**

```

<participantRole classCode="MANU">
  <templateId root="2.16.840.1.113883.10.20.22.4.24"/>
  <code code="412307009" displayName="drug vehicle"
codeSystem="2.16.840.1.113883.6.96"/>
  <playingEntity classCode="MMAT">
    <code code="324049" displayName="Aerosol"
codeSystem="2.16.840.1.113883.6.88"
codeSystemName="RxNorm"/>
    <name>Aerosol</name>
  </playingEntity>
</participantRole>

```

### 3.17 Encounter Activity (V2)

[encounter: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2014-06-09  
(open) ]

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DSTU R2

**Table 112: Encounter Activity (V2) Contexts**

Contained By:	Contains:
<a href="#">Encounters Section (entries optional) (V2)</a> (optional)	<a href="#">Encounter Diagnosis (V2)</a> <a href="#">Indication (V2)</a> <a href="#">Service Delivery Location</a>

This clinical statement describes an interaction between a patient and clinician. Interactions may include in-person encounters, telephone conversations, and email exchanges.

**Table 113: Encounter Activity (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
encounter (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-8710</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ENC
@moodCode	1..1	SHALL		<a href="#">1098-8711</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-8712</a>	
@root	1..1	SHALL		<a href="#">1098-26353</a>	2.16.840.1.113883.10.20.22.4.49
@extension	1..1	SHALL		<a href="#">1098-32546</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-8713</a>	
code	1..1	SHALL		<a href="#">1098-8714</a>	urn:oid:2.16.840.1.113883.3.88.12.80.32 (EncounterTypeCode)
originalText	0..1	SHOULD		<a href="#">1098-8719</a>	
reference	0..1	SHOULD		<a href="#">1098-15970</a>	
@value	0..1	SHOULD		<a href="#">1098-15971</a>	
translation	0..1	MAY		<a href="#">1098-32323</a>	
effectiveTime	1..1	SHALL		<a href="#">1098-8715</a>	
sdtc:dischargeDispositionCode	0..1	MAY		<a href="#">1098-32176</a>	
performer	0..*	MAY		<a href="#">1098-8725</a>	
assignedEntity	1..1	SHALL		<a href="#">1098-8726</a>	
code	0..1	MAY		<a href="#">1098-8727</a>	urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy (HIPAA))
participant	0..*	SHOULD		<a href="#">1098-8738</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8740</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = LOC
participantRole	1..1	SHALL		<a href="#">1098-14903</a>	<a href="#">Service Delivery Location (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32)</a>
entryRelationship	0..*	MAY		<a href="#">1098-</a>	

				<a href="#">8722</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8723</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON
observation	1..1	SHALL		<a href="#">1098-14899</a>	<a href="#">Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2.0.22.4.19:2014-06-09)</a>
entryRelationship	0..*	MAY		<a href="#">1098-15492</a>	
act	1..1	SHALL		<a href="#">1098-15973</a>	<a href="#">Encounter Diagnosis (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2.0.22.4.80:2014-06-09)</a>

1. **SHALL** contain exactly one [1..1] **@classCode="ENC"** (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-8710).
2. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-8711).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-8712) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.22.4.49"** (CONF:1098-26353).
  - b. **SHALL** contain exactly one [1..1] **@extension="2014-06-09"** (CONF:1098-32546).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1098-8713).
5. **SHALL** contain exactly one [1..1] **code**, which **SHOULD** be selected from ValueSet [EncounterTypeCode](#) urn:oid:2.16.840.1.113883.3.88.12.80.32 **DYNAMIC** (CONF:1098-8714).
  - a. This code **SHOULD** contain zero or one [0..1] **originalText** (CONF:1098-8719).
    - i. The originalText, if present, **SHOULD** contain zero or one [0..1] **reference** (CONF:1098-15970).
      1. The reference, if present, **SHOULD** contain zero or one [0..1] **@value** (CONF:1098-15971).
        - a. 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:1098-15972).

The translation may exist to map the code of EncounterTypeCode (2.16.840.1.113883.3.88.12.80.32) valueset to the code of Encounter Planned (2.16.840.1.113883.11.20.9.52) valueset.

- b. This code **MAY** contain zero or one [0..1] **translation** (CONF:1098-32323).
6. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1098-8715).
7. **MAY** contain zero or one [0..1] **sdct:dischargeDispositionCode** (CONF:1098-32176).  
Note: The prefix sdct: SHALL be bound to the namespace "urn:hl7-org:sdct". The use of the namespace provides a necessary extension to CDA R2 for the use of the dischargeDispositionCode element

- a. This `sdtc:dischargeDispositionCode` **SHOULD** contain exactly [1..1] `@code`, which **SHOULD** be selected from ValueSet 2.16.840.1.113883.3.88.12.80.33 NUBC UB-04 FL17-Patient Status (code system 2.16.840.1.113883.6.301.5) **DYNAMIC** or, if access to NUBC is unavailable, from CodeSystem 2.16.840.1.113883.12.112 HL7 Discharge Disposition (CONF:1098-32177).
  - b. This `sdtc:dischargeDispositionCode` **SHOULD** contain exactly [1..1] `@codeSystem`, which **SHOULD** be either CodeSystem: NUBC 2.16.840.1.113883.6.301.5 **OR** CodeSystem: HL7 Discharge Disposition 2.16.840.1.113883.12.112 (CONF:1098-32377).
8. **MAY** contain zero or more [0..\*] `performer` (CONF:1098-8725).
- a. The performer, if present, **SHALL** contain exactly one [1..1] `assignedEntity` (CONF:1098-8726).
    - i. This `assignedEntity` **MAY** contain zero or one [0..1] `code`, which **SHOULD** be selected from ValueSet [Healthcare Provider Taxonomy \(HIPAA\)](#) `urn:oid:2.16.840.1.114222.4.11.1066` **DYNAMIC** (CONF:1098-8727).
9. **SHOULD** contain zero or more [0..\*] `participant` (CONF:1098-8738) such that it
- a. **SHALL** contain exactly one [1..1] `@typeCode="LOC"` Location (CodeSystem: HL7ActRelationshipType `urn:oid:2.16.840.1.113883.5.1002` **STATIC**) (CONF:1098-8740).
  - b. **SHALL** contain exactly one [1..1] [Service Delivery Location](#) (identifier: `urn:oid:2.16.840.1.113883.10.20.22.4.32`) (CONF:1098-14903).
10. **MAY** contain zero or more [0..\*] `entryRelationship` (CONF:1098-8722) 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` **STATIC**) (CONF:1098-8723).
  - 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:1098-14899).
11. **MAY** contain zero or more [0..\*] `entryRelationship` (CONF:1098-15492) such that it
- a. **SHALL** contain exactly one [1..1] [Encounter Diagnosis \(V2\)](#) (identifier: `urn:hl7ii:2.16.840.1.113883.10.20.22.4.80:2014-06-09`) (CONF:1098-15973).

**Table 114: EncounterTypeCode**

Value Set: EncounterTypeCode urn:oid:2.16.840.1.113883.3.88.12.80.32			
This value set includes only the codes of the Current Procedure and Terminology designated for Evaluation and Management (99200 – 99607) (subscription to AMA Required)			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
99201	CPT4	urn:oid:2.16.840.1.113883.6.12	Office or other outpatient visit (problem focused)
99202	CPT4	urn:oid:2.16.840.1.113883.6.12	Office or other outpatient visit (expanded problem (expanded))
99203	CPT4	urn:oid:2.16.840.1.113883.6.12	Office or other outpatient visit (detailed)
99204	CPT4	urn:oid:2.16.840.1.113883.6.12	Office or other outpatient visit (comprehensive, (comprehensive - moderate))
99205	CPT4	urn:oid:2.16.840.1.113883.6.12	Office or other outpatient visit (comprehensive, comprehensive-high)
19681004	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Nursing evaluation of patient and report (procedure)
207195004	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	History and physical examination with evaluation and management of nursing facility patient (procedure)
209099002	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	History and physical examination with management of domiciliary or rest home patient (procedure)
210098006	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Domiciliary or rest home patient evaluation and management (procedure)
225929007	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Joint home visit (procedure)
...			

**Figure 64: Encounter Activity (V2) Example**

```

<encounter classCode="ENC" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.49" extension="2014-06-09" />
  <id root="2a620155-9d11-439e-92b3-5d9815ff4de8" />
  <code code="99213" displayName="Office outpatient visit 15 minutes"
codeSystemName="CPT-4" codeSystem="2.16.840.1.113883.6.12">
    <originalText>
      <reference value="#Encounter1" />
    </originalText>
    <translation code="AMB" codeSystem="2.16.840.1.113883.5.4" displayName="Ambulatory"
codeSystemName="HL7 ActEncounterCode" />
  </code>
  <effectiveTime value="201209271300+0500" />
  <performer>
    <assignedEntity>
      . . .
    </assignedEntity>
  </performer>
  <participant typeCode="LOC">
    <participantRole classCode="SDLOC">
      <templateId root="2.16.840.1.113883.10.20.22.4.32" />
      . . .
    </participantRole>
  </participant>
  <entryRelationship typeCode="RSON">
    <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.22.4.19" extension="2014-06-09" />
      . . .
    </observation>
  </entryRelationship>
</encounter>

```



### 3.17.1 Current Emergency Department Visit (V2)

[encounter: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.3.40:2016-07-01 (open) ]

Draft as part of National Health Care Surveys Release 1, DSTU Release 1.2 - US Realm

**Table 115: Current Emergency Department Visit (V2) Contexts**

Contained By:	Contains:
<a href="#">Emergency Department Encounters Section (V2)</a> (required)	<a href="#">Clinical Note and External Document Reference</a> <a href="#">Episode of Care Observation (V2)</a> <a href="#">Major Reason for Visit</a> <a href="#">Patient Seen in this ED in last 72 Hours and Discharged</a> <a href="#">Point of Origin Observation</a> <a href="#">Transport Mode to Hospital Observation</a>

This template represents the patient's current emergency department visit. The major reason for this visit is represented by the Major Reason for this Visit template. To indicate whether this is an initial or follow-up visit use the Episode of Care template. The method of transport to the hospital is recorded in the Transport Mode to Hospital Observation. The point of origin of the patient is entered in the Point of Origin Observation template. The Clinical Note and External Document Reference template is used to record clinician notes (e.g., physicians', nurses', P.A.s', N.P.s' and C.N.M.s' notes) such as Triage, Intake, History of Present Illness, Clinical Impression and Discharge.

**Table 116: Current Emergency Department Visit (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
encounter (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.40:2016-07-01)					
@classCode	1..1	SHALL		<a href="#">3256-1036</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ENC
@moodCode	1..1	SHALL		<a href="#">3256-1037</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">3256-997</a>	
@root	1..1	SHALL		<a href="#">3256-1010</a>	2.16.840.1.113883.10.20.34.3.40
@extension	1..1	SHALL		<a href="#">3256-1011</a>	2016-07-01
code	1..1	SHALL		<a href="#">3256-1006</a>	
@code	1..1	SHALL		<a href="#">3256-1038</a>	EMER
@codeSystem	1..1	SHALL		<a href="#">3256-1039</a>	urn:oid:2.16.840.1.113883.5.4 (ActCode) = 2.16.840.1.113883.5.4
entryRelationship	0..1	MAY		<a href="#">3256-999</a>	
@typeCode	1..1	SHALL		<a href="#">3256-1016</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON
observation	1..1	SHALL		<a href="#">3256-1015</a>	<a href="#">Major Reason for Visit (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.7)</a>
entryRelationship	0..1	MAY		<a href="#">3256-1001</a>	
@typeCode	1..1	SHALL		<a href="#">3256-1021</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">3256-1115</a>	<a href="#">Episode of Care Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.32:2015-04-01)</a>
entryRelationship	0..1	MAY		<a href="#">3256-1002</a>	
@typeCode	1..1	SHALL		<a href="#">3256-1024</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">3256-1025</a>	<a href="#">Transport Mode to Hospital Observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.24)</a>
entryRelationship	0..1	MAY		<a href="#">3256-</a>	

				<a href="#">1003</a>	
@typeCode	1..1	SHALL		<a href="#">3256-1027</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">3256-1028</a>	<a href="#">Patient Seen in this ED in last 72 Hours and Discharged (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.31)</a>
entryRelationship	0..1	MAY		<a href="#">3256-1005</a>	
@typeCode	1..1	SHALL		<a href="#">3256-1033</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">3256-1034</a>	<a href="#">Point of Origin Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.36:2015-04-01)</a>
reference	0..*	MAY		<a href="#">3256-1155</a>	
@typeCode	1..1	SHALL		<a href="#">3256-1156</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
externalDocument	1..1	SHALL		<a href="#">3256-1157</a>	<a href="#">Clinical Note and External Document Reference (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.44:2016-07-01)</a>

1. Conforms to [Encounter Activity \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2014-06-09).
2. **SHALL** contain exactly one [1..1] @classCode="ENC" Encounter (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:3256-1036).
3. **SHALL** contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:3256-1037).
4. **SHALL** contain exactly one [1..1] templateId (CONF:3256-997) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.34.3.40" (CONF:3256-1010).
  - b. **SHALL** contain exactly one [1..1] @extension="2016-07-01" (CONF:3256-1011).
5. **SHALL** contain exactly one [1..1] code (CONF:3256-1006).
  - a. This code **SHALL** contain exactly one [1..1] @code="EMER" Emergency (CONF:3256-1038).
  - b. This code **SHALL** contain exactly one [1..1] @codeSystem="2.16.840.1.113883.5.4" (CodeSystem: ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:3256-1039).
6. **MAY** contain zero or one [0..1] entryRelationship (CONF:3256-999) 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:3256-1016).

- b. **SHALL** contain exactly one [1..1] Major Reason for Visit (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.7) (CONF:3256-1015).  
Note: Major Reason for This Visit
- 7. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:3256-1001) 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:3256-1021).
  - b. **SHALL** contain exactly one [1..1] Episode of Care Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.32:2015-04-01) (CONF:3256-1115).
- 8. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:3256-1002) 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:3256-1024).
  - b. **SHALL** contain exactly one [1..1] Transport Mode to Hospital Observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.24) (CONF:3256-1025).  
Note: Mode of arrival
- 9. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:3256-1003) 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:3256-1027).
  - b. **SHALL** contain exactly one [1..1] Patient Seen in this ED in last 72 Hours and Discharged (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.31) (CONF:3256-1028).  
Note: Was this patient seen in this ED and discharged in the prior 72 hours?
- 10. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:3256-1005) 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:3256-1033).
  - b. **SHALL** contain exactly one [1..1] Point of Origin Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.36:2015-04-01) (CONF:3256-1034).  
Note: Point of Origin
- 11. **MAY** contain zero or more [0..\*] **reference** (CONF:3256-1155).
  - a. The reference, if present, **SHALL** contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:3256-1156).
  - b. The reference, if present, **SHALL** contain exactly one [1..1] Clinical Note and External Document Reference (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.44:2016-07-01) (CONF:3256-1157).

**Figure 65: Current Emergency Department Visit (V2) Example**

```

<encounter classCode="ENC" moodCode="EVN">
  <!-- [C-CDA R2] R2 Encounter Activity (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.4.49" extension="2014-06-09" />
  <!-- [NHCS R1D1.2] Current Outpatient Visit (V3) -->
  <templateId root="2.16.840.1.113883.10.20.34.3.10" extension="2016-07-01" />
  <!-- This id is the same as the encompassingEncounter id -->
  <id root="57edf80c-7114-4dc3-b3f4-abf515d18c90" />
  <code code="AMB"
    displayName="Ambulatory (outpatient)"
    codeSystem="2.16.840.1.113883.5.4"
    codeSystemName="ActCode" />
  <effectiveTime>
    <!-- Date of Visit -->
    <low value="20130815" />
  </effectiveTime>
  <entryRelationship typeCode="RSON">
    <!-- Major Reason for Visit -->
    <observation classCode="OBS" moodCode="EVN">
      <!-- [C-CDA R2] R2 Indication (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.19" extension="2014-06-09" />
      <!-- [NHCS R1D1] Major Reason for Visit -->
      <templateId root="2.16.840.1.113883.10.20.34.3.7" />
      ...
    </observation>
  </entryRelationship>
  <!-- New Patient -->
  <entryRelationship typeCode="COMP">
    <act classCode="ACT" moodCode="EVN">
      <!-- [NHCS R1D1] New Patient Act -->
      <templateId root="2.16.840.1.113883.10.20.34.3.9" />
      ...
    </act>
  </entryRelationship>
  <!-- Clearly a patient can't both be new and have visits in the past
    12 months. This is for XML sample file illustration purposes only -->
  <entryRelationship typeCode="REFR">
    <observation classCode="OBS" moodCode="EVN">
      <!-- [NHCS R1D1] Number of Visits in the Last 12 Months -->
      <templateId root="2.16.840.1.113883.10.20.34.3.26" />
      <id root="cd691b5e-2464-4fb4-936d-0d9d67ebb8fd" />
      ...
    </observation>
  </entryRelationship>
  <entryRelationship typeCode="REFR">
    <observation classCode="OBS" moodCode="EVN">
      <!-- [NHCS R1D1.1] Episode of Care Observation (V2) -->
      <templateId root="2.16.840.1.113883.10.20.34.3.32" extension="2015-04-01" />
      <id root="ecbec7b7-7fc0-47b2-85b5-39778319b8fb" />
      ...
    </observation>
  </entryRelationship>
  <entryRelationship typeCode="REFR">
    <observation classCode="OBS" moodCode="EVN">
      <!-- [NHCS R1D1.1] Procedure Follow-Up Attempt -->
      <templateId root="2.16.840.1.113883.10.20.34.3.42" extension="2015-04-01" />

```

```

        <id root="ecbec7b7-7fc0-47b2-85b5-39778319b8fb" />
        ...
    </observation>
</entryRelationship>
<!-- Was patient referred for this visit -->
<reference typeCode="REFR">
    <!-- This is a reference to a CDA document so use classCode="DOCCLIN" -->
    <externalDocument classCode="DOCCLIN" moodCode="EVN">
        <!-- [NHCS R1D1.2] Clinical Note and External Document Reference -->
        <templateId root="2.16.840.1.113883.10.20.34.3.44" extension="2016-07-01" />
        ...
    </externalDocument>
</reference>
</encounter>

```

### 3.17.2 Current Inpatient Visit

[encounter: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.3.39:2015-04-01 (open)]

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**Table 117: Current Inpatient Visit Contexts**

Contained By:	Contains:
<a href="#">Inpatient Encounters Section (V2)</a> (optional)	<a href="#">Admission Priority Observation</a> <a href="#">Point of Origin Observation</a>

This template represents the patient's current inpatient visit to the facility. The priority level of the admission is indicated using the Admission Priority Observation template and the point of origin of the patient is entered in the Point of Origin Observation template.

**Table 118: Current Inpatient Visit Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
encounter (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.39:2015-04-01)					
@classCode	1..1	SHALL		<a href="#">1184-983</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ENC
@moodCode	1..1	SHALL		<a href="#">1184-984</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1184-949</a>	
@root	1..1	SHALL		<a href="#">1184-961</a>	2.16.840.1.113883.10.20.34.3.39
@extension	1..1	SHALL		<a href="#">1184-989</a>	2015-04-01
code	1..1	SHALL		<a href="#">1184-988</a>	
@code	1..1	SHALL		<a href="#">1184-990</a>	IMP
@codeSystem	1..1	SHALL		<a href="#">1184-991</a>	urn:oid:2.16.840.1.113883.5.4 (ActCode) = 2.16.840.1.113883.5.4
entryRelationship	0..1	MAY		<a href="#">1184-956</a>	
@typeCode	1..1	SHALL		<a href="#">1184-980</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">1184-981</a>	<a href="#">Admission Priority Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.35:2015-04-01)</a>
entryRelationship	0..1	MAY		<a href="#">1184-957</a>	
@typeCode	1..1	SHALL		<a href="#">1184-985</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">1184-986</a>	<a href="#">Point of Origin Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.36:2015-04-01)</a>

1. Conforms to [Encounter Activity \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2014-06-09).
2. **SHALL** contain exactly one [1..1] **@classCode**="ENC" Encounter (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1184-983).
3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1184-984).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:1184-949) such that it

- a. **SHALL** contain exactly one [1..1] `@root="2.16.840.1.113883.10.20.34.3.39"` (CONF:1184-961).
  - b. **SHALL** contain exactly one [1..1] `@extension="2015-04-01"` (CONF:1184-989).
- 5. **SHALL** contain exactly one [1..1] `code` (CONF:1184-988).
  - a. This code **SHALL** contain exactly one [1..1] `@code="IMP"` Inpatient (CONF:1184-990).
  - b. This code **SHALL** contain exactly one [1..1] `@codeSystem="2.16.840.1.113883.5.4"` (CodeSystem: ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:1184-991).
- 6. **MAY** contain zero or one [0..1] `entryRelationship` (CONF:1184-956) 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:1184-980).
  - b. **SHALL** contain exactly one [1..1] [Admission Priority Observation](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.35:2015-04-01) (CONF:1184-981).  
Note: Admission priority
- 7. **MAY** contain zero or one [0..1] `entryRelationship` (CONF:1184-957) 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:1184-985).
  - b. **SHALL** contain exactly one [1..1] [Point of Origin Observation](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.36:2015-04-01) (CONF:1184-986).  
Note: Point of Origin



**Figure 66: Current Inpatient Visit Example**

```

<encounter classCode="ENC" moodCode="EVN">
  <!-- Conforms to C-CDA R2 Encounter Activity (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.4.49"
    extension="2014-06-09" />
  <!-- Current Inpatient Visit -->
  <templateId root="2.16.840.1.113883.10.20.34.3.39"
    extension="2015-04-01" />
  <!-- This id is the same as the encompassingEncounter id -->
  <id root="57edf80c-7114-4dc3-b3f4-abf515d18c90" />
  <code code="IMP"
    displayName="Inpatient"
    codeSystem="2.16.840.1.113883.5.4"
    codeSystemName="ActCode" />
  <effectiveTime>
    <!-- Date of Visit -->
    <low value="20130815" />
  </effectiveTime>
  <!-- Admission Priority -->
  <entryRelationship typeCode="REFR">
    <observation classCode="OBS" moodCode="EVN">
      <!-- Admission Priority Observation -->
      <templateId root="2.16.840.1.113883.10.20.34.3.35"
        extension="2015-04-01" />
      ...
    </observation>
  </entryRelationship>
  <!-- Point of Origin -->
  <entryRelationship typeCode="REFR">
    <observation classCode="OBS" moodCode="EVN">
      <!-- Point of Origin Observation -->
      <templateId root="2.16.840.1.113883.10.20.34.3.36"
        extension="2015-04-01" />
      ...
    </observation>
  </entryRelationship>
</encounter>

```

### 3.17.3 Current Outpatient Visit (V3)

[encounter: identifier urn:h17ii:2.16.840.1.113883.10.20.34.3.10:2016-07-01 (open) ]

Draft as part of National Health Care Surveys Release 1, DSTU Release 1.2 - US Realm

**Table 119: Current Outpatient Visit (V3) Contexts**

Contained By:	Contains:
<a href="#">Outpatient Encounters Section (V3)</a> (required)	<a href="#">Clinical Note and External Document Reference</a> <a href="#">Episode of Care Observation (V2)</a> <a href="#">Major Reason for Visit</a> <a href="#">New Patient Act</a> <a href="#">Number of Visits in the Last 12 Months</a> <a href="#">Procedure Follow-Up Attempt Observation</a>

This template represents the patient's current outpatient visit to the facility. If the current visit is the result of a referral, the referral document is referenced through the Clinical Note and External Document Reference template. If the patient is an established patient, then a count of all visits in the last 12 months (excluding this visit) is entered in the Number of Visits in the Last 12 Months template. If the patient is a new patient, this is indicated using the New Patient Act template. The major reason for this visit is represented by the Major Reason for this Visit template. To indicate whether this is an initial or follow-up visit use the Episode of Care template. Information about follow-up after surgery is contained in the Procedure Follow-up Attempt Observation template.

**Table 120: Current Outpatient Visit (V3) Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
encounter (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.10:2016-07-01)					
@classCode	1..1	SHALL		<a href="#">3256-463</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ENC
@moodCode	1..1	SHALL		<a href="#">3256-464</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">3256-465</a>	
@root	1..1	SHALL		<a href="#">3256-466</a>	2.16.840.1.113883.10.20.34.3.10
@extension	1..1	SHALL		<a href="#">3256-993</a>	2016-07-01
code	1..1	SHALL		<a href="#">3256-992</a>	
@code	1..1	SHALL		<a href="#">3256-994</a>	AMB
@codeSystem	1..1	SHALL		<a href="#">3256-995</a>	urn:oid:2.16.840.1.113883.5.4 (ActCode) = 2.16.840.1.113883.5.4
entryRelationship	0..1	MAY		<a href="#">3256-469</a>	
@typeCode	1..1	SHALL		<a href="#">3256-474</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">3256-470</a>	<a href="#">Number of Visits in the Last 12 Months (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.26)</a>
entryRelationship	0..1	MAY		<a href="#">3256-471</a>	
@typeCode	1..1	SHALL		<a href="#">3256-475</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON
observation	1..1	SHALL		<a href="#">3256-472</a>	<a href="#">Major Reason for Visit (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.7)</a>
entryRelationship	0..1	MAY		<a href="#">3256-484</a>	
@typeCode	1..1	SHALL		<a href="#">3256-485</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
act	1..1	SHALL		<a href="#">3256-486</a>	<a href="#">New Patient Act (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.9)</a>
entryRelationship	0..1	MAY		<a href="#">3256-747</a>	

@typeCode	1..1	SHALL		<a href="#">3256-748</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">3256-1063</a>	<a href="#">Episode of Care Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.32:2015-04-01)</a>
entryRelationship	0..1	MAY		<a href="#">3256-1152</a>	
@typeCode	1..1	SHALL		<a href="#">3256-1153</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">3256-1154</a>	<a href="#">Procedure Follow-Up Attempt Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.42:2015-04-01)</a>
reference	0..*	MAY		<a href="#">3256-1158</a>	
@typeCode	1..1	SHALL		<a href="#">3256-1159</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
externalDocument	1..1	SHALL		<a href="#">3256-1160</a>	<a href="#">Clinical Note and External Document Reference (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.44:2016-07-01)</a>

1. Conforms to [Encounter Activity \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2014-06-09).
2. **SHALL** contain exactly one [1..1] **@classCode="ENC"** Encounter (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:3256-463).
3. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:3256-464).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:3256-465) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.34.3.10"** (CONF:3256-466).
  - b. **SHALL** contain exactly one [1..1] **@extension="2016-07-01"** (CONF:3256-993).
5. **SHALL** contain exactly one [1..1] **code** (CONF:3256-992).
  - a. This code **SHALL** contain exactly one [1..1] **@code="AMB"** Ambulatory (outpatient) (CONF:3256-994).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem="2.16.840.1.113883.5.4"** (CodeSystem: ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:3256-995).
6. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:3256-469) 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:3256-474).

- b. **SHALL** contain exactly one [1..1] Number of Visits in the Last 12 Months (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.26) (CONF:3256-470).  
Note: Number of Past Visits in the Last 12 Months
- 7. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:3256-471) 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:3256-475).
  - b. **SHALL** contain exactly one [1..1] Major Reason for Visit (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.7) (CONF:3256-472).  
Note: Major Reason for This Visit
- 8. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:3256-484) 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:3256-485).
  - b. **SHALL** contain exactly one [1..1] New Patient Act (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.9) (CONF:3256-486).  
Note: Has patient been seen in clinic/location before
- 9. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:3256-747) 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:3256-748).
  - b. **SHALL** contain exactly one [1..1] Episode of Care Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.32:2015-04-01) (CONF:3256-1063).  
Note: Initial or follow-up visit
- 10. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:3256-1152) 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:3256-1153).
  - b. **SHALL** contain exactly one [1..1] Procedure Follow-Up Attempt Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.42:2015-04-01) (CONF:3256-1154).
- 11. **MAY** contain zero or more [0..\*] **reference** (CONF:3256-1158).
  - a. The reference, if present, **SHALL** contain exactly one [1..1] **@typeCode="REFR"** Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:3256-1159).
  - b. The reference, if present, **SHALL** contain exactly one [1..1] Clinical Note and External Document Reference (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.44:2016-07-01) (CONF:3256-1160).

**Figure 67: Current Outpatient Visit (V3) Example**

```

<encounter classCode="ENC" moodCode="EVN">
  <!-- [C-CDA R2] R2 Encounter Activity (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.4.49" extension="2014-06-09" />
  <!-- [NHCS R1D1.2] Current Outpatient Visit (V3) -->
  <templateId root="2.16.840.1.113883.10.20.34.3.10" extension="2016-07-01" />
  <!-- This id is the same as the encompassingEncounter id -->
  <id root="57edf80c-7114-4dc3-b3f4-abf515d18c90" />
  <code code="AMB"
    displayName="Ambulatory (outpatient)"
    codeSystem="2.16.840.1.113883.5.4"
    codeSystemName="ActCode" />
  <effectiveTime>
    <!-- Date of Visit -->
    <low value="20130815" />
  </effectiveTime>
  <entryRelationship typeCode="RSON">
    <!-- Major Reason for Visit -->
    <observation classCode="OBS" moodCode="EVN">
      <!-- [C-CDA R2] R2 Indication (V2) -->
      <templateId root="2.16.840.1.113883.10.20.22.4.19" extension="2014-06-09" />
      <!-- [NHCS R1D1] Major Reason for Visit -->
      ...
    </observation>
  </entryRelationship>
  <!-- New Patient -->
  <entryRelationship typeCode="COMP">
    <act classCode="ACT" moodCode="EVN">
      <!-- [NHCS R1D1] New Patient Act -->
      <templateId root="2.16.840.1.113883.10.20.34.3.9" />
      ...
    </act>
  </entryRelationship>
  <!-- Clearly a patient can't both be new and have visits in the past
    12 months. This is for XML sample file illustration purposes only -->
  <entryRelationship typeCode="REFR">
    <observation classCode="OBS" moodCode="EVN">
      <!-- [NHCS R1D1] Number of Visits in the Last 12 Months -->
      <templateId root="2.16.840.1.113883.10.20.34.3.26" />
      ...
    </observation>
  </entryRelationship>
  <entryRelationship typeCode="REFR">
    <observation classCode="OBS" moodCode="EVN">
      <!-- [NHCS R1D1.1] Episode of Care Observation (V2) -->
      <templateId root="2.16.840.1.113883.10.20.34.3.32" extension="2015-04-01" />
      ...
    </observation>
  </entryRelationship>
  <entryRelationship typeCode="REFR">
    <observation classCode="OBS" moodCode="EVN">
      <!-- [NHCS R1D1.1] Procedure Follow-Up Attempt -->
      <templateId root="2.16.840.1.113883.10.20.34.3.42" extension="2015-04-01" />
      <id root="ecbec7b7-7fc0-47b2-85b5-39778319b8fb" />
      ...
    </observation>

```

```

</entryRelationship>
<!-- Was patient referred for this visit -->
<reference typeCode="REFR">
  <!-- This is a reference to a CDA document so use classCode="DOCCLIN" -->
  <externalDocument classCode="DOCCLIN" moodCode="EVN">
    <!-- [NHCS R1D1.2] Clinical Note and External Document Reference -->
    <templateId root="2.16.840.1.113883.10.20.34.3.44" extension="2016-07-01" />
    ...
  </externalDocument>
</reference>
</encounter>

```

### 3.17.4 Hospital Admission Encounter

[encounter: identifier urn:oid:2.16.840.1.113883.10.20.34.3.18 (open)]

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**Table 121: Hospital Admission Encounter Contexts**

Contained By:	Contains:
<a href="#">Emergency Department Encounters Section (V2)</a> (optional)	<a href="#">Discharge Status Observation</a> <a href="#">Hospital Discharge Diagnosis (V2)</a> <a href="#">Listed for Admission to Hospital Act</a> <a href="#">Service Delivery Location</a>

This template represents the encounter when the patient was admitted to hospital this ED visit.

If efforts have been exhausted to collect the data, set the appropriate nullFlavor to "UNK".

**Table 122: Hospital Admission Encounter Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
encounter (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.18)					
@classCode	1..1	SHALL		<a href="#">1106-540</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ENC
@moodCode	1..1	SHALL		<a href="#">1106-541</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1106-532</a>	
@root	1..1	SHALL		<a href="#">1106-542</a>	2.16.840.1.113883.10.20.34.3.18
code	1..1	SHALL		<a href="#">1106-533</a>	
@code	1..1	SHALL		<a href="#">1106-543</a>	32485007
@codeSystem	1..1	SHALL		<a href="#">1106-544</a>	urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.6.96
effectiveTime	1..1	SHALL		<a href="#">1106-534</a>	
low	1..1	SHALL		<a href="#">1106-545</a>	
high	1..1	SHALL		<a href="#">1106-546</a>	
sdct:dischargeDispositionCode	0..1	SHOULD		<a href="#">1106-548</a>	urn:oid:2.16.840.1.114222.4.11.7436 (Disposition (NCHS))
participant	1..1	SHALL		<a href="#">1106-531</a>	
@typeCode	1..1	SHALL		<a href="#">1106-547</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = LOC
participantRole	1..1	SHALL		<a href="#">1106-539</a>	<a href="#">Service Delivery Location (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32)</a>
participant	1..1	SHALL		<a href="#">1106-536</a>	
@typeCode	1..1	SHALL		<a href="#">1106-551</a>	urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = ADM
participantRole	1..1	SHALL		<a href="#">1106-537</a>	
@classCode	0..1	MAY		<a href="#">1106-552</a>	urn:oid:2.16.840.1.113883.5.110 (RoleClass) = ASSIGNED
code	1..1	SHALL		<a href="#">1106-553</a>	urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy (HIPAA))



entryRelationship	1..1	SHALL		<a href="#">1106-535</a>	
@typeCode	1..1	SHALL		<a href="#">1106-550</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
act	1..1	SHALL		<a href="#">1106-549</a>	<a href="#">Hospital Discharge Diagnosis (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.33:2014-06-09)</a>
entryRelationship	1..1	SHALL	EntryRelationship	<a href="#">1106-697</a>	
@typeCode	1..1	SHALL		<a href="#">1106-698</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
observation	1..1	SHALL		<a href="#">1106-699</a>	<a href="#">Discharge Status Observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.28)</a>
entryRelationship	1..1	SHALL		<a href="#">1106-538</a>	
@typeCode	1..1	SHALL		<a href="#">1106-554</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SAS
act	1..1	SHALL		<a href="#">1106-555</a>	<a href="#">Listed for Admission to Hospital Act (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.15)</a>

1. Conforms to [Encounter Activity \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2014-06-09).
2. **SHALL** contain exactly one [1..1] **@classCode="ENC"** (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1106-540).
3. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1106-541).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-532) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.34.3.18"** (CONF:1106-542).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1106-533).
  - a. This code **SHALL** contain exactly one [1..1] **@code="32485007"** Hospital admission (CONF:1106-543).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem="2.16.840.1.113883.6.96"** (CodeSystem: SNOMED CT urn:oid:2.16.840.1.113883.6.96) (CONF:1106-544).
6. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1106-534).
  - a. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:1106-545).  
Note: Form Element: Date and time patient actually left the ED or observation unit

- b. This effectiveTime **SHALL** contain exactly one [1..1] **high** (CONF:1106-546).  
Note: Form Element: Hospital Discharge Date
- 7. **SHOULD** contain zero or one [0..1] **sdtc:dischargeDispositionCode**, which **SHALL** be selected from ValueSet [Disposition \(NCHS\)](#) urn:oid:2.16.840.1.114222.4.11.7436 **DYNAMIC** (CONF:1106-548).  
Note: Form Element: Hospital discharge disposition
- 8. **SHALL** contain exactly one [1..1] **participant** (CONF:1106-531) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="LOC"** Location (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1106-547).
  - b. **SHALL** contain exactly one [1..1] [Service Delivery Location](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32) (CONF:1106-539).  
Note: Form Element: Admitted To
- 9. **SHALL** contain exactly one [1..1] **participant** (CONF:1106-536) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="ADM"** Admitter (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90) (CONF:1106-551).
  - b. **SHALL** contain exactly one [1..1] **participantRole** (CONF:1106-537).  
Note: Form Element: Admitting Physician
    - i. This participantRole **MAY** contain zero or one [0..1] **@classCode="ASSIGNED"** (CodeSystem: RoleClass urn:oid:2.16.840.1.113883.5.110) (CONF:1106-552).
    - ii. This participantRole **SHALL** contain exactly one [1..1] **code**, which **SHALL** be selected from ValueSet [Healthcare Provider Taxonomy \(HIPAA\)](#) urn:oid:2.16.840.1.114222.4.11.1066 **DYNAMIC** (CONF:1106-553).
- 10. **SHALL** contain exactly one [1..1] **entryRelationship** (CONF:1106-535) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="COMP"** (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1106-550).
  - b. **SHALL** contain exactly one [1..1] [Hospital Discharge Diagnosis \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.33:2014-06-09) (CONF:1106-549).  
Note: Form Element: Principal Hospital Discharge Diagnosis
- 11. **SHALL** contain exactly one [1..1] **entryRelationship** (CONF:1106-697) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="COMP"** (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1106-698).
  - b. **SHALL** contain exactly one [1..1] [Discharge Status Observation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.28) (CONF:1106-699).  
Note: Form Element: Discharge Status
- 12. **SHALL** contain exactly one [1..1] **entryRelationship** (CONF:1106-538) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="SAS"** Starts after start (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1106-554).

- b. **SHALL** contain exactly one [1..1] [Listed for Admission to Hospital Act](#) (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.15) (CONF:1106-555).  
Note: Form Element: Date and time bed requested for hospital admission

**Table 123: Disposition (NCHS)**

Value Set: Disposition (NCHS) urn:oid:2.16.840.1.114222.4.11.7436 This value set describes visit disposition concepts. Value Set Source: <a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7436">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7436</a>			
Code	Code System	Code System OID	Print Name
PHC1270	PHIN VADS code system	urn:oid:2.16.840.1.11422 2.4.5.274	Refer to other physician
PHC1271	PHIN VADS code system	urn:oid:2.16.840.1.11422 2.4.5.274	Return at specified time
PHC1272	PHIN VADS code system	urn:oid:2.16.840.1.11422 2.4.5.274	Refer to ER/Admit to hospital
PHC1273	PHIN VADS code system	urn:oid:2.16.840.1.11422 2.4.5.274	Other
...			

**Figure 68: Hospital Admission Encounter Example**

```

<encounter classCode="ENC" moodCode="EVN">
  <!-- C-CDA R2 Encounter Activity (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.4.49" extension="2014-06-09" />
  <!-- Hospital Admission Encounter -->
  <templateId root="2.16.840.1.113883.10.20.34.3.18" />
  <id root="515fe5e3-12ca-48d2-b9ca-a3acc78156a4" />
  <code code="32485007" displayName="Hospital Admission"
    codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" />
  <effectiveTime>
    <!-- Form Element: Date and time patient actually left the ED or observation unit -->
    <low value="201308160920" />
    <!-- Form Element: Hospital Discharge Date -->
    <high value="20130820" />
  </effectiveTime>
  <!-- NOTE: The sdtc:dischargeDispositionCode will fail Schematron validation
    as, in the implied C-CDA Encounter Activity (V2) template,
    sdtc:dischargeDispositionCode is SHALL bound to either
    CodeSystem: NUBC 2.16.840.1.113883.6.301.5 OR
    CodeSystem: HL7 Discharge Disposition 2.16.840.1.113883.12.112.
    However Hospital Admission Encounter is SHALL bound to the value set
    "Disposition (NCHS)" whose codes come from code system
    PHINVADS (2.16.840.1.114222.4.5.274)
    An errata will be raised against C-CDA R2 to change this
    SHALL constraint -->
  <sdtc:dischargeDispositionCode code="PHC1273" displayName="Other"
    codeSystem="2.16.840.1.114222.4.5.274"
    codeSystemName="PHIN VADS code system" />
  <!-- Form Element: Admitted to -->
  <participant typeCode="LOC">
    <participantRole classCode="SDLOC">
      <!-- C-CDA Service Delivery Location -->
      <templateId root="2.16.840.1.113883.10.20.22.4.32" />
      <code code="1027-2" codeSystem="2.16.840.1.113883.6.259"
        codeSystemName="HealthcareServiceLocation"
        displayName="Medical Critical Care" />
    </participantRole>
  </participant>
  <!-- Form Element: Admitting Physician -->
  <participant typeCode="ADM">
    <participantRole>
      <id nullFlavor="NA" />
      <code code="208M00000X" displayName="Hospitalist"
        codeSystem="2.16.840.1.113883.5.53"
        codeSystemName="Healthcare Provider Taxonomy (HIPAA)" />
    </participantRole>
  </participant>
  <!-- Form Element: Principal Hospital Discharge Diagnosis -->
  <entryRelationship typeCode="COMP">
    <act classCode="ACT" moodCode="EVN">
      <!-- C-CDA R2 Hospital Discharge Diagnosis -->
      <templateId root="2.16.840.1.113883.10.20.22.4.33" extension="2014-06-09" />
      ...
    </act>
  </entryRelationship>
  <!-- Form Element: Date and time bed requested for hospital admission -->

```

```

<entryRelationship typeCode="SAS">
  <act classCode="ACT" moodCode="EVN">
    <templateId root="2.16.840.1.113883.10.20.34.3.15" />
    ...
  </act>
</entryRelationship>
<!-- Form Element: Discharge Status -->
<entryRelationship typeCode="COMP">
  <observation classCode="OBS" moodCode="EVN">
    <!-- Discharge Status Observation -->
    <templateId root="2.16.840.1.113883.10.20.34.3.28" />
    ...
  </observation>
</entryRelationship>
</encounter>

```

### 3.17.5 Observation Unit Stay Encounter

[encounter: identifier urn:oid:2.16.840.1.113883.10.20.34.3.33 (open)]

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**Table 124: Observation Unit Stay Encounter Contexts**

Contained By:	Contains:
<a href="#">Emergency Department Encounters Section (V2)</a> (optional)	

This template represents the encounter when the patient stayed in the observation unit.

If this information is not available at time of abstraction, then complete the Hospital Admission Log.

**Table 125: Observation Unit Stay Encounter Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
encounter (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.33)					
@classCode	1..1	SHALL		<a href="#">1106-797</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ENC
@moodCode	1..1	SHALL		<a href="#">1106-798</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1106-775</a>	
@root	1..1	SHALL		<a href="#">1106-785</a>	2.16.840.1.113883.10.20.34.3.33
code	1..1	SHALL		<a href="#">1106-776</a>	
@code	1..1	SHALL		<a href="#">1106-868</a>	75912-6
@codeSystem	1..1	SHALL		<a href="#">1106-869</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
effectiveTime	1..1	SHALL		<a href="#">1106-777</a>	
low	1..1	SHALL		<a href="#">1106-788</a>	
@nullFlavor	0..1	MAY		<a href="#">1106-799</a>	UNK
@value	0..1	SHOULD		<a href="#">1106-800</a>	
high	1..1	SHALL		<a href="#">1106-789</a>	
@nullFlavor	0..1	MAY		<a href="#">1106-801</a>	UNK
@value	0..1	SHOULD		<a href="#">1106-802</a>	

1. Conforms to [Encounter Activity \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2014-06-09).
2. **SHALL** contain exactly one [1..1] @classCode="ENC" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1106-797).
3. **SHALL** contain exactly one [1..1] @moodCode="EVN" (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1106-798).
4. **SHALL** contain exactly one [1..1] templateId (CONF:1106-775) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.34.3.33" (CONF:1106-785).
5. **SHALL** contain exactly one [1..1] code (CONF:1106-776).
  - a. This code **SHALL** contain exactly one [1..1] @code="75912-6" Observation unit stay discharge (CONF:1106-868).

- b. This code **SHALL** contain exactly one [1..1]  
**@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC  
urn:oid:2.16.840.1.113883.6.1) (CONF:1106-869).

If either the admission or discharge date and time is unknown, use @nullFlavor="UNK"

- 6. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1106-777).
  - a. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:1106-788).  
Note: Form Element: Date and time of observation unit admission
    - i. This low **MAY** contain zero or one [0..1] **@nullFlavor**="UNK" (CONF:1106-799).
    - ii. This low **SHOULD** contain zero or one [0..1] **@value** (CONF:1106-800).
  - b. This effectiveTime **SHALL** contain exactly one [1..1] **high** (CONF:1106-789).  
Note: Form Element: Date and time of observation unit discharge
    - i. This high **MAY** contain zero or one [0..1] **@nullFlavor**="UNK" (CONF:1106-801).
    - ii. This high **SHOULD** contain zero or one [0..1] **@value** (CONF:1106-802).

**Figure 69: Observation Unit Stay Encounter Example**

```
<encounter classCode="ENC" moodCode="EVN">
  <!-- C-CDA R2 Encounter Activity (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.4.49" extension="2014-06-09" />
  <!-- Observation Unit Stay Encounter -->
  <templateId root="2.16.840.1.113883.10.20.34.3.33" />
  <id root="565c21dd-3b53-47e0-a904-1dc840d2b2b5" />
  <code code="75912-6" displayName="Observation Unit Stay Discharge"
    codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
  <effectiveTime>
    <!-- Date and time of observation unit admission -->
    <low nullFlavor="UNK" />
    <!-- Form Element: Date and time of observation unit discharge -->
    <high value="20130820" />
  </effectiveTime>
</encounter>
```

### 3.17.6 Specialty Unit Stay Encounter

[encounter: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.3.38:2015-04-01  
(open)]

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Realm

**Table 126: Specialty Unit Stay Encounter Contexts**

Contained By:	Contains:
<a href="#">Inpatient Encounters Section (V2)</a> (optional)	

This template represents a specialty unit (such as ICU, NICU or CCU) stay.

**Table 127: Specialty Unit Stay Encounter Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
encounter (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.38:2015-04-01)					
@classCode	1..1	SHALL		<a href="#">1184-945</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ENC
@moodCode	1..1	SHALL		<a href="#">1184-946</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1184-923</a>	
@root	1..1	SHALL		<a href="#">1184-933</a>	2.16.840.1.113883.10.20.34.3.38
@extension	1..1	SHALL		<a href="#">1184-947</a>	2015-04-01
code	1..1	SHALL		<a href="#">1184-924</a>	urn:oid:2.16.840.1.114222.4.11.7363 (Specialty Unit Type (NCHS))
effectiveTime	1..1	SHALL		<a href="#">1184-925</a>	
low	1..1	SHALL		<a href="#">1184-936</a>	
high	1..1	SHALL		<a href="#">1184-937</a>	

1. Conforms to [Encounter Activity \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2014-06-09).
2. **SHALL** contain exactly one [1..1] **@classCode**="ENC" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1184-945).
3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1184-946).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:1184-923) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.38" (CONF:1184-933).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2015-04-01" (CONF:1184-947).
5. **SHALL** contain exactly one [1..1] **code**, which **SHALL** be selected from ValueSet [Specialty Unit Type \(NCHS\)](#) urn:oid:2.16.840.1.114222.4.11.7363 **DYNAMIC** (CONF:1184-924).
6. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1184-925).
  - a. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:1184-936).  
Note: Date patient entered the unit.
  - b. This effectiveTime **SHALL** contain exactly one [1..1] **high** (CONF:1184-937).  
Note: Date patient left the unit.



**Table 128: Specialty Unit Type (NCHS)**

Value Set: Specialty Unit Type (NCHS) urn:oid:2.16.840.1.114222.4.11.7363 The kind of hospital unit having any necessary specialized equipment and/or personnel for handling critically ill or injured patients. Value Set Source: <a href="https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7363">https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7363</a>			
Code	Code System	Code System OID	Print Name
1026-4	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.11388 3.6.259	Burn critical care unit
1028-0	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.11388 3.6.259	Medical cardiac critical care unit
1027-2	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.11388 3.6.259	Medical critical care unit
1029-8	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.11388 3.6.259	Medical/Surgical critical care unit
1039-7	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.11388 3.6.259	Neonatal critical care unit [Level II/III]
1040-5	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.11388 3.6.259	Neonatal critical care unit [Level III]
1035-5	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.11388 3.6.259	Neurology critical care and stroke unit
1031-4	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.11388 3.6.259	Neurosurgical critical care unit
1042-1	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.11388 3.6.259	Pediatric burn critical care unit
1044-7	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.11388 3.6.259	Pediatric medical critical care unit
...			

**Figure 70: Special Unit Stay Encounter Example**

```

<encounter classCode="ENC" moodCode="EVN">
  <!-- Conforms to C-CDA R2 Encounter Activity (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.4.49"
    extension="2014-06-09" />
  <!-- Specialty Unit Stay Encounter -->
  <templateId root="2.16.840.1.113883.10.20.34.3.38"
    extension="2015-04-01" />
  <id root="57edf80c-7114-4dc3-b3f4-abf515d18c92" />
  <code code="1027-2"
    displayName="Medical critical care unit"
    codeSystem="2.16.840.1.113883.6.259"
    codeSystemName="HL7 HealthcareServiceLocation" />
  <effectiveTime>
    <!-- Date patient entered the unit -->
    <low value="20130815" />
    <!-- Date patient left the unit -->
    <high value="20130819" />
  </effectiveTime>
</encounter>

```

### 3.18 Encounter Diagnosis (V2)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.80:2014-06-09 (open)]

Published as part of Consolidated CDA Templates for Clinical Notes (US Realm)  
DSTU R2

**Table 129: Encounter Diagnosis (V2) Contexts**

Contained By:	Contains:
<a href="#">Encounter Activity (V2)</a> (optional)	<a href="#">Problem Observation (V2)</a>

This template wraps relevant problems or diagnoses at the close of a visit or that need to be followed after the visit. If the encounter is associated with a Hospital Discharge, the Hospital Discharge Diagnosis must be used. This entry requires at least one Problem Observation entry.

**Table 130: Encounter Diagnosis (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.80:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-14889</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT
@moodCode	1..1	SHALL		<a href="#">1098-14890</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-14895</a>	
@root	1..1	SHALL		<a href="#">1098-14896</a>	2.16.840.1.113883.10.20.22.4.80
@extension	1..1	SHALL		<a href="#">1098-32542</a>	2014-06-09
code	1..1	SHALL		<a href="#">1098-19182</a>	
@code	1..1	SHALL		<a href="#">1098-19183</a>	29308-4
@codeSystem	1..1	SHALL		<a href="#">1098-32160</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
entryRelationship	1..*	SHALL		<a href="#">1098-14892</a>	
@typeCode	1..1	SHALL		<a href="#">1098-14893</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
observation	1..1	SHALL		<a href="#">1098-14898</a>	<a href="#">Problem Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2014-06-09)</a>

1. **SHALL** contain exactly one [1..1] **@classCode="ACT"** (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-14889).
2. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-14890).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-14895) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.22.4.80"** (CONF:1098-14896).
  - b. **SHALL** contain exactly one [1..1] **@extension="2014-06-09"** (CONF:1098-32542).
4. **SHALL** contain exactly one [1..1] **code** (CONF:1098-19182).
  - a. This code **SHALL** contain exactly one [1..1] **@code="29308-4"** Diagnosis (CONF:1098-19183).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem="2.16.840.1.113883.6.1"** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1098-32160).
5. **SHALL** contain at least one [1..\*] **entryRelationship** (CONF:1098-14892) 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:1098-14893).
- b. **SHALL** contain exactly one [1..1] [Problem Observation \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2014-06-09) (CONF:1098-14898).

**Figure 71: Encounter Diagnosis (V2) Example**

```

<act classCode="ACT" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.80" extension="2014-06-09" />
  <code code="29308-4" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
  displayName=" DIAGNOSIS" />
  <statusCode code="active" />
  <effectiveTime>
    <low value="20903003" />
  </effectiveTime>
  <entryRelationship typeCode="SUBJ">
    <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2014-06-09" />
      <!-- Problem Observation -->
      ...
    </observation>
  </entryRelationship>
</act>

```

### 3.19 Episode of Care Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.3.32:2015-04-01 (open)]

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**Table 131: Episode of Care Observation (V2) Contexts**

Contained By:	Contains:
<a href="#">Current Outpatient Visit (V3)</a> (optional) <a href="#">Current Emergency Department Visit (V2)</a> (optional)	

This template represents whether this is a follow-up visit to this facility for this problem or if it is the initial visit to this facility for this problem. If it is unknown whether or not this is a follow-up visit use nullFlavor="UNK".

**Table 132: Episode of Care Observation (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.32:2015-04-01)					
@classCode	1..1	SHALL		<a href="#">1184-846</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1184-847</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1184-842</a>	
@root	1..1	SHALL		<a href="#">1184-844</a>	2.16.840.1.113883.10.20.34.3.32
id	1..*	SHALL		<a href="#">1184-848</a>	
code	1..1	SHALL		<a href="#">1184-849</a>	
@code	1..1	SHALL		<a href="#">1184-851</a>	78030-4
@codeSystem	1..1	SHALL		<a href="#">1184-852</a>	2.16.840.1.113883.6.1
statusCode	1..1	SHALL		<a href="#">1184-843</a>	
@code	1..1	SHALL		<a href="#">1184-845</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	CD	<a href="#">1184-850</a>	urn:oid:2.16.840.1.114222.4.11.7439 (Episode of Care (NCHS))
@nullFlavor	0..1	MAY		<a href="#">1184-853</a>	UNK

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1184-846).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1184-847).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1184-842) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.32" (CONF:1184-844).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1184-848).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1184-849).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="78030-4" Episode of Care (CONF:1184-851).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CONF:1184-852).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1184-843).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1184-845).

7. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD", where the code **SHOULD** be selected from ValueSet [Episode of Care \(NCHS\)](#) urn:oid:2.16.840.1.114222.4.11.7439 **DYNAMIC** (CONF:1184-850).
- a. This value **MAY** contain zero or one [0..1] @nullFlavor="UNK" (CONF:1184-853).

**Table 133: Episode of Care (NCHS)**

Value Set: Episode of Care (NCHS) urn:oid:2.16.840.1.114222.4.11.7439			
These values specify the type of visit.			
Value Set Source: <a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7439">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7439</a>			
Code	Code System	Code System OID	Print Name
315639002	SNOMED CT	urn:oid:2.16.840.1.11388 3.6.96	Initial patient assessment
185389009	SNOMED CT	urn:oid:2.16.840.1.11388 3.6.96	Follow-up visit
...			

**Figure 72: Episode of Care Observation (V2) Example**

```

<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.34.3.32" extension="2015-04-01" />
  <id root="ecbec7b7-7fc0-47b2-85b5-39778319b8fb" />
  <!-- Form Element: Episode of Care -->
  <code code="78030-4"
    displayName="Episode of care"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC" />
  <statusCode code="completed" />
  <value xsi:type="CD" code="185389009"
    displayName="Follow-up Visit"
    codeSystem="2.16.840.1.113883.6.96"
    codeSystemName="SNOMED CT" />
</observation>

```

### 3.20 Estimated Date of Delivery

[observation: identifier urn:oid:2.16.840.1.113883.10.20.15.3.1 (closed)]

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DSTU R1.1

**Table 134: Estimated Date of Delivery Contexts**

Contained By:	Contains:
<a href="#">Pregnancy Observation</a> (optional)	

This clinical statement represents the anticipated date when a woman will give birth.

**Table 135: Estimated Date of Delivery Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.15.3.1)					
@classCode	1..1	SHALL		<a href="#">81-444</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">81-445</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">81-16762</a>	
@root	1..1	SHALL		<a href="#">81-16763</a>	2.16.840.1.113883.10.20.15.3.1
code	1..1	SHALL		<a href="#">81-19139</a>	
@code	1..1	SHALL		<a href="#">81-19140</a>	11778-8
@codeSystem	1..1	SHALL		<a href="#">81-26503</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
statusCode	1..1	SHALL		<a href="#">81-448</a>	
@code	1..1	SHALL		<a href="#">81-19096</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	TS	<a href="#">81-450</a>	

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:81-444).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:81-445).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:81-16762) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.15.3.1" (CONF:81-16763).
4. **SHALL** contain exactly one [1..1] **code** (CONF:81-19139).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="11778-8" Estimated date of delivery (CONF:81-19140).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:81-26503).
5. **SHALL** contain exactly one [1..1] **statusCode** (CONF:81-448).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:81-19096).
6. **SHALL** contain exactly one [1..1] **value** with **@xsi:type**="TS" (CONF:81-450).

**Figure 73: Estimated Date of Delivery Example**

```

<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.15.3.1"/>
  <code code="11778-8" codeSystem="2.16.840.1.113883.6.1"
    displayName="Estimated date of delivery"/>
  <statusCode code="completed"/>
  <value xsi:type="TS" value="20110919" />
</observation>

```

### 3.21 Follow-up Attempt Outcome Observation

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.3.43:2015-04-01 (open)]

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**Table 136: Follow-up Attempt Outcome Observation Contexts**

Contained By:	Contains:
<a href="#">Procedure Follow-Up Attempt Observation</a> (optional)	

This template represents the outcome of a follow-up attempt made within 24 hours of surgery.



**Table 137: Follow-up Attempt Outcome Observation Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.43:2015-04-01)					
@classCode	1..1	SHALL		<a href="#">1184-1145</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1184-1146</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1184-1135</a>	
@root	1..1	SHALL		<a href="#">1184-1139</a>	2.16.840.1.113883.10.20.34.3.43
@extension	1..1	SHALL		<a href="#">1184-1140</a>	2015-04-01
id	1..*	SHALL		<a href="#">1184-1147</a>	
code	1..1	SHALL		<a href="#">1184-1136</a>	
@code	1..1	SHALL		<a href="#">1184-1141</a>	78028-8
@codeSystem	1..1	SHALL		<a href="#">1184-1142</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
statusCode	1..1	SHALL		<a href="#">1184-1138</a>	
@code	1..1	SHALL		<a href="#">1184-1144</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	CD	<a href="#">1184-1137</a>	urn:oid:2.16.840.1.114222.4.11.7362 (Follow-up Attempt Outcome (NCHS))
@nullFlavor	0..1	MAY		<a href="#">1184-1143</a>	urn:oid:2.16.840.1.113883.10.20.5.9.1 (NullValues_UNK_OTH)

1. **SHALL** contain exactly one [1..1] **@classCode="OBS"** (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1184-1145).
2. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1184-1146).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1184-1135) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.34.3.43"** (CONF:1184-1139).
  - b. **SHALL** contain exactly one [1..1] **@extension="2015-04-01"** (CONF:1184-1140).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1184-1147).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1184-1136).
  - a. This code **SHALL** contain exactly one [1..1] **@code="78028-8"** Follow-up attempt outcome (CONF:1184-1141).

- b. This code **SHALL** contain exactly one [1..1] `@codeSystem="2.16.840.1.113883.6.1"` (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1184-1142).
6. **SHALL** contain exactly one [1..1] `statusCode` (CONF:1184-1138).
- a. This `statusCode` **SHALL** contain exactly one [1..1] `@code="completed"` Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1184-1144).
7. **SHALL** contain exactly one [1..1] `value` with `@xsi:type="CD"`, where the code **SHALL** be selected from ValueSet [Follow-up Attempt Outcome \(NCHS\)](#) urn:oid:2.16.840.1.114222.4.11.7362 **DYNAMIC** (CONF:1184-1137).
- a. This value **MAY** contain zero or one [0..1] `@nullFlavor`, which **SHALL** be selected from ValueSet [NullValues UNK OTH](#) urn:oid:2.16.840.1.113883.10.20.5.9.1 (CONF:1184-1143).

**Table 138: Follow-up Attempt Outcome (NCHS)**

Value Set: Follow-up Attempt Outcome (NCHS) urn:oid:2.16.840.1.114222.4.11.7362 The finding(s) or result(s) of contact made by healthcare staff with a patient after an outpatient surgical procedure. Value Set Source: <a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7362">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7362</a>			
Code	Code System	Code System OID	Print Name
398090008	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Unable to reach Patient
160245001	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Patient reported no problems
PHC1392	PHIN VADS code system	urn:oid:2.16.840.1.114222.4.5.274	Patient reported problems and sought medical care
PHC1393	PHIN VADS code system	urn:oid:2.16.840.1.114222.4.5.274	Patient reported problems and was advised by ambulatory surgical staff to seek medical care
PHC1394	PHIN VADS code system	urn:oid:2.16.840.1.114222.4.5.274	Patient reported problems, but no follow-up medical care was needed
...			

**Table 139: NullValues\_UNK\_OTH**

Value Set: NullValues_UNK_OTH urn:oid:2.16.840.1.113883.10.20.5.9.1 Null values of unknown and other.			
Code	Code System	Code System OID	Print Name
UNK	HL7NullFlavor	urn:oid:2.16.840.1.113883.5.1008	Unknown
OTH	HL7NullFlavor	urn:oid:2.16.840.1.113883.5.1008	Other

**Figure 74: Follow-up Attempt Outcome Observation**

```

<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.34.3.43"
    extension="2015-04-01" />
  <id root="ecbec7b7-7fc0-47b2-85b5-39778319b8g4" />
  <!-- Follow-up outcome -->
  <code code="78028-8"
    displayName="Follow-up Attempt Outcome"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC" />
  <statusCode code="completed" />
  <value xsi:type="CD" code="248264000"
    displayName="No complaints"
    codeSystem="2.16.840.1.113883.6.96"
    codeSystemName="SNOMED CT" />
</observation>

```

### 3.22 Hospital Discharge Diagnosis (V2)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.33:2014-06-09 (open)]

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DSTU R2

**Table 140: Hospital Discharge Diagnosis (V2) Contexts**

Contained By:	Contains:
<a href="#">Hospital Admission Encounter</a> (required)	<a href="#">Problem Observation (V2)</a>

This template represents problems or diagnoses present at the time of discharge which occurred during the hospitalization or need to be monitored after hospitalization. It requires at least one Problem Observation entry.

**Table 141: Hospital Discharge Diagnosis (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.33:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-7663</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT
@moodCode	1..1	SHALL		<a href="#">1098-7664</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-16764</a>	
@root	1..1	SHALL		<a href="#">1098-16765</a>	2.16.840.1.113883.10.20.22.4.33
@extension	1..1	SHALL		<a href="#">1098-32534</a>	2014-06-09
code	1..1	SHALL		<a href="#">1098-19147</a>	
@code	1..1	SHALL		<a href="#">1098-19148</a>	11535-2
@codeSystem	1..1	SHALL		<a href="#">1098-32163</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
entryRelationship	1..*	SHALL		<a href="#">1098-7666</a>	
@typeCode	1..1	SHALL		<a href="#">1098-7667</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
observation	1..1	SHALL		<a href="#">1098-15536</a>	<a href="#">Problem Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2014-06-09)</a>

1. **SHALL** contain exactly one [1..1] **@classCode="ACT"** (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-7663).
2. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-7664).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-16764) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.22.4.33"** (CONF:1098-16765).
  - b. **SHALL** contain exactly one [1..1] **@extension="2014-06-09"** (CONF:1098-32534).
4. **SHALL** contain exactly one [1..1] **code** (CONF:1098-19147).
  - a. This code **SHALL** contain exactly one [1..1] **@code="11535-2"** Hospital discharge diagnosis (CONF:1098-19148).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem="2.16.840.1.113883.6.1"** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1098-32163).
5. **SHALL** contain at least one [1..\*] **entryRelationship** (CONF:1098-7666) 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 **STATIC**) (CONF:1098-7667).
- b. **SHALL** contain exactly one [1..1] [Problem Observation \(V2\)](#) (identifier: urn:h17ii:2.16.840.1.113883.10.20.22.4.4:2014-06-09) (CONF:1098-15536).

**Figure 75: Hospital Discharge Diagnosis (V2) Example**

```

<act classCode="ACT" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.33" extension="2014-06-09"/>
  <id root="5a784260-6856-4f38-9638-80c751aff2fb" />
  <code code="11535-2" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
displayName="HOSPITAL DISCHARGE DIAGNOSIS" />
  <statusCode code="active" />
  <effectiveTime>
    <low value="201209091904-0400" />
  </effectiveTime>
  <entryRelationship typeCode="SUBJ" inversionInd="false">
    <observation classCode="OBS" moodCode="EVN">
      <!-- Problem observation template -->
      <templateId root="2.16.840.1.113883.10.20.22.4.4" />

      ...

    </observation>
  </entryRelationship>
</act>

```

### 3.23 Immunization Activity (V2)

[substanceAdministration: identifier  
urn:hl7ii:2.16.840.1.113883.10.20.22.4.52:2014-06-09 (open)]

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DSTU R2

**Table 142: Immunization Activity (V2) Contexts**

Contained By:	Contains:
<a href="#">Immunizations Section</a> (optional)	<a href="#">Author Participation</a> <a href="#">Drug Vehicle</a> <a href="#">Immunization Medication Information (V2)</a> <a href="#">Immunization Refusal Reason</a> <a href="#">Indication (V2)</a> <a href="#">Instruction (V2)</a> <a href="#">Medication Dispense (V2)</a> <a href="#">Medication Supply Order (V2)</a> <a href="#">Precondition for Substance Administration (V2)</a> <a href="#">Reaction Observation (V2)</a> <a href="#">Substance Administered Act</a>

An Immunization Activity describes immunization substance administrations that have actually occurred or are intended to occur. Immunization Activities in "INT" mood are reflections of immunizations a clinician intends a patient to receive. Immunization Activities in "EVN" mood reflect immunizations actually received.

An Immunization Activity is very similar to a Medication Activity with some key differentiators. The drug code system is constrained to CVX codes. Administration timing is less complex. Patient refusal reasons should be captured. All vaccines administered should be fully documented in the patient's permanent medical record. Healthcare providers who administer vaccines covered by the National Childhood Vaccine Injury Act are required to ensure that the permanent medical record of the recipient indicates:

- 1) Date of administration
- 2) Vaccine manufacturer
- 3) Vaccine lot number
- 4) Name and title of the person who administered the vaccine and the address of the clinic or facility where the permanent record will reside
- 5) Vaccine information statement (VIS)
  - a. Date printed on the VIS
  - b. Date VIS given to patient or parent/guardian.

This information should be included in an Immunization Activity when available. (Reference: [http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/D/vacc\\_admin.pdf](http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/D/vacc_admin.pdf))

**Table 143: Immunization Activity (V2) Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
substanceAdministration (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.52:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-8826</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = SBADM
@moodCode	1..1	SHALL		<a href="#">1098-8827</a>	urn:oid:2.16.840.1.113883.11.20.9.18 (MoodCodeEvnInt)
@negationInd	0..1	MAY		<a href="#">1098-8985</a>	
templateId	1..1	SHALL		<a href="#">1098-8828</a>	
@root	1..1	SHALL		<a href="#">1098-10498</a>	2.16.840.1.113883.10.20.22.4.52
@extension	1..1	SHALL		<a href="#">1098-32528</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-8829</a>	
code	0..1	MAY		<a href="#">1098-8830</a>	
statusCode	1..1	SHALL		<a href="#">1098-8833</a>	
@code	1..1	SHALL		<a href="#">1098-32359</a>	urn:oid:2.16.840.1.113883.1.11.159331 (ActStatus)
effectiveTime	1..1	SHALL		<a href="#">1098-8834</a>	
repeatNumber	0..1	MAY		<a href="#">1098-8838</a>	
routeCode	0..1	MAY		<a href="#">1098-8839</a>	urn:oid:2.16.840.1.113883.3.88.12.3221.8.7 (Medication Route FDA)
approachSiteCode	0..1	MAY	SET<CD>	<a href="#">1098-8840</a>	urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 (Body Site)
doseQuantity	0..1	SHOULD		<a href="#">1098-8841</a>	
@unit	0..1	SHOULD		<a href="#">1098-8842</a>	urn:oid:2.16.840.1.113883.1.11.12839 (UnitsOfMeasureCaseSensitive)
administrationUnitCode	0..1	MAY		<a href="#">1098-8846</a>	urn:oid:2.16.840.1.113762.1.4.1021.30 (AdministrationUnitDoseForm)
consumable	1..1	SHALL		<a href="#">1098-8847</a>	
manufacturedProduct	1..1	SHALL		<a href="#">1098-15546</a>	<a href="#">Immunization Medication Information (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09)</a>

performer	0..1	SHOULD		<a href="#">1098-8849</a>	
author	0..*	SHOULD		<a href="#">1098-31151</a>	<a href="#">Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)</a>
participant	0..*	MAY		<a href="#">1098-8850</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8851</a>	urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = CSM
participantRole	1..1	SHALL		<a href="#">1098-15547</a>	<a href="#">Drug Vehicle (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.24)</a>
entryRelationship	0..*	MAY		<a href="#">1098-8853</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8854</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON
observation	1..1	SHALL		<a href="#">1098-15537</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="#">1098-8856</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8857</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
@inversionInd	1..1	SHALL		<a href="#">1098-8858</a>	true
act	1..1	SHALL		<a href="#">1098-31392</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="#">1098-8860</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8861</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
supply	1..1	SHALL		<a href="#">1098-15539</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..1	MAY		<a href="#">1098-8863</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8864</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
supply	1..1	SHALL		<a href="#">1098-15540</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..1	MAY		<a href="#">1098-</a>	



				<a href="#">8866</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8867</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = CAUS
observation	1..1	SHALL		<a href="#">1098-15541</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="#">1098-8988</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8989</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON
observation	1..1	SHALL		<a href="#">1098-15542</a>	<a href="#">Immunization Refusal Reason (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.53)</a>
entryRelationship	0..*	SHOULD		<a href="#">1098-31510</a>	
@typeCode	1..1	SHALL		<a href="#">1098-31511</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
@inversionInd	1..1	SHALL		<a href="#">1098-31512</a>	true
sequenceNumber	0..1	MAY		<a href="#">1098-31513</a>	
act	1..1	SHALL		<a href="#">1098-31514</a>	<a href="#">Substance Administered Act (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.118)</a>
precondition	0..*	MAY		<a href="#">1098-8869</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8870</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = PRCN
criterion	1..1	SHALL		<a href="#">1098-15548</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:1098-8826).
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** 2014-09-01 (CONF:1098-8827).
3. **MAY** contain zero or one [0..1] @negationInd (CONF:1098-8985).  
Note: Use negationInd="true" to indicate that the immunization was not given.
4. **SHALL** contain exactly one [1..1] templateId (CONF:1098-8828) such that it

- a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.52" (CONF:1098-10498).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32528).
5. **SHALL** contain at least one [1..\*] **id** (CONF:1098-8829).
6. **MAY** contain zero or one [0..1] **code** (CONF:1098-8830).  
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.
7. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-8833).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [ActStatus](#) urn:oid:2.16.840.1.113883.1.11.159331 **DYNAMIC** (CONF:1098-32359).
8. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1098-8834).  
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:1098-8838).
10. **MAY** contain zero or one [0..1] **routeCode**, which **SHALL** be selected from ValueSet [Medication Route FDA](#) urn:oid:2.16.840.1.113883.3.88.12.3221.8.7 **DYNAMIC** (CONF:1098-8839).
11. **MAY** contain zero or one [0..1] **approachSiteCode**, where the code **SHALL** be selected from ValueSet [Body Site](#) urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 **DYNAMIC** (CONF:1098-8840).
12. **SHOULD** contain zero or one [0..1] **doseQuantity** (CONF:1098-8841).
  - a. The doseQuantity, if present, **SHOULD** contain zero or one [0..1] **@unit**, which **SHALL** be selected from ValueSet [UnitsOfMeasureCaseSensitive](#) urn:oid:2.16.840.1.113883.1.11.12839 **DYNAMIC** (CONF:1098-8842).
13. **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:1098-8846).
14. **SHALL** contain exactly one [1..1] **consumable** (CONF:1098-8847).
  - a. This consumable **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:1098-15546).
15. **SHOULD** contain zero or one [0..1] **performer** (CONF:1098-8849).
16. **SHOULD** contain zero or more [0..\*] [Author Participation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31151).
17. **MAY** contain zero or more [0..\*] **participant** (CONF:1098-8850) 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:1098-8851).
  - b. **SHALL** contain exactly one [1..1] [Drug Vehicle](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.24) (CONF:1098-15547).
18. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-8853) 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:1098-8854).
  - 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:1098-15537).
19. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1098-8856) 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:1098-8857).
  - b. **SHALL** contain exactly one [1..1] @inversionInd="true" True (CONF:1098-8858).
  - 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:1098-31392).
20. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1098-8860) 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:1098-8861).
  - 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:1098-15539).
21. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1098-8863) 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:1098-8864).
  - 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:1098-15540).
22. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1098-8866) 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:1098-8867).
  - 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:1098-15541).
23. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1098-8988) 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:1098-8989).

- b. **SHALL** contain exactly one [1..1] Immunization Refusal Reason (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.53) (CONF:1098-15542).

The following entryRelationship is used to indicate a given immunization'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.

- 24. **SHOULD** contain zero or more [0..\*] **entryRelationship** (CONF:1098-31510) 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:1098-31511).
  - b. **SHALL** contain exactly one [1..1] **@inversionInd="true"** (CONF:1098-31512).
  - c. **MAY** contain zero or one [0..1] **sequenceNumber** (CONF:1098-31513).
  - d. **SHALL** contain exactly one [1..1] Substance Administered Act (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.118) (CONF:1098-31514).
- 25. **MAY** contain zero or more [0..\*] **precondition** (CONF:1098-8869) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="PRCN"** (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 **STATIC**) (CONF:1098-8870).
  - b. **SHALL** contain exactly one [1..1] Precondition for Substance Administration (V2) (identifier: urn:h17ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09) (CONF:1098-15548).

**Table 144: MoodCodeEvnInt**

Value Set: MoodCodeEvnInt urn:oid:2.16.840.1.113883.11.20.9.18			
Contains moodCode EVN and INT			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
EVN	ActMood	urn:oid:2.16.840.1.113883.5.1001	Event
INT	ActMood	urn:oid:2.16.840.1.113883.5.1001	Intent

**Table 145: Medication Route FDA**

Value Set: Medication Route FDA urn:oid:2.16.840.1.113883.3.88.12.3221.8.7			
Route of Administration value set is based upon FDA Drug Registration and Listing Database (FDA Orange Book) which are used in FDA Structured Product Labeling (SPL).			
Value Set Source:			
<a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.3221.8.7">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.3221.8.7</a>			
Code	Code System	Code System OID	Print Name
C38192	NCI Thesaurus (NCIt)	urn:oid:2.16.840.1.113883.3.26.1.1	AURICULAR (OTIC)
C38193	NCI Thesaurus (NCIt)	urn:oid:2.16.840.1.113883.3.26.1.1	BUCCAL
C38194	NCI Thesaurus (NCIt)	urn:oid:2.16.840.1.113883.3.26.1.1	CONJUNCTIVAL
C38675	NCI Thesaurus (NCIt)	urn:oid:2.16.840.1.113883.3.26.1.1	CUTANEOUS
C38197	NCI Thesaurus (NCIt)	urn:oid:2.16.840.1.113883.3.26.1.1	DENTAL
C38633	NCI Thesaurus (NCIt)	urn:oid:2.16.840.1.113883.3.26.1.1	ELECTRO-OSMOSIS
C38205	NCI Thesaurus (NCIt)	urn:oid:2.16.840.1.113883.3.26.1.1	ENDOCERVICAL
C38206	NCI Thesaurus (NCIt)	urn:oid:2.16.840.1.113883.3.26.1.1	ENDOSINUSIAL
C38208	NCI Thesaurus (NCIt)	urn:oid:2.16.840.1.113883.3.26.1.1	ENDOTRACHEAL
C38209	NCI Thesaurus (NCIt)	urn:oid:2.16.840.1.113883.3.26.1.1	ENTERAL
...			

**Table 146: Body Site**

Value Set: Body Site urn:oid:2.16.840.1.113883.3.88.12.3221.8.9			
Contains values descending from the SNOMED CT® Anatomical Structure (91723000) hierarchy or Acquired body structure (body structure) (280115004) or Anatomical site notations for tumor staging (body structure) (258331007) or Body structure, altered from its original anatomical structure (morphologic abnormality) (118956008) or Physical anatomical entity (body structure) (91722005) This indicates the anatomical site.			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
362783006	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	entire medial surface of lower extremity (body structure)
302539009	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	entire hand (body structure)
287679003	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	left hip region structure (body structure)
3341006	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	right lung structure (body structure)
87878005	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	left ventricular structure (body structure)
49848007	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	structure of myocardium of left ventricle (body structure)
38033009	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	amputation stump (body structure)
305005006	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	6/7 interchondral joint (body structure)
28726007	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	corneal structure (body structure)
75324005	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	70 to 79 percent of body surface (body structure)
...			

**Table 147: UnitsOfMeasureCaseSensitive**

Value Set: UnitsOfMeasureCaseSensitive urn:oid:2.16.840.1.113883.1.11.12839			
The UCUM code system provides a set of structural units from which working codes are built. There is an unlimited number of possible valid UCUM codes.			
Value Set Source: <a href="http://unitsofmeasure.org/ucum.html">http://unitsofmeasure.org/ucum.html</a>			
Code	Code System	Code System OID	Print Name
min	UCUM	urn:oid:2.16.840.1.113883.6.8	minute
hour	UCUM	urn:oid:2.16.840.1.113883.6.8	hr
%	UCUM	urn:oid:2.16.840.1.113883.6.8	percent
cm	UCUM	urn:oid:2.16.840.1.113883.6.8	centimeter
g	UCUM	urn:oid:2.16.840.1.113883.6.8	gram
g/(12.h)	UCUM	urn:oid:2.16.840.1.113883.6.8	gram per 12 hour
g/L	UCUM	urn:oid:2.16.840.1.113883.6.8	gram per liter
mol	UCUM	urn:oid:2.16.840.1.113883.6.8	mole
[IU]	UCUM	urn:oid:2.16.840.1.113883.6.8	international unit
Hz	UCUM	urn:oid:2.16.840.1.113883.6.8	Hertz
...			

**Table 148: AdministrationUnitDoseForm**

Value Set: AdministrationUnitDoseForm urn:oid:2.16.840.1.113762.1.4.1021.30			
Codes that are similar to a drug "form" but limited to those used as units when describing drug administration when the drug item is a physical form that is continuous and therefore not administered as an "each" of the physical form, or is not using standard measurement units (inch, ounce, gram, etc.) This set does not include unit concepts that mimic "physical form" concepts that can be counted using "each", such as tablet, bar, lozenge, packet, etc.			
Code	Code System	Code System OID	Print Name
C122629	NCI Thesaurus (NCIt)	urn:oid:2.16.840.1.11388 3.3.26.1.1	Actuation Dosing Unit
C25397	NCI Thesaurus (NCIt)	urn:oid:2.16.840.1.11388 3.3.26.1.1	Application Unit
C102405	NCI Thesaurus (NCIt)	urn:oid:2.16.840.1.11388 3.3.26.1.1	Capful Dosing Unit
C122631	NCI Thesaurus (NCIt)	urn:oid:2.16.840.1.11388 3.3.26.1.1	Dropperful Dosing Unit
C48501	NCI Thesaurus (NCIt)	urn:oid:2.16.840.1.11388 3.3.26.1.1	Inhalation Dosing Unit
C48491	NCI Thesaurus (NCIt)	urn:oid:2.16.840.1.11388 3.3.26.1.1	Metric Drop
C71204	NCI Thesaurus (NCIt)	urn:oid:2.16.840.1.11388 3.3.26.1.1	Nebule Dosing Unit
C65060	NCI Thesaurus (NCIt)	urn:oid:2.16.840.1.11388 3.3.26.1.1	Puff Dosing Unit
C48536	NCI Thesaurus (NCIt)	urn:oid:2.16.840.1.11388 3.3.26.1.1	Scoopful Dosing Unit
C48537	NCI Thesaurus (NCIt)	urn:oid:2.16.840.1.11388 3.3.26.1.1	Spray Dosing Unit
...			



**Figure 76: Immunization Activity (V2) Example**

```

<substanceAdministration classCode="SBADM" moodCode="EVN">
  <!-- ** Immunization activity ** -->
  <templateId root="2.16.840.1.113883.10.20.22.4.52" extension="2014-06-09" />
  <id root="e6f1ba43-c0ed-4b9b-9f12-f435d8ad8f92" />
  <statusCode code="completed" />
  <effectiveTime value="19981215" />
  <routeCode code="C28161" codeSystem="2.16.840.1.113883.3.26.1.1"
codeSystemName="National Cancer Institute (NCI) Thesaurus" displayName="Intramuscular
injection" />
  <doseQuantity value="50" unit="ug" />
  <consumable>
    <manufacturedProduct classCode="MANU">
      <!-- ** Immunization medication information ** -->
      <templateId root="2.16.840.1.113883.10.20.22.4.54" extension="2014-06-09" />
      <manufacturedMaterial>
        <code code="33" codeSystem="2.16.840.1.113883.12.292"
displayName="Pneumococcal polysaccharide vaccine" codeSystemName="CVX">
          <translation code="854981" displayName="Pneumovax 23 (Pneumococcal vaccine
polyvalent) Injectable Solution" codeSystemName="RxNORM"
codeSystem="2.16.840.1.113883.6.88" />
        </code>
        <lotNumberText>1</lotNumberText>
      </manufacturedMaterial>
      <manufacturerOrganization>
        <name>Health LS - Immuno Inc.</name>
      </manufacturerOrganization>
    </manufacturedProduct>
  </consumable>
  <performer>
    <assignedEntity>
      <id root="2.16.840.1.113883.19.5.9999.456" extension="2981824" />
      <addr>
        <streetAddressLine>1007 Health Drive</streetAddressLine>
        <city>Portland</city>
        <state>OR</state>
        <postalCode>99123</postalCode>
        <country>US</country>
      </addr>
      <telecom use="WP" value="tel: +(555)-555-1030" />
      <assignedPerson>
        <name>
          <given>Harold</given>
          <family>Hippocrates</family>
        </name>
      </assignedPerson>
      <representedOrganization>
        <id root="2.16.840.1.113883.19.5.9999.1394" />
        <name>Good Health Clinic</name>
        <telecom use="WP" value="tel: +(555)-555-1030" />
        <addr>
          <streetAddressLine>1007 Health Drive</streetAddressLine>
          <city>Portland</city>
          <state>OR</state>
          <postalCode>99123</postalCode>
          <country>US</country>
        </addr>
      </representedOrganization>
    </assignedEntity>
  </performer>
</substanceAdministration>

```

```

        </addr>
    </representedOrganization>
</assignedEntity>
</performer>
</substanceAdministration>
    
```

### 3.24 Immunization Medication Information (V2)

[manufacturedProduct: identifier

urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09 (open)]

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**Table 149: Immunization Medication Information (V2) Contexts**

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

The Immunization Medication Information represents product information about the immunization substance. The vaccine manufacturer and vaccine lot number are typically recorded in the medical record and should be included if known.

**Table 150: Immunization Medication Information (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
manufacturedProduct (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-9002</a>	urn:oid:2.16.840.1.113883.5.110 (RoleClass) = MANU
templateId	1..1	SHALL		<a href="#">1098-9004</a>	
@root	1..1	SHALL		<a href="#">1098-10499</a>	2.16.840.1.113883.10.20.22.4.54
@extension	1..1	SHALL		<a href="#">1098-32602</a>	2014-06-09
id	0..*	MAY		<a href="#">1098-9005</a>	
manufacturedMaterial	1..1	SHALL		<a href="#">1098-9006</a>	
code	1..1	SHALL		<a href="#">1098-9007</a>	urn:oid:2.16.840.1.113762.1.4.1010.6 (CVX Vaccines Administered - Vaccine Set )
translation	0..*	MAY		<a href="#">1098-31543</a>	urn:oid:2.16.840.1.113762.1.4.1010.8 (Vaccine Clinical Drug)
translation	0..*	MAY		<a href="#">1098-31881</a>	urn:oid:2.16.840.1.113762.1.4.1010.10 (Specific Vaccine Clinical Drug)
lotNumberText	1..1	SHALL		<a href="#">1098-9014</a>	
manufacturerOrganization	0..1	SHOULD		<a href="#">1098-9012</a>	

1. **SHALL** contain exactly one [1..1] **@classCode**="MANU" (CodeSystem: RoleClass urn:oid:2.16.840.1.113883.5.110 **STATIC**) (CONF:1098-9002).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-9004) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.54" (CONF:1098-10499).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32602).
3. **MAY** contain zero or more [0..\*] **id** (CONF:1098-9005).
4. **SHALL** contain exactly one [1..1] **manufacturedMaterial** (CONF:1098-9006).
  - a. This **manufacturedMaterial** **SHALL** contain exactly one [1..1] **code**, which **SHALL** be selected from ValueSet [CVX Vaccines Administered - Vaccine Set](#) urn:oid:2.16.840.1.113762.1.4.1010.6 **DYNAMIC** (CONF:1098-9007).
    - i. This **code** **MAY** contain zero or more [0..\*] **translation**, which **MAY** be selected from ValueSet [Vaccine Clinical Drug](#) urn:oid:2.16.840.1.113762.1.4.1010.8 **DYNAMIC** (CONF:1098-31543).
    - ii. This **code** **MAY** contain zero or more [0..\*] **translation**, which **MAY** be selected from ValueSet [Specific Vaccine Clinical Drug](#) urn:oid:2.16.840.1.113762.1.4.1010.10 **DYNAMIC** (CONF:1098-31881).

- b. This manufacturedMaterial **SHALL** contain exactly one [1..1] **lotNumberText** (CONF:1098-9014).
5. **SHOULD** contain zero or one [0..1] **manufacturerOrganization** (CONF:1098-9012).

**Table 151: CVX Vaccines Administered - Vaccine Set**

Value Set: CVX Vaccines Administered - Vaccine Set urn:oid:2.16.840.1.113762.1.4.1010.6 CVX vaccine concepts that represent actual vaccines types. This does not include the identifiers for CVX codes that do not represent vaccines. Value set intensionally defined from CVX (OID: 2.16.840.1.113883.12.292) FilterOnProperty(nonvaccine, FALSE). Value Set Source: <a href="http://www2a.cdc.gov/vaccines/iis/iisstandards/vaccines.asp?rpt=cvx">http://www2a.cdc.gov/vaccines/iis/iisstandards/vaccines.asp?rpt=cvx</a>			
Code	Code System	Code System OID	Print Name
19	CDC Vaccine Code (CVX)	urn:oid:2.16.840.1.113883.12.292	BCG
26	CDC Vaccine Code (CVX)	urn:oid:2.16.840.1.113883.12.292	Cholera
24	CDC Vaccine Code (CVX)	urn:oid:2.16.840.1.113883.12.292	Anthrax
27	CDC Vaccine Code (CVX)	urn:oid:2.16.840.1.113883.12.292	Botulinum antitoxin
...			

**Table 152: Vaccine Clinical Drug**

Value Set: Vaccine Clinical Drug urn:oid:2.16.840.1.113762.1.4.1010.8  
 Administrable vaccine medication formulations represented using either a "generic" or "brand-specific" concept.  
 Value set intentionally defined from RXNORM (OID: 2.16.840.1.113883.6.88), comprised of those codes whose ingredients map to NDC codes that the CDC associates with CVX codes.  
 Value Set Source: <https://vsac.nlm.nih.gov/>

Code	Code System	Code System OID	Print Name
898572	RxNorm	urn:oid:2.16.840.1.113883.6.88	0.17 ML Rho(D) Immune Globulin 0.3 MG/ML Prefilled Syringe [HyperRHO]
807276	RxNorm	urn:oid:2.16.840.1.113883.6.88	0.5 ML diphtheria toxoid vaccine, inactivated 4 UNT/ML / tetanus toxoid vaccine, inactivated 10 UNT/ML Prefilled Syringe [Decavac]
798482	RxNorm	urn:oid:2.16.840.1.113883.6.88	0.5 ML Hepatitis A Vaccine (Inactivated) Strain HM175 1440 UNT/ML Prefilled Syringe [Havrix]
836636	RxNorm	urn:oid:2.16.840.1.113883.6.88	0.5 ML Hepatitis A Vaccine, Inactivated 50 UNT/ML Prefilled Syringe [Vaqta]
...			

**Table 153: Specific Vaccine Clinical Drug**

Value Set: Specific Vaccine Clinical Drug urn:oid:2.16.840.1.113762.1.4.1010.10  
 This value set contains extensionally identified RxNorm vaccine codes. It should be used to supplement the Vaccine Clinical Drug Value Set (Value Set OID 2.16.840.1.113762.1.4.1010.8). Intensional rules for the latter value set are being refined, but at this time lack complete sensitivity, and as a result can miss including relevant codes. This Specific Vaccine Clinical Drug Value Set is used to manually provide for these other RxNorm codes.  
 (At the time of Consolidated CDA R2 publication, the value set has no members)  
 Value Set Source: <https://vsac.nlm.nih.gov/>

Code	Code System	Code System OID	Print Name
NA	RxNorm	urn:oid:2.16.840.1.113883.6.88	At the time of Consolidated CDA R2 publication, the value set has no members
...			

**Figure 77: Immunization Medication Information (V2) Example**

```

<manufacturedProduct classCode="MANU">
  <!-- ** Immunization medication information ** -->
  <templateId root="2.16.840.1.113883.10.20.22.4.54" extension="2014-06-09" />
  <manufacturedMaterial>
    <code code="33" codeSystem="2.16.840.1.113883.12.292" displayName="Pneumococcal
polysaccharide vaccine" codeSystemName="CVX">
      <translation code="854981" displayName="Pneumovax 23 (Pneumococcal vaccine
polyvalent) Injectable Solution" codeSystemName="RxNORM"
codeSystem="2.16.840.1.113883.6.88" />
    </code>
    <lotNumberText>1</lotNumberText>
  </manufacturedMaterial>
  <manufacturerOrganization>
    <name>Health LS - Immuno Inc.</name>
  </manufacturerOrganization>
</manufacturedProduct>

```

### 3.25 Immunization Refusal Reason

[observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.53 (open)]

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DSTU R1.1

**Table 154: Immunization Refusal Reason Contexts**

Contained By:	Contains:
<a href="#">Immunization Activity (V2)</a> (optional)	

The Immunization Refusal Reason documents the rationale for the patient declining an immunization.

**Table 155: Immunization Refusal Reason Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.53)					
@classCode	1..1	SHALL		<a href="#">81-8991</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">81-8992</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">81-8993</a>	
@root	1..1	SHALL		<a href="#">81-10500</a>	2.16.840.1.113883.10.20.22.4.53
id	1..*	SHALL		<a href="#">81-8994</a>	
code	1..1	SHALL		<a href="#">81-8995</a>	urn:oid:2.16.840.1.113883.1.11.19717 (No Immunization Reason Value Set)
statusCode	1..1	SHALL		<a href="#">81-8996</a>	
@code	1..1	SHALL		<a href="#">81-19104</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:81-8991).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:81-8992).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:81-8993) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.53" (CONF:81-10500).
4. **SHALL** contain at least one [1..\*] **id** (CONF:81-8994).
5. **SHALL** contain exactly one [1..1] **code**, which **SHALL** be selected from ValueSet [No Immunization Reason Value Set](#) urn:oid:2.16.840.1.113883.1.11.19717 **DYNAMIC** (CONF:81-8995).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:81-8996).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:81-19104).

**Table 156: No Immunization Reason Value Set**

Value Set: No Immunization Reason Value Set urn:oid:2.16.840.1.113883.1.11.19717			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
IMMUNE	ActReason	urn:oid:2.16.840.1.113883.5.8	Immunity
MEDPREC	ActReason	urn:oid:2.16.840.1.113883.5.8	Medical precaution
OSTOCK	ActReason	urn:oid:2.16.840.1.113883.5.8	Out of stock
PATOBJ	ActReason	urn:oid:2.16.840.1.113883.5.8	Patient objection
PHILISOP	ActReason	urn:oid:2.16.840.1.113883.5.8	Philosophical objection
RELIG	ActReason	urn:oid:2.16.840.1.113883.5.8	Religious objection
VACEFF	ActReason	urn:oid:2.16.840.1.113883.5.8	Vaccine efficacy concerns
VACSAF	ActReason	urn:oid:2.16.840.1.113883.5.8	Vaccine safety concerns

**Figure 78: Immunization Refusal Reason Example**

```

<observation classCode="OBS" moodCode="EVN">
<templateId root="2.16.840.1.113883.10.20.22.4.53"/>
<id root="2a620155-9d11-439e-92b3-5d9815ff4dd8"/>
<code displayName="Patient Objection" code="PATOBJ"
  codeSystemName="HL7 ActNoImmunizationReason" codeSystem="2.16.840.1.113883.5.8"/>
<statusCode code="completed"/>
</observation>

```



### 3.26 Indication (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09 (open) ]

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DSTU R2

**Table 157: Indication (V2) Contexts**

Contained By:	Contains:
<a href="#">Medication Activity (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="#">Immunization Activity (V2)</a> (optional) <a href="#">Encounter Activity (V2)</a> (optional) <a href="#">Planned Act (V2)</a> (optional) <a href="#">Planned Procedure (V2)</a> (optional) <a href="#">Planned Observation (V2)</a> (optional) <a href="#">Planned Medication Activity (V2)</a> (optional) <a href="#">Planned Immunization Activity</a> (optional)	

This template represents the rationale for an action such as an encounter, a medication administration, or a procedure. The id element can be used to reference a problem recorded elsewhere in the document, or can be used with a code and value to record the problem. Indications for treatment are not laboratory results; rather the problem associated with the laboratory result should be sited (e.g., hypokalemia instead of a laboratory result of Potassium 2.0 mEq/L). Use the Drug Monitoring Act [templateId 2.16.840.1.113883.10.20.22.4.123] to indicate if a particular drug needs special monitoring (e.g., anticoagulant therapy). Use Precondition for Substance Administration (V2) [templateId 2.16.840.1.113883.10.20.22.4.25.2] to represent that a medication is to be administered only when the associated criteria are met.

**Table 158: Indication (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-7480</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1098-7481</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-7482</a>	
@root	1..1	SHALL		<a href="#">1098-10502</a>	2.16.840.1.113883.10.20.22.4.19
@extension	1..1	SHALL		<a href="#">1098-32570</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-7483</a>	
code	1..1	SHALL		<a href="#">1098-31229</a>	urn:oid:2.16.840.1.113883.3.88.12.3221.7.2 (Problem Type)
statusCode	1..1	SHALL		<a href="#">1098-7487</a>	
@code	1..1	SHALL		<a href="#">1098-19105</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
effectiveTime	0..1	SHOULD		<a href="#">1098-7488</a>	
value	0..1	MAY	CD	<a href="#">1098-7489</a>	urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 (Problem)

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-7480).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-7481).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7482) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.19" (CONF:1098-10502).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32570).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1098-7483).  
 Note: If the id element is used to reference a problem recorded else where in the document then this id must equal another entry/id in the same document instance. Application Software must be responsible for resolving the identifier back to its original object and then rendering the information in the correct place in the containing section's narrative text. Its purpose is to obviate the need to repeat the complete XML representation of the referred to entry when relating one entry to another.
5. **SHALL** contain exactly one [1..1] **code**, which **MAY** be selected from ValueSet [Problem Type](#) urn:oid:2.16.840.1.113883.3.88.12.3221.7.2 **STATIC** 2014-09-02 (CONF:1098-31229).

6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-7487).
  - a. This **statusCode** **SHALL** contain exactly one [1..1] **@code="completed"** Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098-19105).
7. **SHOULD** contain zero or one [0..1] **effectiveTime** (CONF:1098-7488).
8. **MAY** contain zero or one [0..1] **value** with **@xsi:type="CD"**, where the code **SHOULD** be selected from ValueSet [Problem](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.3221.7.4) urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 **DYNAMIC** (CONF:1098-7489).

**Table 159: Problem**

Value Set: Problem urn:oid:2.16.840.1.113883.3.88.12.3221.7.4			
A value set of SNOMED-CT codes limited to terms descending from the Clinical Findings (404684003) or Situation with Explicit Context (243796009) hierarchies.			
Specific URL Pending			
Value Set Source: <a href="http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.3221.7.4">http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.3221.7.4</a>			
Code	Code System	Code System OID	Print Name
46635009	SNOMED CT	urn:oid:2.16.840.1.113883.3.6.96	diabetes mellitus type 1
234422006	SNOMED CT	urn:oid:2.16.840.1.113883.3.6.96	acute intermittent porphyria
31712002	SNOMED CT	urn:oid:2.16.840.1.113883.3.6.96	primary biliary cirrhosis
302002000	SNOMED CT	urn:oid:2.16.840.1.113883.3.6.96	difficulty moving
15188001	SNOMED CT	urn:oid:2.16.840.1.113883.3.6.96	hearing loss
129851009	SNOMED CT	urn:oid:2.16.840.1.113883.3.6.96	alteration in bowel elimination
247472004	SNOMED CT	urn:oid:2.16.840.1.113883.3.6.96	hives
39579001	SNOMED CT	urn:oid:2.16.840.1.113883.3.6.96	anaphylaxis
274945004	SNOMED CT	urn:oid:2.16.840.1.113883.3.6.96	AA amyloidosis (disorder)
129851009	SNOMED CT	urn:oid:2.16.840.1.113883.3.6.96	alteration in comfort: pain
...			

**Table 160: Problem Type**

Value Set: Problem Type urn:oid:2.16.840.1.113883.3.88.12.3221.7.2			
This value set indicates the level of medical judgment used to determine the existence of a problem.			
Value Set Source: <a href="http://www.loinc.org">http://www.loinc.org</a>			
Code	Code System	Code System OID	Print Name
75326-9	LOINC	urn:oid:2.16.840.1.113883.6.1	Problem HL7.CCDAR2
75325-1	LOINC	urn:oid:2.16.840.1.113883.6.1	Symptom HL7.CCDAR2
75324-4	LOINC	urn:oid:2.16.840.1.113883.6.1	Diagnosis
75321-0	LOINC	urn:oid:2.16.840.1.113883.6.1	Clinical finding HL7.CCDAR2
75323-6	LOINC	urn:oid:2.16.840.1.113883.6.1	Condition HL7.CCDAR2
29308-4	LOINC	urn:oid:2.16.840.1.113883.6.1	Complaint HL7.CCDAR2
75322-8	LOINC	urn:oid:2.16.840.1.113883.6.1	Functional performance HL7.CCDAR2
75275-8	LOINC	urn:oid:2.16.840.1.113883.6.1	Cognitive Function HL7.CCDAR2
75318-6	LOINC	urn:oid:2.16.840.1.113883.6.1	Problem family member HL7.CCDAR2
75319-4	LOINC	urn:oid:2.16.840.1.113883.6.1	Symptom family member HL7.CCDAR2
...			

**Figure 79: Indication (V2) 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="2014-06-09"
/>
<!-- Note that this id equals the problem observation/id -->
        <id root="db734647-fc99-424c-a864-7e3cda82e703" />
        <code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4" />
        <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"/> -->

```

### 3.26.1 Major Reason for Visit

[observation: identifier urn:oid:2.16.840.1.113883.10.20.34.3.7 (open)]

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**Table 161: Major Reason for Visit Contexts**

Contained By:	Contains:
<a href="#">Current Outpatient Visit (V3)</a> (optional) <a href="#">Current Emergency Department Visit (V2)</a> (optional)	

This template represents the major reason for this visit.

**Table 162: Major Reason for Visit Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.7)					
@classCode	1..1	SHALL		<a href="#">1106-405</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1106-406</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1106-407</a>	
@root	1..1	SHALL		<a href="#">1106-408</a>	2.16.840.1.113883.10.20.34.3.7
code	1..1	SHALL		<a href="#">1106-409</a>	
@code	1..1	SHALL		<a href="#">1106-410</a>	ASSERTION
@codeSystem	1..1	SHALL		<a href="#">1106-411</a>	urn:oid:2.16.840.1.113883.5.4 (ActCode) = 2.16.840.1.113883.5.4
value	1..1	SHALL	CD	<a href="#">1106-412</a>	urn:oid:2.16.840.1.114222.4.11.7404 (Major Reason for Visit (NCHS))

1. Conforms to [Indication \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09).
2. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1106-405).
3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1106-406).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-407) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.7" (CONF:1106-408).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1106-409).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="ASSERTION" (CONF:1106-410).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.5.4" (CodeSystem: ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:1106-411).
6. **SHALL** contain exactly one [1..1] **value** with **@xsi:type**="CD", where the code **SHALL** be selected from ValueSet [Major Reason for Visit \(NCHS\)](#) urn:oid:2.16.840.1.114222.4.11.7404 **DYNAMIC** (CONF:1106-412).

**Table 163: Major Reason for Visit (NCHS)**

Value Set: Major Reason for Visit (NCHS) urn:oid:2.16.840.1.114222.4.11.7404			
These codes describe the major reason for the visit.			
Value Set Source:			
<a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7404">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7404</a>			
Code	Code System	Code System OID	Print Name
PHC1268	PHIN VADS code system	urn:oid:2.16.840.1.11422 2.4.5.274	Chronic problem, flare-up
PHC1267	PHIN VADS code system	urn:oid:2.16.840.1.11422 2.4.5.274	Chronic problem, routine
PHC1265	PHIN VADS code system	urn:oid:2.16.840.1.11422 2.4.5.274	New problem (<3 mos. onset)
PHC1269	PHIN VADS code system	urn:oid:2.16.840.1.11422 2.4.5.274	Pre/Post surgery
PHC1266	PHIN VADS code system	urn:oid:2.16.840.1.11422 2.4.5.274	Preventive care (e.g., routine prenatal, well- baby, screening, insurance, general exams)
...			

**Figure 80: Major Reason for Visit Example**

<pre> &lt;observation classCode="OBS" moodCode="EVN"&gt;   &lt;!-- C-CDA R2 Indication (V2) --&gt;   &lt;templateId root="2.16.840.1.113883.10.20.22.4.19" extension="2014-06-09" /&gt;   &lt;!-- Major Reason for Visit --&gt;   &lt;templateId root="2.16.840.1.113883.10.20.34.3.7" /&gt;   &lt;id root="e88883d7-39b7-4550-b2b4-e34a4bddd78d" /&gt;   &lt;code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4" /&gt;   &lt;statusCode code="completed" /&gt;   &lt;value xsi:type="CD" code="PHC1268" codeSystem="2.16.840.1.114222.4.5.274"     codeSystemName="PHIN VS (CDC Local Coding System)"     displayName="Chronic problem, flare-up" /&gt; &lt;/observation&gt; </pre>
---

### 3.27 Instruction (V2)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09 (open)]

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DSTU R2

**Table 164: Instruction (V2) Contexts**

Contained By:	Contains:
<a href="#">Medication Activity (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="#">Immunization Activity (V2)</a> (optional) <a href="#">Planned Act (V2)</a> (optional) <a href="#">Planned Procedure (V2)</a> (optional) <a href="#">Planned Observation (V2)</a> (optional) <a href="#">Planned Medication Activity (V2)</a> (optional) <a href="#">Medication Supply Order (V2)</a> (optional) <a href="#">Planned Immunization Activity</a> (optional)	

The Instruction template can be used in several ways, such as to record patient instructions within a Medication Activity or to record fill instructions within a supply order. The template's moodCode can only be INT. If an instruction was already be given, the Procedure Activity Act template (instead of this template) should be used to represent the already occurred instruction. The act/code defines the type of instruction. Though not defined in this template, a Vaccine Information Statement (VIS) document could be referenced through act/reference/externalDocument, and patient awareness of the instructions can be represented with the generic participant and the participant/awarenessCode.



**Table 165: Instruction (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-7391</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT
@moodCode	1..1	SHALL		<a href="#">1098-7392</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = INT
templateId	1..1	SHALL		<a href="#">1098-7393</a>	
@root	1..1	SHALL		<a href="#">1098-10503</a>	2.16.840.1.113883.10.20.22.4.20
@extension	1..1	SHALL		<a href="#">1098-32598</a>	2014-06-09
code	1..1	SHALL		<a href="#">1098-16884</a>	urn:oid:2.16.840.1.113883.11.20.9.34 (Patient Education)
statusCode	1..1	SHALL		<a href="#">1098-7396</a>	
@code	1..1	SHALL		<a href="#">1098-19106</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed

1. **SHALL** contain exactly one [1..1] **@classCode="ACT"** (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-7391).
2. **SHALL** contain exactly one [1..1] **@moodCode="INT"** (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-7392).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7393) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.22.4.20"** (CONF:1098-10503).
  - b. **SHALL** contain exactly one [1..1] **@extension="2014-06-09"** (CONF:1098-32598).
4. **SHALL** contain exactly one [1..1] **code**, which **SHOULD** be selected from ValueSet [Patient Education](#) urn:oid:2.16.840.1.113883.11.20.9.34 **DYNAMIC** (CONF:1098-16884).
5. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-7396).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code="completed"** Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098-19106).

**Table 166: Patient Education**

Value Set: Patient Education urn:oid:2.16.840.1.113883.11.20.9.34 Limited to terms descending from the Education (409073007) hierarchy. Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
311401005	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Patient Education
171044003	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Immunization Education
243072006	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Cancer Education
...			

**Figure 81: Instruction (V2) Example**

<pre> &lt;act classCode="ACT" moodCode="INT"&gt; &lt;templateId root="2.16.840.1.113883.10.20.22.4.20" extension="2014-06-09" /&gt; &lt;code code="171044003" codeSystem="2.16.840.1.113883.6.96" displayName="immunization education" /&gt; &lt;text&gt;   &lt;reference value="#immunSect" /&gt;   Possible flu-like symptoms for three days. &lt;/text&gt; &lt;statusCode code="completed" /&gt; &lt;/act&gt; </pre>
---

### 3.28 Listed for Admission to Hospital Act

[act: identifier urn:oid:2.16.840.1.113883.10.20.34.3.15 (open)]

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**Table 167: Listed for Admission to Hospital Act Contexts**

Contained By:	Contains:
<a href="#">Hospital Admission Encounter</a> (required)	

This template represents the time that a bed was requested for the patient for hospital admission.

**Table 168: Listed for Admission to Hospital Act Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
act (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.15)					
@classCode	1..1	SHALL		<a href="#">1106-700</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT
@moodCode	1..1	SHALL		<a href="#">1106-701</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1106-560</a>	
@root	1..1	SHALL		<a href="#">1106-564</a>	2.16.840.1.113883.10.20.34.3.15
id	1..*	SHALL		<a href="#">1106-565</a>	
code	1..1	SHALL		<a href="#">1106-561</a>	
@code	1..1	SHALL		<a href="#">1106-566</a>	183767005
@codeSystem	1..1	SHALL		<a href="#">1106-567</a>	2.16.840.1.113883.6.96
statusCode	1..1	SHALL		<a href="#">1106-563</a>	
@code	1..1	SHALL		<a href="#">1106-569</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
effectiveTime	1..1	SHALL		<a href="#">1106-562</a>	
low	1..1	SHALL		<a href="#">1106-568</a>	

1. **SHALL** contain exactly one [1..1] **@classCode="ACT"** (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1106-700).
2. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1106-701).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-560) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.34.3.15"** (CONF:1106-564).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1106-565).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1106-561).
  - a. This code **SHALL** contain exactly one [1..1] **@code="183767005"** Listed for admission to hospital (CONF:1106-566).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem="2.16.840.1.113883.6.96"** SNOMED (CONF:1106-567).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1106-563).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code="completed"** Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1106-569).

7. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1106-562).
- a. This **effectiveTime** **SHALL** contain exactly one [1..1] **low** (CONF:1106-568).  
Note: Form Element: Date and time bed was requested for hospital admission

**Figure 82: Listed for Admission to Hospital Act Example**

```
<act classCode="ACT" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.34.3.15"/>
  <id root="b5833096-e341-4e6c-b493-020a55267ba7"/>
  <code code="183767005"
    displayName="Listed for admission to hospital"
    codeSystem="2.16.840.1.113883.6.96"
    codeSystemName="SNOMED CT"/>
  <statusCode code="completed"/>
  <effectiveTime>
    <low value="201308160700"/>
  </effectiveTime>
</act>
```

### 3.29 Medication Activity (V2)

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

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**Table 169: Medication Activity (V2) Contexts**

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

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 to 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 170: Medication Activity (V2) Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
substanceAdministration (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09)					
@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:2.16.840.1.113883.1.11.159331 (ActStatus)
effectiveTime	1..1	SHALL	IVL_TS	<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:2.16.840.1.113883.3.88.12.3221.8.7 (Medication Route FDA)
approachSiteCode	0..1	MAY	SET<CD>	<a href="#">1098-7515</a>	urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 (Body Site)
doseQuantity	1..1	SHALL		<a href="#">1098-7516</a>	
@unit	0..1	SHOULD		<a href="#">1098-7526</a>	urn:oid:2.16.840.1.113883.1.11.12839 (UnitsOfMeasureCaseSensitive)
rateQuantity	0..1	MAY		<a href="#">1098-</a>	

				<a href="#">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:2.16.840.1.113883.10.2.0.22.4.23:2014-06-09)</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:2.16.840.1.113883.10.2.0.22.4.19:2014-06-09)</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
act	1..1	SHALL		<a href="#">1098-31387</a>	<a href="#">Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2.0.22.4.20:2014-06-09)</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:2.16.840.1.113883.10.2.0.22.4.17:2014-06-09)</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:2.16.840.1.113883.10.2.0.22.4.18:2014-06-09)</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:2.16.840.1.113883.10.2.0.22.4.9:2014-06-09)</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>	
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-</a>	<a href="#">Medication Free Text Sig (identifier:</a>



				<a href="#">32909</a>	<a href="urn:oid:2.16.840.1.113883.10.20.22.4.147">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 [ActStatus](#) urn:oid:2.16.840.1.113883.1.11.159331 **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 [Medication Route FDA](#) urn:oid:2.16.840.1.113883.3.88.12.3221.8.7 **DYNAMIC** (CONF:1098-7514).
11. **MAY** contain zero or one [0..1] **approachSiteCode**, where the code **SHALL** be selected from ValueSet [Body Site](#) 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).
- a. This doseQuantity **SHOULD** contain zero or one [0..1] @unit, which **SHALL** 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).
- a. The rateQuantity, if present, **SHALL** contain exactly one [1..1] @unit, which **SHALL** 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
- a. **SHALL** contain exactly one [1..1] **@typeCode="COMP"** Has component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32908).
  - b. **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).
- a. The precondition, if present, **SHALL** contain exactly one [1..1] **@typeCode="PRCN"** (CONF:1098-31882).
  - 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:1098-31883).
29. Medication Activity **SHOULD** include doseQuantity **OR** rateQuantity (CONF:1098-30800).

**Figure 83: 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 84: 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>

```

### 3.30 Medication Dispense (V2)

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

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**Table 171: Medication Dispense (V2) Contexts**

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

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

**Table 172: Medication Dispense (V2) Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
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:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-7453</a>	
@root	1..1	SHALL		<a href="#">1098-10505</a>	2.16.840.1.113883.10.20.22.4.18
@extension	1..1	SHALL		<a href="#">1098-32580</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-7454</a>	
statusCode	1..1	SHALL		<a href="#">1098-7455</a>	
@code	1..1	SHALL		<a href="#">1098-32361</a>	urn:oid:2.16.840.1.113883.3.88.12.80.64 (Medication Fill Status)
effectiveTime	0..1	SHOULD		<a href="#">1098-7456</a>	
repeatNumber	0..1	SHOULD		<a href="#">1098-7457</a>	
quantity	0..1	SHOULD		<a href="#">1098-7458</a>	
product	0..1	MAY		<a href="#">1098-7459</a>	
manufacturedProduct	1..1	SHALL		<a href="#">1098-15607</a>	<a href="#">Medication Information (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09)</a>
product	0..1	MAY		<a href="#">1098-9331</a>	
manufacturedProduct	1..1	SHALL		<a href="#">1098-31696</a>	<a href="#">Immunization Medication Information (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09)</a>
performer	0..1	MAY		<a href="#">1098-7461</a>	
assignedEntity	1..1	SHALL		<a href="#">1098-7467</a>	
addr	0..1	SHOULD		<a href="#">1098-7468</a>	<a href="#">US Realm Address (AD.US.FIELDDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2)</a>
entryRelationship	0..1	MAY		<a href="#">1098-7473</a>	

@typeCode	1..1	SHALL		<a href="#">1098-7474</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
supply	1..1	SHALL		<a href="#">1098-15606</a>	<a href="#">Medication Supply Order (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09)</a>

1. **SHALL** contain exactly one [1..1] @classCode="SPLY" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-7451).
2. **SHALL** contain exactly one [1..1] @moodCode="EVN" (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-7452).
3. **SHALL** contain exactly one [1..1] templateId (CONF:1098-7453) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.18" (CONF:1098-10505).
  - b. **SHALL** contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32580).
4. **SHALL** contain at least one [1..\*] id (CONF:1098-7454).
5. **SHALL** contain exactly one [1..1] statusCode (CONF:1098-7455).
  - a. This statusCode **SHALL** contain exactly one [1..1] @code, which **SHALL** be selected from ValueSet [Medication Fill Status](#) urn:oid:2.16.840.1.113883.3.88.12.80.64 **STATIC** 2014-04-23 (CONF:1098-32361).
6. **SHOULD** contain zero or one [0..1] effectiveTime (CONF:1098-7456).

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.

7. **SHOULD** contain zero or one [0..1] repeatNumber (CONF:1098-7457).
8. **SHOULD** contain zero or one [0..1] quantity (CONF:1098-7458).
9. **MAY** contain zero or one [0..1] product (CONF:1098-7459) 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:1098-15607).
10. **MAY** contain zero or one [0..1] product (CONF:1098-9331) 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:1098-31696).
11. **MAY** contain zero or one [0..1] performer (CONF:1098-7461).
  - a. The performer, if present, **SHALL** contain exactly one [1..1] assignedEntity (CONF:1098-7467).
    - 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:1098-7468).



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:1098-10565).
12. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1098-7473) 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:1098-7474).
  - b. **SHALL** contain exactly one [1..1] **Medication Supply Order (V2)** (identifier: urn:h17ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09) (CONF:1098-15606).
13. A supply act **SHALL** contain one product/Medication Information **OR** one product/Immunization Medication Information template (CONF:1098-9333).

**Table 173: Medication Fill Status**

Value Set: Medication Fill Status urn:oid:2.16.840.1.113883.3.88.12.80.64 Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
aborted	ActStatus	urn:oid:2.16.840.1.113883.3.5.14	Aborted
completed	ActStatus	urn:oid:2.16.840.1.113883.3.5.14	Completed

**Figure 85: Medication Dispense (V2) Example**

```

<supply classCode="SPLY" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.18" extension="2014-06-09" />
  <id root="1.2.3.4.56789.1" extension="cb734647-fc99-424c-a864-7e3cda82e704" />
  <statusCode code="completed" />
  <effectiveTime value="201208151450-0800" />
  <repeatNumber value="1" />
  <quantity value="75" />
  <product>
    <manufacturedProduct classCode="MANU">
      <templateId root="2.16.840.1.113883.10.20.22.4.23" extension="2014-06-09" />
      . . .
    </manufacturedProduct>
  </product>
  <performer>
    <assignedEntity>
      . . .
    </assignedEntity>
  </performer>
</supply>

```

### 3.31 Medication Free Text Sig

[substanceAdministration: identifier urn:oid:2.16.840.1.113883.10.20.22.4.147 (closed)]

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**Table 174: Medication Free Text Sig Contexts**

Contained By:	Contains:
<a href="#">Medication Activity (V2)</a> (optional)	

The template is available to explicitly identify the free text Sig within each medication.

An example free text sig: Thyroxin 150 ug, take one tab by mouth every morning.

**Table 175: Medication Free Text Sig Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
substanceAdministration (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.147)					
@classCode	1..1	SHALL		<a href="#">1198-32770</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = SBADM
@moodCode	1..1	SHALL		<a href="#">1198-32771</a>	urn:oid:2.16.840.1.113883.11.20.9.18 (MoodCodeEvnInt)
templateId	1..1	SHALL		<a href="#">1198-32753</a>	
@root	1..1	SHALL		<a href="#">1198-32772</a>	2.16.840.1.113883.10.20.22.4.147
code	1..1	SHALL		<a href="#">1198-32775</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC)
@code	1..1	SHALL		<a href="#">1198-32780</a>	76662-6
@codeSystem	1..1	SHALL		<a href="#">1198-32781</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
text	1..1	SHALL		<a href="#">1198-32754</a>	
reference	1..1	SHALL		<a href="#">1198-32755</a>	
@value	0..1	SHOULD		<a href="#">1198-32756</a>	
consumable	1..1	SHALL		<a href="#">1198-32776</a>	
manufacturedProduct	1..1	SHALL		<a href="#">1198-32777</a>	
manufacturedLabeledDrug	1..1	SHALL		<a href="#">1198-32778</a>	
@nullFlavor	1..1	SHALL		<a href="#">1198-32779</a>	NA

1. **SHALL** contain exactly one [1..1] **@classCode**="SBADM" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1198-32770).
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:1198-32771).  
Note: moodCode must match the parent substanceAdministration EVN or INT
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1198-32753) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.147" (CONF:1198-32772).
4. **SHALL** contain exactly one [1..1] **code** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1198-32775).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="76662-6" Instructions Medication (CONF:1198-32780).

- b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1 **STATIC**) (CONF:1198-32781).
5. **SHALL** contain exactly one [1..1] **text** (CONF:1198-32754).

Reference into the section/text to a tag that only contains free text sig.

- a. This text **SHALL** contain exactly one [1..1] **reference** (CONF:1198-32755).
    - i. This reference **SHOULD** contain zero or one [0..1] **@value** (CONF:1198-32756).
      - 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:1198-32774).
6. **SHALL** contain exactly one [1..1] **consumable** (CONF:1198-32776).
- a. This consumable **SHALL** contain exactly one [1..1] **manufacturedProduct** (CONF:1198-32777).
    - i. This manufacturedProduct **SHALL** contain exactly one [1..1] **manufacturedLabeledDrug** (CONF:1198-32778).
      - 1. This manufacturedLabeledDrug **SHALL** contain exactly one [1..1] **@nullFlavor**="NA" Not Applicable (CONF:1198-32779).

**Figure 86: 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>
```

### 3.32 Medication Information (V2)

[manufacturedProduct: identifier

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

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**Table 176: Medication Information (V2) Contexts**

Contained By:	Contains:
<a href="#">Medication Activity (V2)</a> (required) <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), BPCK (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 177: 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 (RoleClass) = 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:2.16.840.1.113762.1.4.10 10.4 (Medication Clinical Drug)
translation	0..*	MAY		<a href="#">1098-31884</a>	urn:oid:2.16.840.1.113762.1.4.10 10.2 (Clinical Substance)
manufacturerOrganization	0..1	MAY		<a href="#">1098-7416</a>	

1. **SHALL** contain exactly one [1..1] **@classCode="MANU"** (CodeSystem: RoleClass 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), BPCK (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 178: Medication Clinical Drug**

Value Set: Medication Clinical Drug urn:oid:2.16.840.1.113762.1.4.1010.4			
All prescribable medication formulations represented using either a "generic" or "brand-specific" concept. This includes RxNorm codes whose Term Type is SCD (semantic clinical drug), SBD (semantic brand drug), GPCK (generic pack), BPCK (brand pack), SCDG (semantic clinical drug group), SBDG (semantic brand drug group), SCDF (semantic clinical drug form), or SBDF (semantic brand drug form).			
Value set intensionally defined as a GROUPING made up of: Value Set: Medication Clinical General Drug (2.16.840.1.113883.3.88.12.80.17) (RxNorm Generic Drugs); Value Set: Medication Clinical Brand-specific Drug (2.16.840.1.113762.1.4.1010.5) (RxNorm Branded Drugs).			
Value Set Source: <a href="http://phinivads.cdc.gov/vads/ViewValueSet.action?id=239BEF3E-971C-DF11-B334-0015173D1785">http://phinivads.cdc.gov/vads/ViewValueSet.action?id=239BEF3E-971C-DF11-B334-0015173D1785</a>			
Code	Code System	Code System OID	Print Name
978727	RxNorm	urn:oid:2.16.840.1.113883.6.88	0.2 ML Dalteparin Sodium 12500 UNT/ML Prefilled Syringe [Fragmin]
827318	RxNorm	urn:oid:2.16.840.1.113883.6.88	Acetaminophen 250 MG / Aspirin 250 MG / Caffeine 65 MG Oral Capsule
199274	RxNorm	urn:oid:2.16.840.1.113883.6.88	Aspirin 300 MG Oral Capsule
362867	RxNorm	urn:oid:2.16.840.1.113883.6.88	Cefotetan Injectable Solution [Cefotan]
...			

**Table 179: Clinical Substance**

Value Set: Clinical Substance urn:oid:2.16.840.1.113762.1.4.1010.2			
All substances that may need to be represented in the context of health care related activities. This value set is quite broad in coverage and includes concepts that may never be needed in a health care activity event, particularly the included SNOMED CT concepts. The code system-specific value sets in this grouping value set are intended to provide broad coverage of all kinds of agents, but the expectation for use is that the chosen concept identifier for a substance should be appropriately specific and drawn from the appropriate code system as noted: prescribable medications should use RXNORM concepts, more specific drugs and chemicals should be represented using UNII concepts, and any substances not found in either of those two code systems, should use the appropriate SNOMED CT concept. This overarching grouping value set is intended to support identification of prescribable medications, foods, general substances and environmental entities.			
Value set intensionally defined as a GROUPING made up of: Value Set: Medication Clinical Drug (2.16.840.1.113762.1.4.1010.4) (RxNorm generic and brand codes); Value Set: Unique Ingredient Identifier - Complete Set (2.16.840.1.113883.3.88.12.80.20) (UNII codes); Value Set: Substance Other Than Clinical Drug (2.16.840.1.113762.1.4.1010.9) (SNOMED CT codes).			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
369436	RxNorm	urn:oid:2.16.840.1.113883.6.88	6-Aminocaproic Acid Oral Tablet [Amicar]
1116447	RxNorm	urn:oid:2.16.840.1.113883.6.88	Acepromazine Oral Tablet
9042592173	Unique Ingredient Identifier (UNII)	urn:oid:2.16.840.1.113883.4.9	ATROMEPIE
7673326042	Unique Ingredient Identifier (UNII)	urn:oid:2.16.840.1.113883.4.9	IRINOTECAN
413480003	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Almond product (substance)
256915001	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Aluminum hydroxide absorbed plasma (substance)
10020007	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Biperiden hydrochloride (substance)
10133003	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Cyclizine lactate (substance)
10174003	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Procabazine hydrochloride (substance)
102259006	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Citrus fruit (substance)
...			

**Figure 87: 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="573621" displayName="Proventil 0.09 MG/ACTUAT inhalant solution"
codeSystem="2.16.840.1.113883.6.88" codeSystemName="RxNorm" />
  </manufacturedMaterial>
  <manufacturerOrganization>
    <name>Medication Factory Inc.</name>
  </manufacturerOrganization>
</manufacturedProduct>

```

### 3.33 Medication Supply Order (V2)

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

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**Table 180: Medication Supply Order (V2) Contexts**

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

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



**Table 181: Medication Supply Order (V2) Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
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:2.16.840.1.113883.5.1001 (ActMood) = 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="#">1098-32362</a>	urn:oid:2.16.840.1.113883.1.11.159331 (ActStatus)
effectiveTime	0..1	SHOULD	IVL_TS	<a href="#">1098-15143</a>	
high	1..1	SHALL		<a href="#">1098-15144</a>	
repeatNumber	0..1	SHOULD		<a href="#">1098-7434</a>	
quantity	0..1	SHOULD		<a href="#">1098-7436</a>	
product	0..1	MAY		<a href="#">1098-7439</a>	
manufacturedProduct	1..1	SHALL		<a href="#">1098-16093</a>	<a href="#">Medication Information (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09)</a>
product	0..1	MAY		<a href="#">1098-9334</a>	
manufacturedProduct	1..1	SHALL		<a href="#">1098-31695</a>	<a href="#">Immunization Medication Information (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09)</a>
author	0..1	MAY		<a href="#">1098-7438</a>	
entryRelationship	0..1	MAY		<a href="#">1098-7442</a>	
@typeCode	1..1	SHALL		<a href="#">1098-7444</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ

@inversionInd	1..1	SHALL		<a href="#">1098-7445</a>	true
act	1..1	SHALL		<a href="#">1098-31391</a>	<a href="#">Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2.0.22.4.20:2014-06-09)</a>

1. **SHALL** contain exactly one [1..1] **@classCode="SPLY"** (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-7427).
2. **SHALL** contain exactly one [1..1] **@moodCode="INT"** (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-7428).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7429) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.22.4.17"** (CONF:1098-10507).
  - b. **SHALL** contain exactly one [1..1] **@extension="2014-06-09"** (CONF:1098-32578).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1098-7430).
5. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-7432).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [ActStatus](#) urn:oid:2.16.840.1.113883.1.11.159331 **DYNAMIC** (CONF:1098-32362).
6. **SHOULD** contain zero or one [0..1] **effectiveTime** (CONF:1098-15143) such that it
  - a. **SHALL** contain exactly one [1..1] **high** (CONF:1098-15144).

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.

7. **SHOULD** contain zero or one [0..1] **repeatNumber** (CONF:1098-7434).
8. **SHOULD** contain zero or one [0..1] **quantity** (CONF:1098-7436).
9. **MAY** contain zero or one [0..1] **product** (CONF:1098-7439) 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:1098-16093).
10. **MAY** contain zero or one [0..1] **product** (CONF:1098-9334) 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:1098-31695).
    - i. A supply act **SHALL** contain one product/Medication Information **OR** one product/Immunization Medication Information template (CONF:1098-16870).
11. **MAY** contain zero or one [0..1] **author** (CONF:1098-7438).
12. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1098-7442).
  - a. The entryRelationship, if present, **SHALL** contain exactly one [1..1] **@typeCode="SUBJ"** (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 **STATIC**) (CONF:1098-7444).

- b. The entryRelationship, if present, **SHALL** contain exactly one [1..1] **@inversionInd="true"** True (CONF:1098-7445).
- c. The entryRelationship, if present, **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:1098-31391).

**Figure 88: Medication Supply Order (V2) Example**

```

<supply classCode="SPLY" moodCode="INT">
  <templateId root="2.16.840.1.113883.10.20.22.4.17" extension="2014-06-09" />
  <id root="aba2fc75-1a43-435f-8309-d24e4be5f1cd" />
  <statusCode code="completed" />
  <effectiveTime xsi:type="IVL_TS">
    <low value="20070103" />
    <high nullFlavor="UNK" />
  </effectiveTime>
  <repeatNumber value="1" />
  <quantity value="75" />
  <product>
    <manufacturedProduct classCode="MANU">
      <templateId root="2.16.840.1.113883.10.20.22.4.23" extension="2014-06-09" />
      . . .
    </manufacturedProduct>
  </product>
  <author>
    . . .
  </author>
  <entryRelationship typeCode="SUBJ" inversionInd="true">
    <act classCode="ACT" moodCode="INT">
      <templateId root="2.16.840.1.113883.10.20.22.4.20" extension="2014-06-09" />
      . . .
    </act>
  </entryRelationship>
</supply>

```

### 3.34 New Patient Act

[act: identifier urn:oid:2.16.840.1.113883.10.20.34.3.9 (open)]

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**Table 182: New Patient Act Contexts**

Contained By:	Contains:
<a href="#">Current Outpatient Visit (V3)</a> (optional)	

This template represents the fact that this patient is a new patient at this practice.

**Table 183: New Patient Act Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
act (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.9)					
@classCode	1..1	SHALL		<a href="#">1106-476</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT
@moodCode	1..1	SHALL		<a href="#">1106-477</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1106-478</a>	
@root	1..1	SHALL		<a href="#">1106-479</a>	2.16.840.1.113883.10.20.34.3.9
id	1..*	SHALL		<a href="#">1106-480</a>	
code	1..1	SHALL		<a href="#">1106-481</a>	
@code	1..1	SHALL		<a href="#">1106-482</a>	108220007
@codeSystem	1..1	SHALL		<a href="#">1106-483</a>	urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.6.96
statusCode	1..1	SHALL		<a href="#">1106-741</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed

1. **SHALL** contain exactly one [1..1] **@classCode**="ACT" Act (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1106-476).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1106-477).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-478) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.9" (CONF:1106-479).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1106-480).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1106-481).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="108220007" Evaluation and/or management - new patient (CONF:1106-482).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.96" (CodeSystem: SNOMED CT urn:oid:2.16.840.1.113883.6.96) (CONF:1106-483).
6. **SHALL** contain exactly one [1..1] **statusCode**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1106-741).

**Figure 89: New Patient Act Example**

```

<act classCode="ACT" moodCode="EVN">
  <!-- New Patient Act -->
  <templateId root="2.16.840.1.113883.10.20.34.3.9"/>
  <id root="32cab171-dcbe-4447-9b5f-c43cc94e0ee4"/>
  <code code="108220007"
    displayName="Evaluation and/or management - new patient"
    codeSystem="2.16.840.1.113883.6.96"
    codeSystemName="SNOMED CT"/>
  <statusCode code="completed"/>
</act>

```

### 3.35 Number of Visits in the Last 12 Months

[observation: identifier urn:oid:2.16.840.1.113883.10.20.34.3.26 (open)]

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**Table 184: Number of Visits in the Last 12 Months Contexts**

Contained By:	Contains:
<a href="#">Current Outpatient Visit (V3)</a> (optional)	

This template represents the number of visits in the last 12 months, excluding the current visit.

**Table 185: Number of Visits in the Last 12 Months Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.26)					
@classCode	1..1	SHALL		<a href="#">1106-521</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1106-522</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1106-523</a>	
@root	1..1	SHALL		<a href="#">1106-524</a>	2.16.840.1.113883.10.20.34.3.26
id	1..*	SHALL		<a href="#">1106-525</a>	
code	1..1	SHALL		<a href="#">1106-526</a>	
@code	0..1	MAY		<a href="#">1106-527</a>	75612-2
@codeSystem	0..1	MAY		<a href="#">1106-528</a>	2.16.840.1.113883.6.1
statusCode	1..1	SHALL		<a href="#">1106-529</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	INT	<a href="#">1106-530</a>	

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1106-521).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1106-522).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-523) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.26" (CONF:1106-524).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1106-525).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1106-526).
  - a. This code **MAY** contain zero or one [0..1] **@code**="75612-2" Number of visits to this healthcare entity in the last 12MO (CONF:1106-527).
  - b. This code **MAY** contain zero or one [0..1] **@codeSystem**="2.16.840.1.113883.6.1" (CONF:1106-528).
6. **SHALL** contain exactly one [1..1] **statusCode**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1106-529).
7. **SHALL** contain exactly one [1..1] **value** with **@xsi:type**="INT" (CONF:1106-530).  
Note: Form Element: Number of Visits in the Last 12 Months

**Figure 90: Number of Visits in the Last 12 Months Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- Number of Visits in the Last 12 Months -->
  <templateId root="2.16.840.1.113883.10.20.34.3.26" />
  <id root="cd691b5e-2464-4fb4-936d-0d9d67ebb8fd" />
  <code code="75612-2"
    displayName="Number of visits to this healthcare entity in the last 12MO"
    codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
  <statusCode code="completed" />
  <!-- Form Element: Number of Past Visits in the Last 12 Months -->
  <value xsi:type="INT" value="4" />
</observation>

```

### 3.36 On Oxygen on Arrival Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.34.3.29 (open)]

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**Table 186: On Oxygen on Arrival Observation Contexts**

Contained By:	Contains:
<a href="#">Triage Section</a> (required)	

This template represents whether or not the patient was on oxygen on arrival. If it is unknown whether the patient was on oxygen on arrival use nullFlavor="UNK".

**Table 187: On Oxygen on Arrival Observation Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.29)					
@classCode	1..1	SHALL		<a href="#">1106-704</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1106-705</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1106-706</a>	
@root	1..1	SHALL		<a href="#">1106-707</a>	2.16.840.1.113883.10.20.34.3.29
id	1..*	SHALL		<a href="#">1106-708</a>	
code	1..1	SHALL		<a href="#">1106-709</a>	
@code	1..1	SHALL		<a href="#">1106-713</a>	75610-6
@codeSystem	0..1	MAY		<a href="#">1106-714</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
statusCode	1..1	SHALL		<a href="#">1106-710</a>	
@code	1..1	SHALL		<a href="#">1106-711</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	BL	<a href="#">1106-712</a>	
@nullFlavor	0..1	MAY		<a href="#">1106-715</a>	UNK
@value	0..1	SHOULD		<a href="#">1106-856</a>	

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1106-704).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1106-705).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-706) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.29" (CONF:1106-707).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1106-708).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1106-709).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="75610-6" Oxygen therapy at arrival (CONF:1106-713).
  - b. This code **MAY** contain zero or one [0..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1106-714).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1106-710).



- a. This statusCode **SHALL** contain exactly one [1..1] @code="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1106-711).
- 7. **SHALL** contain exactly one [1..1] value with @xsi:type="BL" (CONF:1106-712).
  - a. This value **MAY** contain zero or one [0..1] @nullFlavor="UNK" (CONF:1106-715).
  - b. This value **SHOULD** contain zero or one [0..1] @value (CONF:1106-856).

**Figure 91: On Oxygen on Arrival Observation Example**

```
<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.34.3.29" />
  <id root="dealdf8b-7b43-4166-839a-84149d061d6a" />
  <code code="75610-6" displayName="Oxygen therapy at arrival"
    codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
  <statusCode code="completed" />
  <!-- Form element: On oxygen on arrival -->
  <value xsi:type="BL" value="true" />
</observation>
```

### 3.37 Patient Residence Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.34.3.25 (open)]

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**Table 188: Patient Residence Observation Contexts**

Contained By:	Contains:
<a href="#">Patient Information Section (V3)</a> (optional)	

This template represents the patient residence type. If the type of residence is other use nullFlavor="OTH". If the type of residence is unknown use nullFlavor="UNK".

**Table 189: Patient Residence Observation Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.25)					
@classCode	1..1	SHALL		<a href="#">1106-606</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1106-607</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1106-601</a>	
@root	1..1	SHALL		<a href="#">1106-603</a>	2.16.840.1.113883.10.20.34.3.25
id	1..*	SHALL		<a href="#">1106-679</a>	
code	1..1	SHALL		<a href="#">1106-602</a>	
@code	1..1	SHALL		<a href="#">1106-604</a>	75617-1
@codeSystem	1..1	SHALL		<a href="#">1106-605</a>	2.16.840.1.113883.6.1
statusCode	1..1	SHALL		<a href="#">1106-680</a>	
@code	0..1	MAY		<a href="#">1106-681</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	CD	<a href="#">1106-608</a>	urn:oid:2.16.840.1.114222.4.11.7402 (Patient Residence (NCHS))
@nullFlavor	0..1	MAY		<a href="#">1106-675</a>	urn:oid:2.16.840.1.113883.10.20.5.9.1 (NullValues_UNK_OTH)

1. **SHALL** contain exactly one [1..1] **@classCode="OBS"** (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1106-606).
2. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1106-607).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-601) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.34.3.25"** (CONF:1106-603).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1106-679).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1106-602).
  - a. This code **SHALL** contain exactly one [1..1] **@code="75617-1"** Residence (CONF:1106-604).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem="2.16.840.1.113883.6.1"** (CONF:1106-605).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1106-680).
  - a. This statusCode **MAY** contain zero or one [0..1] **@code="completed"** Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1106-681).

7. **SHALL** contain exactly one [1..1] **value** with `@xsi:type="CD"`, where the code **SHOULD** be selected from ValueSet [Patient Residence \(NCHS\)](#) `urn:oid:2.16.840.1.114222.4.11.7402` **DYNAMIC** (CONF:1106-608).
- a. This value **MAY** contain zero or one [0..1] `@nullFlavor`, which **SHALL** be selected from ValueSet [NullValues UNK OTH](#) `urn:oid:2.16.840.1.113883.10.20.5.9.1` **STATIC** 2014-01-01 (CONF:1106-675).

**Table 190: Patient Residence (NCHS)**

Value Set: Patient Residence (NCHS) <code>urn:oid:2.16.840.1.114222.4.11.7402</code>			
These codes describe the patient's residence type.			
Value Set Source: <a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7402">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7402</a>			
Code	Code System	Code System OID	Print Name
394778007	SNOMED CT	<code>urn:oid:2.16.840.1.113883.6.96</code>	Client's or patient's home
42665001	SNOMED CT	<code>urn:oid:2.16.840.1.113883.6.96</code>	Nursing home
32911000	SNOMED CT	<code>urn:oid:2.16.840.1.113883.6.96</code>	Homeless
...			

**Figure 92: Patient Residence Example**

```

<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.34.3.25" />
  <id root="5501b49a-32ea-4c78-9c31-3dbe782871b6" />
  <code code="75617-1" displayName="Residence"
    codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
  <statusCode code="completed" />
  <!-- Form element: Patient Residence -->
  <value xsi:type="CD" code="264362003" displayName="Private home"
    codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" />
</observation>

```

### 3.38 Patient Seen in this ED in last 72 Hours and Discharged

[observation: identifier `urn:oid:2.16.840.1.113883.10.20.34.3.31` (open)]

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**Table 191: Patient Seen in this ED in last 72 Hours and Discharged Contexts**

Contained By:	Contains:
<a href="#">Current Emergency Department Visit (V2)</a> (optional)	

This template represents whether or not the patient has been seen in this ED within the last 72 hours and discharged. If this fact is unknown use nullFlavor="UNK".

**Table 192: Patient Seen in this ED in last 72 Hours and Discharged Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.31)					
@classCode	1..1	SHALL		<a href="#">1106-722</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1106-723</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1106-718</a>	
@root	1..1	SHALL		<a href="#">1106-720</a>	2.16.840.1.113883.10.20.34.3.31
id	1..*	SHALL		<a href="#">1106-724</a>	
code	1..1	SHALL		<a href="#">1106-725</a>	
@code	0..1	MAY		<a href="#">1106-727</a>	75611-4
@codeSystem	0..1	MAY		<a href="#">1106-728</a>	2.16.840.1.113883.6.1
statusCode	1..1	SHALL		<a href="#">1106-719</a>	
@code	1..1	SHALL		<a href="#">1106-721</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	BL	<a href="#">1106-726</a>	
@nullFlavor	0..1	MAY		<a href="#">1106-729</a>	UNK
@value	0..1	SHOULD		<a href="#">1106-862</a>	

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1106-722).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1106-723).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-718) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.31" (CONF:1106-720).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1106-724).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1106-725).
  - a. This code **MAY** contain zero or one [0..1] **@code**="75611-4" Patient seen in this ED in last 72H and discharged (CONF:1106-727).

- b. This code **MAY** contain zero or one [0..1] @codeSystem="2.16.840.1.113883.6.1" (CONF:1106-728).
  - 6. **SHALL** contain exactly one [1..1] statusCode (CONF:1106-719).
    - a. This statusCode **SHALL** contain exactly one [1..1] @code="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1106-721).
- Use @value="true" for "yes", @value="false" for "no" and @nullFlavor="UNK" for "unknown".
- 7. **SHALL** contain exactly one [1..1] value with @xsi:type="BL" (CONF:1106-726).
    - a. This value **MAY** contain zero or one [0..1] @nullFlavor="UNK" (CONF:1106-729).
    - b. This value **SHOULD** contain zero or one [0..1] @value (CONF:1106-862).

**Figure 93: Patient Seen in this ED in last 72 Hours and Discharged Example**

```

<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.34.3.31" />
  <id root="6bb81e98-8a19-43b9-bc50-9997e0766ba3" />
  <code code="75611-4"
    displayName="Patient seen in this ED in last 72H and discharged"
    codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
  <statusCode code="completed" />
  <!-- Form element: Has patient been seen in this ED within the last 72 hours and
  discharged -->
  <value xsi:type="BL" value="true" />
</observation>
    
```

### 3.39 Planned Act (V2)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.39:2014-06-09 (open)]  
 Published as part of Consolidated CDA Templates for Clinical Notes (US Realm)  
 DSTU R2

**Table 193: Planned Act (V2) Contexts**

Contained By:	Contains:
	<a href="#">Author Participation</a> <a href="#">Indication (V2)</a> <a href="#">Instruction (V2)</a> <a href="#">Priority Preference</a>

This template represents planned acts that are not classified as an observation or a procedure according to the HL7 RIM. Examples of these acts are a dressing change, the teaching or feeding of a patient or the providing of comfort measures.

The priority of the activity to the patient and provider is communicated through Priority Preference. The effectiveTime indicates the time when the activity is intended to take place.

**Table 194: Planned Act (V2) Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.39:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-8538</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT
@moodCode	1..1	SHALL		<a href="#">1098-8539</a>	urn:oid:2.16.840.1.113883.11.20.9.23 (Planned moodCode (Act/Encounter/Procedure))
templateId	1..1	SHALL		<a href="#">1098-30430</a>	
@root	1..1	SHALL		<a href="#">1098-30431</a>	2.16.840.1.113883.10.20.22.4.39
@extension	1..1	SHALL		<a href="#">1098-32552</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-8546</a>	
code	1..1	SHALL		<a href="#">1098-31687</a>	
statusCode	1..1	SHALL		<a href="#">1098-30432</a>	
@code	1..1	SHALL		<a href="#">1098-32019</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = active
effectiveTime	0..1	SHOULD		<a href="#">1098-30433</a>	
performer	0..*	MAY		<a href="#">1098-30435</a>	
author	0..1	SHOULD		<a href="#">1098-32020</a>	<a href="#">Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)</a>
entryRelationship	0..*	MAY		<a href="#">1098-31067</a>	
@typeCode	1..1	SHALL		<a href="#">1098-31068</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">1098-31069</a>	<a href="#">Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143)</a>
entryRelationship	0..*	MAY		<a href="#">1098-32021</a>	
@typeCode	1..1	SHALL		<a href="#">1098-32022</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON
observation	1..1	SHALL		<a href="#">1098-32023</a>	<a href="#">Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09)</a>
entryRelationship	0..*	MAY		<a href="#">1098-32024</a>	

@typeCode	1..1	SHALL		<a href="#">1098-32025</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
act	1..1	SHALL		<a href="#">1098-32026</a>	<a href="#">Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09)</a>

1. **SHALL** contain exactly one [1..1] @classCode="ACT" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-8538).
2. **SHALL** contain exactly one [1..1] @moodCode, which **SHALL** be selected from ValueSet [Planned moodCode \(Act/Encounter/Procedure\)](#) urn:oid:2.16.840.1.113883.11.20.9.23 **STATIC** 2011-09-30 (CONF:1098-8539).
3. **SHALL** contain exactly one [1..1] templateId (CONF:1098-30430) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.39" (CONF:1098-30431).
  - b. **SHALL** contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32552).
4. **SHALL** contain at least one [1..\*] id (CONF:1098-8546).
5. **SHALL** contain exactly one [1..1] code (CONF:1098-31687).
  - a. This code in a Planned Act **SHOULD** be selected from LOINC (CodeSystem: 2.16.840.1.113883.6.1) **OR** SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) (CONF:1098-32030).
6. **SHALL** contain exactly one [1..1] statusCode (CONF:1098-30432).
  - a. This statusCode **SHALL** contain exactly one [1..1] @code="active" Active (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-32019).

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

7. **SHOULD** contain zero or one [0..1] effectiveTime (CONF:1098-30433).

The clinician who is expected to carry out the act could be identified using act/performer.

8. **MAY** contain zero or more [0..\*] performer (CONF:1098-30435).

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

9. **SHOULD** contain zero or one [0..1] [Author Participation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-32020).

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

10. **MAY** contain zero or more [0..\*] entryRelationship (CONF:1098-31067) 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:1098-31068).
  - b. **SHALL** contain exactly one [1..1] [Priority Preference](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:1098-31069).

The following entryRelationship represents the indication for the act.

11. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-32021) 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:1098-32022).
  - 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:1098-32023).

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

12. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-32024) 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:1098-32025).
  - 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:1098-32026).

**Table 195: Planned moodCode (Act/Encounter/Procedure)**

Value Set: Planned moodCode (Act/Encounter/Procedure) urn:oid:2.16.840.1.113883.11.20.9.23 This value set is used to restrict the moodCode on an act, an encounter or a procedure to future moods Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
INT	ActMood	urn:oid:2.16.840.1.113883.5.1001	Intent
ARQ	ActMood	urn:oid:2.16.840.1.113883.5.1001	Appointment Request
PRMS	ActMood	urn:oid:2.16.840.1.113883.5.1001	Promise
PRP	ActMood	urn:oid:2.16.840.1.113883.5.1001	Proposal
RQO	ActMood	urn:oid:2.16.840.1.113883.5.1001	Request
APT	ActMood	urn:oid:2.16.840.1.113883.5.1001	Appointment



**Figure 94: Planned Act (V2) Example**

```

<act classCode="ACT" moodCode="INT">
  <templateId root="2.16.840.1.113883.10.20.22.4.39" extension="2014-06-09" />
  <id root="7658963e-54da-496f-bf18-dea1dddaa3b0" />
  <code code="423171007" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
displayName="Elevate head of bed" />
  <statusCode code="active" />
  <effectiveTime value="20130902" />
  <author typeCode="AUT">
    <!-- Author Participation -->
  </author>
  <entryRelationship typeCode="RSON">
    <!-- Patient Priority Preference -->
    ...
  </entryRelationship>
  <entryRelationship typeCode="RSON">
    <!-- Provider Priority Preference -->
    ...
  </entryRelationship>
  <entryRelationship typeCode="RSON">
    <!-- Indication (V2) -->
    ...
  </entryRelationship>
  <entryRelationship typeCode="SUBJ">
    <!-- Instruction (V2) -->
    ...
  </entryRelationship>
  <entryRelationship typeCode="COMP">
    <!-- Planned Coverage -->
    ...
  </entryRelationship>
</act>

```

### 3.39.1 Ordered Service Act

[act: identifier urn:oid:2.16.840.1.113883.10.20.34.3.19 (open)]

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**Table 196: Ordered Service Act Contexts**

Contained By:	Contains:
<a href="#">Services and Procedures Section</a> (optional)	

This template represents service activities ordered, but not yet provided. Examples of service acts include non-medication treatments, such as physical therapy or home health care, other

tests and procedures (except excision of tissue), as well as health education or counseling. To represent the ordered service act, the moodCode value is constrained to "RQO".

**Table 197: Ordered Service Act Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
act (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.19)					
@classCode	1..1	SHALL		<a href="#">1106-221</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT
@moodCode	1..1	SHALL		<a href="#">1106-222</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = RQO
templateId	1..1	SHALL		<a href="#">1106-223</a>	
@root	1..1	SHALL		<a href="#">1106-224</a>	2.16.840.1.113883.10.20.34.3.19
code	1..1	SHALL		<a href="#">1106-225</a>	
@code	0..1	SHOULD		<a href="#">1106-362</a>	
translation	0..*	MAY		<a href="#">1106-363</a>	
@code	1..1	SHALL		<a href="#">1106-378</a>	urn:oid:2.16.840.1.113883.6.12 (CPT4)

1. Conforms to [Planned Act \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.39:2014-06-09).
2. **SHALL** contain exactly one [1..1] **@classCode**="ACT" Act (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1106-221).
3. **SHALL** contain exactly one [1..1] **@moodCode**="RQO" Request (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1106-222).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-223) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.19" (CONF:1106-224).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1106-225).
  - a. This code **SHOULD** contain zero or one [0..1] **@code** (CONF:1106-362).  
Note: Inclusion of both SNOMED CT/LOINC and a local code is permitted. When both codes are available, include the local code within the translation element. When only a local code is available, include the local code within the translation element and use **@nullFlavor**="OTH" in the code element.
    - i. This **@code** **SHOULD** be selected from LOINC (CodeSystem: 2.16.840.1.113883.6.1) or SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) (CONF:1106-767).
  - b. This code **MAY** contain zero or more [0..\*] **translation** (CONF:1106-363).
    - i. The translation, if present, **SHALL** contain exactly one [1..1] **@code** (CodeSystem: CPT4 urn:oid:2.16.840.1.113883.6.12) (CONF:1106-378).

**Figure 95: Ordered Service Act Example**

```

<act classCode="ACT" moodCode="RQO">
  <!-- C-CDA R2 Planned Act (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.4.39" extension="2014-06-09" />
  <!-- Ordered Service Act -->
  <templateId root="2.16.840.1.113883.10.20.34.3.19" />
  <id root="8daa4618-03c6-4339-89b4-3862e96298b2" />
  <code code="266724001" displayName="Weight-reducing diet education"
    codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" />
  <statusCode code="active" />
</act>
    
```

### 3.40 Planned Coverage

[act: identifier urn:oid:2.16.840.1.113883.10.20.22.4.129 (open)]

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DSTU R2

**Table 198: Planned Coverage Contexts**

Contained By:	Contains:
<a href="#">Planned Procedure (V2)</a> (optional) <a href="#">Planned Observation (V2)</a> (optional) <a href="#">Payment Sources Section</a> (optional)	<a href="#">Author Participation</a>

This template represents the insurance coverage intended to cover an act or procedure.

**Table 199: Planned Coverage Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
act (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.129)					
@classCode	1..1	SHALL		<a href="#">1098-31945</a>	urn:oid:2.16.840.1.113883.5.4 (ActCode) = ACT
@moodCode	1..1	SHALL		<a href="#">1098-31946</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = INT
templateId	1..1	SHALL		<a href="#">1098-31947</a>	
@root	1..1	SHALL		<a href="#">1098-31948</a>	2.16.840.1.113883.10.20.22.4.129
id	1..*	SHALL		<a href="#">1098-31950</a>	
code	1..1	SHALL		<a href="#">1098-31951</a>	
@code	1..1	SHALL		<a href="#">1098-31952</a>	48768-6
@codeSystem	1..1	SHALL		<a href="#">1098-31953</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
statusCode	1..1	SHALL		<a href="#">1098-31954</a>	
@code	1..1	SHALL		<a href="#">1098-31955</a>	urn:oid:2.16.840.1.113883.5.4 (ActCode) = active
author	0..*	MAY		<a href="#">1098-32178</a>	<a href="#">Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)</a>
entryRelationship	1..1	SHALL		<a href="#">1098-31967</a>	
@typeCode	1..1	SHALL		<a href="#">1098-31968</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
act	1..1	SHALL		<a href="#">1098-31969</a>	
@classCode	1..1	SHALL		<a href="#">1098-31970</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT
@moodCode	1..1	SHALL		<a href="#">1098-31971</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = INT
id	1..*	SHALL		<a href="#">1098-31972</a>	
code	1..1	SHALL		<a href="#">1098-31973</a>	urn:oid:2.16.840.1.114222.4.11.3591 (Payer)
statusCode	1..1	SHALL		<a href="#">1098-31974</a>	
@code	1..1	SHALL		<a href="#">1098-31975</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = active

1. **SHALL** contain exactly one [1..1] **@classCode="ACT"** act (CodeSystem: ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:1098-31945).
2. **SHALL** contain exactly one [1..1] **@moodCode="INT"** Intent (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1098-31946).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-31947) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.22.4.129"** (CONF:1098-31948).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1098-31950).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1098-31951).
  - a. This code **SHALL** contain exactly one [1..1] **@code="48768-6"** Payment Sources (CONF:1098-31952).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem="2.16.840.1.113883.6.1"** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1098-31953).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-31954).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code="active"** Active (CodeSystem: ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:1098-31955).
7. **MAY** contain zero or more [0..\*] **Author Participation** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-32178).
8. **SHALL** contain exactly one [1..1] **entryRelationship** (CONF:1098-31967) 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:1098-31968).
  - b. **SHALL** contain exactly one [1..1] **act** (CONF:1098-31969).
    - i. This act **SHALL** contain exactly one [1..1] **@classCode="ACT"** ACT (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1098-31970).
    - ii. This act **SHALL** contain exactly one [1..1] **@moodCode="INT"** intent (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1098-31971).

These act/identifiers are unique identifiers for the policy or program providing the coverage.

- iii. This act **SHALL** contain at least one [1..\*] **id** (CONF:1098-31972).
- iv. This act **SHALL** contain exactly one [1..1] **code**, which **SHALL** be selected from ValueSet **Payer** urn:oid:2.16.840.1.114222.4.11.3591 **DYNAMIC** (CONF:1098-31973).
- v. This act **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-31974).
  1. This statusCode **SHALL** contain exactly one [1..1] **@code="active"** Active (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-31975).

**Table 200: Payer**

Value Set: Payer urn:oid:2.16.840.1.114222.4.11.3591 A value set of Public Health Data Standards Consortium Source of Payment Typology Version 3.0 Codes Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
1	Source of Payment Typology (PHDSC)	urn:oid:2.16.840.1.113883.3.221.5	Medicare
2	Source of Payment Typology (PHDSC)	urn:oid:2.16.840.1.113883.3.221.5	Medicaid
311	Source of Payment Typology (PHDSC)	urn:oid:2.16.840.1.113883.3.221.5	Tricare (CHAMPUS)
33	Source of Payment Typology (PHDSC)	urn:oid:2.16.840.1.113883.3.221.5	Indian Health Service or Tribe
62	Source of Payment Typology (PHDSC)	urn:oid:2.16.840.1.113883.3.221.5	BC Indemnity
61	Source of Payment Typology (PHDSC)	urn:oid:2.16.840.1.113883.3.221.5	BC Managed Care
611	Source of Payment Typology (PHDSC)	urn:oid:2.16.840.1.113883.3.221.5	BC Managed Care - HMO
619	Source of Payment Typology (PHDSC)	urn:oid:2.16.840.1.113883.3.221.5	BC Managed Care - Other
613	Source of Payment Typology (PHDSC)	urn:oid:2.16.840.1.113883.3.221.5	BC Managed Care - POS
612	Source of Payment Typology (PHDSC)	urn:oid:2.16.840.1.113883.3.221.5	BC Managed Care - PPO
...			

**Figure 96: Planned Coverage Example**

<pre> &lt;act classCode="ACT" moodCode="INT"&gt;   &lt;templateId root="2.16.840.1.113883.10.20.22.4.129" /&gt;   &lt;id root="03f5e10b-7e79-4610-9626-d2984ff10cc1" /&gt;   &lt;code code="48768-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"   displayName="Payment Sources" /&gt;   &lt;statusCode code="active" /&gt;   &lt;entryRelationship typeCode="COMP"&gt;     &lt;act classCode="ACT" moodCode="INT"&gt;       &lt;!-- These act/identifiers are unique identifiers       for the policy or program providing the coverage. --&gt;       &lt;id root="4c9a3be1-5f09-46dd-88e7-14c8ec612e4c" /&gt;       &lt;code code="111" displayName="Medicare HMO"       codeSystemName="Source of Payment Typology (PHDSC)"       codeSystem="2.16.840.1.113883.3.221.5" /&gt;       &lt;statusCode code="active" /&gt;     &lt;/act&gt;   &lt;/entryRelationship&gt; &lt;/act&gt; </pre>
--

### 3.41 Planned Immunization Activity

[substanceAdministration: identifier urn:oid:2.16.840.1.113883.10.20.22.4.120 (open) ]

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DSTU R2

**Table 201: Planned Immunization Activity Contexts**

Contained By:	Contains:
<a href="#">Immunizations Section</a> (optional)	<a href="#">Author Participation</a> <a href="#">Immunization Medication Information (V2)</a> <a href="#">Indication (V2)</a> <a href="#">Instruction (V2)</a> <a href="#">Precondition for Substance Administration (V2)</a> <a href="#">Priority Preference</a>

This template represents planned immunizations. Planned Immunization Activity is very similar to Planned Medication Activity with some key differences, for example, the drug code system is constrained to CVX codes.

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

**Table 202: Planned Immunization Activity Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
substanceAdministration (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.120)					
@classCode	1..1	SHALL		<a href="#">1098-32091</a>	SBADM
@moodCode	1..1	SHALL		<a href="#">1098-32097</a>	urn:oid:2.16.840.1.113883.11.20.9.24 (Planned moodCode (SubstanceAdministration/Supply))
templateId	1..1	SHALL		<a href="#">1098-32098</a>	
@root	1..1	SHALL		<a href="#">1098-32099</a>	2.16.840.1.113883.10.20.22.4.120
id	1..*	SHALL		<a href="#">1098-32100</a>	
statusCode	1..1	SHALL		<a href="#">1098-32101</a>	
@code	1..1	SHALL		<a href="#">1098-32102</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = active
effectiveTime	1..1	SHALL		<a href="#">1098-32103</a>	
repeatNumber	0..1	MAY		<a href="#">1098-32126</a>	
routeCode	0..1	MAY		<a href="#">1098-32127</a>	urn:oid:2.16.840.1.113883.3.88.1.2.3221.8.7 (Medication Route FDA)
approachSiteCode	0..*	MAY		<a href="#">1098-32128</a>	urn:oid:2.16.840.1.113883.3.88.1.2.3221.8.9 (Body Site)
doseQuantity	0..1	MAY		<a href="#">1098-32129</a>	
@unit	0..1	SHOULD		<a href="#">1098-32130</a>	urn:oid:2.16.840.1.113883.1.11.1.2839 (UnitsOfMeasureCaseSensitive)
consumable	1..1	SHALL		<a href="#">1098-32131</a>	
manufacturedProduct	1..1	SHALL		<a href="#">1098-32132</a>	<a href="#">Immunization Medication Information (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09)</a>
performer	0..*	MAY		<a href="#">1098-32104</a>	
author	0..*	MAY		<a href="#">1098-32105</a>	<a href="#">Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)</a>
entryRelationship	0..*	MAY		<a href="#">1098-32108</a>	
@typeCode	1..1	SHALL		<a href="#">1098-</a>	urn:oid:2.16.840.1.113883.5.100



				<a href="#">32109</a>	2 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">1098-32110</a>	<a href="#">Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143)</a>
entryRelationship	0..*	MAY		<a href="#">1098-32114</a>	
@typeCode	1..1	SHALL		<a href="#">1098-32115</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON
observation	1..1	SHALL		<a href="#">1098-32116</a>	<a href="#">Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09)</a>
entryRelationship	0..*	MAY		<a href="#">1098-32117</a>	
@typeCode	1..1	SHALL		<a href="#">1098-32118</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
act	1..1	SHALL		<a href="#">1098-32119</a>	<a href="#">Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09)</a>
precondition	0..*	MAY		<a href="#">1098-32123</a>	
@typeCode	1..1	SHALL		<a href="#">1098-32124</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = PRCN
criterion	1..1	SHALL		<a href="#">1098-32125</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" (CONF:1098-32091).
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** 2014-09-01 (CONF:1098-32097).
3. **SHALL** contain exactly one [1..1] templateId (CONF:1098-32098) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.120" (CONF:1098-32099).
4. **SHALL** contain at least one [1..\*] id (CONF:1098-32100).
5. **SHALL** contain exactly one [1..1] statusCode (CONF:1098-32101).
  - a. This statusCode **SHALL** contain exactly one [1..1] @code="active" Active (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-32102).

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

6. **SHALL** contain exactly one [1..1] effectiveTime (CONF:1098-32103).

In a Planned Immunization 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.

7. **MAY** contain zero or one [0..1] **repeatNumber** (CONF:1098-32126).
8. **MAY** contain zero or one [0..1] **routeCode**, which **SHALL** be selected from ValueSet [Medication Route FDA](#) urn:oid:2.16.840.1.113883.3.88.12.3221.8.7 **DYNAMIC** (CONF:1098-32127).
9. **MAY** contain zero or more [0..\*] **approachSiteCode**, which **SHALL** be selected from ValueSet [Body Site](#) urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 **DYNAMIC** (CONF:1098-32128).
10. **MAY** contain zero or one [0..1] **doseQuantity** (CONF:1098-32129).
  - a. The doseQuantity, if present, **SHOULD** contain zero or one [0..1] **@unit**, which **SHALL** be selected from ValueSet [UnitsOfMeasureCaseSensitive](#) urn:oid:2.16.840.1.113883.1.11.12839 **DYNAMIC** (CONF:1098-32130).
11. **SHALL** contain exactly one [1..1] **consumable** (CONF:1098-32131).
  - a. This consumable **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:1098-32132).

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

12. **MAY** contain zero or more [0..\*] **performer** (CONF:1098-32104).

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

13. **MAY** contain zero or more [0..\*] [Author Participation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-32105).

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

14. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-32108) 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:1098-32109).
  - b. **SHALL** contain exactly one [1..1] [Priority Preference](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:1098-32110).

The following entryRelationship represents the indication for the immunization activity.

15. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-32114) 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:1098-32115).
  - 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:1098-32116).

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

16. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-32117) 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:1098-32118).
  - 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:1098-32119).
17. **MAY** contain zero or more [0..\*] **precondition** (CONF:1098-32123) such that it
- SHALL** contain exactly one [1..1] **@typeCode="PRCN"** Precondition (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32124).
  - 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:1098-32125).

**Table 203: Planned moodCode (SubstanceAdministration/Supply)**

Value Set: Planned moodCode (SubstanceAdministration/Supply) urn:oid:2.16.840.1.113883.11.20.9.24 This value set is used to restrict the moodCode on a substance administration or a supply to future moods. Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
INT	ActMood	urn:oid:2.16.840.1.113883.5.1001	Intent
PRMS	ActMood	urn:oid:2.16.840.1.113883.5.1001	Promise
PRP	ActMood	urn:oid:2.16.840.1.113883.5.1001	Proposal
RQO	ActMood	urn:oid:2.16.840.1.113883.5.1001	Request

**Figure 97: Planned Immunization Activity**

```

<substanceAdministration classCode="SBADM" moodCode="INT">
  <!-- Planned Immunization Activity -->
  <templateId root="2.16.840.1.113883.10.20.22.4.120" />
  <id root="81505d5e-2305-42b3-9273-f579d622000d" />
  <statusCode code="active" />
  <effectiveTime xsi:type="IVL_TS" value="20131115" />
  <repeatNumber value="1" />
  <routeCode code="IM" codeSystem="2.16.840.1.113883.5.112"
codeSystemName="RouteOfAdministration" displayName="Intramuscular injection" />
  <consumable>
    <!-- Immunization Medication Information (V2) -->
  </consumable>
  <performer>
    ...
  </performer>
  <author>
    <!-- Author Participation -->
  </author>
  <entryRelationship typeCode="REFR">
    <!-- Patient Priority Preference -->
    ...
  </entryRelationship>
  <entryRelationship typeCode="REFR">
    <!-- Provider Priority Preference -->
    ...
  </entryRelationship>
  <entryRelationship typeCode="RSON">
    <!-- Indication (V2) -->
    ...
  </entryRelationship>
  <entryRelationship typeCode="SUBJ">
    <!-- Instruction (V2) -->
    ...
  </entryRelationship>
  <precondition typeCode="PRCN">
    <!-- Precondition for Substance Administration (V2) -->
    ...
  </precondition>
</substanceAdministration>

```

### 3.42 Planned Medication Activity (V2)

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

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**Table 204: Planned Medication Activity (V2) Contexts**

Contained By:	Contains:
<a href="#">Medications Section</a> (optional)	<a href="#">Author Participation</a> <a href="#">Indication (V2)</a> <a href="#">Instruction (V2)</a> <a href="#">Medication Information (V2)</a> <a href="#">Precondition for Substance Administration (V2)</a> <a href="#">Priority Preference</a>

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 205: Planned Medication Activity (V2) Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
substanceAdministration (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-8572</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = SBADM
@moodCode	1..1	SHALL		<a href="#">1098-8573</a>	urn:oid:2.16.840.1.113883.11.20.9.24 (Planned moodCode (SubstanceAdministration/Supply))
templateId	1..1	SHALL		<a href="#">1098-30465</a>	
@root	1..1	SHALL		<a href="#">1098-30466</a>	2.16.840.1.113883.10.20.22.4.42
@extension	1..1	SHALL		<a href="#">1098-32557</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-8575</a>	
statusCode	1..1	SHALL		<a href="#">1098-32087</a>	
@code	1..1	SHALL		<a href="#">1098-32088</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = active
effectiveTime	1..1	SHALL		<a href="#">1098-30468</a>	
repeatNumber	0..1	MAY		<a href="#">1098-32066</a>	
routeCode	0..1	MAY		<a href="#">1098-32067</a>	urn:oid:2.16.840.1.113883.3.88.1.2.3221.8.7 (Medication Route FDA)
approachSiteCode	0..*	MAY		<a href="#">1098-32078</a>	urn:oid:2.16.840.1.113883.3.88.1.2.3221.8.9 (Body Site)
doseQuantity	0..1	MAY		<a href="#">1098-32068</a>	
@unit	0..1	SHOULD		<a href="#">1098-32133</a>	urn:oid:2.16.840.1.113883.1.11.1.2839 (UnitsOfMeasureCaseSensitive)
rateQuantity	0..1	MAY		<a href="#">1098-32079</a>	
@unit	0..1	SHOULD		<a href="#">1098-32134</a>	urn:oid:2.16.840.1.113883.1.11.1.2839 (UnitsOfMeasureCaseSensitive)
maxDoseQuantity	0..1	MAY		<a href="#">1098-32080</a>	
administrationUnitCode	0..1	MAY		<a href="#">1098-32081</a>	urn:oid:2.16.840.1.113762.1.4.10.21.30 (AdministrationUnitDoseForm)
consumable	1..1	SHALL		<a href="#">1098-32082</a>	

manufacturedProduct	1..1	SHALL		<a href="#">1098-32083</a>	<a href="#">Medication Information (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2.0.22.4.23:2014-06-09)</a>
performer	0..*	MAY		<a href="#">1098-30470</a>	
author	0..1	SHOULD		<a href="#">1098-32046</a>	<a href="#">Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)</a>
entryRelationship	0..*	MAY		<a href="#">1098-31104</a>	
@typeCode	1..1	SHALL		<a href="#">1098-31105</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">1098-31106</a>	<a href="#">Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143)</a>
entryRelationship	0..*	MAY		<a href="#">1098-32069</a>	
@typeCode	1..1	SHALL		<a href="#">1098-32070</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON
observation	1..1	SHALL		<a href="#">1098-32071</a>	<a href="#">Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2.0.22.4.19:2014-06-09)</a>
entryRelationship	0..*	MAY		<a href="#">1098-32072</a>	
@typeCode	1..1	SHALL		<a href="#">1098-32073</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
act	1..1	SHALL		<a href="#">1098-32074</a>	<a href="#">Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2.0.22.4.20:2014-06-09)</a>
precondition	0..*	MAY		<a href="#">1098-32084</a>	
@typeCode	1..1	SHALL		<a href="#">1098-32085</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = PRCN
criterion	1..1	SHALL		<a href="#">1098-32086</a>	<a href="#">Precondition for Substance Administration (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2.0.22.4.25:2014-06-09)</a>

1. **SHALL** contain exactly one [1..1] @classCode="SBADM" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-8572).
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: ActStatus 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).

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.

7. **MAY** contain zero or one [0..1] `repeatNumber` (CONF:1098-32066).
8. **MAY** contain zero or one [0..1] `routeCode`, which **SHALL** be selected from ValueSet [Medication Route FDA](#) urn:oid:2.16.840.1.113883.3.88.12.3221.8.7 **DYNAMIC** (CONF:1098-32067).
9. **MAY** contain zero or more [0..\*] `approachSiteCode`, which **SHALL** be selected from ValueSet [Body Site](#) urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 **DYNAMIC** (CONF:1098-32078).
10. **MAY** contain zero or one [0..1] `doseQuantity` (CONF:1098-32068).
  - a. The `doseQuantity`, if present, **SHOULD** contain zero or one [0..1] `@unit`, which **SHALL** be selected from ValueSet [UnitsOfMeasureCaseSensitive](#) urn:oid:2.16.840.1.113883.1.11.12839 **DYNAMIC** (CONF:1098-32133).
11. **MAY** contain zero or one [0..1] `rateQuantity` (CONF:1098-32079).
  - a. The `rateQuantity`, if present, **SHOULD** contain zero or one [0..1] `@unit`, which **SHALL** be selected from ValueSet [UnitsOfMeasureCaseSensitive](#) urn:oid:2.16.840.1.113883.1.11.12839 **DYNAMIC** (CONF:1098-32134).
12. **MAY** contain zero or one [0..1] `maxDoseQuantity` (CONF:1098-32080).
13. **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).
14. **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`.

15. **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.



16. **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.

17. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-31104) 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:1098-31105).
  - 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.

18. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-32069) 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:1098-32070).
  - SHALL** contain exactly one [1..1] [Indication \(V2\)](#) (identifier: urn:h17ii: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.

19. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-32072) 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:1098-32073).
  - SHALL** contain exactly one [1..1] [Instruction \(V2\)](#) (identifier: urn:h17ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:1098-32074).
20. **MAY** contain zero or more [0..\*] **precondition** (CONF:1098-32084).
- 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).
  - The precondition, if present, **SHALL** contain exactly one [1..1] [Precondition for Substance Administration \(V2\)](#) (identifier: urn:h17ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09) (CONF:1098-32086).

**Figure 98: 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="cbbd33f0-6cde-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>

```

### 3.43 Planned Observation (V2)

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

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**Table 206: Planned Observation (V2) Contexts**

Contained By:	Contains:
	<a href="#">Author Participation</a> <a href="#">Indication (V2)</a> <a href="#">Instruction (V2)</a> <a href="#">Planned Coverage</a>

<b>Contained By:</b>	<b>Contains:</b>
	<a href="#">Priority Preference</a>

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 207: Planned Observation (V2) Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.44:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-8581</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1098-8582</a>	urn:oid:2.16.840.1.113883.11.20.9.25 (Planned moodCode (Observation))
templateId	1..1	SHALL		<a href="#">1098-30451</a>	
@root	1..1	SHALL		<a href="#">1098-30452</a>	2.16.840.1.113883.10.20.22.4.44
@extension	1..1	SHALL		<a href="#">1098-32555</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-8584</a>	
code	1..1	SHALL		<a href="#">1098-31030</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC)
statusCode	1..1	SHALL		<a href="#">1098-30453</a>	
@code	1..1	SHALL		<a href="#">1098-32032</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = active
effectiveTime	0..1	SHOULD		<a href="#">1098-30454</a>	
value	0..1	MAY		<a href="#">1098-31031</a>	
methodCode	0..1	MAY		<a href="#">1098-32043</a>	
targetSiteCode	0..*	SHOULD		<a href="#">1098-32044</a>	urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 (Body Site)
performer	0..*	MAY		<a href="#">1098-30456</a>	
author	0..*	SHOULD		<a href="#">1098-32033</a>	<a href="#">Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)</a>
entryRelationship	0..*	MAY		<a href="#">1098-31073</a>	
@typeCode	1..1	SHALL		<a href="#">1098-31074</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">1098-31075</a>	<a href="#">Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143)</a>
entryRelationship	0..*	MAY		<a href="#">1098-32034</a>	
@typeCode	1..1	SHALL		<a href="#">1098-</a>	urn:oid:2.16.840.1.113883.5.100

				<a href="#">32035</a>	2 (HL7ActRelationshipType) = RSON
observation	1..1	SHALL		<a href="#">1098-32036</a>	<a href="#">Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09)</a>
entryRelationship	0..*	MAY		<a href="#">1098-32037</a>	
@typeCode	1..1	SHALL		<a href="#">1098-32038</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
act	1..1	SHALL		<a href="#">1098-32039</a>	<a href="#">Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09)</a>
entryRelationship	0..*	MAY		<a href="#">1098-32040</a>	
@typeCode	1..1	SHALL		<a href="#">1098-32041</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
act	1..1	SHALL		<a href="#">1098-32042</a>	<a href="#">Planned Coverage (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.129)</a>

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: ActStatus 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](#) 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 208: 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: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
INT	ActMood	urn:oid:2.16.840.1.113883.5.1001	Intent
PRMS	ActMood	urn:oid:2.16.840.1.113883.5.1001	Promise
PRP	ActMood	urn:oid:2.16.840.1.113883.5.1001	Proposal
RQO	ActMood	urn:oid:2.16.840.1.113883.5.1001	Request

**Figure 99: 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="71850-2"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC"
    displayName="Oxygen saturation [Pure mass fraction] in Capillary blood by
      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>

```

### 3.43.1 Ordered Service Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.34.3.2 (open)]

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**Table 209: Ordered Service Observation Contexts**

Contained By:	Contains:
<a href="#">Services and Procedures Section</a> (optional)	

This template represents service observations ordered, but not yet provided. Examples of service observations include examinations, blood tests, and imaging. To represent the ordered service observation, the moodCode value is constrained to "RQO".



**Table 210: Ordered Service Observation Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.2)					
@classCode	1..1	SHALL		<a href="#">1106-381</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1106-382</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = RQO
templateId	1..1	SHALL		<a href="#">1106-383</a>	
@root	1..1	SHALL		<a href="#">1106-384</a>	2.16.840.1.113883.10.20.34.3.2
code	1..1	SHALL		<a href="#">1106-385</a>	
@code	0..1	SHOULD		<a href="#">1106-386</a>	
translation	0..*	MAY		<a href="#">1106-387</a>	
@code	1..1	SHALL		<a href="#">1106-388</a>	

1. Conforms to [Planned Observation \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.44:2014-06-09).
2. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1106-381).
3. **SHALL** contain exactly one [1..1] **@moodCode**="RQO" Request (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1106-382).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-383) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.2" (CONF:1106-384).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1106-385).
  - a. This code **SHOULD** contain zero or one [0..1] **@code** (CONF:1106-386).  
Note: Inclusion of both SNOMED CT/LOINC and a local code is permitted. When both codes are available, include the local code within the translation element. When only a local code is available, include the local code within the translation element and use **@nullFlavor**="OTH" in the code element.
    - i. This **@code** **SHOULD** be selected from LOINC (CodeSystem: 2.16.840.1.113883.6.1) or SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) (CONF:1106-769).
  - b. This code **MAY** contain zero or more [0..\*] **translation** (CONF:1106-387).
    - i. The translation, if present, **SHALL** contain exactly one [1..1] **@code** (CONF:1106-388).

**Figure 100: Ordered Service Observation Example**

```

<observation classCode="OBS" moodCode="RQO">
  <!-- C-CDA R2 Planned Observation (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.4.44" extension="2014-06-09" />
  <!-- Ordered Service Observation -->
  <templateId root="2.16.840.1.113883.10.20.34.3.2" />
  <id root="60b4ec95-1faa-49f4-a59e-02ccdcfb33f1" />
  <code code="473381003"
    displayName="Transthoracic echocardiography for congenital heart disease"
    codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT">
    <translation code="93303"
      displayName="COMPLETE TTHRC ECHO CONGENITAL CARDIAC ANOMALY"
      codeSystemName="CPT-4" codeSystem="2.16.840.1.113883.6.12" />
    </code>
  <statusCode code="active" />
</observation>

```

### 3.44 Planned Procedure (V2)

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

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DSTU R2

**Table 211: Planned Procedure (V2) Contexts**

Contained By:	Contains:
	<a href="#">Author Participation</a> <a href="#">Indication (V2)</a> <a href="#">Instruction (V2)</a> <a href="#">Planned Coverage</a> <a href="#">Priority Preference</a>

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 when the procedure is intended to take place and authorTime indicates when the documentation of the plan occurred. The Planned Procedure Template may also indicate the potential insurance coverage for the procedure.

**Table 212: Planned Procedure (V2) Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
procedure (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-8568</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = PROC
@moodCode	1..1	SHALL		<a href="#">1098-8569</a>	urn:oid:2.16.840.1.113883.11.20.9.23 (Planned moodCode (Act/Encounter/Procedure))
templateId	1..1	SHALL		<a href="#">1098-30444</a>	
@root	1..1	SHALL		<a href="#">1098-30445</a>	2.16.840.1.113883.10.20.22.4.41
@extension	1..1	SHALL		<a href="#">1098-32554</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-8571</a>	
code	1..1	SHALL		<a href="#">1098-31976</a>	
statusCode	1..1	SHALL		<a href="#">1098-30446</a>	
@code	1..1	SHALL		<a href="#">1098-31978</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = active
effectiveTime	0..1	SHOULD		<a href="#">1098-30447</a>	
methodCode	0..*	MAY		<a href="#">1098-31980</a>	
targetSiteCode	0..*	MAY		<a href="#">1098-31981</a>	urn:oid:2.16.840.1.113883.3.88.1.2.3221.8.9 (Body Site)
performer	0..*	MAY		<a href="#">1098-30449</a>	
author	0..1	SHOULD		<a href="#">1098-31979</a>	<a href="#">Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)</a>
entryRelationship	0..*	MAY		<a href="#">1098-31079</a>	
@typeCode	1..1	SHALL		<a href="#">1098-31080</a>	urn:oid:2.16.840.1.113883.5.100.2 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">1098-31081</a>	<a href="#">Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143)</a>
entryRelationship	0..*	MAY		<a href="#">1098-31982</a>	
@typeCode	1..1	SHALL		<a href="#">1098-31983</a>	urn:oid:2.16.840.1.113883.5.100.2 (HL7ActRelationshipType) = RSON

observation	1..1	SHALL		<a href="#">1098-31984</a>	<a href="#">Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2.0.22.4.19:2014-06-09)</a>
entryRelationship	0..*	MAY		<a href="#">1098-31985</a>	
@typeCode	1..1	SHALL		<a href="#">1098-31986</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
@inversionInd	1..1	SHALL		<a href="#">1098-31987</a>	true
act	1..1	SHALL		<a href="#">1098-31989</a>	<a href="#">Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2.0.22.4.20:2014-06-09)</a>
entryRelationship	0..*	MAY		<a href="#">1098-31990</a>	
@typeCode	1..1	SHALL		<a href="#">1098-31991</a>	COMP
act	1..1	SHALL		<a href="#">1098-31992</a>	<a href="#">Planned Coverage (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.129)</a>

1. **SHALL** contain exactly one [1..1] @classCode="PROC" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-8568).
2. **SHALL** contain exactly one [1..1] @moodCode, which **SHALL** be selected from ValueSet [Planned moodCode \(Act/Encounter/Procedure\)](#) urn:oid:2.16.840.1.113883.11.20.9.23 **STATIC** 2011-09-30 (CONF:1098-8569).
3. **SHALL** contain exactly one [1..1] templateId (CONF:1098-30444) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.41" (CONF:1098-30445).
  - b. **SHALL** contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32554).
4. **SHALL** contain at least one [1..\*] id (CONF:1098-8571).
5. **SHALL** contain exactly one [1..1] code (CONF:1098-31976).
  - a. The procedure/code in a planned procedure **SHOULD** be selected from LOINC (codeSystem 2.16.840.1.113883.6.1) **OR** SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96), and **MAY** be selected from CPT-4 (CodeSystem: 2.16.840.1.113883.6.12) **OR** ICD10 PCS (CodeSystem: 2.16.840.1.113883.6.4) (CONF:1098-31977).
6. **SHALL** contain exactly one [1..1] statusCode (CONF:1098-30446).
  - a. This statusCode **SHALL** contain exactly one [1..1] @code="active" Active (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-31978).

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

7. **SHOULD** contain zero or one [0..1] effectiveTime (CONF:1098-30447).

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

MethodCode **SHALL NOT** conflict with the method inherent in Procedure / code.

8. **MAY** contain zero or more [0..\*] **methodCode** (CONF:1098-31980).

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

9. **MAY** contain zero or more [0..\*] **targetSiteCode**, which **SHALL** be selected from ValueSet [Body Site](#) urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 **DYNAMIC** (CONF:1098-31981).

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

10. **MAY** contain zero or more [0..\*] **performer** (CONF:1098-30449).

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

11. **SHOULD** contain zero or one [0..1] [Author Participation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31979).

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

12. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-31079) 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:1098-31080).
- SHALL** contain exactly one [1..1] [Priority Preference](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:1098-31081).

The following entryRelationship represents the indication for the procedure.

13. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-31982) 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:1098-31983).
- 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:1098-31984).

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

14. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-31985) 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:1098-31986).
- SHALL** contain exactly one [1..1] **@inversionInd="true"** True (CONF:1098-31987).
- 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:1098-31989).

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

15. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-31990) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="COMP"** Has component (CONF:1098-31991).
  - b. **SHALL** contain exactly one [1..1] **Planned Coverage** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.129) (CONF:1098-31992).

**Figure 101: Planned Procedure (V2) Example**

```

<entry>
  <procedure moodCode="RQO" classCode="PROC">
    <templateId root="2.16.840.1.113883.10.20.22.4.41" extension="2014-06-09" />
    <!-- **Planned Procedure (V2) template ** -->
    <id root="9a6d1bac-17d3-4195-89c4-1121bc809b5a" />
    <code code="73761001" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED
CT" displayName="Colonoscopy" />
    <statusCode code="active" />
    <effectiveTime value="20130613" />
    <!-- Author Participation -->
    <author typeCode="AUT">
      ...
    </author>
    <entryRelationship typeCode="REFR">
      <observation classCode="OBS" moodCode="EVN">
        <!-- Patient Priority Preference-->
        <templateId root="2.16.840.1.113883.10.20.22.4.142" />
        ...
      </observation>
    </entryRelationship>
    <entryRelationship typeCode="REFR">
      <observation classCode="OBS" moodCode="EVN">
        <!-- Provider Priority Preference-->
        <templateId root="2.16.840.1.113883.10.20.22.4.143" />
        ...
      </observation>
    </entryRelationship>
    <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"
/>
        ...
      </observation>
    </entryRelationship>
    <entryRelationship typeCode="SUBJ">
      <act classCode="ACT" moodCode="INT">
        <!-- Instruction-->
        <templateId root="2.16.840.1.113883.10.20.22.4.20" extension="2014-06-09"
/>
        ...
      </act>
    </entryRelationship>
    <entryRelationship typeCode="COMP">
      <observation classCode="ACT" moodCode="INT">
        <!-- Planned Coverage -->
        <templateId root="2.16.840.1.113883.10.20.22.4.129" />
        ...
      </observation>
    </entryRelationship>
  </procedure>
</entry>

```

### 3.44.1 Ordered Service Procedure

[procedure: identifier urn:oid:2.16.840.1.113883.10.20.34.3.11 (open)]

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**Table 213: Ordered Service Procedure Contexts**

Contained By:	Contains:
<a href="#">Services and Procedures Section</a> (optional)	

This template represents procedure services ordered, but not yet provided. Examples of procedure services include excisions of tissue. To represent the ordered procedure service, the moodCode value is constrained to "RQO".

**Table 214: Ordered Service Procedure Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
procedure (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.11)					
@classCode	1..1	SHALL		<a href="#">1106-138</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = PROC
@moodCode	1..1	SHALL		<a href="#">1106-139</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = RQO
templateId	1..1	SHALL		<a href="#">1106-140</a>	
@root	1..1	SHALL		<a href="#">1106-141</a>	2.16.840.1.113883.10.20.34.3.11
code	1..1	SHALL		<a href="#">1106-142</a>	
@code	0..1	SHOULD	CS	<a href="#">1106-143</a>	
translation	0..*	MAY		<a href="#">1106-379</a>	
@code	1..1	SHALL		<a href="#">1106-380</a>	

1. Conforms to [Planned Procedure \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2014-06-09).
2. **SHALL** contain exactly one [1..1] **@classCode**="PROC" Procedure (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1106-138).
3. **SHALL** contain exactly one [1..1] **@moodCode**="RQO" Request (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1106-139).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-140) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.11" (CONF:1106-141).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1106-142).



- a. This code **SHOULD** contain zero or one [0..1] **@code** (CONF:1106-143).  
 Note: Inclusion of both SNOMED CT/LOINC and a local code is permitted. When both codes are available, include the local code within the translation element. When only a local code is available, include the local code within the translation element and use **@nullFlavor="OTH"** in the code element.
  - i. This **@code** **SHOULD** be selected from LOINC (CodeSystem: 2.16.840.1.113883.6.1) or SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) (CONF:1106-768).
- b. This code **MAY** contain zero or more [0..\*] **translation** (CONF:1106-379).
  - i. The translation, if present, **SHALL** contain exactly one [1..1] **@code** (CONF:1106-380).

**Figure 102: Ordered Service Procedure Example**

```

<procedure classCode="PROC" moodCode="RQO">
  <!-- Conforms to C-CDA Planned Procedure (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.4.41" extension="2014-06-09" />
  <!-- Ordered Service Procedure -->
  <templateId root="2.16.840.1.113883.10.20.34.3.11" />
  <id root="93078631-5703-4c18-b4aa-f14042ca6e36" />
  <code code="112703008" displayName="Superficial biopsy of muscle"
    codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT">
    <translation code="20200" displayName="BIOPSY MUSCLE SUPERFICIAL"
      codeSystemName="CPT-4" codeSystem="2.16.840.1.113883.6.12" />
  </code>
  <statusCode code="active" />
</procedure>

```

### 3.45 Point of Origin Observation

[observation: identifier urn:h17ii:2.16.840.1.113883.10.20.34.3.36:2015-04-01 (open)]

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**Table 215: Point of Origin Observation Contexts**

Contained By:	Contains:
<a href="#">Current Inpatient Visit</a> (optional) <a href="#">Current Emergency Department Visit (V2)</a> (optional)	

This template represents the patient's point of origin before arrival for this visit.

**Table 216: Point of Origin Observation Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.36:2015-04-01)					
@classCode	1..1	SHALL		<a href="#">1184-614</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1184-615</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1184-609</a>	
@root	1..1	SHALL		<a href="#">1184-611</a>	2.16.840.1.113883.10.20.34.3.36
@extension	1..1	SHALL		<a href="#">1184-894</a>	2015-04-01
id	1..*	SHALL		<a href="#">1184-682</a>	
code	1..1	SHALL		<a href="#">1184-610</a>	
@code	1..1	SHALL		<a href="#">1184-612</a>	78029-6
@codeSystem	1..1	SHALL		<a href="#">1184-613</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
statusCode	1..1	SHALL		<a href="#">1184-683</a>	
@code	1..1	SHALL		<a href="#">1184-684</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	CD	<a href="#">1184-616</a>	urn:oid:2.16.840.1.114222.4.11.7359 (Point of Origin (NCHS))
@nullFlavor	0..1	MAY		<a href="#">1184-892</a>	urn:oid:2.16.840.1.113883.10.20.5.9.1 (NullValues_UNK_OTH)

1. **SHALL** contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1184-614).
2. **SHALL** contain exactly one [1..1] @moodCode="EVN" (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1184-615).
3. **SHALL** contain exactly one [1..1] templateId (CONF:1184-609) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.34.3.36" (CONF:1184-611).
  - b. **SHALL** contain exactly one [1..1] @extension="2015-04-01" (CONF:1184-894).
4. **SHALL** contain at least one [1..\*] id (CONF:1184-682).
5. **SHALL** contain exactly one [1..1] code (CONF:1184-610).
  - a. This code **SHALL** contain exactly one [1..1] @code="78029-6" Point of Origin (CONF:1184-612).

- b. This code **SHALL** contain exactly one [1..1] `@codeSystem="2.16.840.1.113883.6.1"` (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1184-613).
6. **SHALL** contain exactly one [1..1] `statusCode` (CONF:1184-683).
- a. This `statusCode` **SHALL** contain exactly one [1..1] `@code="completed"` Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1184-684).
7. **SHALL** contain exactly one [1..1] `value` with `@xsi:type="CD"`, where the code **SHALL** be selected from ValueSet [Point of Origin \(NCHS\)](#) urn:oid:2.16.840.1.114222.4.11.7359 **DYNAMIC** (CONF:1184-616).
- a. This value **MAY** contain zero or one [0..1] `@nullFlavor`, which **SHALL** be selected from ValueSet [NullValues UNK OTH](#) urn:oid:2.16.840.1.113883.10.20.5.9.1 **STATIC** 2015-04-01 (CONF:1184-892).

**Table 217: Point of Origin (NCHS)**

Value Set: Point of Origin (NCHS) urn:oid:2.16.840.1.114222.4.11.7359 Where the patient came from immediately before arriving at the healthcare facility. Value Set Source: <a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7359">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7359</a>			
Code	Code System	Code System OID	Print Name
4563007	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Transfer from a different hospital
448441000124103	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Transfer from Intermediate Care Facility
448421000124105	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Transfer from physician's office, NOS
1971000124109	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Transfer from a Hospice Facility
107724000	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Patient transfer from one unit to another
448431000124108	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Transfer from Assisted Living Facility
25986004	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Transfer from jail or court
285202004	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Non-Healthcare facility point of origin NOS
442311008	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Newborn born inside this hospital
445585003	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Newborn born outside this hospital
...			

**Figure 103: Point of Origin Observation Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- Point of Origin Observation -->
  <templateId root="2.16.840.1.113883.10.20.34.3.36"
    extension="2015-04-01" />
  <id root="cd691b5e-2464-4fb4-936d-0d9d67ebb8fd" />
  <code code="78029-6"
    displayName="Point of Origin"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC" />
  <statusCode code="completed" />
  <value xsi:type="CD" code="999999"
    displayName="Point of origin"
    codeSystem="2.16.840.1.113883.6.96"
    codeSystemName="SNOMED CT" />
</observation>

```

### 3.46 Policy Activity (V2)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.61:2014-06-09 (open)]

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DSTU R2

**Table 218: Policy Activity (V2) Contexts**

Contained By:	Contains:
<a href="#">Coverage Activity (V2)</a> (required)	<a href="#">US Realm Address (AD.US.FIELDDED)</a>

A policy activity represents the policy or program providing the coverage. The person for whom payment is being provided (i.e., the patient) is the covered party. The subscriber of the policy or program is represented as a participant that is the holder of the coverage. The payer is represented as the performer of the policy activity.

**Table 219: Policy Activity (V2) Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.61:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-8898</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT
@moodCode	1..1	SHALL		<a href="#">1098-8899</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-8900</a>	
@root	1..1	SHALL		<a href="#">1098-10516</a>	2.16.840.1.113883.10.20.22.4.61
@extension	1..1	SHALL		<a href="#">1098-32595</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-8901</a>	
code	1..1	SHALL		<a href="#">1098-8903</a>	urn:oid:2.16.840.1.114222.4.11.3591 (Payer)
statusCode	1..1	SHALL		<a href="#">1098-8902</a>	
@code	1..1	SHALL		<a href="#">1098-19109</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
performer	1..1	SHALL		<a href="#">1098-8906</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8907</a>	urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = PRF
templateId	1..1	SHALL		<a href="#">1098-16808</a>	
@root	1..1	SHALL		<a href="#">1098-16809</a>	2.16.840.1.113883.10.20.22.4.87
assignedEntity	1..1	SHALL		<a href="#">1098-8908</a>	
id	1..*	SHALL		<a href="#">1098-8909</a>	
code	0..1	SHOULD		<a href="#">1098-8914</a>	
@code	1..1	SHALL		<a href="#">1098-15992</a>	urn:oid:2.16.840.1.113883.1.11.10416 (HL7FinanciallyResponsiblePartyType)
addr	0..1	MAY		<a href="#">1098-8910</a>	<a href="#">US Realm Address (AD.US.FIELDDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2)</a>
telecom	0..*	MAY		<a href="#">1098-8911</a>	
representedOrganization	0..1	SHOULD		<a href="#">1098-</a>	

		D		<a href="#">8912</a>	
name	0..1	SHOULD		<a href="#">1098-8913</a>	
performer	0..1	SHOULD		<a href="#">1098-8961</a>	urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = PRF
templateId	1..1	SHALL		<a href="#">1098-16810</a>	
@root	1..1	SHALL		<a href="#">1098-16811</a>	2.16.840.1.113883.10.20.22.4.88
time	0..1	SHOULD		<a href="#">1098-8963</a>	
assignedEntity	1..1	SHALL		<a href="#">1098-8962</a>	
code	1..1	SHALL		<a href="#">1098-8968</a>	
@code	1..1	SHALL		<a href="#">1098-16096</a>	GUAR
@codeSystem	1..1	SHALL		<a href="#">1098-32165</a>	2.16.840.1.113883.5.110
addr	0..1	SHOULD		<a href="#">1098-8964</a>	<a href="#">US Realm Address (AD.US.FIELDDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2)</a>
telecom	0..*	SHOULD		<a href="#">1098-8965</a>	
participant	1..1	SHALL		<a href="#">1098-8916</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8917</a>	urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = COV
templateId	1..1	SHALL		<a href="#">1098-16812</a>	
@root	1..1	SHALL		<a href="#">1098-16814</a>	2.16.840.1.113883.10.20.22.4.89
time	0..1	SHOULD		<a href="#">1098-8918</a>	
low	0..1	SHOULD		<a href="#">1098-8919</a>	
high	0..1	SHOULD		<a href="#">1098-8920</a>	
participantRole	1..1	SHALL		<a href="#">1098-8921</a>	
id	1..*	SHALL		<a href="#">1098-8922</a>	
code	1..1	SHALL		<a href="#">1098-8923</a>	
@code	0..1	SHOULD		<a href="#">1098-16078</a>	urn:oid:2.16.840.1.113883.1.11.18877 (Coverage Role Type)

addr	0..1	SHOULD		<a href="#">1098-8956</a>	
playingEntity	0..1	SHOULD		<a href="#">1098-8932</a>	
name	1..*	SHALL		<a href="#">1098-8930</a>	
sdtc:birthTime	1..1	SHALL		<a href="#">1098-31344</a>	
participant	0..1	SHOULD		<a href="#">1098-8934</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8935</a>	urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = HLD
templateId	1..1	SHALL		<a href="#">1098-16813</a>	
@root	1..1	SHALL		<a href="#">1098-16815</a>	2.16.840.1.113883.10.20.22.4.90
time	0..1	MAY		<a href="#">1098-8938</a>	
participantRole	1..1	SHALL		<a href="#">1098-8936</a>	
id	1..*	SHALL		<a href="#">1098-8937</a>	
addr	0..1	SHOULD		<a href="#">1098-8925</a>	
entryRelationship	1..*	SHALL		<a href="#">1098-8939</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8940</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR

1. **SHALL** contain exactly one [1..1] **@classCode="ACT"** Act (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-8898).
2. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-8899).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-8900) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.22.4.61"** (CONF:1098-10516).
  - b. **SHALL** contain exactly one [1..1] **@extension="2014-06-09"** (CONF:1098-32595).

This id is a unique identifier for the policy or program providing the coverage

4. **SHALL** contain at least one [1..\*] **id** (CONF:1098-8901).
5. **SHALL** contain exactly one [1..1] **code**, which **SHOULD** be selected from ValueSet [Payer](#) urn:oid:2.16.840.1.114222.4.11.3591 **DYNAMIC** (CONF:1098-8903).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-8902).

- a. This statusCode **SHALL** contain exactly one [1..1] @code="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098-19109).

This performer represents the Payer.

- 7. **SHALL** contain exactly one [1..1] performer (CONF:1098-8906) such that it
  - a. **SHALL** contain exactly one [1..1] @typeCode="PRF" Performer (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 **STATIC**) (CONF:1098-8907).
  - b. **SHALL** contain exactly one [1..1] templateId (CONF:1098-16808).
    - i. This templateId **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.87" Payer Performer (CONF:1098-16809).
  - c. **SHALL** contain exactly one [1..1] assignedEntity (CONF:1098-8908).
    - i. This assignedEntity **SHALL** contain at least one [1..\*] id (CONF:1098-8909).
    - ii. This assignedEntity **SHOULD** contain zero or one [0..1] code (CONF:1098-8914).
      - 1. The code, if present, **SHALL** contain exactly one [1..1] @code, which **SHOULD** be selected from ValueSet [HL7FinanciallyResponsiblePartyType](#) urn:oid:2.16.840.1.113883.1.11.10416 **DYNAMIC** (CONF:1098-15992).
    - iii. This assignedEntity **MAY** 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:1098-8910).
    - iv. This assignedEntity **MAY** contain zero or more [0..\*] telecom (CONF:1098-8911).
    - v. This assignedEntity **SHOULD** contain zero or one [0..1] representedOrganization (CONF:1098-8912).
      - 1. The representedOrganization, if present, **SHOULD** contain zero or one [0..1] name (CONF:1098-8913).

This performer represents the Guarantor.

- 8. **SHOULD** contain zero or one [0..1] performer="PRF" Performer (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 **STATIC**) (CONF:1098-8961) such that it
  - a. **SHALL** contain exactly one [1..1] templateId (CONF:1098-16810).
    - i. This templateId **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.88" Guarantor Performer (CONF:1098-16811).
  - b. **SHOULD** contain zero or one [0..1] time (CONF:1098-8963).
  - c. **SHALL** contain exactly one [1..1] assignedEntity (CONF:1098-8962).
    - i. This assignedEntity **SHALL** contain exactly one [1..1] code (CONF:1098-8968).
      - 1. This code **SHALL** contain exactly one [1..1] @code="GUAR" Guarantor (CONF:1098-16096).



2. This code **SHALL** contain exactly one [1..1]
    - @codeSystem="2.16.840.1.113883.5.110" (CONF:1098-32165).
  - ii. 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:1098-8964).
  - iii. This assignedEntity **SHOULD** contain zero or more [0..\*] **telecom** (CONF:1098-8965).
  - iv. **SHOULD** include assignedEntity/assignedPerson/name AND/OR assignedEntity/representedOrganization/name (CONF:1098-8967).
9. **SHALL** contain exactly one [1..1] **participant** (CONF:1098-8916) such that it
- a. **SHALL** contain exactly one [1..1] @typeCode="COV" Coverage target (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 **STATIC**) (CONF:1098-8917).
  - b. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-16812).
    - i. This templateId **SHALL** contain exactly one [1..1]
      - @root="2.16.840.1.113883.10.20.22.4.89" Covered Party Participant (CONF:1098-16814).
  - c. **SHOULD** contain zero or one [0..1] **time** (CONF:1098-8918).
    - i. The time, if present, **SHOULD** contain zero or one [0..1] **low** (CONF:1098-8919).
    - ii. The time, if present, **SHOULD** contain zero or one [0..1] **high** (CONF:1098-8920).
  - d. **SHALL** contain exactly one [1..1] **participantRole** (CONF:1098-8921).
    - i. This participantRole **SHALL** contain at least one [1..\*] **id** (CONF:1098-8922).
      1. This id is a unique identifier for the covered party member. Implementers **SHOULD** use the same GUID for each instance of a member identifier from the same health plan (CONF:1098-8984).
    - ii. This participantRole **SHALL** contain exactly one [1..1] **code** (CONF:1098-8923).
      1. This code **SHOULD** contain zero or one [0..1] @code, which **SHOULD** be selected from ValueSet Coverage Role Type urn:oid:2.16.840.1.113883.1.11.18877 **DYNAMIC** (CONF:1098-16078).
    - iii. This participantRole **SHOULD** contain zero or one [0..1] **addr** (CONF:1098-8956).
      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:1098-10484).
    - iv. This participantRole **SHOULD** contain zero or one [0..1] **playingEntity** (CONF:1098-8932).

If the covered party's name is recorded differently in the health plan and in the registration/pharmacy benefit summary (due to marriage or for other reasons), use the name as it is recorded in the health plan.

1. The playingEntity, if present, **SHALL** contain at least one [1..\*] **name** (CONF:1098-8930).

If the covered party's date of birth is recorded differently in the health plan and in the registration/pharmacy benefit summary, use the date of birth as it is recorded in the health plan.

2. The playingEntity, if present, **SHALL** contain exactly one [1..1] **sdtc:birthTime** (CONF:1098-31344).
  - a. The prefix sdtc: **SHALL** be bound to the namespace "urn:hl7-org:sdtc". The use of the namespace provides a necessary extension to CDA R2 for the use of the birthTime element (CONF:1098-31345).

When the Subscriber is the patient, the participant element describing the subscriber **SHALL NOT** be present. This information will be recorded instead in the data elements used to record member information.

10. **SHOULD** contain zero or one [0..1] **participant** (CONF:1098-8934) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="HLD"** Holder (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 **STATIC**) (CONF:1098-8935).
  - b. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-16813).
    - i. This templateId **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.22.4.90"** Policy Holder Participant (CONF:1098-16815).
  - c. **MAY** contain zero or one [0..1] **time** (CONF:1098-8938).
  - d. **SHALL** contain exactly one [1..1] **participantRole** (CONF:1098-8936).
    - i. This participantRole **SHALL** contain at least one [1..\*] **id** (CONF:1098-8937).
      1. This id is a unique identifier for the subscriber of the coverage (CONF:1098-10120).
    - ii. This participantRole **SHOULD** contain zero or one [0..1] **addr** (CONF:1098-8925).
      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:1098-10483).
  - e. When the Subscriber is the patient, the participant element describing the subscriber **SHALL NOT** be present. This information will be recorded instead in the data elements used to record member information (CONF:1098-17139).
11. **SHALL** contain at least one [1..\*] **entryRelationship** (CONF:1098-8939) 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 **STATIC**) (CONF:1098-8940).
  - b. The target of a policy activity with act/entryRelationship/@typeCode="REFR" **SHALL** be an authorization activity (templateId 2.16.840.1.113883.10.20.1.19) **OR** an act, with act@classCode="ACT"] and act[@moodCode="DEF"], representing a description of the coverage plan (CONF:1098-8942).

- c. A description of the coverage plan **SHALL** contain one or more act/id, to represent the plan identifier, and an act/text with the name of the plan (CONF:1098-8943).

**Table 220: HL7FinanciallyResponsiblePartyType**

Value Set: HL7FinanciallyResponsiblePartyType urn:oid:2.16.840.1.113883.1.11.10416 RoleClass 2.16.840.1.113883.5.110 http://www.hl7.org/memonly/downloads/v3edition.cfm#V32008 Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
GUAR	RoleClass	urn:oid:2.16.840.1.113883.5.110	Guarantor
EMP	RoleClass	urn:oid:2.16.840.1.113883.5.110	Employee
INVSBJ	RoleClass	urn:oid:2.16.840.1.113883.5.110	Investigation Subject

**Table 221: Coverage Role Type**

Value Set: Coverage Role Type urn:oid:2.16.840.1.113883.1.11.18877 A value set of HL7 role Codes for role recognized through the issuance of insurance coverage to an identified covered party who has this relationship with the policy holder such as the policy holder themselves (self), spouse, child, etc. Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
FAMDEP	RoleCode	urn:oid:2.16.840.1.113883.5.111	Family dependent
FSTUD	RoleCode	urn:oid:2.16.840.1.113883.5.111	Full-time student
SELF	RoleCode	urn:oid:2.16.840.1.113883.5.111	Self
...			

**Figure 104: Policy Activity (V2) Example**

```

<act classCode="ACT" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.61" extension="2014-06-09" />
  <id root="3e676a50-7aac-11db-9fe1-0800200c9a66" />
  <code code="81" displayName="self-pay"
        codeSystemName="Source of Payment Typology (PHDSC)"
        codeSystem="2.16.840.1.113883.3.221.5" />
  <statusCode code="completed" />
  <!-- Insurance company information -->
  <performer typeCode="PRF">
    <templateId root="2.16.840.1.113883.10.20.22.4.87" />
    <time>
      <low nullFlavor="UNK" />
      <high nullFlavor="UNK" />
    </time>
    <assignedEntity>
      <id root="2.16.840.1.113883.19" />
      <code code="PAYOR" codeSystem="2.16.840.1.113883.5.110" codeSystemName="HL7
RoleCode" />
      <addr use="WP">
        <streetAddressLine>123 Insurance Road</streetAddressLine>
        <city>Blue Bell</city>
        <state>MA</state>
        <postalCode>02368</postalCode>
        <country>US</country>
        <!-- US is "United States" from ISO 3166-1 Country Codes: 1.0.3166.1 -->
      </addr>
      <telecom value="tel:+(555)555-1515" use="WP" />
      <representedOrganization>
        <name>Good Health Insurance</name>
        <telecom value="tel:+(555)555-1515" use="WP" />
        <addr use="WP">
          <streetAddressLine>123 Insurance Road</streetAddressLine>
          <city>Blue Bell</city>
          <state>MA</state>
          <postalCode>02368</postalCode>
          <country>US</country>
        </addr>
      </representedOrganization>
    </assignedEntity>
  </performer>
  <!-- Guarantor information (the person responsible for the final bill) -->
  <performer typeCode="PRF">
    <templateId root="2.16.840.1.113883.10.20.22.4.88" />
    <time>
      <low nullFlavor="UNK" />
      <high nullFlavor="UNK" />
    </time>
    <assignedEntity>
      <id root="329fcd0-7ab3-11db-9fe1-0800200c9a66" />
      <code code="GUAR" codeSystem="2.16.840.1.113883.5.111" codeSystemName="HL7
RoleCode" />
      <addr use="HP">
        <streetAddressLine>17 Daws Rd.</streetAddressLine>
        <city>Blue Bell</city>
        <state>MA</state>

```

```

        <postalCode>02368</postalCode>
        <country>US</country>
    </addr>
    <telecom value="tel:+(781)555-1212" use="HP" />
    <assignedPerson>
        <name>
            <prefix>Mr.</prefix>
            <given>Adam</given>
            <given>Frankie</given>
            <family>Everyman</family>
        </name>
    </assignedPerson>
</assignedEntity>
</performer>
<!-- Covered party -->
<participant typeCode="COV">
    <templateId root="2.16.840.1.113883.10.20.22.4.89.2" />
    <time>
        <low nullFlavor="UNK" />
        <high nullFlavor="UNK" />
    </time>
    <participantRole classCode="PAT">
        <!-- Health plan ID for patient. -->
        <id root="1.1.1.1.1.1.1.14" extension="1138345" />
        <code code="SELF" codeSystem="2.16.840.1.113883.5.111" />
        <addr use="HP">
            <streetAddressLine>17 Daws Rd.</streetAddressLine>
            <city>Blue Bell</city>
            <state>MA</state>
            <postalCode>02368</postalCode>
            <country>US</country>
        </addr>
        <playingEntity>
            <name>
                <!-- Name is needed if different than name on health plan. -->
                <prefix>Mr.</prefix>
                <given>Frank</given>
                <given>A.</given>
                <family>Everyman</family>
            </name>
        </playingEntity>
    </participantRole>
</participant>
<!-- Policy holder -->
<participant typeCode="HLD">
    <templateId root="2.16.840.1.113883.10.20.22.4.90.2" />
    <participantRole>
        <id extension="1138345" root="2.16.840.1.113883.19" />
        <addr use="HP">
            <streetAddressLine>17 Daws Rd.</streetAddressLine>
            <city>Blue Bell</city>
            <state>MA</state>
            <postalCode>02368</postalCode>
            <country>US</country>
        </addr>
    </participantRole>
</participant>

```

```

<entryRelationship typeCode="REFR">
  <act classCode="ACT" moodCode="EVN">
    <templateId root="2.16.840.1.113883.10.20.1.19" />
    . . .
  </act>
</entryRelationship>
</act>

```

### 3.47 Precondition for Substance Administration (V2)

[criterion: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09 (open)]

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**Table 222: Precondition for Substance Administration (V2) Contexts**

Contained By:	Contains:
<a href="#">Medication Activity (V2)</a> (optional) <a href="#">Immunization Activity (V2)</a> (optional) <a href="#">Planned Medication Activity (V2)</a> (optional) <a href="#">Planned Immunization Activity</a> (optional)	

A criterion for administration can be used to record that the medication is to be administered only when the associated criteria are met.

**Table 223: Precondition for Substance Administration (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
criterion (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09)					
templateId	1..1	SHALL		<a href="#">1098-7372</a>	
@root	1..1	SHALL		<a href="#">1098-10517</a>	2.16.840.1.113883.10.20.22.4.25
@extension	1..1	SHALL		<a href="#">1098-32603</a>	2014-06-09
code	1..1	SHALL	CD	<a href="#">1098-32396</a>	
@code	1..1	SHALL		<a href="#">1098-32397</a>	ASSERTION
@codeSystem	1..1	SHALL		<a href="#">1098-32398</a>	urn:oid:2.16.840.1.113883.5.4 (ActCode) = 2.16.840.1.113883.5.4
value	1..1	SHALL	CD	<a href="#">1098-7369</a>	urn:oid:2.16.840.1.113883.3.88.1 2.3221.7.4 (Problem)

1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7372) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.25" (CONF:1098-10517).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32603).
2. **SHALL** contain exactly one [1..1] **code** with **@xsi:type**="CD" (CONF:1098-32396).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="ASSERTION" Assertion (CONF:1098-32397).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.5.4" (CodeSystem: ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:1098-32398).
3. **SHALL** contain exactly one [1..1] **value** with **@xsi:type**="CD", where the code **SHALL** be selected from ValueSet [Problem](#) urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 **DYNAMIC** (CONF:1098-7369).

**Figure 105: Precondition for Substance Administration (V2) Example**

```

<criterion>
  <templateId root="2.16.840.1.113883.10.20.22.4.25"
    extension="2014-06-09" />
  <code code="ASSERTION"
    codeSystem="2.16.840.1.113883.5.4" />
  <value xsi:type="CD"
    code="56018004"
    codeSystem="2.16.840.1.113883.6.96"
    displayName="Wheezing" />
</criterion>
    
```

### 3.48 Pregnancy Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.15.3.8 (open)]

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**Table 224: Pregnancy Observation Contexts**

Contained By:	Contains:
<a href="#">Social History Section (V2)</a> (optional) <a href="#">Patient Information Section (V3)</a> (optional)	<a href="#">Estimated Date of Delivery</a>

This clinical statement represents current and/or prior pregnancy dates enabling investigators to determine if the subject of the case report was pregnant during the course of a condition.

**Table 225: Pregnancy Observation Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.15.3.8)					
@classCode	1..1	SHALL		<a href="#">81-451</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">81-452</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">81-16768</a>	
@root	1..1	SHALL		<a href="#">81-16868</a>	2.16.840.1.113883.10.20.15.3.8
code	1..1	SHALL		<a href="#">81-19153</a>	
@code	1..1	SHALL		<a href="#">81-19154</a>	ASSERTION
@codeSystem	1..1	SHALL		<a href="#">81-26505</a>	urn:oid:2.16.840.1.113883.5.4 (ActCode) = 2.16.840.1.113883.5.4
statusCode	1..1	SHALL		<a href="#">81-455</a>	
@code	1..1	SHALL		<a href="#">81-19110</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
effectiveTime	0..1	SHOULD		<a href="#">81-2018</a>	
value	1..1	SHALL	CD	<a href="#">81-457</a>	
@code	1..1	SHALL		<a href="#">81-26460</a>	urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 77386006
entryRelationship	0..1	MAY		<a href="#">81-458</a>	
@typeCode	1..1	SHALL		<a href="#">81-459</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">81-15584</a>	<a href="#">Estimated Date of Delivery (identifier: urn:oid:2.16.840.1.113883.10.20.15.3.1)</a>

1. **SHALL** contain exactly one [1..1] **@classCode="OBS"** Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:81-451).
2. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:81-452).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:81-16768) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.15.3.8"** (CONF:81-16868).
4. **SHALL** contain exactly one [1..1] **code** (CONF:81-19153).
  - a. This code **SHALL** contain exactly one [1..1] **@code="ASSERTION"** Assertion (CONF:81-19154).



- b. This code **SHALL** contain exactly one [1..1] `@codeSystem="2.16.840.1.113883.5.4"` (CodeSystem: ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:81-26505).
5. **SHALL** contain exactly one [1..1] `statusCode` (CONF:81-455).
  - a. This `statusCode` **SHALL** contain exactly one [1..1] `@code="completed"` Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:81-19110).
6. **SHOULD** contain zero or one [0..1] `effectiveTime` (CONF:81-2018).
7. **SHALL** contain exactly one [1..1] `value` with `@xsi:type="CD"` (CONF:81-457).
  - a. This value **SHALL** contain exactly one [1..1] `@code="77386006"` Pregnant (CodeSystem: SNOMED CT urn:oid:2.16.840.1.113883.6.96) (CONF:81-26460).
8. **MAY** contain zero or one [0..1] `entryRelationship` (CONF:81-458) 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 **STATIC**) (CONF:81-459).
  - b. **SHALL** contain exactly one [1..1] Estimated Date of Delivery (identifier: urn:oid:2.16.840.1.113883.10.20.15.3.1) (CONF:81-15584).

**Figure 106: Pregnancy Observation Example**

```

<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.15.3.8"/>
  <id extension="123456789" root="2.16.840.1.113883.19"/>
  <code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4"/>
  <statusCode code="completed"/>
  <effectiveTime>
    <low value="20110410"/>
  </effectiveTime>
  <value xsi:type="CD" code="77386006"
    displayName="pregnant"
    codeSystem="2.16.840.1.113883.6.96"/>
  <entryRelationship typeCode="REFR">
    <templateId root="2.16.840.1.113883.10.20.15.3.1"/>
    . . .
  </entryRelationship>
</observation>

```

### 3.49 Present on Admission Observation

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.3.37:2015-04-01 (open) ]

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**Table 226: Present on Admission Observation Contexts**

Contained By:	Contains:
<a href="#">Injury or Poisoning Observation (V2)</a> (optional) <a href="#">Primary Diagnosis Observation (V2)</a> (optional) <a href="#">Problem/Diagnosis/Symptom/Condition Observation (V2)</a> (optional)	

This template represents whether or not the containing diagnosis was present on admission (POA). If this fact is unknown use nullFlavor="UNK".

**Table 227: Present on Admission Observation Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.37:2015-04-01)					
@classCode	1..1	SHALL		<a href="#">1184-905</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1184-906</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1184-899</a>	
@root	1..1	SHALL		<a href="#">1184-903</a>	2.16.840.1.113883.10.20.34.3.37
@extension	1..1	SHALL		<a href="#">1184-912</a>	2015-04-01
id	1..*	SHALL		<a href="#">1184-907</a>	
code	1..1	SHALL		<a href="#">1184-901</a>	
@code	0..1	MAY		<a href="#">1184-908</a>	78026-2
@codeSystem	0..1	MAY		<a href="#">1184-909</a>	2.16.840.1.113883.6.1
statusCode	1..1	SHALL		<a href="#">1184-900</a>	
@code	1..1	SHALL		<a href="#">1184-904</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	BL	<a href="#">1184-902</a>	
@nullFlavor	0..1	MAY		<a href="#">1184-910</a>	UNK
@value	0..1	SHOULD		<a href="#">1184-911</a>	

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1184-905).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1184-906).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1184-899) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.37" (CONF:1184-903).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2015-04-01" (CONF:1184-912).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1184-907).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1184-901).
  - a. This code **MAY** contain zero or one [0..1] **@code**="78026-2" Present on admission (CONF:1184-908).

- b. This code **MAY** contain zero or one [0..1] @codeSystem="2.16.840.1.113883.6.1" (CONF:1184-909).
  - 6. **SHALL** contain exactly one [1..1] statusCode (CONF:1184-900).
    - a. This statusCode **SHALL** contain exactly one [1..1] @code="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1184-904).
- Use @value="true" for "yes", @value="false" for "no" and @nullFlavor="UNK" for "unknown".
- 7. **SHALL** contain exactly one [1..1] value with @xsi:type="BL" (CONF:1184-902).
    - a. This value **MAY** contain zero or one [0..1] @nullFlavor="UNK" (CONF:1184-910).
    - b. This value **SHOULD** contain zero or one [0..1] @value (CONF:1184-911).

**Figure 107: Present on Admission Observation Example**

```
<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.34.3.37"
    extension="2015-04-01" />
  <id root="7d49bb4a-4764-4126-82dd-dcfe7901f702" />
  <code code="78026-2"
    displayName="Present on admission"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC" />
  <statusCode code="completed" />
  <value xsi:type="BL" value="true" />
</observation>
```

### 3.50 Priority Preference

[observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.143 (open)]

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**Table 228: Priority Preference Contexts**

Contained By:	Contains:
<a href="#">Problem Observation (V2)</a> (optional) <a href="#">Planned Act (V2)</a> (optional) <a href="#">Planned Procedure (V2)</a> (optional) <a href="#">Planned Observation (V2)</a> (optional) <a href="#">Planned Medication Activity (V2)</a> (optional) <a href="#">Planned Immunization Activity</a> (optional)	<a href="#">Author Participation</a>

This template represents priority preferences chosen by a patient or a care provider. Priority preferences are choices made by care providers or patients or both relative to options for care or treatment (including scheduling, care experience, and meeting of personal health goals), the sharing and disclosure of health information, and the prioritization of concerns and problems.

**Table 229: Priority Preference Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143)					
@classCode	1..1	SHALL		<a href="#">1098-30949</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1098-30950</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-30951</a>	
@root	1..1	SHALL		<a href="#">1098-30952</a>	2.16.840.1.113883.10.20.22.4.143
id	1..*	SHALL		<a href="#">1098-30953</a>	
code	1..1	SHALL		<a href="#">1098-30954</a>	
@code	1..1	SHALL		<a href="#">1098-30955</a>	225773000
@codeSystem	1..1	SHALL		<a href="#">1098-30956</a>	urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.6.96
effectiveTime	0..1	SHOULD		<a href="#">1098-32327</a>	
value	1..1	SHALL	CD	<a href="#">1098-30957</a>	urn:oid:2.16.840.1.113883.11.20.9.60 (Priority Level)
author	0..*	SHOULD		<a href="#">1098-30958</a>	<a href="#">Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)</a>

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1098-30949).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1098-30950).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-30951) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.143" (CONF:1098-30952).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1098-30953).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1098-30954).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="225773000" Preference (CONF:1098-30955).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.96" (CodeSystem: SNOMED CT urn:oid:2.16.840.1.113883.6.96) (CONF:1098-30956).
6. **SHOULD** contain zero or one [0..1] **effectiveTime** (CONF:1098-32327).

7. **SHALL** contain exactly one [1..1] **value** with `@xsi:type="CD"`, where the code **SHALL** be selected from ValueSet [Priority Level](#) urn:oid:2.16.840.1.113883.11.20.9.60 **STATIC** 2014-06-11 (CONF:1098-30957).
8. **SHOULD** contain zero or more [0..\*] [Author Participation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-30958).

**Table 230: Priority Level**

Value Set: Priority Level urn:oid:2.16.840.1.113883.11.20.9.60			
A value set of SNOMED-CT that contains concepts representing priority.			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
394849002	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	High priority
394848005	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Normal priority
441808003	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Delayed priority

**Figure 108: Priority Preference Example**

```

<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.143" />
  <id root="7d66f448-ba82-4291-a9da-9e5db5e58803" />
  <code code="225773000"
    codeSystem="2.16.840.1.113883.6.96"
    codeSystemName="SNOMED CT"
    displayName="preference" />
  <value xsi:type="CD"
    code="394849002"
    codeSystem="2.16.840.1.113883.6.96"
    codeSystemName="SNOMED"
    displayName="High priority" />
  <!--
    Author Participation Template
    In this case, the author is the same as a participant already described in the
    header.
    However, the author could be a the record target (patient), a different provider -
    someone else in the header, or a new provider not elsewhere specified.
  -->
  <author>
    <templateId root="2.16.840.1.113883.10.20.22.4.119" />
    <time value="20130801" />
    <assignedAuthor>
      <!-- This id points back to a participant in the header -->
      <id root="20cf14fb-b65c-4c8c-a54d-b0cca834c18c" />
    </assignedAuthor>
  </author>
</observation>

```

### 3.51 Problem Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2014-06-09 (open) ]

Published as part of Consolidated CDA Templates for Clinical Notes (US Realm)  
DSTU R2

**Table 231: Problem Observation (V2) Contexts**

Contained By:	Contains:
<a href="#">Hospital Discharge Diagnosis (V2)</a> (required) <a href="#">Encounter Diagnosis (V2)</a> (required)	<a href="#">Age Observation</a> <a href="#">Author Participation</a> <a href="#">Priority Preference</a> <a href="#">Problem Status (DEPRECATED)</a> <a href="#">Prognosis Observation</a>

This template reflects a discrete observation about a patient's problem. Because it is a discrete observation, it will have a statusCode of "completed". The effectiveTime, also referred to as the "biologically relevant time" is the time at which the observation holds for the patient. For a provider seeing a patient in the clinic today, observing a history of heart attack that occurred five years ago, the effectiveTime is five years ago.

The effectiveTime of the Problem Observation is the definitive indication of whether or not the underlying condition is resolved. If the problem is known to be resolved, then an effectiveTime/high would be present. If the date of resolution is not known, then effectiveTime/high will be present with a nullFlavor of "UNK".

**Table 232: Problem Observation (V2) Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-9041</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1098-9042</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
@negationInd	0..1	MAY		<a href="#">1098-10139</a>	
templateId	1..1	SHALL		<a href="#">1098-14926</a>	
@root	1..1	SHALL		<a href="#">1098-14927</a>	2.16.840.1.113883.10.20.22.4.4
@extension	1..1	SHALL		<a href="#">1098-32508</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-9043</a>	
code	1..1	SHALL		<a href="#">1098-9045</a>	urn:oid:2.16.840.1.113883.3.88.12.3221.7.2 (Problem Type)
statusCode	1..1	SHALL		<a href="#">1098-9049</a>	
@code	1..1	SHALL		<a href="#">1098-19112</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
effectiveTime	1..1	SHALL		<a href="#">1098-9050</a>	
low	1..1	SHALL		<a href="#">1098-15603</a>	
high	0..1	MAY		<a href="#">1098-15604</a>	
value	1..1	SHALL	CD	<a href="#">1098-9058</a>	urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 (Problem)
qualifier	0..*	MAY		<a href="#">1098-31870</a>	
translation	0..*	MAY		<a href="#">1098-16749</a>	
@code	0..1	MAY		<a href="#">1098-16750</a>	urn:oid:2.16.840.1.113883.6.90 (ICD-10-CM)
@code	0..1	MAY		<a href="#">1098-31871</a>	
author	0..*	SHOULD		<a href="#">1098-31147</a>	<a href="#">Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)</a>
entryRelationship	0..1	MAY		<a href="#">1098-9059</a>	
@typeCode	1..1	SHALL		<a href="#">1098-9060</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) =



					SUBJ
@inversionInd	1..1	SHALL		<a href="#">1098-9069</a>	true
observation	1..1	SHALL		<a href="#">1098-15590</a>	<a href="#">Age Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.31)</a>
entryRelationship	0..1	MAY		<a href="#">1098-29951</a>	
@typeCode	1..1	SHALL		<a href="#">1098-31531</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">1098-29952</a>	<a href="#">Prognosis Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.113)</a>
entryRelationship	0..*	MAY		<a href="#">1098-31063</a>	
@typeCode	1..1	SHALL		<a href="#">1098-31532</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">1098-31064</a>	<a href="#">Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143)</a>
entryRelationship	0..1	MAY		<a href="#">1098-9063</a>	
@typeCode	1..1	SHALL		<a href="#">1098-9068</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">1098-15591</a>	<a href="#">Problem Status (DEPRECATED) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.6:2014-06-09)</a>

1. **SHALL** contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-9041).
2. **SHALL** contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-9042).

The negationInd is used to indicate the absence of the condition in observation/value. A negationInd of "true" coupled with an observation/value of SNOMED code 64572001 "Disease (disorder)" indicates that the patient has no known conditions.

3. **MAY** contain zero or one [0..1] @negationInd (CONF:1098-10139).
4. **SHALL** contain exactly one [1..1] templateId (CONF:1098-14926) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.4" (CONF:1098-14927).
  - b. **SHALL** contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32508).
5. **SHALL** contain at least one [1..\*] id (CONF:1098-9043).

6. **SHALL** contain exactly one [1..1] **code**, which **SHOULD** be selected from ValueSet [Problem Type](#) urn:oid:2.16.840.1.113883.3.88.12.3221.7.2 **STATIC** 2014-09-02 (CONF:1098-9045).
7. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-9049).
  - a. This **statusCode** **SHALL** contain exactly one [1..1] **@code="completed"** Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098-19112).

If the problem is known to be resolved, but the date of resolution is not known, then the high element SHALL be present, and the nullFlavor attribute SHALL be set to 'UNK'. Therefore, the existence of an high element within a problem does indicate that the problem has been resolved.

8. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1098-9050).

The effectiveTime/low (a.k.a. "onset date") asserts when the condition became biologically active.

- a. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:1098-15603).

The effectiveTime/high (a.k.a. "resolution date") asserts when the condition became biologically resolved.

- b. This effectiveTime **MAY** contain zero or one [0..1] **high** (CONF:1098-15604).

9. **SHALL** contain exactly one [1..1] **value** with **@xsi:type="CD"**, where the code **SHOULD** be selected from ValueSet [Problem](#) urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 **DYNAMIC** (CONF:1098-9058).

The observation/value and all the qualifiers together (often referred to as a post-coordinated expression) make up one concept. Qualifiers constrain the meaning of the primary code, and cannot negate it or change its meaning. Qualifiers can only be used according to well-defined rules of post-coordination and only if the underlying code system defines the use of such qualifiers or if there is a third code system that specifies how other code systems may be combined.

For example, SNOMED CT allows constructing concepts as a combination of multiple codes. SNOMED CT defines a concept "pneumonia (disorder)" (233604007) an attribute "finding site" (363698007) and another concept "left lower lobe of lung (body structure)" (41224006). SNOMED CT allows one to combine these codes in a code phrase, as shown in the sample XML.

- a. This value **MAY** contain zero or more [0..\*] **qualifier** (CONF:1098-31870).
- b. This value **MAY** contain zero or more [0..\*] **translation** (CONF:1098-16749) such that it
  - i. **MAY** contain zero or one [0..1] **@code** (CodeSystem: ICD-10-CM urn:oid:2.16.840.1.113883.6.90 **STATIC**) (CONF:1098-16750).

A negationInd of "true" coupled with an observation/value/@code of SNOMED code 64572001 "Disease (disorder)" indicates that the patient has no known conditions.

- c. This value **MAY** contain zero or one [0..1] **@code** (CONF:1098-31871).

10. **SHOULD** contain zero or more [0..\*] [Author Participation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31147).

11. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1098-9059) 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 **STATIC**) (CONF:1098-9060).
  - b. **SHALL** contain exactly one [1..1] **@inversionInd="true"** True (CONF:1098-9069).
  - c. **SHALL** contain exactly one [1..1] **Age Observation** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.31) (CONF:1098-15590).
12. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1098-29951) 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:1098-31531).
  - b. **SHALL** contain exactly one [1..1] **Prognosis Observation** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.113) (CONF:1098-29952).
13. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-31063) 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:1098-31532).
  - b. **SHALL** contain exactly one [1..1] **Priority Preference** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:1098-31064).
14. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1098-9063) 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:1098-9068).
  - b. **SHALL** contain exactly one [1..1] **Problem Status (DEPRECATED)** (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.6:2014-06-09) (CONF:1098-15591).

**Figure 109: Problem Observation (V2) Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- ** Problem Observation (V2) ** -->
  <templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2014-06-09" />
  <id root="ab1791b0-5c71-11db-b0de-0800200c9a66" />
  <code code="75323-6"
        codeSystem="2.16.840.1.113883.6.1"
        codeSystemName="LOINC"
        displayName="Condition" />
  <!-- The statusCode reflects the status of the observation itself -->
  <statusCode code="completed" />
  <effectiveTime>
    <!-- The low value reflects the date of onset -->
    <!-- Based on patient symptoms, presumed onset is July 3, 2013 -->
    <low value="20130703" />
    <!-- The high value reflects when the problem was known to be resolved -->
    <!-- Based on signs and symptoms, appears to be resolved on Aug 14, 2013 -->
    <high value="20080814" />
  </effectiveTime>
  <value xsi:type="CD"
        code="233604007"
        codeSystem="2.16.840.1.113883.6.96"
        displayName="Pneumonia" />
  <author typeCode="AUT">
    <templateId root="2.16.840.1.113883.10.20.22.4.119" />
    <time value="200808141030-0800" />
    <assignedAuthor>
      <id extension="555555555" root="2.16.840.1.113883.4.6" />
      <code code="207QA0505X"
            displayName="Adult Medicine"
            codeSystem="2.16.840.1.113883.6.101"
            codeSystemName="Healthcare Provider Taxonomy (HIPAA)" />
    </assignedAuthor>
  </author>
</observation>

```

**Figure 110: No Known Problems Example**

```

<observation classCode="OBS" moodCode="EVN" negationInd="true">
  <!-- Model of Meaning for No Problems -->
  <!-- This is more consistent with how we did no known allergies. -->
  <!-- The use of negationInd corresponds with the newer Observation.ValueNegationInd -->
  <!-- The negationInd = true negates the value element. -->
  <!-- problem observation template -->
  <templateId root="2.16.840.1.113883.10.20.22.4.4"
    extension="2014-06-09" />
  <id root="4adc1021-7b14-11db-9fe1-0800200c9a67" />
  <code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4" />
  <text>
    <reference value="#problems1" />
  </text>
  <statusCode code="completed" />
  <effectiveTime>
    <low value="20130607160506" />
  </effectiveTime>
  <!-- The time when this was biologically relevant, i.e., true for the patient. -->
  <!-- As a minimum time interval over which this is true, populate the effectiveTime/low
with the current time. -->
  <!-- It would be equally valid to have a longer range of time over which this statement
was represented as being true. -->
  <!-- As a maximum, you would never indicate an effectiveTime/high that was greater than
the current point in time. -->
  <!-- This idea assumes that the value element could come from the Problem value set, or--
>
  <!-- when negationInd was true, is could also come from the ProblemType value set (and
code would be ASSERTION). -->
  <value xsi:type="CD" code="55607006" displayName="Problem"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT">
    <originalText>
      <reference value="#problemType1" />
    </originalText>
  </value>
</observation>

```

**Figure 111: Resolved Problem and Resolved Concern Example**

```

<act classCode="ACT" moodCode="EVN">
  <!-- ** Problem concern act (V2) ** -->
  <templateId root="2.16.840.1.113883.10.20.22.4.3"
    extension="2014-06-09" />
  <id root="b5159d48-04aa-4927-b355-00d1dcb7158c" />
  <code code="CONC" codeSystem="2.16.840.1.113883.5.6" displayName="Concern" />
  <!-- The statusCode represents the need to continue tracking the problem -->
  <!-- This is no longer of ongoing concern to the provider -->
  <statusCode code="completed" />
  <effectiveTime>
    <!-- The low value represents when the problem was first recorded in the patient's
    chart -->
    <!-- Concern was documented on Mar 10, 1998 -->
    <low value="199803101030-0800" />
    <!-- The high value reflects when there was no longer a need to track the problem -->
    <!-- Concern was closed on May 4, 1998 -->
    <high value="199805041145-0800" />
  </effectiveTime>
  <author typeCode="AUT">
    <templateId root="2.16.840.1.113883.10.20.22.4.119" />
    <!-- Same as Concern effectiveTime/low -->
    <time value="199803161030-0800" />
    <assignedAuthor>
      <id extension="555555555" root="2.16.840.1.113883.4.6" />
      <code code="207QA0505X"
        displayName="Adult Medicine"
        codeSystem="2.16.840.1.113883.6.101"
        codeSystemName="Healthcare Provider Taxonomy (HIPAA)" />
    </assignedAuthor>
  </author>
  <entryRelationship typeCode="SUBJ">
    <observation classCode="OBS" moodCode="EVN">
      <!-- ** Problem observation (V2) ** -->
      <templateId root="2.16.840.1.113883.10.20.22.4.4"
        extension="2014-06-09" />
      <id root="10506b4d-c30a-4220-8bec-97bff9568fd1" />
      <code code="75323-6"
        codeSystem="2.16.840.1.113883.6.1"
        codeSystemName="LOINC"
        displayName="Condition" />
      <!-- The statusCode reflects the status of the observation itself -->
      <statusCode code="completed" />
      <effectiveTime>
        <!-- The low value reflects the date of onset -->
        <!-- Based on patient symptoms, presumed onset is Mar 10, 1998 -->
        <low value="19980310" />
        <!-- The high value reflects when the problem was known to be resolved -->
        <high value="19980316" />
      </effectiveTime>
      <value xsi:type="CD"
        code="233604007"
        codeSystem="2.16.840.1.113883.6.96"
        displayName="Pneumonia">
        <qualifier>
          <name code="363698007" displayName="Finding site" />
        </qualifier>
      </value>
    </observation>
  </entryRelationship>
</act>

```

```
    <value code="41224006" displayName="Left lower lobe of lung" />
  </qualifier>
</value>
<author typeCode="AUT">
  <templateId root="2.16.840.1.113883.10.20.22.4.119" />
  <time value="199803161030-0800" />
  <assignedAuthor>
    <id extension="555555555" root="2.16.840.1.113883.4.6" />
    <code code="207QA0505X"
      displayName="Adult Medicine"
      codeSystem="2.16.840.1.113883.6.101"
      codeSystemName="Healthcare Provider Taxonomy (HIPAA)" />
  </assignedAuthor>
</author>
</observation>
</entryRelationship>
</act>
```

**Figure 112: Problem with Qualifiers Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- ** Problem observation (V2) ** -->
  <templateId root="2.16.840.1.113883.10.20.22.4.4"
    extension="2014-06-09" />
  <id root="10506b4d-c30a-4220-8bec-97bff9568fd1" />
  <code code="75323-6"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC"
    displayName="Condition" />
  <!-- The statusCode reflects the status of the observation itself -->
  <statusCode code="completed" />
  <effectiveTime>
    <!-- The low value reflects the date of onset -->
    <!-- Based on patient symptoms, presumed onset is Mar 10, 1998 -->
    <low value="19980310" />
    <!-- The high value reflects when the problem was known to be resolved -->
    <high value="19980316" />
  </effectiveTime>
  <value xsi:type="CD"
    code="233604007"
    codeSystem="2.16.840.1.113883.6.96"
    displayName="Pneumonia">
    <qualifier>
      <name code="363698007" displayName="Finding site" />
      <value code="41224006" displayName="Left lower lobe of lung" />
    </qualifier>
  </value>
  <author typeCode="AUT">
    <templateId root="2.16.840.1.113883.10.20.22.4.119" />
    <time value="199803161030-0800" />
    <assignedAuthor>
      <id extension="555555555" root="2.16.840.1.113883.4.6" />
      <code code="207QA0505X"
        displayName="Adult Medicine"
        codeSystem="2.16.840.1.113883.6.101"
        codeSystemName="Healthcare Provider Taxonomy (HIPAA)" />
    </assignedAuthor>
  </author>
</observation>

```



### 3.51.1 Admission Diagnosis Observation

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.3.34:2015-04-01 (open) ]

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**Table 233: Admission Diagnosis Observation Contexts**

Contained By:	Contains:
<a href="#">Problems Section (V3)</a> (optional)	

This template represents the admission diagnosis.

**Table 234: Admission Diagnosis Observation Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.34:2015-04-01)					
@classCode	1..1	SHALL		<a href="#">1184-869</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1184-870</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1184-867</a>	
@root	1..1	SHALL		<a href="#">1184-871</a>	2.16.840.1.113883.10.20.34.3.34
@extension	1..1	SHALL		<a href="#">1184-874</a>	2015-04-01
code	1..1	SHALL		<a href="#">1184-868</a>	
@code	1..1	SHALL		<a href="#">1184-872</a>	8646-2
@codeSystem	1..1	SHALL		<a href="#">1184-873</a>	2.16.840.1.113883.6.1

1. Conforms to [Problem Observation \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2014-06-09).
2. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1184-869).
3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1184-870).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:1184-867) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.34" (CONF:1184-871).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2015-04-01" (CONF:1184-874).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1184-868).

- a. This code **SHALL** contain exactly one [1..1] @code="8646-2" Hospital Admission Diagnosis (CONF:1184-872).
- b. This code **SHALL** contain exactly one [1..1] @codeSystem="2.16.840.1.113883.6.1" (CONF:1184-873).

**Figure 113: Admission Diagnosis Observation Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- Conforms to C-CDA R2 Problem Observation (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.4.4"
    extension="2014-06-09" />
  <!-- Admission Diagnosis Observation -->
  <templateId root="2.16.840.1.113883.10.20.34.3.34"
    extension="2015-04-01" />
  <id root="7d49bb4a-4764-4126-82dd-dcfe7901f701" />
  <code code="8646-2"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC"
    displayName="Hospital Admission Diagnosis" />
  <!-- The statusCode reflects the status of the observation itself -->
  <statusCode code="completed" />
  <effectiveTime>
    <!-- The low value reflects the date of onset -->
    <low value="20130703" />
  </effectiveTime>
  <value xsi:type="CD" code="55822004"
    codeSystem="2.16.840.1.113883.6.96"
    codeSystemName="SNOMED CT"
    displayName="Hyperlipidemia" />
</observation>

```

### 3.51.2 Adverse Effect of Medical Treatment

[observation: identifier urn:oid:2.16.840.1.113883.10.20.34.3.14 (open)]

Published as part of National Health Care Surveys, Release 1, DSTU 1 - US Realm

**Table 235: Adverse Effect of Medical Treatment Contexts**

Contained By:	Contains:
<a href="#">Problems Section (V3)</a> (optional)	<a href="#">Cause of Injury, Poisoning, or Adverse Effect</a>

This template represents that the visit is related to an adverse effect of medical treatment. If it is unknown whether this visit is related to adverse effect of medical treatment use nullFlavor="UNK".

**Table 236: Adverse Effect of Medical Treatment Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.14)					
@classCode	1..1	SHALL		<a href="#">1106-487</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1106-488</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1106-489</a>	
@root	1..1	SHALL		<a href="#">1106-490</a>	2.16.840.1.113883.10.20.34.3.14
code	1..1	SHALL		<a href="#">1106-491</a>	
@code	1..1	SHALL		<a href="#">1106-492</a>	ASSERTION
@codeSystem	1..1	SHALL		<a href="#">1106-493</a>	urn:oid:2.16.840.1.113883.5.4 (ActCode) = 2.16.840.1.113883.5.4
value	1..1	SHALL	CD	<a href="#">1106-494</a>	
@nullFlavor	0..1	MAY		<a href="#">1106-703</a>	UNK
@code	0..1	SHOULD		<a href="#">1106-495</a>	269691005
@codeSystem	0..1	SHOULD		<a href="#">1106-496</a>	2.16.840.1.113883.6.96
entryRelationship	0..1	MAY		<a href="#">1106-640</a>	
@typeCode	1..1	SHALL		<a href="#">1106-641</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = CAUS
observation	1..1	SHALL		<a href="#">1106-642</a>	<a href="#">Cause of Injury, Poisoning, or Adverse Effect (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.27)</a>

1. Conforms to [Problem Observation \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2014-06-09).
2. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1106-487).
3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1106-488).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-489) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.14" (CONF:1106-490).

5. **SHALL** contain exactly one [1..1] **code** (CONF:1106-491).
  - a. This code **SHALL** contain exactly one [1..1] **@code="ASSERTION"** Assertion (CONF:1106-492).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem="2.16.840.1.113883.5.4"** (CodeSystem: ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:1106-493).
6. **SHALL** contain exactly one [1..1] **value** with **@xsi:type="CD"** (CONF:1106-494).
  - a. This value **MAY** contain zero or one [0..1] **@nullFlavor="UNK"** (CONF:1106-703).
  - b. This value **SHOULD** contain zero or one [0..1] **@code="269691005"** Medical accidents to patients during surgical and medical care (CONF:1106-495).
  - c. This value **SHOULD** contain zero or one [0..1] **@codeSystem="2.16.840.1.113883.6.96"** (CONF:1106-496).
7. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1106-640).
  - a. The entryRelationship, if present, **SHALL** contain exactly one [1..1] **@typeCode="CAUS"** (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1106-641).
  - b. The entryRelationship, if present, **SHALL** contain exactly one [1..1] **Cause of Injury, Poisoning, or Adverse Effect** (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.27) (CONF:1106-642).

**Figure 114: Adverse Effect of Medical Treatment Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- C-CDA R2 Problem Observation (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2014-06-09" />
  <!-- Adverse Effect of Medical Treatment -->
  <templateId root="2.16.840.1.113883.10.20.34.3.14" />
  <id root="80d0febf-016e-45b5-a531-291dbc2b2d68" />
  <code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4" />
  <statusCode code="completed" />
  <effectiveTime>
    <low value="20130815" />
  </effectiveTime>
  <value xsi:type="CD" code="269691005" codeSystem="2.16.840.1.113883.6.96"
    displayName="Medical accidents to patients during surgical and medical care" />
  <!-- Cause of Injury, Poisoning, or Adverse Effect -->
  <entryRelationship typeCode="CAUS">
    <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.34.3.27" />
      ...
    </observation>
  </entryRelationship>
</observation>

```

### 3.51.3 Injury or Poisoning Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.3.17:2015-04-01 (open)]

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**Table 237: Injury or Poisoning Observation (V2) Contexts**

Contained By:	Contains:
<a href="#">Problems Section (V3)</a> (optional)	<a href="#">Cause of Injury, Poisoning, or Adverse Effect Present on Admission Observation</a>

This template represents whether this visit is related to an injury or poisoning. The code is constrained to "Clinical Finding" and the value is constrained to the Injury or Poisoning value set. If it is unknown whether this visit is related to an injury or poisoning use nullFlavor="UNK".

**Table 238: Injury or Poisoning Observation (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.17:2015-04-01)					
@classCode	1..1	SHALL		<a href="#">1184-209</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1184-210</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1184-211</a>	
@root	1..1	SHALL		<a href="#">1184-212</a>	2.16.840.1.113883.10.20.34.3.17
code	1..1	SHALL		<a href="#">1184-445</a>	
@code	1..1	SHALL		<a href="#">1184-446</a>	75321-0
@codeSystem	1..1	SHALL		<a href="#">1184-447</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
value	1..1	SHALL	CD	<a href="#">1184-218</a>	urn:oid:2.16.840.1.114222.4.11.7403 (Injury or Poisoning (NCHS))
@nullFlavor	0..1	MAY		<a href="#">1184-702</a>	UNK
entryRelationship	0..1	MAY		<a href="#">1184-637</a>	
@typeCode	1..1	SHALL		<a href="#">1184-638</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = CAUS
observation	1..1	SHALL		<a href="#">1184-639</a>	<a href="#">Cause of Injury, Poisoning, or Adverse Effect (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.27)</a>
entryRelationship	0..1	MAY		<a href="#">1184-1096</a>	
@typeCode	1..1	SHALL		<a href="#">1184-1097</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
@inversionInd	1..1	SHALL		<a href="#">1184-1098</a>	true
observation	1..1	SHALL		<a href="#">1184-1099</a>	<a href="#">Present on Admission Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.37:2015-04-01)</a>

1. Conforms to [Problem Observation \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2014-06-09).
2. **SHALL** contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1184-209).

3. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1184-210).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:1184-211) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.34.3.17"** (CONF:1184-212).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1184-445).
  - a. This code **SHALL** contain exactly one [1..1] **@code="75321-0"** Clinical finding (CONF:1184-446).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem="2.16.840.1.113883.6.1"** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1184-447).
6. **SHALL** contain exactly one [1..1] **value** with **@xsi:type="CD"**, where the code **SHOULD** be selected from ValueSet Injury or Poisoning (NCHS) urn:oid:2.16.840.1.114222.4.11.7403 **DYNAMIC** (CONF:1184-218).
  - a. This value **MAY** contain zero or one [0..1] **@nullFlavor="UNK"** (CONF:1184-702).
7. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1184-637) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="CAUS"** (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1184-638).
  - b. **SHALL** contain exactly one [1..1] Cause of Injury, Poisoning, or Adverse Effect (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.27) (CONF:1184-639).
8. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1184-1096) 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:1184-1097).
  - b. **SHALL** contain exactly one [1..1] **@inversionInd="true"** (CONF:1184-1098).
  - c. **SHALL** contain exactly one [1..1] Present on Admission Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.37:2015-04-01) (CONF:1184-1099).

**Table 239: Injury or Poisoning (NCHS)**

Value Set: Injury or Poisoning (NCHS) urn:oid:2.16.840.1.114222.4.11.7403			
All SNOMED CT concepts that are children of the SNOMED CT concept 'traumatic AND/OR non-traumatic injury', including the SNOMED CT concept 'traumatic AND/OR non-traumatic injury' plus all SNOMED CT concepts that are children of the SNOMED CT concept 'poisoning', including the SNOMED CT concept 'poisoning'.			
Value Set Source:			
<a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7403">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7403</a>			
Code	Code System	Code System OID	Print Name
72431002	SNOMED CT	urn:oid:2.16.840.1.11388 3.6.96	Accidental Poisoning
410061008	SNOMED CT	urn:oid:2.16.840.1.11388 3.6.96	Intentional Poisoning
269736006	SNOMED CT	urn:oid:2.16.840.1.11388 3.6.96	Poisoning of undetermined intent
242056005	SNOMED CT	urn:oid:2.16.840.1.11388 3.6.96	Accidental injury
420025004	SNOMED CT	urn:oid:2.16.840.1.11388 3.6.96	Non-accidental injury
269735005	SNOMED CT	urn:oid:2.16.840.1.11388 3.6.96	Injury undetermined whether accidental or purposely inflicted
...			



**Figure 115: Injury or Poisoning Observation (V2) Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- Conforms to C-CDA R2 Problem Observation (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.4.4"
    extension="2014-06-09" />
  <!-- Injury or Poisoning Observation (V2) -->
  <templateId root="2.16.840.1.113883.10.20.34.3.17"
    extension="2015-04-01" />
  <id root="0beae416-311b-413b-b341-5c642bbb0523" />
  <code code="75321-0"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC"
    displayName="Clinical finding" />
  <statusCode code="completed" />
  <effectiveTime>
    <low value="20130815" />
  </effectiveTime>
  <value xsi:type="CD"
    code="410061008"
    codeSystem="2.16.840.1.113883.6.96"
    displayName="Intentional poisoning" />
  <!-- This entryRelationship represents whether or not the diagnosis was present on
admission -->
  <entryRelationship typeCode="SUBJ" inversionInd="true">
    <observation classCode="OBS" moodCode="EVN">
      <!-- Present on Admission Observation -->
      <templateId root="2.16.840.1.113883.10.20.34.3.37"
        extension="2015-04-01" />
      ...
    </observation>
  </entryRelationship>
</observation>

```

### 3.51.4 Patient's Reason for Visit Observation

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.3.41:2015-04-01 (open)]

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**Table 240: Patient's Reason for Visit Observation Contexts**

Contained By:	Contains:
<a href="#">Reasons for Visit Section (V2)</a> (optional)	

This template represents the patient's reason for the visit.

**Table 241: Patient's Reason for Visit Observation Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.41:2015-04-01)					
@classCode	1..1	SHALL		<a href="#">1184-1083</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1184-1084</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1184-1073</a>	
@root	1..1	SHALL		<a href="#">1184-1078</a>	2.16.840.1.113883.10.20.34.3.41
@extension	1..1	SHALL		<a href="#">1184-1079</a>	2015-04-01
code	1..1	SHALL		<a href="#">1184-1074</a>	
@code	1..1	SHALL		<a href="#">1184-1080</a>	75322-8
@codeSystem	1..1	SHALL		<a href="#">1184-1081</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1

1. Conforms to [Problem Observation \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2014-06-09).
2. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1184-1083).
3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1184-1084).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:1184-1073) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.41" (CONF:1184-1078).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2015-04-01" (CONF:1184-1079).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1184-1074).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="75322-8" Complaint (CONF:1184-1080).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1184-1081).

**Figure 116: Patient's Reason for Visit Observation Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- Conforms to C-CDA R2 Problem Observation (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.4.4"
    extension="2014-06-09" />
  <!-- Patient's Reason for Visit -->
  <templateId root="2.16.840.1.113883.10.20.34.3.41"
    extension="2015-04-01" />
  <id root="e88883d7-39b7-4550-b2b4-e34a4bddd78e" />
  <code code="75322-8"
    displayName="Complaint"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC" />
  <statusCode code="completed" />
  <effectiveTime>
    <low value="20130703" />
  </effectiveTime>
  <value xsi:type="CD"
    code="267036007"
    codeSystem="2.16.840.1.113883.6.96"
    codeSystemName="SNOMED CT"
    displayName="Shortness of breath" />
</observation>

```

### 3.51.5 Primary Diagnosis Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.3.6:2015-04-01 (open)]

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**Table 242: Primary Diagnosis Observation (V2) Contexts**

Contained By:	Contains:
<a href="#">Problems Section (V3)</a> (required)	<a href="#">Present on Admission Observation</a>

This template represents the primary diagnosis. If no other means of determination is possible, use first listed diagnosis as the primary diagnosis.

**Table 243: Primary Diagnosis Observation (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.6:2015-04-01)					
@classCode	1..1	SHALL		<a href="#">1184-339</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1184-340</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1184-341</a>	
@root	1..1	SHALL		<a href="#">1184-342</a>	2.16.840.1.113883.10.20.34.3.6
code	1..1	SHALL		<a href="#">1184-518</a>	
@code	1..1	SHALL		<a href="#">1184-519</a>	52534-5
@codeSystem	1..1	SHALL		<a href="#">1184-520</a>	2.16.840.1.113883.6.1
entryRelationship	0..1	MAY		<a href="#">1184-1100</a>	
@typeCode	1..1	SHALL		<a href="#">1184-1101</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
@inversionInd	0..1	MAY		<a href="#">1184-1102</a>	true
observation	1..1	SHALL		<a href="#">1184-1103</a>	<a href="#">Present on Admission Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.37:2015-04-01)</a>

1. Conforms to [Problem Observation \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2014-06-09).
2. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1184-339).
3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1184-340).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:1184-341) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.6" (CONF:1184-342).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1184-518).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="52534-5" Principal Diagnosis (CONF:1184-519).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CONF:1184-520).
6. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1184-1100).

- a. The entryRelationship, if present, **SHALL** contain exactly one [1..1] `@typeCode="SUBJ"` Has subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1184-1101).
- b. The entryRelationship, if present, **MAY** contain zero or one [0..1] `@inversionInd="true"` (CONF:1184-1102).
- c. The entryRelationship, if present, **SHALL** contain exactly one [1..1] [Present on Admission Observation](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.37:2015-04-01) (CONF:1184-1103).

**Figure 117: Primary Diagnosis Observation (V2) Example**

```

<!-- If no other means of determination is possible,
      use first listed diagnosis as the primary diagnosis. -->
<observation classCode="OBS" moodCode="EVN">
  <!-- Conforms to C-CDA R2 Problem Observation (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.4.4"
    extension="2014-06-09" />
  <!-- Primary Diagnosis Observation (V2) -->
  <templateId root="2.16.840.1.113883.10.20.34.3.6"
    extension="2015-04-01" />
  <id root="7d49bb4a-4764-4126-82dd-dcfe7901f701" />
  <code code="52534-5"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC"
    displayName="Principal Diagnosis" />
  <!-- The statusCode reflects the status of the observation itself -->
  <statusCode code="completed" />
  <effectiveTime>
    <!-- The low value reflects the date of onset -->
    <low value="20130703" />
  </effectiveTime>
  <value xsi:type="CD"
    code="55822004"
    codeSystem="2.16.840.1.113883.6.96"
    codeSystemName="SNOMED CT"
    displayName="Hyperlipidemia" />
  <entryRelationship typeCode="SUBJ" inversionInd="true">
    <!-- Present on Admission Observation -->
    <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.34.3.37"
        extension="2015-04-01" />
      ...
    </observation>
  </entryRelationship>
</observation>

```

### 3.51.6 Problem/Diagnosis/Symptom/Condition Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.34.3.1:2015-04-01 (open)]

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**Table 244: Problem/Diagnosis/Symptom/Condition Observation (V2) Contexts**

Contained By:	Contains:
<a href="#">Problems Section (V3)</a> (optional)	<a href="#">Present on Admission Observation</a>

This template represents a problem such as a diagnosis or a symptom or a condition. It is based on the Problem Observation (V2) template.

**Table 245: Problem/Diagnosis/Symptom/Condition Observation (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.1:2015-04-01)					
@classCode	1..1	SHALL		<a href="#">1184-268</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1184-269</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1184-270</a>	
@root	1..1	SHALL		<a href="#">1184-271</a>	2.16.840.1.113883.10.20.34.3.1
@extension	1..1	SHALL		<a href="#">1184-1117</a>	2015-04-01
entryRelationship	0..1	MAY		<a href="#">1184-1116</a>	
@typeCode	1..1	SHALL		<a href="#">1184-1118</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
@inversionInd	1..1	SHALL		<a href="#">1184-1119</a>	true
observation	1..1	SHALL		<a href="#">1184-1120</a>	<a href="#">Present on Admission Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.37:2015-04-01)</a>

1. Conforms to [Problem Observation \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2014-06-09).
2. **SHALL** contain exactly one [1..1] **@classCode="OBS"** Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1184-268).
3. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1184-269).

4. **SHALL** contain exactly one [1..1] **templateId** (CONF:1184-270) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.34.3.1"** (CONF:1184-271).
  - b. **SHALL** contain exactly one [1..1] **@extension="2015-04-01"** (CONF:1184-1117).
5. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1184-1116).
  - a. The entryRelationship, if present, **SHALL** contain exactly one [1..1] **@typeCode="SUBJ" Has subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002)** (CONF:1184-1118).
  - b. The entryRelationship, if present, **SHALL** contain exactly one [1..1] **@inversionInd="true"** (CONF:1184-1119).
  - c. The entryRelationship, if present, **SHALL** contain exactly one [1..1] **Present on Admission Observation** (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.37:2015-04-01) (CONF:1184-1120).

**Figure 118: Problem/Diagnosis/Symptom/Condition Observation (V2) Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- Problem/Diagnosis/Symptom/Condition Observation (V2) -->
  <!-- C-CDA R2 Problem Observation (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.4.4"
    extension="2014-06-09" />
  <templateId root="2.16.840.1.113883.10.20.34.3.1"
    extension="2014-04-01" />
  <id root="0d746213-e380-4ced-a835-bda0369e4c8c" />
  <code code="282291009"
    codeSystem="2.16.840.1.113883.6.96"
    codeSystemName="SNOMED CT"
    displayName="Diagnosis" />
  <!-- The statusCode reflects the status of the observation itself -->
  <statusCode code="completed" />
  <effectiveTime>
    <!-- The low value reflects the date of onset -->
    <low value="20130703" />
  </effectiveTime>
  <value xsi:type="CD"
    code="49008000"
    codeSystemName="SNOMED CT"
    codeSystem="2.16.840.1.113883.6.96"
    displayName="Kidney malrotation" />
</observation>

```

### 3.52 Problem Status (DEPRECATED)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.6:2014-06-09 (open) ]

Deprecated as part of Consolidated CDA Templates for Clinical Notes (US Realm) DSTU R2

**Table 246: Problem Status (DEPRECATED) Contexts**

Contained By:	Contains:
<a href="#">Problem Observation (V2)</a> (optional)	

The Problem Status records whether the indicated problem is active, inactive, or resolved.

THIS TEMPLATE HAS BEEN DEPRECATED IN C-CDA R2 AND MAY BE DELETED FROM A FUTURE RELEASE OF THIS IMPLEMENTATION GUIDE. USE OF THIS TEMPLATE IS NOT RECOMMENDED.

**Reason for deprecation:** Per the explanation in Volume 1, Section 3.2 "Determining a Clinical Statement's Status", the status of a problem is determined based on attributes of the Problem Observation.

**Table 247: Problem Status (DEPRECATED) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.6:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-7357</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1098-7358</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-7359</a>	
@root	1..1	SHALL		<a href="#">1098-10518</a>	2.16.840.1.113883.10.20.22.4.6
code	1..1	SHALL		<a href="#">1098-19162</a>	
@code	1..1	SHALL		<a href="#">1098-19163</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 33999-4
statusCode	1..1	SHALL		<a href="#">1098-7364</a>	
@code	1..1	SHALL		<a href="#">1098-19113</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	CD	<a href="#">1098-7365</a>	urn:oid:2.16.840.1.113883.3.88.12.80.68 (Problem Status)

1. **SHALL** contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-7357).



2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-7358).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7359) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.6" (CONF:1098-10518).
4. **SHALL** contain exactly one [1..1] **code** (CONF:1098-19162).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="33999-4" Status (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1 **STATIC**) (CONF:1098-19163).
5. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-7364).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098-19113).
6. **SHALL** contain exactly one [1..1] **value** with **@xsi:type**="CD", where the code **SHALL** be selected from ValueSet [Problem Status](#) urn:oid:2.16.840.1.113883.3.88.12.80.68 **DYNAMIC** (CONF:1098-7365).

**Table 248: Problem Status**

Value Set: Problem Status urn:oid:2.16.840.1.113883.3.88.12.80.68			
A value set of SNOMED-CT codes reflecting state of existence.			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
55561003	SNOMED CT	urn:oid:2.16.840.1.113883.3.6.96	Active
73425007	SNOMED CT	urn:oid:2.16.840.1.113883.3.6.96	Inactive
413322009	SNOMED CT	urn:oid:2.16.840.1.113883.3.6.96	Resolved

### 3.53 Procedure Activity Act (V2)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.12:2014-06-09 (open)]

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DSTU R2

**Table 249: Procedure Activity Act (V2) Contexts**

Contained By:	Contains:
	<a href="#">Author Participation</a> <a href="#">Indication (V2)</a> <a href="#">Instruction (V2)</a> <a href="#">Medication Activity (V2)</a> <a href="#">Service Delivery Location</a>

This template represents any act that cannot be classified as an observation or procedure according to the HL7 RIM. Examples of these acts are a dressing change, teaching or feeding a patient, or providing comfort measures.

The common notion of "procedure" is broader than that specified by the HL7 Version 3 Reference Information Model (RIM). Procedure templates can be represented with various RIM classes: act (e.g., dressing change), observation (e.g., EEG), procedure (e.g., splenectomy).

**Table 250: Procedure Activity Act (V2) Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.12:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-8289</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT
@moodCode	1..1	SHALL		<a href="#">1098-8290</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-8291</a>	
@root	1..1	SHALL		<a href="#">1098-10519</a>	2.16.840.1.113883.10.20.22.4.12
@extension	1..1	SHALL		<a href="#">1098-32505</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-8292</a>	
code	1..1	SHALL		<a href="#">1098-8293</a>	
originalText	0..1	SHOULD		<a href="#">1098-19186</a>	
reference	0..1	MAY		<a href="#">1098-19187</a>	
@value	0..1	MAY		<a href="#">1098-19188</a>	
statusCode	1..1	SHALL		<a href="#">1098-8298</a>	
@code	1..1	SHALL		<a href="#">1098-32364</a>	urn:oid:2.16.840.1.113883.11.20.9.22 (ProcedureAct statusCode)
effectiveTime	1..1	SHALL		<a href="#">1098-8299</a>	
priorityCode	0..1	MAY		<a href="#">1098-8300</a>	urn:oid:2.16.840.1.113883.1.11.16866 (Act Priority)
performer	0..*	SHOULD		<a href="#">1098-8301</a>	
assignedEntity	1..1	SHALL		<a href="#">1098-8302</a>	
id	1..*	SHALL		<a href="#">1098-8303</a>	
addr	1..*	SHALL		<a href="#">1098-8304</a>	
telecom	1..*	SHALL		<a href="#">1098-8305</a>	
representedOrganization	0..1	SHOULD		<a href="#">1098-8306</a>	
id	0..*	SHOULD		<a href="#">1098-8307</a>	

name	0..*	MAY		<a href="#">1098-8308</a>	
telecom	1..*	SHALL		<a href="#">1098-8310</a>	
addr	1..*	SHALL		<a href="#">1098-8309</a>	
author	1..*	SHOULD		<a href="#">1098-32477</a>	<a href="#">Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)</a>
participant	0..*	MAY		<a href="#">1098-8311</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8312</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = LOC
participantRole	1..1	SHALL		<a href="#">1098-15599</a>	<a href="#">Service Delivery Location (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32)</a>
entryRelationship	0..*	MAY		<a href="#">1098-8314</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8315</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
@inversionInd	1..1	SHALL		<a href="#">1098-8316</a>	true
encounter	1..1	SHALL		<a href="#">1098-8317</a>	
@classCode	1..1	SHALL		<a href="#">1098-8318</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ENC
@moodCode	1..1	SHALL		<a href="#">1098-8319</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
id	1..1	SHALL		<a href="#">1098-8320</a>	
entryRelationship	0..1	MAY		<a href="#">1098-8322</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8323</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
@inversionInd	1..1	SHALL		<a href="#">1098-8324</a>	true
act	1..1	SHALL		<a href="#">1098-31396</a>	<a href="#">Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09)</a>
entryRelationship	0..*	MAY		<a href="#">1098-8326</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8327</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON

observation	1..1	SHALL		<a href="#">1098-15601</a>	<a href="#">Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09)</a>
entryRelationship	0..*	MAY		<a href="#">1098-8329</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8330</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
substanceAdministration	1..1	SHALL		<a href="#">1098-15602</a>	<a href="#">Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09)</a>

1. **SHALL** contain exactly one [1..1] **@classCode="ACT"** Act (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-8289).
2. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-8290).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-8291) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.22.4.12"** (CONF:1098-10519).
  - b. **SHALL** contain exactly one [1..1] **@extension="2014-06-09"** (CONF:1098-32505).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1098-8292).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1098-8293).
  - a. This code **SHOULD** contain zero or one [0..1] **originalText** (CONF:1098-19186).
    - i. The originalText, if present, **MAY** contain zero or one [0..1] **reference** (CONF:1098-19187).
      1. The reference, if present, **MAY** contain zero or one [0..1] **@value** (CONF:1098-19188).
        - a. 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:1098-19189).
      - b. This @code **SHOULD** be selected from LOINC (CodeSystem: 2.16.840.1.113883.6.1) or SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96), and **MAY** be selected from CPT-4 (CodeSystem: 2.16.840.1.113883.6.12) or ICD10 PCS (CodeSystem: 2.16.840.1.113883.6.4) or CDT-2 (Code System: 2.16.840.1.113883.6.13) (CONF:1098-19190).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-8298).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [ProcedureAct statusCode](#) urn:oid:2.16.840.1.113883.11.20.9.22 **STATIC** 2014-04-23 (CONF:1098-32364).
7. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1098-8299).
8. **MAY** contain zero or one [0..1] **priorityCode**, which **SHALL** be selected from ValueSet [Act Priority](#) urn:oid:2.16.840.1.113883.1.11.16866 **DYNAMIC** (CONF:1098-8300).

9. **SHOULD** contain zero or more [0..\*] **performer** (CONF:1098-8301).
- a. The performer, if present, **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:1098-8302).
    - i. This assignedEntity **SHALL** contain at least one [1..\*] **id** (CONF:1098-8303).
    - ii. This assignedEntity **SHALL** contain at least one [1..\*] **addr** (CONF:1098-8304).
    - iii. This assignedEntity **SHALL** contain at least one [1..\*] **telecom** (CONF:1098-8305).
    - iv. This assignedEntity **SHOULD** contain zero or one [0..1] **representedOrganization** (CONF:1098-8306).
      1. The representedOrganization, if present, **SHOULD** contain zero or more [0..\*] **id** (CONF:1098-8307).
      2. The representedOrganization, if present, **MAY** contain zero or more [0..\*] **name** (CONF:1098-8308).
      3. The representedOrganization, if present, **SHALL** contain at least one [1..\*] **telecom** (CONF:1098-8310).
      4. The representedOrganization, if present, **SHALL** contain at least one [1..\*] **addr** (CONF:1098-8309).
10. **SHOULD** contain at least one [1..\*] **Author Participation** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-32477).
11. **MAY** contain zero or more [0..\*] **participant** (CONF:1098-8311) such that it
- a. **SHALL** contain exactly one [1..1] **@typeCode="LOC"** Location (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 **STATIC**) (CONF:1098-8312).
  - b. **SHALL** contain exactly one [1..1] **Service Delivery Location** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32) (CONF:1098-15599).
12. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-8314) 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 **STATIC**) (CONF:1098-8315).
  - b. **SHALL** contain exactly one [1..1] **@inversionInd="true"** true (CONF:1098-8316).
  - c. **SHALL** contain exactly one [1..1] **encounter** (CONF:1098-8317).
    - i. This encounter **SHALL** contain exactly one [1..1] **@classCode="ENC"** Encounter (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-8318).
    - ii. This encounter **SHALL** contain exactly one [1..1] **@moodCode="EVN"** Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-8319).
    - iii. This encounter **SHALL** contain exactly one [1..1] **id** (CONF:1098-8320).
      1. Set the encounter ID to the ID of an encounter in another section to signify they are the same encounter (CONF:1098-16849).
13. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1098-8322) 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 **STATIC**) (CONF:1098-8323).
  - b. **SHALL** contain exactly one [1..1] @inversionInd="true" true (CONF:1098-8324).
  - 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:1098-31396).
14. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-8326) 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 **STATIC**) (CONF:1098-8327).
  - 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:1098-15601).
15. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-8329) 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 **STATIC**) (CONF:1098-8330).
  - b. **SHALL** contain exactly one [1..1] Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09) (CONF:1098-15602).

**Table 251: Act Priority**

Value Set: Act Priority urn:oid:2.16.840.1.113883.1.11.16866			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
A	ActPriority	urn:oid:2.16.840.1.113883.5.7	ASAP
CR	ActPriority	urn:oid:2.16.840.1.113883.5.7	Callback results
CS	ActPriority	urn:oid:2.16.840.1.113883.5.7	Callback for scheduling
CSP	ActPriority	urn:oid:2.16.840.1.113883.5.7	Callback placer for scheduling
CSR	ActPriority	urn:oid:2.16.840.1.113883.5.7	Contact recipient for scheduling
EL	ActPriority	urn:oid:2.16.840.1.113883.5.7	Elective
EM	ActPriority	urn:oid:2.16.840.1.113883.5.7	Emergency
P	ActPriority	urn:oid:2.16.840.1.113883.5.7	Preoperative
PRN	ActPriority	urn:oid:2.16.840.1.113883.5.7	As needed
R	ActPriority	urn:oid:2.16.840.1.113883.5.7	Routine
...			

**Table 252: ProcedureAct statusCode**

Value Set: ProcedureAct statusCode urn:oid:2.16.840.1.113883.11.20.9.22			
A ValueSet of HL7 actStatus codes for use with a procedure activity			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
completed	ActStatus	urn:oid:2.16.840.1.113883.5.14	Completed
active	ActStatus	urn:oid:2.16.840.1.113883.5.14	Active
aborted	ActStatus	urn:oid:2.16.840.1.113883.5.14	Aborted
cancelled	ActStatus	urn:oid:2.16.840.1.113883.5.14	Cancelled



**Figure 119: Procedure Activity Act Example**

```

<act classCode="ACT" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.12" extension="2014-06-09" />
  <id root="1.2.3.4.5.6.7.8" extension="1234567" />
  <code code="274025005" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
  displayName="Colonic polypectomy">
    <originalText>
      <reference value="#Proc1" />
    </originalText>
  </code>
  <statusCode code="completed" />
  <effectiveTime value="20110203" />
  <priorityCode code="CR" codeSystem="2.16.840.1.113883.5.7" codeSystemName="ActPriority"
  displayName="Callback results" />
  <performer>
    <assignedEntity>
      <id root="2.16.840.1.113883.19" extension="1234" />
      <addr>
        <streetAddressLine>1001 Village Avenue</streetAddressLine>
        <city>Portland</city>
        <state>OR</state>
        <postalCode>99123</postalCode>
        <country>US</country>
      </addr>
      <telecom use="WP" value="tel: +1(555)-555-5000" />
      <representedOrganization>
        <id root="2.16.840.1.113883.19.5" />
        <name>Community Health and Hospitals</name>
        <telecom use="WP" value="tel:+1(555)-555-5000" />
        <addr>
          <streetAddressLine>1001 Village Avenue</streetAddressLine>
          <city>Portland</city>
          <state>OR</state>
          <postalCode>99123</postalCode>
          <country>US</country>
        </addr>
      </representedOrganization>
    </assignedEntity>
  </performer>
  <participant typeCode="LOC">
    <participantRole classCode="SDLOC">
      <templateId root="2.16.840.1.113883.10.20.22.4.32" />
      . . .
    </participantRole>
  </participant>
  <entryRelationship typeCode="RSON">
    <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.22.4.19" extension="2014-06-09" />
      . . .
    </observation>
  </entryRelationship>
  <entryRelationship typeCode="SUBJ" inversionInd="true">
    <act classCode="ACT" moodCode="INT">
      <templateId root="2.16.840.1.113883.10.20.22.4.20" extension="2014-06-09" />
      . . .
    </act>
  </entryRelationship>
</act>

```

```
</entryRelationship>
</act>
```

### 3.53.1 Provided Service Act

[act: identifier urn:oid:2.16.840.1.113883.10.20.34.3.20 (open)]

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**Table 253: Provided Service Act Contexts**

Contained By:	Contains:
<a href="#">Services and Procedures Section</a> (optional)	

This template represents a service activity that has been provided. Examples of service acts include non-medication treatments, such as physical therapy, home health care, feeding a patient, medical nutrition therapy, other tests and procedures (except excision of tissue), as well as health education or counseling (e.g., nutrition counseling). To represent the provided service act, the moodCode value is constrained to "EVN" and the statusCode value is constrained to "completed".

**Table 254: Provided Service Act Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
act (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.20)					
@classCode	1..1	SHALL		<a href="#">1106-227</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT
@moodCode	1..1	SHALL		<a href="#">1106-228</a>	urn:oid:2.16.840.1.113883.5.100 1 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1106-229</a>	
@root	1..1	SHALL		<a href="#">1106-230</a>	2.16.840.1.113883.10.20.34.3.20
code	1..1	SHALL		<a href="#">1106-231</a>	
@code	0..1	SHOULD		<a href="#">1106-358</a>	
translation	0..*	MAY		<a href="#">1106-359</a>	
@code	1..1	SHALL		<a href="#">1106-375</a>	urn:oid:2.16.840.1.113883.6.12 (CPT4)
statusCode	1..1	SHALL		<a href="#">1106-233</a>	
@code	1..1	SHALL		<a href="#">1106-364</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed

1. Conforms to [Procedure Activity Act \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.12:2014-06-09).
2. **SHALL** contain exactly one [1..1] **@classCode="ACT"** Act (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1106-227).
3. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1106-228).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-229) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.34.3.20"** (CONF:1106-230).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1106-231).
  - a. This code **SHOULD** contain zero or one [0..1] **@code** (CONF:1106-358).  
Note: Inclusion of both SNOMED CT/LOINC and CPT/HCPCS codes is recommended. When both codes are available, include the CPT code within the translation element. When only the CPT code is available, include the CPT code within the translation element and use **@nullFlavor="OTH"** in the code element.
    - i. This **@code** **SHOULD** be selected from LOINC (CodeSystem: 2.16.840.1.113883.6.1) or SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) (CONF:1106-772).
  - b. This code **MAY** contain zero or more [0..\*] **translation** (CONF:1106-359).
    - i. The translation, if present, **SHALL** contain exactly one [1..1] **@code**, which **SHOULD** be selected from CodeSystem CPT4 (urn:oid:2.16.840.1.113883.6.12) (CONF:1106-375).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1106-233).
  - a. This **statusCode** **SHALL** contain exactly one [1..1] **@code="completed"** Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1106-364).

**Figure 120: Provided Service Act Example 1**

```

<act classCode="ACT" moodCode="EVN">
  <!-- Conforms to C-CDA Procedure Activity Act (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.4.12" extension="2014-06-09" />
  <!-- Provided Service Act -->
  <templateId root="2.16.840.1.113883.10.20.34.3.20" />
  <id root="30590de2-2fd4-42db-a130-6fd8cd4c9d2d" />
  <code code="307571006" displayName="Anticoagulant drug monitoring"
    codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT">
    <translation code="99363"
      displayName="ANTICOAGULANT MGMT OUTPATIENT INIT 90 DAYS"
      codeSystemName="CPT-4" codeSystem="2.16.840.1.113883.6.12" />
  </code>
  <statusCode code="completed" />
  <effectiveTime value="201308150000-0400" />
</act>

```

**Figure 121: Provided Service Act Example 2**

```

<act classCode="ACT" moodCode="EVN">
  <!-- Conforms to C-CDA Procedure Activity Act (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.4.12" extension="2014-06-09" />
  <!-- Provided Service Act -->
  <templateId root="2.16.840.1.113883.10.20.34.3.20" />
  <id root="30590de2-2fd4-42db-a120-6cd8cd4c912d" />
  <code code="266724001" displayName="Weight-reducing diet education"
    codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"> </code>
  <statusCode code="completed" />
  <effectiveTime value="201308150000-0400" />
</act>

```

### 3.54 Procedure Activity Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.13:2014-06-09  
(open)]

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DSTU R2

**Table 255: Procedure Activity Observation (V2) Contexts**

Contained By:	Contains:
	<a href="#">Author Participation</a> <a href="#">Indication (V2)</a> <a href="#">Instruction (V2)</a> <a href="#">Medication Activity (V2)</a> <a href="#">Reaction Observation (V2)</a> <a href="#">Service Delivery Location</a>

The common notion of procedure is broader than that specified by the HL7 Version 3 Reference Information Model (RIM). Therefore procedure templates can be represented with various RIM classes: act (e.g., dressing change), observation (e.g., EEG), procedure (e.g., splenectomy).

This template represents procedures that result in new information about the patient that cannot be classified as a procedure according to the HL7 RIM. Examples of these procedures are diagnostic imaging procedures, EEGs, and EKGs.

**Table 256: Procedure Activity Observation (V2) Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.13:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-8282</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1098-8237</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-8238</a>	
@root	1..1	SHALL		<a href="#">1098-10520</a>	2.16.840.1.113883.10.20.22.4.13
@extension	1..1	SHALL		<a href="#">1098-32507</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-8239</a>	
code	1..1	SHALL		<a href="#">1098-19197</a>	
originalText	0..1	SHOULD		<a href="#">1098-19198</a>	
reference	0..1	SHOULD		<a href="#">1098-19199</a>	
@value	0..1	SHOULD		<a href="#">1098-19200</a>	
statusCode	1..1	SHALL		<a href="#">1098-8245</a>	
@code	1..1	SHALL		<a href="#">1098-32365</a>	urn:oid:2.16.840.1.113883.11.20.9.22 (ProcedureAct statusCode)
effectiveTime	0..1	SHOULD		<a href="#">1098-8246</a>	
priorityCode	0..1	MAY		<a href="#">1098-8247</a>	urn:oid:2.16.840.1.113883.1.11.16866 (Act Priority)
value	1..1	SHALL		<a href="#">1098-16846</a>	
@nullFlavor	0..1	MAY		<a href="#">1098-32778</a>	
methodCode	0..1	MAY		<a href="#">1098-8248</a>	
targetSiteCode	0..*	SHOULD		<a href="#">1098-8250</a>	urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 (Body Site)
performer	0..*	SHOULD		<a href="#">1098-8251</a>	
assignedEntity	1..1	SHALL		<a href="#">1098-8252</a>	
id	1..*	SHALL		<a href="#">1098-8253</a>	

addr	1..*	SHALL		<a href="#">1098-8254</a>	
telecom	1..*	SHALL		<a href="#">1098-8255</a>	
representedOrganization	0..1	SHOULD		<a href="#">1098-8256</a>	
id	0..*	SHOULD		<a href="#">1098-8257</a>	
name	0..*	MAY		<a href="#">1098-8258</a>	
telecom	1..1	SHALL		<a href="#">1098-8260</a>	
addr	1..1	SHALL		<a href="#">1098-8259</a>	
author	1..*	SHOULD		<a href="#">1098-32478</a>	<a href="#">Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)</a>
participant	0..*	MAY		<a href="#">1098-8261</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8262</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = LOC
participantRole	1..1	SHALL		<a href="#">1098-15904</a>	<a href="#">Service Delivery Location (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32)</a>
entryRelationship	0..*	MAY		<a href="#">1098-8264</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8265</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
@inversionInd	1..1	SHALL		<a href="#">1098-8266</a>	true
encounter	1..1	SHALL		<a href="#">1098-8267</a>	
@classCode	1..1	SHALL		<a href="#">1098-8268</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ENC
@moodCode	1..1	SHALL		<a href="#">1098-8269</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
id	1..1	SHALL		<a href="#">1098-8270</a>	
entryRelationship	0..1	MAY		<a href="#">1098-8272</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8273</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
@inversionInd	1..1	SHALL		<a href="#">1098-8274</a>	true

act	1..1	SHALL		<a href="#">1098-31394</a>	<a href="#">Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2.0.22.4.20:2014-06-09)</a>
entryRelationship	0..*	MAY		<a href="#">1098-8276</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8277</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON
observation	1..1	SHALL		<a href="#">1098-15906</a>	<a href="#">Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2.0.22.4.19:2014-06-09)</a>
entryRelationship	0..*	MAY		<a href="#">1098-8279</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8280</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
substanceAdministration	1..1	SHALL		<a href="#">1098-15907</a>	<a href="#">Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2.0.22.4.16:2014-06-09)</a>
entryRelationship	0..*	MAY		<a href="#">1098-32470</a>	
@typeCode	1..1	SHALL		<a href="#">1098-32471</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
observation	1..1	SHALL		<a href="#">1098-32472</a>	<a href="#">Reaction Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2.0.22.4.9:2014-06-09)</a>

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-8282).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-8237).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-8238) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.13" (CONF:1098-10520).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32507).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1098-8239).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1098-19197).
  - a. This code **SHOULD** contain zero or one [0..1] **originalText** (CONF:1098-19198).
    - i. The originalText, if present, **SHOULD** contain zero or one [0..1] **reference** (CONF:1098-19199).
      1. The reference, if present, **SHOULD** contain zero or one [0..1] **@value** (CONF:1098-19200).
        - a. 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:1098-19201).

- b. This @code **SHOULD** be selected from LOINC (CodeSystem: 2.16.840.1.113883.6.1) or SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96), and **MAY** be selected from CPT-4 (CodeSystem: 2.16.840.1.113883.6.12) or ICD10 PCS (CodeSystem: 2.16.840.1.113883.6.4) or CDT-2 (Code System: 2.16.840.1.113883.6.13) (CONF:1098-19202).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-8245).
  - a. This statusCode **SHALL** contain exactly one [1..1] @code, which **SHALL** be selected from ValueSet [ProcedureAct statusCode](#) urn:oid:2.16.840.1.113883.11.20.9.22 **STATIC** 2014-04-23 (CONF:1098-32365).
7. **SHOULD** contain zero or one [0..1] **effectiveTime** (CONF:1098-8246).
8. **MAY** contain zero or one [0..1] **priorityCode**, which **SHALL** be selected from ValueSet [Act Priority](#) urn:oid:2.16.840.1.113883.1.11.16866 **DYNAMIC** (CONF:1098-8247).
9. **SHALL** contain exactly one [1..1] **value** (CONF:1098-16846).

If nothing is appropriate for value, use an appropriate nullFlavor.

- a. This value **MAY** contain zero or one [0..1] @nullFlavor (CONF:1098-32778).
10. **MAY** contain zero or one [0..1] **methodCode** (CONF:1098-8248).
  - a. MethodCode **SHALL NOT** conflict with the method inherent in Observation / code (CONF:1098-8249).
11. **SHOULD** contain zero or more [0..\*] **targetSiteCode**, which **SHALL** be selected from ValueSet [Body Site](#) urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 **DYNAMIC** (CONF:1098-8250).
12. **SHOULD** contain zero or more [0..\*] **performer** (CONF:1098-8251).
  - a. The performer, if present, **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:1098-8252).
    - i. This assignedEntity **SHALL** contain at least one [1..\*] **id** (CONF:1098-8253).
    - ii. This assignedEntity **SHALL** contain at least one [1..\*] **addr** (CONF:1098-8254).
    - iii. This assignedEntity **SHALL** contain at least one [1..\*] **telecom** (CONF:1098-8255).
    - iv. This assignedEntity **SHOULD** contain zero or one [0..1] **representedOrganization** (CONF:1098-8256).
      1. The representedOrganization, if present, **SHOULD** contain zero or more [0..\*] **id** (CONF:1098-8257).
      2. The representedOrganization, if present, **MAY** contain zero or more [0..\*] **name** (CONF:1098-8258).
      3. The representedOrganization, if present, **SHALL** contain exactly one [1..1] **telecom** (CONF:1098-8260).
      4. The representedOrganization, if present, **SHALL** contain exactly one [1..1] **addr** (CONF:1098-8259).



13. **SHOULD** contain at least one [1..\*] [Author Participation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-32478).
14. **MAY** contain zero or more [0..\*] **participant** (CONF:1098-8261) such that it
- SHALL** contain exactly one [1..1] **@typeCode="LOC"** Location (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 **STATIC**) (CONF:1098-8262).
  - SHALL** contain exactly one [1..1] [Service Delivery Location](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32) (CONF:1098-15904).
15. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-8264) such that it
- SHALL** contain exactly one [1..1] **@typeCode="COMP"** Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 **STATIC**) (CONF:1098-8265).
  - SHALL** contain exactly one [1..1] **@inversionInd="true"** true (CONF:1098-8266).
  - SHALL** contain exactly one [1..1] **encounter** (CONF:1098-8267).
    - This encounter **SHALL** contain exactly one [1..1] **@classCode="ENC"** Encounter (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-8268).
    - This encounter **SHALL** contain exactly one [1..1] **@moodCode="EVN"** Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-8269).
    - This encounter **SHALL** contain exactly one [1..1] **id** (CONF:1098-8270).
      - Set encounter/id to the id of an encounter in another section to signify they are the same encounter (CONF:1098-16847).
16. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1098-8272) such that it
- SHALL** contain exactly one [1..1] **@typeCode="SUBJ"** Has Subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 **STATIC**) (CONF:1098-8273).
  - SHALL** contain exactly one [1..1] **@inversionInd="true"** true (CONF:1098-8274).
  - 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:1098-31394).
17. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-8276) such that it
- SHALL** contain exactly one [1..1] **@typeCode="RSON"** Has Reason (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 **STATIC**) (CONF:1098-8277).
  - 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:1098-15906).
18. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-8279) such that it
- SHALL** contain exactly one [1..1] **@typeCode="COMP"** Has Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 **STATIC**) (CONF:1098-8280).
  - SHALL** contain exactly one [1..1] [Medication Activity \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09) (CONF:1098-15907).

19. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-32470) 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:1098-32471).
  - 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:1098-32472).

**Figure 122: Procedure Activity Observation (V2) Example**

```

<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.13" extension="2014-06-09" />
  <id extension="123456789" root="2.16.840.1.113883.19" />
  <code code="274025005"
    codeSystem="2.16.840.1.113883.6.96"
    displayName="Colonic polypectomy"
    codeSystemName="SNOMED-CT">
    <originalText>
      <reference value="#Procl" />
    </originalText>
  </code>
  <statusCode code="aborted" />
  <effectiveTime value="20110203" />
  <priorityCode code="CR" codeSystem="2.16.840.1.113883.5.7" codeSystemName="ActPriority"
  displayName="Callback results" />
  <value nullFlavor="NA" />
  <methodCode nullFlavor="UNK" />
  <targetSiteCode code="416949008" codeSystem="2.16.840.1.113883.6.96"
  codeSystemName="SNOMED CT" displayName="Abdomen and pelvis" />
  <performer>
    <assignedEntity>
      <id root="2.16.840.1.113883.19" extension="1234" />
      <addr>
        <streetAddressLine>1001 Village Avenue</streetAddressLine>
        <city>Portland</city>
        <state>OR</state>
        <postalCode>99123</postalCode>
        <country>US</country>
      </addr>
      <telecom use="WP" value="tel: +1(555)-555-5000" />
      <representedOrganization>
        <id root="2.16.840.1.113883.19.5" />
        <name>Community Health and Hospitals</name>
        <telecom use="WP" value="tel:+1(555)-555-5000" />
        <addr>
          <streetAddressLine>1001 Village Avenue</streetAddressLine>
          <city>Portland</city>
          <state>OR</state>
          <postalCode>99123</postalCode>
          <country>US</country>
        </addr>
      </representedOrganization>
    </assignedEntity>
  </performer>
  <participant typeCode="LOC">
    <participantRole classCode="SDLOC">
      <templateId root="2.16.840.1.113883.10.20.22.4.32" />
      . . .
    </participantRole>
  </participant>
  <entryRelationship typeCode="RSON">
    <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.22.4.19" extension="2014-06-09" />
      . . .
    </observation>
  </entryRelationship>
</observation>

```

```

        </observation>
    </entryRelationship>
    <entryRelationship typeCode="SUBJ" inversionInd="true">
        <act classCode="ACT" moodCode="INT">
            <templateId root="2.16.840.1.113883.10.20.22.4.20" extension="2014-06-09" />
            . . .

        </act>
    </entryRelationship>
</observation>

```

### 3.54.1 Provided Service Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.34.3.3 (open)]

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**Table 257: Provided Service Observation Contexts**

Contained By:	Contains:
<a href="#">Services and Procedures Section</a> (optional)	

This template represents a service observation that has been provided. Examples of service observations include examinations, blood tests, and imaging. To represent the provided service observation, the moodCode value is constrained to "EVN" and the statusCode value is constrained to "completed".

**Table 258: Provided Service Observation Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.3)					
@classCode	1..1	SHALL		<a href="#">1106-365</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1106-366</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1106-367</a>	
@root	1..1	SHALL		<a href="#">1106-368</a>	2.16.840.1.113883.10.20.34.3.3
code	1..1	SHALL		<a href="#">1106-369</a>	
@code	1..1	SHALL		<a href="#">1106-370</a>	
translation	0..*	MAY		<a href="#">1106-371</a>	
@code	1..1	SHALL		<a href="#">1106-372</a>	urn:oid:2.16.840.1.113883.6.12 (CPT4)
statusCode	1..1	SHALL		<a href="#">1106-373</a>	
@code	1..1	SHALL		<a href="#">1106-374</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed

1. Conforms to [Procedure Activity Observation \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.13:2014-06-09).
2. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1106-365).
3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1106-366).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-367) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.3" (CONF:1106-368).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1106-369).
  - a. This code **SHALL** contain exactly one [1..1] **@code** (CONF:1106-370).  
Note: Inclusion of both SNOMED CT/LOINC and CPT/HCPCS codes is recommended. When both codes are available, include the CPT code within the translation element. When only the CPT code is available, include the CPT code within the translation element and use **@nullFlavor**="OTH" in the code element.
    - i. This **@code** **SHOULD** be selected from LOINC (CodeSystem: 2.16.840.1.113883.6.1) or SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) (CONF:1106-771).
  - b. This code **MAY** contain zero or more [0..\*] **translation** (CONF:1106-371).

- i. The translation, if present, **SHALL** contain exactly one [1..1] @code, which **SHOULD** be selected from CodeSystem CPT4 (urn:oid:2.16.840.1.113883.6.12) (CONF:1106-372).
- 6. **SHALL** contain exactly one [1..1] statusCode (CONF:1106-373).
  - a. This statusCode **SHALL** contain exactly one [1..1] @code="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1106-374).

**Figure 123: Provided Service Observation Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- Conforms to C-CDA R2 Procedure Activity Observation (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.4.13" extension="2014-06-09" />
  <!-- Provided Service Observation -->
  <templateId root="2.16.840.1.113883.10.20.34.3.3" />
  <id root="dc507ac6-cb15-4d21-9410-fb399a2b95f6" />
  <code code="22059005"
    displayName="Computerized tomography, bone density study"
    codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT">
    <translation code="77078"
      displayName="CT BONE MINERL DENSITY STUDY 1/> SITS AXIAL SKE"
      codeSystemName="CPT-4" codeSystem="2.16.840.1.113883.6.12" />
    </code>
  <statusCode code="completed" />
  <value xsi:type="CD" nullFlavor="NA" />
</observation>
    
```

### 3.55 Procedure Activity Procedure (V2)

[procedure: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09 (open)]

Published as part of Consolidated CDA Templates for Clinical Notes (US Realm) DSTU R2

**Table 259: Procedure Activity Procedure (V2) Contexts**

Contained By:	Contains:
<a href="#">Reaction Observation (V2)</a> (optional)	<a href="#">Author Participation</a> <a href="#">Indication (V2)</a> <a href="#">Instruction (V2)</a> <a href="#">Medication Activity (V2)</a> <a href="#">Product Instance</a> <a href="#">Reaction Observation (V2)</a> <a href="#">Service Delivery Location</a>

The common notion of "procedure" is broader than that specified by the HL7 Version 3 Reference Information Model (RIM). Therefore procedure templates can be represented with various RIM classes: act (e.g., dressing change), observation (e.g., EEG), procedure (e.g., splenectomy).

This template represents procedures whose immediate and primary outcome (post-condition) is the alteration of the physical condition of the patient. Examples of these procedures are an appendectomy, hip replacement, and a creation of a gastrostomy.

This template can be used with a contained Product Instance template to represent a device in or on a patient. In this case, targetSiteCode is used to record the location of the device in or on the patient's body. Equipment supplied to the patient (e.g., pumps, inhalers, wheelchairs) is represented by the Non-Medicinal Supply Activity (V2) template.

**Table 260: Procedure Activity Procedure (V2) Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
procedure (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-7652</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = PROC
@moodCode	1..1	SHALL		<a href="#">1098-7653</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-7654</a>	
@root	1..1	SHALL		<a href="#">1098-10521</a>	2.16.840.1.113883.10.20.22.4.14
@extension	1..1	SHALL		<a href="#">1098-32506</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-7655</a>	
code	1..1	SHALL		<a href="#">1098-7656</a>	
originalText	0..1	SHOULD		<a href="#">1098-19203</a>	
reference	0..1	SHOULD		<a href="#">1098-19204</a>	
@value	0..1	SHOULD		<a href="#">1098-19205</a>	
statusCode	1..1	SHALL		<a href="#">1098-7661</a>	
@code	1..1	SHALL		<a href="#">1098-32366</a>	urn:oid:2.16.840.1.113883.11.20.9.22 (ProcedureAct statusCode)
effectiveTime	0..1	SHOULD		<a href="#">1098-7662</a>	
priorityCode	0..1	MAY		<a href="#">1098-7668</a>	urn:oid:2.16.840.1.113883.1.11.16866 (Act Priority)
methodCode	0..1	MAY		<a href="#">1098-7670</a>	
targetSiteCode	0..*	SHOULD		<a href="#">1098-7683</a>	
@code	1..1	SHALL		<a href="#">1098-16082</a>	urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 (Body Site)
specimen	0..*	MAY		<a href="#">1098-7697</a>	
specimenRole	1..1	SHALL		<a href="#">1098-7704</a>	
id	0..*	SHOULD		<a href="#">1098-7716</a>	
performer	0..*	SHOULD		<a href="#">1098-7718</a>	



assignedEntity	1..1	SHALL		<a href="#">1098-7720</a>	
id	1..*	SHALL		<a href="#">1098-7722</a>	
addr	1..*	SHALL		<a href="#">1098-7731</a>	
telecom	1..*	SHALL		<a href="#">1098-7732</a>	
representedOrganization	0..1	SHOULD		<a href="#">1098-7733</a>	
id	0..*	SHOULD		<a href="#">1098-7734</a>	
name	0..*	MAY		<a href="#">1098-7735</a>	
telecom	1..1	SHALL		<a href="#">1098-7737</a>	
addr	1..1	SHALL		<a href="#">1098-7736</a>	
author	1..*	SHOULD		<a href="#">1098-32479</a>	<a href="#">Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)</a>
participant	0..*	MAY		<a href="#">1098-7751</a>	
@typeCode	1..1	SHALL		<a href="#">1098-7752</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = DEV
participantRole	1..1	SHALL		<a href="#">1098-15911</a>	<a href="#">Product Instance (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.37)</a>
participant	0..*	MAY		<a href="#">1098-7765</a>	
@typeCode	1..1	SHALL		<a href="#">1098-7766</a>	urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = LOC
participantRole	1..1	SHALL		<a href="#">1098-15912</a>	<a href="#">Service Delivery Location (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32)</a>
entryRelationship	0..*	MAY		<a href="#">1098-7768</a>	
@typeCode	1..1	SHALL		<a href="#">1098-7769</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
@inversionInd	1..1	SHALL		<a href="#">1098-8009</a>	true
encounter	1..1	SHALL		<a href="#">1098-7770</a>	
@classCode	1..1	SHALL		<a href="#">1098-7771</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ENC

@moodCode	1..1	SHALL		<a href="#">1098-7772</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
id	1..1	SHALL		<a href="#">1098-7773</a>	
entryRelationship	0..1	MAY		<a href="#">1098-7775</a>	
@typeCode	1..1	SHALL		<a href="#">1098-7776</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
@inversionInd	1..1	SHALL		<a href="#">1098-7777</a>	true
act	1..1	SHALL		<a href="#">1098-31395</a>	<a href="#">Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2.0.22.4.20:2014-06-09)</a>
entryRelationship	0..*	MAY		<a href="#">1098-7779</a>	
@typeCode	1..1	SHALL		<a href="#">1098-7780</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON
observation	1..1	SHALL		<a href="#">1098-15914</a>	<a href="#">Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2.0.22.4.19:2014-06-09)</a>
entryRelationship	0..*	MAY		<a href="#">1098-7886</a>	
@typeCode	1..1	SHALL		<a href="#">1098-7887</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
substanceAdministration	1..1	SHALL		<a href="#">1098-15915</a>	<a href="#">Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2.0.22.4.16:2014-06-09)</a>
entryRelationship	0..*	MAY		<a href="#">1098-32473</a>	
@typeCode	1..1	SHALL		<a href="#">1098-32474</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
observation	1..1	SHALL		<a href="#">1098-32475</a>	<a href="#">Reaction Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2.0.22.4.9:2014-06-09)</a>

1. **SHALL** contain exactly one [1..1] @classCode="PROC" Procedure (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-7652).
2. **SHALL** contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-7653).
3. **SHALL** contain exactly one [1..1] templateId (CONF:1098-7654) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.14" (CONF:1098-10521).

- b. **SHALL** contain exactly one [1..1] **@extension="2014-06-09"** (CONF:1098-32506).
- 4. **SHALL** contain at least one [1..\*] **id** (CONF:1098-7655).
- 5. **SHALL** contain exactly one [1..1] **code** (CONF:1098-7656).
  - a. This code **SHOULD** contain zero or one [0..1] **originalText** (CONF:1098-19203).
    - i. The originalText, if present, **SHOULD** contain zero or one [0..1] **reference** (CONF:1098-19204).
      - 1. The reference, if present, **SHOULD** contain zero or one [0..1] **@value** (CONF:1098-19205).
        - a. 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:1098-19206).
    - b. This **@code** **SHOULD** be selected from LOINC (CodeSystem: 2.16.840.1.113883.6.1) or SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96), and **MAY** be selected from CPT-4 (CodeSystem: 2.16.840.1.113883.6.12) or ICD10 PCS (CodeSystem: 2.16.840.1.113883.6.4) or CDT-2 (Code System: 2.16.840.1.113883.6.13) (CONF:1098-19207).
- 6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-7661).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [ProcedureAct statusCode](#) urn:oid:2.16.840.1.113883.11.20.9.22 **STATIC** 2014-04-23 (CONF:1098-32366).
- 7. **SHOULD** contain zero or one [0..1] **effectiveTime** (CONF:1098-7662).
- 8. **MAY** contain zero or one [0..1] **priorityCode**, which **SHALL** be selected from ValueSet [Act Priority](#) urn:oid:2.16.840.1.113883.1.11.16866 **DYNAMIC** (CONF:1098-7668).
- 9. **MAY** contain zero or one [0..1] **methodCode** (CONF:1098-7670).
  - a. MethodCode **SHALL NOT** conflict with the method inherent in Procedure / code (CONF:1098-7890).

In the case of an implanted medical device, targetSiteCode is used to record the location of the device, in or on the patient's body.

- 10. **SHOULD** contain zero or more [0..\*] **targetSiteCode** (CONF:1098-7683).
  - a. The targetSiteCode, if present, **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [Body Site](#) urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 **DYNAMIC** (CONF:1098-16082).
- 11. **MAY** contain zero or more [0..\*] **specimen** (CONF:1098-7697).
  - a. The specimen, if present, **SHALL** contain exactly one [1..1] **specimenRole** (CONF:1098-7704).
    - i. This specimenRole **SHOULD** contain zero or more [0..\*] **id** (CONF:1098-7716).
      - 1. If you want to indicate that the Procedure and the Results are referring to the same specimen, the Procedure/specimen/specimenRole/id **SHOULD** be set to equal an Organizer/specimen/ specimenRole/id (CONF:1098-29744).

- b. This specimen is for representing specimens obtained from a procedure (CONF:1098-16842).
12. **SHOULD** contain zero or more [0..\*] **performer** (CONF:1098-7718) such that it
- a. **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:1098-7720).
    - i. This assignedEntity **SHALL** contain at least one [1..\*] **id** (CONF:1098-7722).
    - ii. This assignedEntity **SHALL** contain at least one [1..\*] **addr** (CONF:1098-7731).
    - iii. This assignedEntity **SHALL** contain at least one [1..\*] **telecom** (CONF:1098-7732).
    - iv. This assignedEntity **SHOULD** contain zero or one [0..1] **representedOrganization** (CONF:1098-7733).
      - 1. The representedOrganization, if present, **SHOULD** contain zero or more [0..\*] **id** (CONF:1098-7734).
      - 2. The representedOrganization, if present, **MAY** contain zero or more [0..\*] **name** (CONF:1098-7735).
      - 3. The representedOrganization, if present, **SHALL** contain exactly one [1..1] **telecom** (CONF:1098-7737).
      - 4. The representedOrganization, if present, **SHALL** contain exactly one [1..1] **addr** (CONF:1098-7736).
13. **SHOULD** contain at least one [1..\*] **Author Participation** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-32479).
14. **MAY** contain zero or more [0..\*] **participant** (CONF:1098-7751) such that it
- a. **SHALL** contain exactly one [1..1] **@typeCode="DEV" Device** (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 **STATIC**) (CONF:1098-7752).
  - b. **SHALL** contain exactly one [1..1] **Product Instance** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.37) (CONF:1098-15911).
15. **MAY** contain zero or more [0..\*] **participant** (CONF:1098-7765) such that it
- a. **SHALL** contain exactly one [1..1] **@typeCode="LOC" Location** (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 **STATIC**) (CONF:1098-7766).
  - b. **SHALL** contain exactly one [1..1] **Service Delivery Location** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32) (CONF:1098-15912).
16. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-7768) 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 **STATIC**) (CONF:1098-7769).
  - b. **SHALL** contain exactly one [1..1] **@inversionInd="true" true** (CONF:1098-8009).
  - c. **SHALL** contain exactly one [1..1] **encounter** (CONF:1098-7770).
    - i. This encounter **SHALL** contain exactly one [1..1] **@classCode="ENC" Encounter** (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-7771).

- ii. This encounter **SHALL** contain exactly one [1..1] **@moodCode="EVN"** Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-7772).
  - iii. This encounter **SHALL** contain exactly one [1..1] **id** (CONF:1098-7773).
    - 1. Set the encounter ID to the ID of an encounter in another section to signify they are the same encounter (CONF:1098-16843).
- 17. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1098-7775) 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 **STATIC**) (CONF:1098-7776).
  - b. **SHALL** contain exactly one [1..1] **@inversionInd="true"** true (CONF:1098-7777).
  - 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:1098-31395).
- 18. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-7779) 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 **STATIC**) (CONF:1098-7780).
  - 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:1098-15914).
- 19. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-7886) 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 **STATIC**) (CONF:1098-7887).
  - b. **SHALL** contain exactly one [1..1] **Medication Activity (V2)** (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09) (CONF:1098-15915).
- 20. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-32473) 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:1098-32474).
  - 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:1098-32475).

**Figure 124: Procedure Activity Procedure (V2) Example**

```

<procedure classCode="PROC" moodCode="EVN">
  <!-- Procedure Activity Procedure V2-->
  <templateId root="2.16.840.1.113883.10.20.22.4.14" extension="2014-06-09" />
  <id root="d5b614bd-01ce-410d-8726-e1fd01dcc72a" />
  <code code="103716009" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
  displayName="Stent Placement">
    <originalText>
      <reference value="#Proc1" />
    </originalText>
  </code>
  <statusCode code="completed" />
  <effectiveTime value="20130512" />
  <targetSiteCode code="28273000" displayName="bile duct"
  codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" />
  <specimen typeCode="SPC">
    <specimenRole classCode="SPEC">
      <id root="a6d7b927-2b70-43c7-bdf3-0e7c4133062c" />
      <specimenPlayingEntity>
        <code code="57259009" codeSystem="2.16.840.1.113883.6.96"
        displayName="gallbladder bile" />
      </specimenPlayingEntity>
    </specimenRole>
  </specimen>
  <performer>
    ...
  </performer>
</procedure>

```

### 3.55.1 Provided Service Procedure

[procedure: identifier urn:oid:2.16.840.1.113883.10.20.34.3.12 (open)]

Published as part of National Health Care Surveys, Release 1, DSTU 1 - US Realm

**Table 261: Provided Service Procedure Contexts**

Contained By:	Contains:
<a href="#">Services and Procedures Section</a> (optional)	

This template represents a procedure service that has been provided. Examples of procedure services include excisions of tissue and biopsies. To represent the provided procedure service, the moodCode value is constrained to "EVN" and the statusCode value is constrained to "completed".

**Table 262: Provided Service Procedure Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
procedure (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.12)					
@classCode	1..1	SHALL		<a href="#">1106-145</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = PROC
@moodCode	1..1	SHALL		<a href="#">1106-146</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1106-147</a>	
@root	1..1	SHALL		<a href="#">1106-148</a>	2.16.840.1.113883.10.20.34.3.12
code	1..1	SHALL		<a href="#">1106-149</a>	
@code	0..1	SHOULD	CS	<a href="#">1106-150</a>	
translation	0..*	MAY		<a href="#">1106-360</a>	urn:oid:2.16.840.1.113883.6.12 (CPT4)
@code	1..1	SHALL		<a href="#">1106-376</a>	urn:oid:2.16.840.1.113883.6.12 (CPT4)
statusCode	1..1	SHALL		<a href="#">1106-152</a>	
@code	1..1	SHALL		<a href="#">1106-377</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed

1. Conforms to [Procedure Activity Procedure \(V2\)](#) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09).
2. **SHALL** contain exactly one [1..1] **@classCode**="PROC" Procedure (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1106-145).
3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1106-146).
4. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-147) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.12" (CONF:1106-148).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1106-149).
  - a. This code **SHOULD** contain zero or one [0..1] **@code** (CONF:1106-150).  
Note: Inclusion of both SNOMED CT/LOINC and CPT/HCPCS codes is recommended. When both codes are available, include the CPT code within the translation element. When only the CPT code is available, include the CPT code within the translation element and use **@nullFlavor**="OTH" in the code element.
    - i. This **@code** **SHOULD** be selected from LOINC (CodeSystem: 2.16.840.1.113883.6.1) or SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) (CONF:1106-770).
  - b. This code **MAY** contain zero or more [0..\*] **translation** (CodeSystem: CPT4 urn:oid:2.16.840.1.113883.6.12) (CONF:1106-360).

- i. The translation, if present, **SHALL** contain exactly one [1..1] @code, which **SHOULD** be selected from CodeSystem CPT4 (urn:oid:2.16.840.1.113883.6.12) (CONF:1106-376).
- 6. **SHALL** contain exactly one [1..1] statusCode (CONF:1106-152).
  - a. This statusCode **SHALL** contain exactly one [1..1] @code="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1106-377).

**Figure 125: Provided Service Procedure Example**

```

<procedure classCode="PROC" moodCode="EVN">
  <!-- Conforms to C-CDA R2 Procedure Activity Procedure (V2) -->
  <templateId root="2.16.840.1.113883.10.20.22.4.14" extension="2014-06-09" />
  <!-- Provided Service Procedure -->
  <templateId root="2.16.840.1.113883.10.20.34.3.12" />
  <id root="305c55e3-ff9d-4402-b34a-97da397cc29e" />
  <code code="30374004" displayName="Excision of uvula"
    codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT">
    <translation code="42140" displayName="UVULECTOMY EXCISION UVULA"
      codeSystemName="CPT-4" codeSystem="2.16.840.1.113883.6.12" />
  </code>
  <statusCode code="completed" />
</procedure>
    
```

### 3.56 Procedure Follow-Up Attempt Observation

[observation: identifier urn:h17ii:2.16.840.1.113883.10.20.34.3.42:2015-04-01 (open) ]

Published as part of National Health Care Surveys, Release 1, DSTU 1.1 - US Realm

**Table 263: Procedure Follow-Up Attempt Observation Contexts**

Contained By:	Contains:
<a href="#">Current Outpatient Visit (V3)</a> (optional)	<a href="#">Follow-up Attempt Outcome Observation</a>

This template represents whether or not a follow-up attempt was made within 24-hours after surgery and if so, the results of that follow-up. If this fact is unknown use nullFlavor="UNK".



**Table 264: Procedure Follow-Up Attempt Observation Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.42:2015-04-01)					
@classCode	1..1	SHALL		<a href="#">1184-1127</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1184-1128</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1184-1121</a>	
@root	1..1	SHALL		<a href="#">1184-1125</a>	2.16.840.1.113883.10.20.34.3.42
@extension	1..1	SHALL		<a href="#">1184-1134</a>	2015-04-01
id	1..*	SHALL		<a href="#">1184-1129</a>	
code	1..1	SHALL		<a href="#">1184-1123</a>	
@code	1..1	SHALL		<a href="#">1184-1130</a>	78027-0
@codeSystem	1..1	SHALL		<a href="#">1184-1131</a>	2.16.840.1.113883.6.1
statusCode	1..1	SHALL		<a href="#">1184-1122</a>	
@code	1..1	SHALL		<a href="#">1184-1126</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	BL	<a href="#">1184-1124</a>	
@nullFlavor	0..1	MAY		<a href="#">1184-1132</a>	UNK
@value	0..1	SHOULD		<a href="#">1184-1133</a>	
entryRelationship	0..1	SHOULD		<a href="#">1184-1148</a>	
@typeCode	1..1	SHALL		<a href="#">1184-1149</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR
observation	1..1	SHALL		<a href="#">1184-1150</a>	<a href="#">Follow-up Attempt Outcome Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.43:2015-04-01)</a>

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1184-1127).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1184-1128).

3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1184-1121) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.42" (CONF:1184-1125).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2015-04-01" (CONF:1184-1134).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1184-1129).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1184-1123).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="78027-0" Follow-up attempt made within 24-hours after surgery (CONF:1184-1130).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CONF:1184-1131).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1184-1122).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1184-1126).

Use **@value**="true" for "yes", **@value**="false" for "no" and **@nullFlavor**="UNK" for "unknown".

7. **SHALL** contain exactly one [1..1] **value** with **@xsi:type**="BL" (CONF:1184-1124).
  - a. This value **MAY** contain zero or one [0..1] **@nullFlavor**="UNK" (CONF:1184-1132).
  - b. This value **SHOULD** contain zero or one [0..1] **@value** (CONF:1184-1133).
8. **SHOULD** contain zero or one [0..1] **entryRelationship** (CONF:1184-1148).
  - a. The entryRelationship, if present, **SHALL** contain exactly one [1..1] **@typeCode**="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1184-1149).
  - b. The entryRelationship, if present, **SHALL** contain exactly one [1..1] **Follow-up Attempt Outcome Observation** (identifier: urn:h17ii:2.16.840.1.113883.10.20.34.3.43:2015-04-01) (CONF:1184-1150).
  - c. If a follow-up attempt was made then this entry **SHALL** be present (CONF:1184-1151).

**Figure 126: Procedure Follow-Up Attempt Observation**

```

<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.34.3.42"
    extension="2015-04-01" />
  <id root="ecbec7b7-7fc0-47b2-85b5-39778319b8fb" />
  <!-- Follow-up attempt -->
  <code code="78027-0"
    displayName="Follow-up attempt made within 24-hours after surgery"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC" />
  <statusCode code="completed" />
  <value xsi:type="BL" value="true" />
  <!-- Follow-Up Attempt Outcome Observation -->
  <entryRelationship typeCode="REFR">
    <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.34.3.43"
        extension="2015-04-01" />
      ...
    </observation>
  </entryRelationship>
</observation>

```

### 3.57 Product Instance

[participantRole: identifier urn:oid:2.16.840.1.113883.10.20.22.4.37 (open)]

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DSTU R1.1

**Table 265: Product Instance Contexts**

Contained By:	Contains:
<a href="#">Procedure Activity Procedure (V2)</a> (optional)	

This clinical statement represents a particular device that was placed in a patient or used as part of a procedure or other act. This provides a record of the identifier and other details about the given product that was used. For example, it is important to have a record that indicates not just that a hip prostheses was placed in a patient but that it was a particular hip prostheses number with a unique identifier.

The FDA Amendments Act specifies the creation of a Unique Device Identification (UDI) System that requires the label of devices to bear a unique identifier that will standardize device identification and identify the device through distribution and use.

The FDA permits an issuing agency to designate that their Device Identifier (DI) + Production Identifier (PI) format qualifies as a UDI through a process of accreditation. Currently, there are three FDA-accredited issuing agencies that are allowed to call their format a UDI. These organizations are GS1, HIBCC, and ICCBBA. For additional information on technical formats that qualify as UDI from each of the issuing agencies see the UDI Appendix.

When communicating only the issuing agency device identifier (i.e., subcomponent of the UDI), the use of the issuing agency OID is appropriate. However, when communicating the unique device identifier (DI + PI), the FDA OID (2.16.840.1.113883.3.3719) must be used.

When sending a UDI, populate the participantRole/id/@root with the FDA OID (2.16.840.1.113883.3.3719) and participantRole/id/@extension with the UDI.

When sending a DI, populate the participantRole/id/@root with the appropriate assigning agency OID and participantRole/id/@extension with the DI.

The scopingEntity/id should correspond to FDA or the appropriate issuing agency.

**Table 266: Product Instance Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
participantRole (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.37)					
@classCode	1..1	SHALL		<a href="#">81-7900</a>	urn:oid:2.16.840.1.113883.5.110 (RoleClass) = MANU
templateId	1..1	SHALL		<a href="#">81-7901</a>	
@root	1..1	SHALL		<a href="#">81-10522</a>	2.16.840.1.113883.10.20.22.4.37
id	1..*	SHALL		<a href="#">81-7902</a>	
playingDevice	1..1	SHALL		<a href="#">81-7903</a>	
code	0..1	SHOULD		<a href="#">81-16837</a>	
scopingEntity	1..1	SHALL		<a href="#">81-7905</a>	
id	1..*	SHALL		<a href="#">81-7908</a>	

1. **SHALL** contain exactly one [1..1] @classCode="MANU" Manufactured Product (CodeSystem: RoleClass urn:oid:2.16.840.1.113883.5.110 **STATIC**) (CONF:81-7900).
2. **SHALL** contain exactly one [1..1] templateId (CONF:81-7901) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.37" (CONF:81-10522).
3. **SHALL** contain at least one [1..\*] id (CONF:81-7902).
4. **SHALL** contain exactly one [1..1] playingDevice (CONF:81-7903).
  - a. This playingDevice **SHOULD** contain zero or one [0..1] code (CONF:81-16837).
5. **SHALL** contain exactly one [1..1] scopingEntity (CONF:81-7905).
  - a. This scopingEntity **SHALL** contain at least one [1..\*] id (CONF:81-7908).

**Figure 127: Product Instance Example**

```

<participantRole classCode="MANU">
  <templateId root="2.16.840.1.113883.10.20.22.4.37"/>
  <id root="2.16.840.1.113883.3.3719"
    extension="(01)5102222233336(11)141231(17)150707(10)A213B1(21)1234"
    assigningAuthorityName="FDA"/>
  <playingDevice>
    <code code="90412006" codeSystem="2.16.840.1.113883.6.96"
      displayName="Colonoscope"/>
  </playingDevice>
  <scopingEntity>
    <id root="2.16.840.1.113883.3.3719"/>
  </scopingEntity>
</participantRole>

```

### 3.58 Prognosis Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.113 (open)]

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DSTU R2

**Table 267: Prognosis Observation Contexts**

Contained By:	Contains:
<a href="#">Problem Observation (V2)</a> (optional)	

This template represents the patient's prognosis, which must be associated with a problem observation. It may serve as an alert to scope intervention plans.

The effectiveTime represents the clinically relevant time of the observation. The observation/value is not constrained and can represent the expected life duration in PQ, an anticipated course of the disease in text, or coded term.

**Table 268: Prognosis Observation Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.113)					
@classCode	1..1	SHALL		<a href="#">1098-29035</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1098-29036</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-29037</a>	
@root	1..1	SHALL		<a href="#">1098-29038</a>	2.16.840.1.113883.10.20.22.4.113
code	1..1	SHALL		<a href="#">1098-29039</a>	
@code	1..1	SHALL		<a href="#">1098-29468</a>	75328-5
@codeSystem	1..1	SHALL		<a href="#">1098-31349</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
statusCode	1..1	SHALL		<a href="#">1098-31350</a>	
@code	1..1	SHALL		<a href="#">1098-31351</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
effectiveTime	1..1	SHALL		<a href="#">1098-31123</a>	
value	1..1	SHALL		<a href="#">1098-29469</a>	

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-29035).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-29036).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-29037) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.113" (CONF:1098-29038).
4. **SHALL** contain exactly one [1..1] **code** (CONF:1098-29039).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="75328-5" Prognosis (CONF:1098-29468).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1098-31349).
5. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-31350).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-31351).
6. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1098-31123).
7. **SHALL** contain exactly one [1..1] **value** (CONF:1098-29469).

**Figure 128: Prognosis, Free Text Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- Prognosis -->
  <templateId root="2.16.840.1.113883.10.20.22.4.113" />
  <id root="2097c709-291b-4a0f-bef9-ad9b23b3bb43" />
  <code code="75328-5"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC"
    displayName="Prognosis" />
  <text>
    Presence of a life limiting condition(>50% possibility of death within 2 year)
  </text>
  <statusCode code="completed" />
  <effectiveTime value="20130606" />
  <value xsi:type="ST">Presence of a life limiting condition(>50% possibility of death
  within 2 year</value>
</observation>

```

**Figure 129: Prognosis, Coded Example**

```

<entryRelationship typeCode="REFR">
  <observation classCode="OBS" moodCode="EVN">
    <!-- Prognosis -->
    <templateId root="2.16.840.1.113883.10.20.22.4.113" />
    <id root="2097c709-291b-4a0f-bef9-ad9b23b3bb43" />
    <code code="75328-5"
      codeSystem="2.16.840.1.113883.6.1"
      codeSystemName="LOINC"
      displayName="Prognosis" />
    <statusCode code="completed" />
    <effectiveTime>
      <low value="20130301" />
    </effectiveTime>
    <value xsi:type="CD" code="67334001" codeSystem="2.16.840.1.113883.6.96"
    displayName="guarded prognosis" codeSystemName="SNOMED CT" />
  </observation>
</entryRelationship>

```

### 3.59 Reaction Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09 (open) ]

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**Table 269: Reaction Observation (V2) Contexts**

<b>Contained By:</b>	<b>Contains:</b>
<a href="#">Medication Activity (V2)</a> (optional) <a href="#">Procedure Activity Procedure (V2)</a> (optional) <a href="#">Procedure Activity Observation (V2)</a> (optional) <a href="#">Immunization Activity (V2)</a> (optional)	<a href="#">Medication Activity (V2)</a> <a href="#">Procedure Activity Procedure (V2)</a> <a href="#">Severity Observation (V2)</a>

This clinical statement represents the response to an undesired symptom, finding, etc. due to administered or exposed substance. This reaction may be an undesired symptom, finding, etc. or it could be a desired response to a treatment. A reaction can be defined with respect to its severity, and can have been treated by one or more interventions.



**Table 270: Reaction Observation (V2) Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-7325</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1098-7326</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-7323</a>	
@root	1..1	SHALL		<a href="#">1098-10523</a>	2.16.840.1.113883.10.20.22.4.9
@extension	1..1	SHALL		<a href="#">1098-32504</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-7329</a>	
code	1..1	SHALL		<a href="#">1098-16851</a>	
@code	1..1	SHALL		<a href="#">1098-31124</a>	ASSERTION
@codeSystem	1..1	SHALL		<a href="#">1098-32169</a>	urn:oid:2.16.840.1.113883.5.4 (ActCode) = 2.16.840.1.113883.5.4
statusCode	1..1	SHALL		<a href="#">1098-7328</a>	
@code	1..1	SHALL		<a href="#">1098-19114</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
effectiveTime	0..1	SHOULD		<a href="#">1098-7332</a>	
low	0..1	SHOULD		<a href="#">1098-7333</a>	
high	0..1	SHOULD		<a href="#">1098-7334</a>	
value	1..1	SHALL	CD	<a href="#">1098-7335</a>	urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 (Problem)
entryRelationship	0..*	MAY		<a href="#">1098-7337</a>	
@typeCode	1..1	SHALL		<a href="#">1098-7338</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON
@inversionInd	1..1	SHALL		<a href="#">1098-7343</a>	true
procedure	1..1	SHALL		<a href="#">1098-15920</a>	<a href="#">Procedure Activity Procedure (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09)</a>
entryRelationship	0..*	MAY		<a href="#">1098-</a>	

				<a href="#">7340</a>	
@typeCode	1..1	SHALL		<a href="#">1098-7341</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON
@inversionInd	1..1	SHALL		<a href="#">1098-7344</a>	true
substanceAdministration	1..1	SHALL		<a href="#">1098-15921</a>	<a href="#">Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09)</a>
entryRelationship	0..1	MAY		<a href="#">1098-7580</a>	
@typeCode	1..1	SHALL		<a href="#">1098-7581</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
@inversionInd	1..1	SHALL		<a href="#">1098-10375</a>	true
observation	1..1	SHALL		<a href="#">1098-15922</a>	<a href="#">Severity Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.8:2014-06-09)</a>

1. **SHALL** contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-7325).
2. **SHALL** contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-7326).
3. **SHALL** contain exactly one [1..1] templateId (CONF:1098-7323) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.9" (CONF:1098-10523).
  - b. **SHALL** contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32504).
4. **SHALL** contain at least one [1..\*] id (CONF:1098-7329).
5. **SHALL** contain exactly one [1..1] code (CONF:1098-16851).
  - a. This code **SHALL** contain exactly one [1..1] @code="ASSERTION" (CONF:1098-31124).
  - b. This code **SHALL** contain exactly one [1..1] @codeSystem="2.16.840.1.113883.5.4" (CodeSystem: ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:1098-32169).
6. **SHALL** contain exactly one [1..1] statusCode (CONF:1098-7328).
  - a. This statusCode **SHALL** contain exactly one [1..1] @code="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098-19114).
7. **SHOULD** contain zero or one [0..1] effectiveTime (CONF:1098-7332).
  - a. The effectiveTime, if present, **SHOULD** contain zero or one [0..1] low (CONF:1098-7333).
  - b. The effectiveTime, if present, **SHOULD** contain zero or one [0..1] high (CONF:1098-7334).

8. **SHALL** contain exactly one [1..1] **value** with `@xsi:type="CD"`, where the code **SHALL** be selected from ValueSet [Problem](#) urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 **DYNAMIC** (CONF:1098-7335).
9. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-7337) 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 **STATIC**) (CONF:1098-7338).
  - b. **SHALL** contain exactly one [1..1] `@inversionInd="true"` True (CONF:1098-7343).

This procedure activity is intended to contain information about procedures that were performed in response to an allergy reaction.

- c. **SHALL** contain exactly one [1..1] [Procedure Activity Procedure \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09) (CONF:1098-15920).
10. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-7340) 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 **STATIC**) (CONF:1098-7341).
  - b. **SHALL** contain exactly one [1..1] `@inversionInd="true"` True (CONF:1098-7344).

This medication activity is intended to contain information about medications that were administered in response to an allergy reaction.

- c. **SHALL** contain exactly one [1..1] [Medication Activity \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09) (CONF:1098-15921).
11. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1098-7580) 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 **STATIC**) (CONF:1098-7581).
  - b. **SHALL** contain exactly one [1..1] `@inversionInd="true"` TRUE (CONF:1098-10375).
  - c. **SHALL** contain exactly one [1..1] [Severity Observation \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.8:2014-06-09) (CONF:1098-15922).

**Figure 130: Reaction Observation (V2) Example**

```

<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.9" extension="2014-06-09" />
  <id root="4adc1020-7b14-11db-9fe1-0800200c9a64" />
  <code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4" />
  <text>
    <reference value="#reaction1" />
  </text>
  <statusCode code="completed" />
  <effectiveTime>
    <low value="200802260805-0800" />
    <high value="200802281205-0800" />
  </effectiveTime>
  <value xsi:type="CD" code="422587007" codeSystem="2.16.840.1.113883.6.96"
  displayName="Nausea" />
  <entryRelationship typeCode="SUBJ" inversionInd="true">
    <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.22.4.8" extension="2014-06-09" />
      . . .
    </observation>
  </entryRelationship>
</observation>

```

### 3.60 Result Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.2:2014-06-09 (open)]

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**Table 271: Result Observation (V2) Contexts**

Contained By:	Contains:
<a href="#">Result Organizer (V2)</a> (required)	<a href="#">Author Participation</a>

This template represents the results of a laboratory, radiology, or other study performed on a patient.

The result observation includes a statusCode to allow recording the status of an observation. “Pending” results (e.g., a test has been run but results have not been reported yet) should be represented as “active” ActStatus.

**Table 272: Result Observation (V2) Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.2:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-7130</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1098-7131</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-7136</a>	
@root	1..1	SHALL		<a href="#">1098-9138</a>	2.16.840.1.113883.10.20.22.4.2
@extension	1..1	SHALL		<a href="#">1098-32575</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-7137</a>	
code	1..1	SHALL		<a href="#">1098-7133</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC)
statusCode	1..1	SHALL		<a href="#">1098-7134</a>	
@code	1..1	SHALL		<a href="#">1098-14849</a>	urn:oid:2.16.840.1.113883.11.20.9.39 (Result Status)
effectiveTime	1..1	SHALL		<a href="#">1098-7140</a>	
value	0..1	SHOULD		<a href="#">1098-7143</a>	urn:oid:2.16.840.1.113883.6.96 (SNOMED CT)
interpretationCode	0..*	SHOULD		<a href="#">1098-7147</a>	
@code	1..1	SHALL		<a href="#">1098-32476</a>	urn:oid:2.16.840.1.113883.1.11.78 (Observation Interpretation (HL7))
methodCode	0..1	MAY	SET<CE>	<a href="#">1098-7148</a>	
targetSiteCode	0..1	MAY	SET<CD>	<a href="#">1098-7153</a>	
author	0..*	SHOULD		<a href="#">1098-7149</a>	<a href="#">Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)</a>
referenceRange	0..*	SHOULD		<a href="#">1098-7150</a>	
observationRange	1..1	SHALL		<a href="#">1098-7151</a>	
code	0..0	SHALL NOT		<a href="#">1098-7152</a>	
value	1..1	SHALL		<a href="#">1098-32175</a>	

1. **SHALL** contain exactly one [1..1] **@classCode="OBS"** Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-7130).
2. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-7131).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7136) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.22.4.2"** (CONF:1098-9138).
  - b. **SHALL** contain exactly one [1..1] **@extension="2014-06-09"** (CONF:1098-32575).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1098-7137).
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:1098-7133).
  - a. This code **SHOULD** be a code from the LOINC that identifies the result observation. If an appropriate LOINC code does not exist, then the local code for this result **SHALL** be sent (CONF:1098-19212).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-7134).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [Result Status](#) urn:oid:2.16.840.1.113883.11.20.9.39 **STATIC** 2013-08-09 (CONF:1098-14849).
7. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1098-7140).  
Note: Represents the biologically relevant time of the measurement (e.g., the time a blood pressure reading is obtained, the time the blood sample was obtained for a chemistry test).
8. **SHOULD** contain zero or one [0..1] **value**, which **SHOULD** be selected from CodeSystem SNOMED CT (urn:oid:2.16.840.1.113883.6.96) (CONF:1098-7143).
  - a. If Observation/value is a physical quantity ( **xsi:type="PQ"**), the unit of measure **SHALL** be selected from ValueSet UnitsOfMeasureCaseSensitive 2.16.840.1.113883.1.11.12839 **DYNAMIC** (CONF:1098-31484).
  - b. A coded value **MAY** contain zero or more [0..\*] translations, which can be used to represent the original results as output by the lab (CONF:1098-31866).
  - c. If Observation/value is a CD ( **xsi:type="CD"**) the value **SHOULD** be SNOMED-CT (CONF:1098-32610).
9. **SHOULD** contain zero or more [0..\*] **interpretationCode** (CONF:1098-7147).
  - a. The interpretationCode, if present, **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [Observation Interpretation \(HL7\)](#) urn:oid:2.16.840.1.113883.1.11.78 **STATIC** 2014-09-01 (CONF:1098-32476).
10. **MAY** contain zero or one [0..1] **methodCode** (CONF:1098-7148).
11. **MAY** contain zero or one [0..1] **targetSiteCode** (CONF:1098-7153).
12. **SHOULD** contain zero or more [0..\*] [Author Participation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-7149).
13. **SHOULD** contain zero or more [0..\*] **referenceRange** (CONF:1098-7150).
  - a. The referenceRange, if present, **SHALL** contain exactly one [1..1] **observationRange** (CONF:1098-7151).
    - i. This observationRange **SHALL NOT** contain [0..0] **code** (CONF:1098-7152).

- ii. This observationRange **SHALL** contain exactly one [1..1] value (CONF:1098-32175).

**Table 273: Result Status**

Value Set: Result Status urn:oid:2.16.840.1.113883.11.20.9.39			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
aborted	ActStatus	urn:oid:2.16.840.1.113883.5.14	aborted
active	ActStatus	urn:oid:2.16.840.1.113883.5.14	active
cancelled	ActStatus	urn:oid:2.16.840.1.113883.5.14	cancelled
completed	ActStatus	urn:oid:2.16.840.1.113883.5.14	completed
held	ActStatus	urn:oid:2.16.840.1.113883.5.14	held
suspended	ActStatus	urn:oid:2.16.840.1.113883.5.14	suspended

**Table 274: Observation Interpretation (HL7)**

Value Set: Observation Interpretation (HL7) urn:oid:2.16.840.1.113883.1.11.78			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
A	HITSP-CS-83	urn:oid:2.16.840.1.113883.5.83	abnormal
B	HITSP-CS-83	urn:oid:2.16.840.1.113883.5.83	better
Carrier	HITSP-CS-83	urn:oid:2.16.840.1.113883.5.83	carrier
D	HITSP-CS-83	urn:oid:2.16.840.1.113883.5.83	decreased
HX	HITSP-CS-83	urn:oid:2.16.840.1.113883.5.83	above high threshold
I	HITSP-CS-83	urn:oid:2.16.840.1.113883.5.83	intermediate
IND	HITSP-CS-83	urn:oid:2.16.840.1.113883.5.83	indeterminate
LX	HITSP-CS-83	urn:oid:2.16.840.1.113883.5.83	below low threshold
MS	HITSP-CS-83	urn:oid:2.16.840.1.113883.5.83	moderately susceptible
N	HITSP-CS-83	urn:oid:2.16.840.1.113883.5.83	normal
...			



**Figure 131: Result Observation (V2) Example**

```

<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.2" extension="2014-06-09" />
  <id root="7c0704bb-9c40-41b5-9c7d-26b2d59e234f" />
  <code code="4544-3" displayName="Hematocrit" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC" />
  <statusCode code="completed" />
  <effectiveTime value="200803190830-0800" />
  <value xsi:type="PQ" value="35.3" unit="%" />
  <interpretationCode code="L" codeSystem="2.16.840.1.113883.5.83" />
  <author>
    <time value="200803190830-0800" />
    <assignedAuthor>
      <id extension="333444444" root="1.1.1.1.1.1.4" />
      <addr>
        <streetAddressLine>1017 Health Drive</streetAddressLine>
        <city>Portland</city>
        <state>OR</state>
        <postalCode>99123</postalCode>
        <country>US</country>
      </addr>
      <telecom use="WP" value="tel:+1(555)555-1017" />
      <assignedPerson>
        <name>
          <given>William</given>
          <given qualifier="CL">Bill</given>
          <family>Beaker</family>
        </name>
      </assignedPerson>
      <representedOrganization>
        <name>Good Health Laboratory</name>
      </representedOrganization>
    </assignedAuthor>
  </author>
  <referenceRange>
    <observationRange>
      <value xsi:type="IVL_PQ">
        <low value="34.9" unit="%" />
        <high value="44.5" unit="%" />
      </value>
    </observationRange>
  </referenceRange>
</observation>

```

**Figure 132: Pending Result Observation (V2) Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- ** Result observation ** -->
  <templateId root="2.16.840.1.113883.10.20.22.4.2" extension="2014-06-09" />
  <id root="aed821af-3330-4138-97f0-e84dfe5f3c35" />
  <code code="3094-0" displayName="Urea nitrogen, Serum"
codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
  <statusCode code="active" />
  <effectiveTime value="200803200930-0800" />
  <value xsi:type="PQ" nullFlavor="NI" />
</observation>

```

**Figure 133: Original Lab Units in <translation> Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- ** Result observation ** -->
  <templateId root="2.16.840.1.113883.10.20.22.4.2" extension="2014-06-09" />
  <id root="a69b3d60-2ffd-4440-958b-72b3335ff35f" />
  <code code="6690-2" displayName="Leukocytes" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC" />
  <statusCode code="completed" />
  <effectiveTime value="200803190830-0800" />
  <value xsi:type="PQ" value="6.7" unit="10*9/L">
    <translation>
      <originalText>6.7 billion per liter</originalText>
    </translation>
  </value>
  <interpretationCode code="N" codeSystem="2.16.840.1.113883.5.83" />
  <author typeCode="AUT">
    <time value="200803190830-0800" />
    <assignedAuthor>
      <id extension="333444444" root="1.1.1.1.1.1.4" />
    </assignedAuthor>
  </author>
  <referenceRange>
    <observationRange>
      <value xsi:type="IVL_PQ">
        <low value="4.3" unit="10*9/L" />
        <high value="10.8" unit="10*9/L" />
      </value>
    </observationRange>
  </referenceRange>
</observation>

```

### 3.61 Result Organizer (V2)

[organizer: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.1:2014-06-09 (open) ]

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**Table 275: Result Organizer (V2) Contexts**

Contained By:	Contains:
<a href="#">Results Section (entries optional) (V2)</a> (optional)	<a href="#">Author Participation</a> <a href="#">Result Observation (V2)</a>

This template provides a mechanism for grouping result observations. It contains information applicable to all of the contained result observations. The Result Organizer code categorizes the contained results into one of several commonly accepted values (e.g., “Hematology”, “Chemistry”, “Nuclear Medicine”).

If any Result Observation within the organizer has a statusCode of "active", the Result Organizer must also have a statusCode of "active".

**Table 276: Result Organizer (V2) Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
organizer (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.1:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-7121</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass)
@moodCode	1..1	SHALL		<a href="#">1098-7122</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-7126</a>	
@root	1..1	SHALL		<a href="#">1098-9134</a>	2.16.840.1.113883.10.20.22.4.1
@extension	1..1	SHALL		<a href="#">1098-32588</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-7127</a>	
code	1..1	SHALL		<a href="#">1098-7128</a>	
statusCode	1..1	SHALL		<a href="#">1098-7123</a>	
@code	1..1	SHALL		<a href="#">1098-14848</a>	urn:oid:2.16.840.1.113883.11.20.9.39 (Result Status)
effectiveTime	0..1	MAY		<a href="#">1098-31865</a>	
low	1..1	SHALL		<a href="#">1098-32488</a>	
high	1..1	SHALL		<a href="#">1098-32489</a>	
author	0..*	SHOULD		<a href="#">1098-31149</a>	<a href="#">Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)</a>
component	1..*	SHALL		<a href="#">1098-7124</a>	
observation	1..1	SHALL		<a href="#">1098-14850</a>	<a href="#">Result Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.2:2014-06-09)</a>

1. **SHALL** contain exactly one [1..1] **@classCode** (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-7121).
2. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-7122).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7126) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.22.4.1"** (CONF:1098-9134).
  - b. **SHALL** contain exactly one [1..1] **@extension="2014-06-09"** (CONF:1098-32588).

4. **SHALL** contain at least one [1..\*] **id** (CONF:1098-7127).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1098-7128).
  - a. **SHOULD** be selected from LOINC (codeSystem 2.16.840.1.113883.6.1) **OR** SNOMED CT (codeSystem 2.16.840.1.113883.6.96), and **MAY** be selected from CPT-4 (codeSystem 2.16.840.1.113883.6.12) (CONF:1098-19218).
  - b. Laboratory results **SHOULD** be from LOINC (CodeSystem: 2.16.840.1.113883.6.1) or other constrained terminology named by the US Department of Health and Human Services Office of National Coordinator or other federal agency (CONF:1098-19219).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-7123).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [Result Status](#) urn:oid:2.16.840.1.113883.11.20.9.39 **STATIC** 2013-08-09 (CONF:1098-14848).
7. **MAY** contain zero or one [0..1] **effectiveTime** (CONF:1098-31865).  
 Note: The effectiveTime is an interval that spans the effectiveTimes of the contained result observations. Because all contained result observations have a required time stamp, it is not required that this effectiveTime be populated.
  - a. The effectiveTime, if present, **SHALL** contain exactly one [1..1] **low** (CONF:1098-32488).
  - b. The effectiveTime, if present, **SHALL** contain exactly one [1..1] **high** (CONF:1098-32489).
8. **SHOULD** contain zero or more [0..\*] [Author Participation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31149).
9. **SHALL** contain at least one [1..\*] **component** (CONF:1098-7124) such that it
  - a. **SHALL** contain exactly one [1..1] [Result Observation \(V2\)](#) (identifier: urn:h17ii:2.16.840.1.113883.10.20.22.4.2:2014-06-09) (CONF:1098-14850).

**Figure 134: Result Organizer (V2) Example**

```

<organizer classCode="BATTERY" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.1" extension="2014-06-09" />
  <id root="7d5a02b0-67a4-11db-bd13-0800200c9a66" />
  <code code="57021-8" displayName="CBC W Auto Differential panel in Blood"
codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />
  <statusCode code="completed" />
  <effectiveTime>
    <low value="200803190830-0800" />
    <high value="200803190830-0800" />
  </effectiveTime>
  <author>
    . . .
  </author>
  <component>
    <observation classCode="OBS" moodCode="EVN">
      <!-- ** Result observation ** -->
      <templateId root="2.16.840.1.113883.10.20.22.4.2" extension="2014-06-09" />
      . . .
    </observation>
  </component>
</organizer>

```

### 3.62 Service Delivery Location

[participantRole: identifier urn:oid:2.16.840.1.113883.10.20.22.4.32 (open)]

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**Table 277: Service Delivery Location Contexts**

Contained By:	Contains:
<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="#">Encounter Activity (V2)</a> (optional) <a href="#">Hospital Admission Encounter</a> (required)	

This clinical statement represents the location of a service event where an act, observation or procedure took place.

**Table 278: Service Delivery Location Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
participantRole (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32)					
@classCode	1..1	SHALL		<a href="#">81-7758</a>	urn:oid:2.16.840.1.113883.5.111 (RoleCode) = SDLOC
templateId	1..1	SHALL		<a href="#">81-7635</a>	
@root	1..1	SHALL		<a href="#">81-10524</a>	2.16.840.1.113883.10.20.22.4.32
code	1..1	SHALL		<a href="#">81-16850</a>	urn:oid:2.16.840.1.113883.1.11.20275 (HealthcareServiceLocation)
addr	0..*	SHOULD		<a href="#">81-7760</a>	
telecom	0..*	SHOULD		<a href="#">81-7761</a>	
playingEntity	0..1	MAY		<a href="#">81-7762</a>	
@classCode	1..1	SHALL		<a href="#">81-7763</a>	urn:oid:2.16.840.1.113883.5.41 (EntityClass) = PLC
name	0..1	MAY		<a href="#">81-16037</a>	

1. **SHALL** contain exactly one [1..1] **@classCode**="SDLOC" (CodeSystem: RoleCode urn:oid:2.16.840.1.113883.5.111 **STATIC**) (CONF:81-7758).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:81-7635) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.32" (CONF:81-10524).
3. **SHALL** contain exactly one [1..1] **code**, which **SHALL** be selected from ValueSet [HealthcareServiceLocation](#) urn:oid:2.16.840.1.113883.1.11.20275 **STATIC** (CONF:81-16850).
4. **SHOULD** contain zero or more [0..\*] **addr** (CONF:81-7760).
5. **SHOULD** contain zero or more [0..\*] **telecom** (CONF:81-7761).
6. **MAY** contain zero or one [0..1] **playingEntity** (CONF:81-7762).
  - a. The playingEntity, if present, **SHALL** contain exactly one [1..1] **@classCode**="PLC" (CodeSystem: EntityClass urn:oid:2.16.840.1.113883.5.41 **STATIC**) (CONF:81-7763).
  - b. The playingEntity, if present, **MAY** contain zero or one [0..1] **name** (CONF:81-16037).

**Table 279: HealthcareServiceLocation**

Value Set: HealthcareServiceLocation urn:oid:2.16.840.1.113883.1.11.20275			
A comprehensive classification of locations and settings where healthcare services are provided. This value set is based on the National Healthcare Safety Network (NHSN) location code system that has been developed over a number of years through CDC's interaction with a variety of healthcare facilities and is intended to serve a variety of reporting needs where coding of healthcare service locations is required.			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
1162-7	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.113883.6.259	24-Hour observation area
1184-1	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.113883.6.259	Administrative area
1210-4	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.113883.6.259	Adult Mixed Acuity Unit
1099-1	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.113883.6.259	Adult step down unit [post-critical care]
1110-6	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.113883.6.259	Allergy clinic
1166-8	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.113883.6.259	Ambulatory surgical setting
1212-0	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.113883.6.259	Any Age Mixed Acuity Unit
1106-4	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.113883.6.259	Assisted living area
1145-2	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.113883.6.259	Behavioral health clinic
1185-8	HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.113883.6.259	Blood bank
...			



**Figure 135: Service Delivery Location Example**

```

<participantRole classCode="SDLOC">
  <templateId root="2.16.840.1.113883.10.20.22.4.32"/>
  <code code="1160-1" codeSystem="2.16.840.1.113883.6.259"
    codeSystemName="HealthcareServiceLocation" displayName="Urgent Care Center"/>
  <addr>
    <streetAddressLine>17 Daws Rd.</streetAddressLine>
    <city>Blue Bell</city>
    <state>MA</state>
    <postalCode>02368</postalCode>
    <country>US</country>
  </addr>
  <telecom use="WP" value="tel:+1(555)555-5000"/>
  <playingEntity classCode="PLC">
    <name>Community Health and Hospitals</name>
  </playingEntity>
</participantRole>

```

### 3.63 Severity Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.8:2014-06-09  
(open)]

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**Table 280: Severity Observation (V2) Contexts**

Contained By:	Contains:
<a href="#">Reaction Observation (V2)</a> (optional)	

This clinical statement represents the gravity of the problem, such as allergy or reaction, in terms of its actual or potential impact on the patient. The Severity Observation can be associated with an Allergy - Intolerance Observation, Substance or Device Allergy - Intolerance Observation, Reaction Observation or all. When the Severity Observation is associated directly with an allergy it characterizes the allergy. When the Severity Observation is associated with a Reaction Observation it characterizes a reaction. A person may manifest many symptoms in a reaction to a single substance, and each reaction to the substance can be represented. However, each reaction observation can have only one severity observation associated with it. For example, someone may have a rash reaction observation as well as an itching reaction observation, but each can have only one level of severity.

**Table 281: Severity Observation (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.8:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-7345</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1098-7346</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-7347</a>	
@root	1..1	SHALL		<a href="#">1098-10525</a>	2.16.840.1.113883.10.20.22.4.8
@extension	1..1	SHALL		<a href="#">1098-32577</a>	2014-06-09
code	1..1	SHALL		<a href="#">1098-19168</a>	
@code	1..1	SHALL		<a href="#">1098-19169</a>	SEV
@codeSystem	1..1	SHALL		<a href="#">1098-32170</a>	urn:oid:2.16.840.1.113883.5.4 (ActCode) = 2.16.840.1.113883.5.4
statusCode	1..1	SHALL		<a href="#">1098-7352</a>	
@code	1..1	SHALL		<a href="#">1098-19115</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	CD	<a href="#">1098-7356</a>	urn:oid:2.16.840.1.113883.3.88.12.3221.6.8 (Problem Severity)

1. **SHALL** contain exactly one [1..1] **@classCode="OBS"** Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-7345).
2. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-7346).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7347) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.22.4.8"** (CONF:1098-10525).
  - b. **SHALL** contain exactly one [1..1] **@extension="2014-06-09"** (CONF:1098-32577).
4. **SHALL** contain exactly one [1..1] **code** (CONF:1098-19168).
  - a. This code **SHALL** contain exactly one [1..1] **@code="SEV"** Severity (CONF:1098-19169).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem="2.16.840.1.113883.5.4"** (CodeSystem: ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:1098-32170).
5. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-7352).

- a. This statusCode **SHALL** contain exactly one [1..1] @code="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098-19115).
6. **SHALL** contain exactly one [1..1] value with @xsi:type="CD", where the code **SHALL** be selected from ValueSet [Problem Severity](#) urn:oid:2.16.840.1.113883.3.88.12.3221.6.8 **DYNAMIC** (CONF:1098-7356).

**Table 282: Problem Severity**

Value Set: Problem Severity urn:oid:2.16.840.1.113883.3.88.12.3221.6.8 This is a description of the level of the severity of the problem. Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
255604002	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Mild (qualifier value)
371923003	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Mild to moderate (qualifier value)
6736007	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Moderate (severity modifier) (qualifier value)
371924009	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Moderate to severe (qualifier value)
24484000	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Severe (severity modifier) (qualifier value)
399166001	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Fatal (qualifier value)

**Figure 136: Severity Observation (V2) Example**

```

<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.8" extension="2014-06-09" />
  <code code="SEV" displayName="Severity Observation" codeSystem="2.16.840.1.113883.5.4"
codeSystemName="ActCode" />
  <text>
    <reference value="#allergyseverity1" />
  </text>
  <statusCode code="completed" />
  <value xsi:type="CD" code="371924009" displayName="Moderate to severe"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" />
</observation>

```

### 3.64 Smoking Status - Meaningful Use (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09 (open) ]

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**Table 283: Smoking Status - Meaningful Use (V2) Contexts**

Contained By:	Contains:
<a href="#">Social History Section (V2)</a> (optional) <a href="#">Patient Information Section (V3)</a> (optional)	<a href="#">Author Participation</a>

This template represents the current smoking status of the patient as specified in Meaningful Use (MU) Stage 2 requirements. Historic smoking status observations as well as details about the smoking habit (e.g., how many per day) would be represented in the Tobacco Use template.

This template represents a “snapshot in time” observation, simply reflecting what the patient’s current smoking status is at the time of the observation. As a result, the effectiveTime is constrained to a time stamp, and will approximately correspond with the author/time. Details regarding the time period when the patient is/was smoking would be recorded in the Tobacco Use template.

If the patient's current smoking status is unknown, the value element must be populated with SNOMED CT code 266927001 to communicate "Unknown if ever smoked" from the Current Smoking Status Value Set.

**Table 284: Smoking Status - Meaningful Use (V2) Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-14806</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1098-14807</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-14815</a>	
@root	1..1	SHALL		<a href="#">1098-14816</a>	2.16.840.1.113883.10.20.22.4.78
@extension	1..1	SHALL		<a href="#">1098-32573</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-32401</a>	
code	1..1	SHALL		<a href="#">1098-19170</a>	
@code	1..1	SHALL		<a href="#">1098-31039</a>	72166-2
@codeSystem	1..1	SHALL		<a href="#">1098-32157</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
statusCode	1..1	SHALL		<a href="#">1098-14809</a>	
@code	1..1	SHALL		<a href="#">1098-19116</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
effectiveTime	1..1	SHALL		<a href="#">1098-31928</a>	
low	0..0	SHALL NOT		<a href="#">1098-32894</a>	
width	0..0	SHALL NOT		<a href="#">1098-32895</a>	
high	0..0	SHALL NOT		<a href="#">1098-32896</a>	
center	0..0	SHALL NOT		<a href="#">1098-32897</a>	
value	1..1	SHALL	CD	<a href="#">1098-14810</a>	
@code	1..1	SHALL		<a href="#">1098-14817</a>	urn:oid:2.16.840.1.113883.11.20.9.38 (Current Smoking Status)
author	0..*	SHOULD		<a href="#">1098-31148</a>	<a href="#">Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)</a>

1. **SHALL** contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-14806).

2. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-14807).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-14815) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.22.4.78"** (CONF:1098-14816).
  - b. **SHALL** contain exactly one [1..1] **@extension="2014-06-09"** (CONF:1098-32573).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1098-32401).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1098-19170).
  - a. This code **SHALL** contain exactly one [1..1] **@code="72166-2"** Tobacco smoking status NHIS (CONF:1098-31039).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem="2.16.840.1.113883.6.1"** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1098-32157).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-14809).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code="completed"** Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098-19116).
7. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1098-31928).  
 Note: This template represents a “snapshot in time” observation, simply reflecting what the patient’s current smoking status is at the time of the observation. As a result, the effectiveTime is constrained to just a time stamp, and will approximately correspond with the author/time.
  - a. This effectiveTime **SHALL NOT** contain [0..0] **low** (CONF:1098-32894).
  - b. This effectiveTime **SHALL NOT** contain [0..0] **width** (CONF:1098-32895).
  - c. This effectiveTime **SHALL NOT** contain [0..0] **high** (CONF:1098-32896).
  - d. This effectiveTime **SHALL NOT** contain [0..0] **center** (CONF:1098-32897).
8. **SHALL** contain exactly one [1..1] **value** with **@xsi:type="CD"** (CONF:1098-14810).
  - a. This value **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet Current Smoking Status urn:oid:2.16.840.1.113883.11.20.9.38 **STATIC** 2014-09-01 (CONF:1098-14817).
  - b. If the patient's current smoking status is unknown, **@code** **SHALL** contain '266927001' (Unknown if ever smoked) from ValueSet Current Smoking Status (2.16.840.1.113883.11.20.9.38 **STATIC** 2014-09-01) (CONF:1098-31019).
9. **SHOULD** contain zero or more [0..\*] Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31148).

**Table 285: Current Smoking Status**

Value Set: Current Smoking Status urn:oid:2.16.840.1.113883.11.20.9.38			
This value set indicates the current smoking status of a patient.			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
449868002	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Current every day smoker
428041000124106	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Current some day smoker
8517006	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Former smoker
266919005	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Never smoker (Never Smoked)
77176002	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Smoker, current status unknown
266927001	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Unknown if ever smoked
428071000124103	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Heavy tobacco smoker
428061000124105	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Light tobacco smoker

**Figure 137: Smoking Status - Meaningful Use (V2) Example**

```

<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.78" extension="2014-06-09" />
  <id extension="123456789" root="2.16.840.1.113883.19" />
  <code code="72166-2" codeSystem="2.16.840.1.113883.6.1" displayName="Tobacco smoking
status NHIS" />
  <statusCode code="completed" />
  <!-- The effectiveTime reflects when the current smoking status was observed. -->
  <effectiveTime value="20120910" />
  <!-- The value represents the patient's smoking status currently observed. -->
  <value xsi:type="CD" code="8517006" displayName="Former smoker"
codeSystem="2.16.840.1.113883.6.96" />
  <author typeCode="AUT">
    <time value="199803161030-0800" />
    <assignedAuthor>
      <id extension="555555555" root="1.1.1.1.1.1.2" />
    </assignedAuthor>
  </author>
</observation>

```

### 3.65 Social History Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2014-06-09 (open) ]

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**Table 286: Social History Observation (V2) Contexts**

Contained By:	Contains:
<a href="#">Social History Section (V2)</a> (optional)	<a href="#">Author Participation</a>

This template represents a patient's occupations, lifestyle, and environmental health risk factors. Demographic data (e.g., marital status, race, ethnicity, religious affiliation) are captured in the header. Though tobacco use and exposure may be represented with a Social History Observation, it is recommended to use the Current Smoking Status template or the Tobacco Use template instead, to represent smoking or tobacco habits.



**Table 287: Social History Observation (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-8548</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1098-8549</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-8550</a>	
@root	1..1	SHALL		<a href="#">1098-10526</a>	2.16.840.1.113883.10.20.22.4.38
@extension	1..1	SHALL		<a href="#">1098-32495</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-8551</a>	
code	1..1	SHALL		<a href="#">1098-8558</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC)
originalText	0..1	SHOULD		<a href="#">1098-19221</a>	
reference	0..1	SHOULD		<a href="#">1098-19222</a>	
@value	0..1	SHOULD		<a href="#">1098-19223</a>	
statusCode	1..1	SHALL		<a href="#">1098-8553</a>	
@code	1..1	SHALL		<a href="#">1098-19117</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
effectiveTime	1..1	SHALL		<a href="#">1098-31868</a>	
value	0..1	SHOULD		<a href="#">1098-8559</a>	
author	0..*	SHOULD		<a href="#">1098-31869</a>	<a href="#">Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)</a>

1. **SHALL** contain exactly one [1..1] **@classCode="OBS"** Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-8548).
2. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-8549).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-8550) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.22.4.38"** (CONF:1098-10526).
  - b. **SHALL** contain exactly one [1..1] **@extension="2014-06-09"** (CONF:1098-32495).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1098-8551).

5. **SHALL** contain exactly one [1..1] **code**, which **SHOULD** be selected from CodeSystem LOINC (urn:oid:2.16.840.1.113883.6.1) **DYNAMIC** (CONF:1098-8558).
  - a. This code **SHOULD** contain zero or one [0..1] **originalText** (CONF:1098-19221).
    - i. The originalText, if present, **SHOULD** contain zero or one [0..1] **reference** (CONF:1098-19222).
      1. The reference, if present, **SHOULD** contain zero or one [0..1] **@value** (CONF:1098-19223).
        - a. 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:1098-19224).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-8553).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code="completed"** Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098-19117).
7. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1098-31868).
8. **SHOULD** contain zero or one [0..1] **value** (CONF:1098-8559).
  - a. If Observation/value is a physical quantity (xsi:type="PQ"), the unit of measure **SHALL** be selected from ValueSet UnitsOfMeasureCaseSensitive (2.16.840.1.113883.1.11.12839) **DYNAMIC** (CONF:1098-8555).
9. **SHOULD** contain zero or more [0..\*] **Author Participation** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31869).

**Figure 138: Social History Observation (V2) Example**

```

<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.38"
    extension="2014-06-09" />
  <id root="37f76c51-6411-4e1d-8a37-957fd49d2cef" />
  <code code="74013-4"
    codeSystem="2.16.840.1.113883.6.1"
    codeSystemName="LOINC"
    displayName="Alcoholic drinks per day" />
  <statusCode code="completed" />
  <effectiveTime>
    <low value="20120215" />
  </effectiveTime>
  <value xsi:type="PQ" value="12" />
  <author typeCode="AUT">
    <templateId root="2.16.840.1.113883.10.20.22.4.119" />
    ...
  </author>
</observation>

```

### 3.66 Substance Administered Act

[act: identifier urn:oid:2.16.840.1.113883.10.20.22.4.118 (open)]

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DSTU R2

**Table 288: Substance Administered Act Contexts**

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

This template represents the administration course in a series. The entryRelationship/sequenceNumber in the containing template shows the order of this particular administration in that medication series.

**Table 289: Substance Administered Act Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
act (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.118)					
@classCode	1..1	SHALL		<a href="#">1098-31500</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT
@moodCode	1..1	SHALL		<a href="#">1098-31501</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-31502</a>	
@root	1..1	SHALL		<a href="#">1098-31503</a>	2.16.840.1.113883.10.20.22.4.118
id	1..*	SHALL		<a href="#">1098-31504</a>	
code	1..1	SHALL		<a href="#">1098-31506</a>	
@code	1..1	SHALL		<a href="#">1098-31507</a>	416118004
@codeSystem	1..1	SHALL		<a href="#">1098-31508</a>	urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.6.96
statusCode	1..1	SHALL		<a href="#">1098-31505</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
effectiveTime	0..1	MAY		<a href="#">1098-31509</a>	

1. **SHALL** contain exactly one [1..1] **@classCode**="ACT" Act (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1098-31500).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1098-31501).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-31502) such that it

- a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.118" (CONF:1098-31503).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1098-31504).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1098-31506).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="416118004" Administration (CONF:1098-31507).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.96" (CodeSystem: SNOMED CT urn:oid:2.16.840.1.113883.6.96) (CONF:1098-31508).
6. **SHALL** contain exactly one [1..1] **statusCode**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-31505).
7. **MAY** contain zero or one [0..1] **effectiveTime** (CONF:1098-31509).

**Figure 139: Substance Administered Act Example**

```

<substanceAdministration classCode="SBADM" moodCode="EVN">
  ...
  <consumable>
    ...
    <code code="43" codeSystem="2.16.840.1.113883.6.59" displayName="Hepatitis B
Vaccine" codeSystemName="CVX" />
  </consumable>
  <entryRelationship typeCode="COMP">
    <!-- This entryRelationship sequenceNumber indicates this is #2 in the series -->
    <sequenceNumber value="2" />
    <act classCode="ACT" moodCode="EVN">
      <!-- Substance Administered Act Template -->
      <templateId root="2.16.840.1.113883.10.20.22.4.118" />
      <id root="df8908d0-40f2-11e3-aa6e-0800200c9a66" />
      <code code="416118004" displayName="administration"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT" />
      <statusCode code="completed" />
      <effectiveTime value="19991101" />
    </act>
  </entryRelationship>
  ...
</substanceAdministration>

```

### 3.67 Tobacco Use (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09 (open) ]

Published as part of Consolidated CDA Templates for Clinical Notes (US Realm)  
DSTU R2

**Table 290: Tobacco Use (V2) Contexts**

Contained By:	Contains:
<a href="#">Social History Section (V2)</a> (optional) <a href="#">Patient Information Section (V3)</a> (optional)	<a href="#">Author Participation</a>

This template represents a patient's tobacco use.

All the types of tobacco use are represented using the codes from the tobacco use and exposure-finding hierarchy in SNOMED CT, including codes required for recording smoking status in Meaningful Use Stage 2.

The effectiveTime element is used to describe dates associated with the patient's tobacco use. Whereas the Smoking Status - Meaningful Use (V2) template (2.16.840.1.113883.10.20.22.4.78:2014-06-09) represents a "snapshot in time" observation, simply reflecting what the patient's current smoking status is at the time of the observation, this Tobacco Use template uses effectiveTime to represent the biologically relevant time of the observation. Thus, to record a former smoker, an observation of "cigarette smoker" will have an effectiveTime/low defining the time the patient started to smoke cigarettes and an effectiveTime/high defining the time the patient ceased to smoke cigarettes. To record a current smoker, the effectiveTime/low will define the time the patient started smoking and will have no effectiveTime/high to indicated that the patient is still smoking.

**Table 291: Tobacco Use (V2) Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-16558</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1098-16559</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-16566</a>	
@root	1..1	SHALL		<a href="#">1098-16567</a>	2.16.840.1.113883.10.20.22.4.85
@extension	1..1	SHALL		<a href="#">1098-32589</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-32400</a>	
code	1..1	SHALL		<a href="#">1098-19174</a>	
@code	1..1	SHALL		<a href="#">1098-19175</a>	11367-0
@codeSystem	1..1	SHALL		<a href="#">1098-32172</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
statusCode	1..1	SHALL		<a href="#">1098-16561</a>	
@code	1..1	SHALL		<a href="#">1098-19118</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
effectiveTime	1..1	SHALL		<a href="#">1098-16564</a>	
low	1..1	SHALL		<a href="#">1098-16565</a>	
high	0..1	MAY		<a href="#">1098-31431</a>	
value	1..1	SHALL	CD	<a href="#">1098-16562</a>	
@code	1..1	SHALL		<a href="#">1098-16563</a>	urn:oid:2.16.840.1.113883.11.20.9.41 (Tobacco Use)
author	0..*	SHOULD		<a href="#">1098-31152</a>	<a href="#">Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)</a>

1. **SHALL** contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-16558).
2. **SHALL** contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-16559).
3. **SHALL** contain exactly one [1..1] templateId (CONF:1098-16566) such that it

- a. **SHALL** contain exactly one [1..1] `@root="2.16.840.1.113883.10.20.22.4.85"` (CONF:1098-16567).
  - b. **SHALL** contain exactly one [1..1] `@extension="2014-06-09"` (CONF:1098-32589).
4. **SHALL** contain at least one [1..\*] `id` (CONF:1098-32400).
5. **SHALL** contain exactly one [1..1] `code` (CONF:1098-19174).
  - a. This code **SHALL** contain exactly one [1..1] `@code="11367-0"` History of tobacco use (CONF:1098-19175).
  - b. This code **SHALL** contain exactly one [1..1] `@codeSystem="2.16.840.1.113883.6.1"` (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1098-32172).
6. **SHALL** contain exactly one [1..1] `statusCode` (CONF:1098-16561).
  - a. This statusCode **SHALL** contain exactly one [1..1] `@code="completed"` Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098-19118).
7. **SHALL** contain exactly one [1..1] `effectiveTime` (CONF:1098-16564).  
 Note: The effectiveTime represents the biologically relevant time of the observation. A “former smoker” is recorded with the proper code “current smoker” with an effectiveTime/low and effectiveTime/high defining the time during which the patient was a smoker.
  - a. This effectiveTime **SHALL** contain exactly one [1..1] `low` (CONF:1098-16565).
  - b. This effectiveTime **MAY** contain zero or one [0..1] `high` (CONF:1098-31431).
8. **SHALL** contain exactly one [1..1] `value` with `@xsi:type="CD"` (CONF:1098-16562).
  - a. This value **SHALL** contain exactly one [1..1] `@code`, which **SHALL** be selected from ValueSet Tobacco Use urn:oid:2.16.840.1.113883.11.20.9.41 **DYNAMIC** (CONF:1098-16563).
9. **SHOULD** contain zero or more [0..\*] Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31152).

**Table 292: Tobacco Use**

Value Set: Tobacco Use urn:oid:2.16.840.1.113883.11.20.9.41			
Contains values descending from the SNOMED CT® Finding of tobacco use and exposure (finding) (365980008) hierarchy excluding temporal findings such as 'Former Smoker' 'Never Chewed', etc.			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
81703003	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Chews tobacco
228494002	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Snuff user
59978006	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Cigar smoker
43381005	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Passive smoker
228524006	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Exposed to tobacco smoke at home
427189007	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Maternal tobacco use
394871007	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Thinking about stopping smoking
65568007	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Cigarette smoker
160619003	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Rolls own cigarettes
266927001	SNOMED CT	urn:oid:2.16.840.1.113883.6.96	Pipe smoker
...			



**Figure 140: Tobacco Use (V2) Example**

```

<observation classCode="OBS" moodCode="EVN">
  <!-- ** Tobacco use ** -->
  <templateId root="2.16.840.1.113883.10.20.22.4.85" extension="2014-06-09" />
  <id root="45efb604-7049-4a2e-ad33-d38556c9636c" />
  <code code="11367-0" codeSystem="2.16.840.1.113883.6.1" displayName="History of tobacco
use" />
  <statusCode code="completed" />
  <effectiveTime>
    <!-- The low value reflects the start date of the observation/value (moderate
smoker) -->
    <low value="20090214" />
    <!-- The high value reflects the end date of the observation/value (moderate
smoker) -->
    <high value="20110215" />
  </effectiveTime>
  <value xsi:type="CD" code="160604004" displayName="Moderate cigarette smoker, 10-
19/day" codeSystem="2.16.840.1.113883.6.96" />
  <author typeCode="AUT">
    <time value="201209101145-0800" />
    <assignedAuthor>
      <id extension="555555555" root="1.1.1.1.1.1.2" />
    </assignedAuthor>
  </author>
</observation>

```

### 3.68 Transport Mode to Hospital Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.34.3.24 (open)]

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**Table 293: Transport Mode to Hospital Observation Contexts**

Contained By:	Contains:
<a href="#">Current Emergency Department Visit (V2)</a> (optional)	

This template represents the patient's mode of transport to the hospital.

**Table 294: Transport Mode to Hospital Observation Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.24)					
@classCode	1..1	SHALL		<a href="#">1106-614</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1106-615</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1106-609</a>	
@root	1..1	SHALL		<a href="#">1106-611</a>	2.16.840.1.113883.10.20.34.3.24
id	1..*	SHALL		<a href="#">1106-682</a>	
code	1..1	SHALL		<a href="#">1106-610</a>	
@code	1..1	SHALL		<a href="#">1106-612</a>	74286-6
@codeSystem	1..1	SHALL		<a href="#">1106-613</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
statusCode	1..1	SHALL		<a href="#">1106-683</a>	
@code	1..1	SHALL		<a href="#">1106-684</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
value	1..1	SHALL	CD	<a href="#">1106-616</a>	urn:oid:2.16.840.1.114222.4.11.7277 (Transport Mode to Hospital (NCHS))
@nullFlavor	0..1	MAY		<a href="#">1106-866</a>	

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1106-614).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1106-615).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1106-609) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.34.3.24" (CONF:1106-611).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1106-682).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1106-610).
  - a. This code **SHALL** contain exactly one [1..1] **@code**="74286-6" Transport mode to hospital (CONF:1106-612).
  - b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1106-613).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1106-683).

- a. This statusCode **SHALL** contain exactly one [1..1] @code="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1106-684).
7. **SHALL** contain exactly one [1..1] value with @xsi:type="CD", where the code **SHALL** be selected from ValueSet [Transport Mode to Hospital \(NCHS\)](#) urn:oid:2.16.840.1.114222.4.11.7277 **DYNAMIC** (CONF:1106-616).
- a. This value **MAY** contain zero or one [0..1] @nullFlavor (CONF:1106-866).
- i. NullFlavor **SHALL** be "UNK" Unknown, "OTH" Other, or "NA" Not Applicable (CONF:1106-867).

**Table 295: Transport Mode to Hospital (NCHS)**

Value Set: Transport Mode to Hospital (NCHS) urn:oid:2.16.840.1.114222.4.11.7277			
The mode of transport (e.g., ground ambulance, walk-in, police) delivering the patient to a hospital.			
Value Set Source: <a href="https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7277">https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7277</a>			
Code	Code System	Code System OID	Print Name
44613004	SNOMED CT	urn:oid:2.16.840.1.113883.3.6.96	Ground transport ambulance
32472009	SNOMED CT	urn:oid:2.16.840.1.113883.3.6.96	Medical helicopter
73957001	SNOMED CT	urn:oid:2.16.840.1.113883.3.6.96	Air transport ambulance
46160005	SNOMED CT	urn:oid:2.16.840.1.113883.3.6.96	Motor vehicle
257250006	SNOMED CT	urn:oid:2.16.840.1.113883.3.6.96	Pedestrian conveyance
442301000124107	SNOMED CT	urn:oid:2.16.840.1.113883.3.6.96	Police vehicle

**Figure 141: Transport Mode to Hospital Observation Example**

```
<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.34.3.24"/>
  <id root="0c957122-f93f-484b-9a8e-8dladbecea10"/>
  <code code="74286-6" displayName="Transport mode to hospital"
    codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
  <statusCode code="completed"/>
  <!-- Form element: Arrival by ambulance -->
  <value xsi:type="CD" code="LA9315-8" displayName="Ground ambulance"
    codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
</observation>
```

### 3.69 Vital Sign Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.27:2014-06-09 (open) ]

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DSTU R2

**Table 296: Vital Sign Observation (V2) Contexts**

Contained By:	Contains:
<a href="#">Vital Signs Organizer (V2)</a> (required)	<a href="#">Author Participation</a>

This template represents measurement of common vital signs. Vital signs are represented with additional vocabulary constraints for type of vital sign and unit of measure.

The following is a list of recommended units for common types of vital sign measurements:

Name	Unit
PulseOx	%
Height/Head Circumf	cm
Weight	kg
Temp	Cel
BP	mm[Hg]
Pulse/Resp Rate	/min
BMI	kg/m2
BSA	m2

**Table 297: Vital Sign Observation (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.27:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-7297</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		<a href="#">1098-7298</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-7299</a>	
@root	1..1	SHALL		<a href="#">1098-10527</a>	2.16.840.1.113883.10.20.22.4.27
@extension	1..1	SHALL		<a href="#">1098-32574</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-7300</a>	
code	1..1	SHALL		<a href="#">1098-7301</a>	urn:oid:2.16.840.1.113883.3.88.1.2.80.62 (Vital Sign Result)
statusCode	1..1	SHALL		<a href="#">1098-7303</a>	
@code	1..1	SHALL		<a href="#">1098-19119</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
effectiveTime	1..1	SHALL		<a href="#">1098-7304</a>	
value	1..1	SHALL	PQ	<a href="#">1098-7305</a>	
@unit	1..1	SHALL		<a href="#">1098-31579</a>	urn:oid:2.16.840.1.113883.1.11.1.2839 (UnitsOfMeasureCaseSensitive)
interpretationCode	0..1	MAY		<a href="#">1098-7307</a>	
@code	1..1	SHALL		<a href="#">1098-32886</a>	urn:oid:2.16.840.1.113883.1.11.7.8 (Observation Interpretation (HL7))
methodCode	0..1	MAY	SET<CE>	<a href="#">1098-7308</a>	
targetSiteCode	0..1	MAY	SET<CD>	<a href="#">1098-7309</a>	
author	0..*	SHOULD		<a href="#">1098-7310</a>	<a href="#">Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)</a>

1. **SHALL** contain exactly one [1..1] **@classCode="OBS"** Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-7297).
2. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-7298).

3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7299) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.27" (CONF:1098-10527).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32574).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1098-7300).
5. **SHALL** contain exactly one [1..1] **code**, which **SHOULD** be selected from ValueSet [Vital Sign Result](#) urn:oid:2.16.840.1.113883.3.88.12.80.62 **DYNAMIC** (CONF:1098-7301).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-7303).
  - a. This **statusCode** **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098-19119).
7. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1098-7304).
8. **SHALL** contain exactly one [1..1] **value** with **@xsi:type**="PQ" (CONF:1098-7305).
  - a. This **value** **SHALL** contain exactly one [1..1] **@unit**, which **SHALL** be selected from ValueSet [UnitsOfMeasureCaseSensitive](#) urn:oid:2.16.840.1.113883.1.11.12839 **DYNAMIC** (CONF:1098-31579).
9. **MAY** contain zero or one [0..1] **interpretationCode** (CONF:1098-7307).
  - a. The **interpretationCode**, if present, **SHALL** contain exactly one [1..1] **@code** (ValueSet: [Observation Interpretation \(HL7\)](#) urn:oid:2.16.840.1.113883.1.11.78 **STATIC** 2014-09-01) (CONF:1098-32886).
10. **MAY** contain zero or one [0..1] **methodCode** (CONF:1098-7308).
11. **MAY** contain zero or one [0..1] **targetSiteCode** (CONF:1098-7309).
12. **SHOULD** contain zero or more [0..\*] [Author Participation](#) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-7310).

**Table 298: Vital Sign Result**

Value Set: Vital Sign Result urn:oid:2.16.840.1.113883.3.88.12.80.62 This identifies the vital sign result type. Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
8310-5	LOINC	urn:oid:2.16.840.1.113883.6.1	Body Temperature
8462-4	LOINC	urn:oid:2.16.840.1.113883.6.1	BP Diastolic
8480-6	LOINC	urn:oid:2.16.840.1.113883.6.1	BP Systolic
8287-5	LOINC	urn:oid:2.16.840.1.113883.6.1	Head Circumference
8867-4	LOINC	urn:oid:2.16.840.1.113883.6.1	Heart Rate
8302-2	LOINC	urn:oid:2.16.840.1.113883.6.1	Height
39156-5	LOINC	urn:oid:2.16.840.1.113883.6.1	BMI (Body Mass Index)
2710-2	LOINC	urn:oid:2.16.840.1.113883.6.1	O2 % BldC Oximetry
9279-1	LOINC	urn:oid:2.16.840.1.113883.6.1	Respiratory Rate
3141-9	LOINC	urn:oid:2.16.840.1.113883.6.1	Weight Measured
...			

**Figure 142: Vital Sign Observation (V2) Example**

```

<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.27" extension="2014-06-09" />
  <!-- Vital Sign Observation template -->
  <id root="c6f88321-67ad-11db-bd13-0800200c9a66" />
  <code code="8302-2" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
  displayName="Height" />
  <statusCode code="completed" />
  <effectiveTime value="20121114" />
  <value xsi:type="PQ" value="177" unit="cm" />
  ....
</observation>

```

### 3.70 Vital Signs Organizer (V2)

[organizer: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.26:2014-06-09 (open) ]

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DSTU R2

**Table 299: Vital Signs Organizer (V2) Contexts**

Contained By:	Contains:
<a href="#">Vital Signs Section (entries optional) (V2)</a> (optional)	<a href="#">Author Participation</a>
<a href="#">Vital Signs Section (entries required) (V2)</a> (required)	<a href="#">Vital Sign Observation (V2)</a>

This template provides a mechanism for grouping vital signs (e.g., grouping systolic blood pressure and diastolic blood pressure).



**Table 300: Vital Signs Organizer (V2) Constraints Overview**

<b>XPath</b>	<b>Card.</b>	<b>Verb</b>	<b>Data Type</b>	<b>CONF#</b>	<b>Value</b>
organizer (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.26:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-7279</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = CLUSTER
@moodCode	1..1	SHALL		<a href="#">1098-7280</a>	urn:oid:2.16.840.1.113883.5.1001 (ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-7281</a>	
@root	1..1	SHALL		<a href="#">1098-10528</a>	2.16.840.1.113883.10.20.22.4.26
@extension	1..1	SHALL		<a href="#">1098-32582</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-7282</a>	
code	0..1	MAY		<a href="#">1098-32740</a>	
@code	1..1	SHALL		<a href="#">1098-32741</a>	74728-7
@codeSystem	1..1	SHALL		<a href="#">1098-32742</a>	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
statusCode	1..1	SHALL		<a href="#">1098-7284</a>	
@code	1..1	SHALL		<a href="#">1098-19120</a>	urn:oid:2.16.840.1.113883.5.14 (ActStatus) = completed
effectiveTime	0..1	MAY		<a href="#">1098-7288</a>	
author	0..*	SHOULD		<a href="#">1098-31153</a>	<a href="#">Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)</a>
component	1..*	SHALL		<a href="#">1098-7285</a>	
observation	1..1	SHALL		<a href="#">1098-15946</a>	<a href="#">Vital Sign Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.27:2014-06-09)</a>

1. **SHALL** contain exactly one [1..1] @classCode="CLUSTER" CLUSTER (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-7279).
2. **SHALL** contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-7280).
3. **SHALL** contain exactly one [1..1] templateId (CONF:1098-7281) such that it
  - a. **SHALL** contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.26" (CONF:1098-10528).
  - b. **SHALL** contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32582).

4. **SHALL** contain at least one [1..\*] **id** (CONF:1098-7282).
5. **MAY** contain zero or one [0..1] **code** (CONF:1098-32740).
  - a. The code, if present, **SHALL** contain exactly one [1..1] **@code**="74728-7" Vital signs, weight, height, head circumference, oximetry, BMI, and BSA panel - HL7.CCDAr1.1 (CONF:1098-32741).
  - b. The code, if present, **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1 " LOINC (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1098-32742).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-7284).
  - a. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098-19120).
7. **MAY** contain zero or one [0..1] **effectiveTime** (CONF:1098-7288).  
 Note: The effectiveTime is an interval that spans the effectiveTimes of the contained vital signs observations. Because all contained vital signs observations have a required time stamp, it is not required that this effectiveTime be populated.
8. **SHOULD** contain zero or more [0..\*] **Author Participation** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31153).
9. **SHALL** contain at least one [1..\*] **component** (CONF:1098-7285) such that it
  - a. **SHALL** contain exactly one [1..1] **Vital Sign Observation (V2)** (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.27:2014-06-09) (CONF:1098-15946).

**Figure 143: Vital Signs Organizer (V2) Example**

```

<organizer classCode="CLUSTER" moodCode="EVN">
  <!-- ** Vital signs organizer ** -->
  <templateId root="2.16.840.1.113883.10.20.22.4.26" extension="2014-06-09" />
  <id root="24f6ad18-c512-40fc-82bd-1e131aa9e52b" />
  <code code="46680005" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED -CT"
  displayName="Vital signs" />
  <statusCode code="completed" />
  <effectiveTime>
    <low value="20120910" />
    <high value="20120910" />
  </effectiveTime>
  <component>
    <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.22.4.27" extension="2014-06-09" />
      <!-- Vital Sign Observation template -->
      ...
    </observation>
  </component>
  <component>
    <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.22.4.27" extension="2014-06-09" />
      <!-- Vital Sign Observation template -->
      ...
    </observation>
  </component>
  <component>
    <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.22.4.27" extension="2014-06-09" />
      <!-- Vital Sign Observation template -->
      ...
    </observation>
  </component>
</organizer>

```

## 4 PARTICIPATION AND OTHER TEMPLATES

### 4.1 Author Participation

[author: identifier urn:oid:2.16.840.1.113883.10.20.22.4.119 (open)]

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**Table 301: Author Participation Contexts**

Contained By:	Contains:
<a href="#">Social History Observation (V2)</a> (optional) <a href="#">Medication Activity (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="#">Problem Observation (V2)</a> (optional) <a href="#">Immunization Activity (V2)</a> (optional) <a href="#">Planned Act (V2)</a> (optional) <a href="#">Planned Procedure (V2)</a> (optional) <a href="#">Planned Observation (V2)</a> (optional) <a href="#">Planned Medication Activity (V2)</a> (optional) <a href="#">Smoking Status - Meaningful Use (V2)</a> (optional) <a href="#">Vital Sign Observation (V2)</a> (optional) <a href="#">Result Observation (V2)</a> (optional) <a href="#">Vital Signs Organizer (V2)</a> (optional) <a href="#">Priority Preference</a> (optional) <a href="#">Result Organizer (V2)</a> (optional) <a href="#">Tobacco Use (V2)</a> (optional) <a href="#">Planned Coverage</a> (optional) <a href="#">Planned Immunization Activity</a> (optional)	

This template represents the Author Participation (including the author timestamp). CDA R2 requires that Author and Author timestamp be asserted in the document header. From there, authorship propagates to contained sections and contained entries, unless explicitly overridden.

The Author Participation template was added to those templates in scope for analysis in R2. Although it is not explicitly stated in all templates the Author Participation template can be used in any template.

**Table 302: Author Participation Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
author (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)					
templateId	1..1	SHALL		<a href="#">1098-32017</a>	
@root	1..1	SHALL		<a href="#">1098-32018</a>	2.16.840.1.113883.10.20.22.4.119
time	1..1	SHALL		<a href="#">1098-31471</a>	
assignedAuthor	1..1	SHALL		<a href="#">1098-31472</a>	
id	1..*	SHALL		<a href="#">1098-31473</a>	
code	0..1	SHOULD		<a href="#">1098-31671</a>	urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy (HIPAA))
assignedPerson	0..1	MAY		<a href="#">1098-31474</a>	
name	0..*	MAY		<a href="#">1098-31475</a>	
representedOrganization	0..1	MAY		<a href="#">1098-31476</a>	
id	0..*	MAY		<a href="#">1098-31478</a>	
name	0..*	MAY		<a href="#">1098-31479</a>	
telecom	0..*	MAY		<a href="#">1098-31480</a>	
addr	0..*	MAY		<a href="#">1098-31481</a>	

1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-32017) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.22.4.119"** (CONF:1098-32018).
2. **SHALL** contain exactly one [1..1] **time** (CONF:1098-31471).
3. **SHALL** contain exactly one [1..1] **assignedAuthor** (CONF:1098-31472).
  - a. This assignedAuthor **SHALL** contain at least one [1..\*] **id** (CONF:1098-31473).  
 Note: This id may be set equal to (a pointer to) an id on a participant elsewhere in the document (header or entries) or a new author participant can be described here. If the id is pointing to a participant already described elsewhere in the document, assignedAuthor/id is sufficient to identify this participant and none of the remaining details of assignedAuthor are required to be set. Application Software must be responsible for resolving the identifier back to its original object and then rendering the information in the correct place in the containing section's narrative text. This id must be a pointer to another author participant.

- i. If the ID isn't referencing an author described elsewhere in the document, then the author components required in US Realm Header are required here as well (CONF:1098-32628).
- b. This assignedAuthor **SHOULD** contain zero or one [0..1] **code**, which **SHOULD** be selected from ValueSet [Healthcare Provider Taxonomy \(HIPAA\)](#) urn:oid:2.16.840.1.114222.4.11.1066 **DYNAMIC** (CONF:1098-31671).
  - i. If the content is patient authored the code **SHOULD** be selected from Personal And Legal Relationship Role Type (2.16.840.1.113883.11.20.12.1) (CONF:1098-32315).
- c. This assignedAuthor **MAY** contain zero or one [0..1] **assignedPerson** (CONF:1098-31474).
  - i. The assignedPerson, if present, **MAY** contain zero or more [0..\*] **name** (CONF:1098-31475).
- d. This assignedAuthor **MAY** contain zero or one [0..1] **representedOrganization** (CONF:1098-31476).
  - i. The representedOrganization, if present, **MAY** contain zero or more [0..\*] **id** (CONF:1098-31478).
  - ii. The representedOrganization, if present, **MAY** contain zero or more [0..\*] **name** (CONF:1098-31479).
  - iii. The representedOrganization, if present, **MAY** contain zero or more [0..\*] **telecom** (CONF:1098-31480).
  - iv. The representedOrganization, if present, **MAY** contain zero or more [0..\*] **addr** (CONF:1098-31481).

**Figure 144: New Author Participant Example**

```

<author>
  <templateId root="2.16.840.1.113883.10.20.22.4.119" />
  <time value="201308011235-0800" />
  <assignedAuthor>
    <id root="20cf14fb-b65c-4c8c-a54d-b0cca834c18c" />
    <code code="163W00000X" codeSystem="2.16.840.1.113883.5.53" codeSystemName="Health
Care Provider Taxonomy" displayName="Registered nurse" />
    <assignedPerson>
      <name>
        <given>Nurse</given>
        <family>Nightingale</family>
        <suffix>RN</suffix>
      </name>
    </assignedPerson>
    <representedOrganization>
      <id root="2.16.840.1.113883.19.5" />
      <name>Good Health Hospital</name>
    </representedOrganization>
  </assignedAuthor>
</author>

```

**Figure 145: Existing Author Reference Example**

```

<author>
  <time value="201308011235-0800" />
  <assignedAuthor>
    <!--
      This id points to a participant already described
      elsewhere in the document
    -->
    <id root="20cf14fb-b65c-4c8c-a54d-b0cca834c18c" />
  </assignedAuthor>
</author>

```

## 4.2 US Realm Address (AD.US.FIELDED)

[addr: identifier urn:oid:2.16.840.1.113883.10.20.22.5.2 (open)]

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DSTU R1.1

**Table 303: US Realm Address (AD.US.FIELDED) Contexts**

Contained By:	Contains:
<a href="#">US Realm Header (V2)</a> (required) <a href="#">Medication Dispense (V2)</a> (optional) <a href="#">Policy Activity (V2)</a> (optional)	

Reusable address template, for use in US Realm CDA Header.

**Table 304: US Realm Address (AD.US.FIELDED) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
addr (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2)					
@use	0..1	SHOULD		<a href="#">81-7290</a>	urn:oid:2.16.840.1.113883.1.11.10637 (PostalAddressUse)
country	0..1	SHOULD		<a href="#">81-7295</a>	urn:oid:2.16.840.1.113883.3.88.12.80.63 (Country)
state	0..1	SHOULD		<a href="#">81-7293</a>	urn:oid:2.16.840.1.113883.3.88.12.80.1 (StateValueSet)
city	1..1	SHALL		<a href="#">81-7292</a>	
postalCode	0..1	SHOULD		<a href="#">81-7294</a>	urn:oid:2.16.840.1.113883.3.88.12.80.2 (PostalCode)
streetAddressLine	1..1	SHALL		<a href="#">81-7291</a>	

1. **SHOULD** contain zero or one [0..1] **@use**, which **SHALL** be selected from ValueSet [PostalAddressUse](#) urn:oid:2.16.840.1.113883.1.11.10637 **STATIC** 2005-05-01 (CONF:81-7290).
2. **SHOULD** contain zero or one [0..1] **country**, which **SHALL** be selected from ValueSet [Country](#) urn:oid:2.16.840.1.113883.3.88.12.80.63 **DYNAMIC** (CONF:81-7295).
3. **SHOULD** contain zero or one [0..1] **state** (ValueSet: [StateValueSet](#) urn:oid:2.16.840.1.113883.3.88.12.80.1 **DYNAMIC**) (CONF:81-7293).
  - a. State is required if the country is US. If country is not specified, it's assumed to be US. If country is something other than US, the state **MAY** be present but **MAY** be bound to different vocabularies (CONF:81-10024).
4. **SHALL** contain exactly one [1..1] **city** (CONF:81-7292).
5. **SHOULD** contain zero or one [0..1] **postalCode**, which **SHOULD** be selected from ValueSet [PostalCode](#) urn:oid:2.16.840.1.113883.3.88.12.80.2 **DYNAMIC** (CONF:81-7294).
  - a. PostalCode is required if the country is US. If country is not specified, it's assumed to be US. If country is something other than US, the postalCode **MAY** be present but **MAY** be bound to different vocabularies (CONF:81-10025).
6. **SHALL** contain exactly one [1..1] **streetAddressLine** (CONF:81-7291).
7. **SHALL NOT** have mixed content except for white space (CONF:81-7296).



**Table 305: PostalAddressUse**

Value Set: PostalAddressUse urn:oid:2.16.840.1.113883.1.11.10637			
A value set of HL7 Codes for address use.			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
BAD	AddressUse	urn:oid:2.16.840.1.113883.5.1119	bad address
CONF	AddressUse	urn:oid:2.16.840.1.113883.5.1119	confidential
DIR	AddressUse	urn:oid:2.16.840.1.113883.5.1119	direct
H	AddressUse	urn:oid:2.16.840.1.113883.5.1119	home address
HP	AddressUse	urn:oid:2.16.840.1.113883.5.1119	primary home
HV	AddressUse	urn:oid:2.16.840.1.113883.5.1119	vacation home
PHYS	AddressUse	urn:oid:2.16.840.1.113883.5.1119	physical visit address
PST	AddressUse	urn:oid:2.16.840.1.113883.5.1119	postal address
PUB	AddressUse	urn:oid:2.16.840.1.113883.5.1119	public
TMP	AddressUse	urn:oid:2.16.840.1.113883.5.1119	temporary
...			

**Table 306: StateValueSet**

Value Set: StateValueSet urn:oid:2.16.840.1.113883.3.88.12.80.1			
Identifies addresses within the United States are recorded using the FIPS 5-2 two-letter alphabetic codes for the State, District of Columbia, or an outlying area of the United States or associated area			
Value Set Source: <a href="http://www.census.gov/geo/reference/ansi_statetables.html">http://www.census.gov/geo/reference/ansi_statetables.html</a>			
Code	Code System	Code System OID	Print Name
AL	FIPS 5-2 (State)	urn:oid:2.16.840.1.113883.6.92	Alabama
AK	FIPS 5-2 (State)	urn:oid:2.16.840.1.113883.6.92	Alaska
AZ	FIPS 5-2 (State)	urn:oid:2.16.840.1.113883.6.92	Arizona
AR	FIPS 5-2 (State)	urn:oid:2.16.840.1.113883.6.92	Arkansas
CA	FIPS 5-2 (State)	urn:oid:2.16.840.1.113883.6.92	California
CO	FIPS 5-2 (State)	urn:oid:2.16.840.1.113883.6.92	Colorado
CT	FIPS 5-2 (State)	urn:oid:2.16.840.1.113883.6.92	Connecticut
DE	FIPS 5-2 (State)	urn:oid:2.16.840.1.113883.6.92	Delaware
DC	FIPS 5-2 (State)	urn:oid:2.16.840.1.113883.6.92	District of Columbia
FL	FIPS 5-2 (State)	urn:oid:2.16.840.1.113883.6.92	Florida
...			

**Figure 146: US Realm Address Example**

```

<addr use="HP">
  <streetAddressLine>22 Sample Street</streetAddressLine>
  <city>Beaverton</city>
  <state>OR</state>
  <postalCode>97867</postalCode>
  <country>US</country>
</addr>

```

### 4.3 US Realm Date and Time (DTM.US.FIELDED)

[effectiveTime: identifier urn:oid:2.16.840.1.113883.10.20.22.5.4 (open)]

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**Table 307: US Realm Date and Time (DTM.US.FIELDED) Contexts**

Contained By:	Contains:
<a href="#">US Realm Header (V2)</a> (required)	

The US Realm Clinical Document Date and Time datatype flavor records date and time information. If no time zone offset is provided, you can make no assumption about time, unless you have made a local exchange agreement.

This data type uses the same rules as US Realm Date and Time (DT.US.FIELDED), but is used with elements having a datatype of TS.

**Table 308: US Realm Date and Time (DTM.US.FIELDED) Constraints Overview**

X P a t h	Card.	Verb	Data Type	CONF#	Value
effectiveTime (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.4)					

1. **SHALL** be precise to the day (CONF:81-10127).
2. **SHOULD** be precise to the minute (CONF:81-10128).
3. **MAY** be precise to the second (CONF:81-10129).
4. If more precise than day, **SHOULD** include time-zone offset (CONF:81-10130).

**Figure 147: US Realm Date and Time Example**

```
<!-- Common values for date/time elements would range in precision to the day YYYYMMDD to
precision to the second with a time zone offset YYYYMMDDHHMMSS - ZZzz -->
<!-- time element with TS data type precise to the day for a birthdate -->
<time value="19800531"/>
<!-- effectiveTime element with IVL<TS> data type precise to the second for an observation
-->
<effectiveTime>
  <low value='20110706122735-0800' />
  <high value='20110706122815-0800' />
</effectiveTime>
```

## 4.4 US Realm Patient Name (PTN.US.FIELDDED)

[name: identifier urn:oid:2.16.840.1.113883.10.20.22.5.1 (open)]

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**Table 309: US Realm Patient Name (PTN.US.FIELDDED) Contexts**

Contained By:	Contains:
<a href="#">Drug Monitoring Act</a> (required)	

The US Realm Patient Name datatype flavor is a set of reusable constraints that can be used for the patient or any other person. It requires a first (given) and last (family) name. If a patient or person has only one name part (e.g., patient with first name only) place the name part in the field required by the organization. Use the appropriate nullFlavor, "Not Applicable" (NA), in the other field.

For information on mixed content see the Extensible Markup Language reference (<http://www.w3c.org/TR/2008/REC-xml-20081126/>).

**Table 310: US Realm Patient Name (PTN.US.FIELDDED) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
name (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1)					
@use	0..1	MAY		<a href="#">81-7154</a>	urn:oid:2.16.840.1.113883.1.11.15913 (EntityNameUse)
family	1..1	SHALL	ST	<a href="#">81-7159</a>	
@qualifier	0..1	MAY		<a href="#">81-7160</a>	urn:oid:2.16.840.1.113883.11.20.9.26 (EntityPersonNamePartQualifier)
given	1..*	SHALL	ST	<a href="#">81-7157</a>	
@qualifier	0..1	MAY		<a href="#">81-7158</a>	urn:oid:2.16.840.1.113883.11.20.9.26 (EntityPersonNamePartQualifier)
prefix	0..*	MAY	ST	<a href="#">81-7155</a>	
@qualifier	0..1	MAY		<a href="#">81-7156</a>	urn:oid:2.16.840.1.113883.11.20.9.26 (EntityPersonNamePartQualifier)
suffix	0..1	MAY	ST	<a href="#">81-7161</a>	
@qualifier	0..1	MAY		<a href="#">81-7162</a>	urn:oid:2.16.840.1.113883.11.20.9.26 (EntityPersonNamePartQualifier)

1. **MAY** contain zero or one [0..1] **@use**, which **SHALL** be selected from ValueSet [EntityNameUse](#) urn:oid:2.16.840.1.113883.1.11.15913 **STATIC** 2005-05-01 (CONF:81-7154).
2. **SHALL** contain exactly one [1..1] **family** (CONF:81-7159).
  - a. This family **MAY** contain zero or one [0..1] **@qualifier**, which **SHALL** be selected from ValueSet [EntityPersonNamePartQualifier](#) urn:oid:2.16.840.1.113883.11.20.9.26 **STATIC** 2011-09-30 (CONF:81-7160).
3. **SHALL** contain at least one [1..\*] **given** (CONF:81-7157).
  - a. Such givens **MAY** contain zero or one [0..1] **@qualifier**, which **SHALL** be selected from ValueSet [EntityPersonNamePartQualifier](#) urn:oid:2.16.840.1.113883.11.20.9.26 **STATIC** 2011-09-30 (CONF:81-7158).
  - b. The second occurrence of given (given2) if provided, **SHALL** include middle name or middle initial (CONF:81-7163).
4. **MAY** contain zero or more [0..\*] **prefix** (CONF:81-7155).
  - a. The prefix, if present, **MAY** contain zero or one [0..1] **@qualifier**, which **SHALL** be selected from ValueSet [EntityPersonNamePartQualifier](#) urn:oid:2.16.840.1.113883.11.20.9.26 **STATIC** 2011-09-30 (CONF:81-7156).
5. **MAY** contain zero or one [0..1] **suffix** (CONF:81-7161).
  - a. The suffix, if present, **MAY** contain zero or one [0..1] **@qualifier**, which **SHALL** be selected from ValueSet [EntityPersonNamePartQualifier](#) urn:oid:2.16.840.1.113883.11.20.9.26 **STATIC** 2011-09-30 (CONF:81-7162).
6. **SHALL NOT** have mixed content except for white space (CONF:81-7278).

**Table 311: EntityNameUse**

Value Set: EntityNameUse urn:oid:2.16.840.1.113883.1.11.15913			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
A	EntityNameUse	urn:oid:2.16.840.1.113883.5.45	Artist/Stage
ABC	EntityNameUse	urn:oid:2.16.840.1.113883.5.45	Alphabetic
ASGN	EntityNameUse	urn:oid:2.16.840.1.113883.5.45	Assigned
C	EntityNameUse	urn:oid:2.16.840.1.113883.5.45	License
I	EntityNameUse	urn:oid:2.16.840.1.113883.5.45	Indigenous/Tribal
IDE	EntityNameUse	urn:oid:2.16.840.1.113883.5.45	Ideographic
L	EntityNameUse	urn:oid:2.16.840.1.113883.5.45	Legal
P	EntityNameUse	urn:oid:2.16.840.1.113883.5.45	Pseudonym
PHON	EntityNameUse	urn:oid:2.16.840.1.113883.5.45	Phonetic
R	EntityNameUse	urn:oid:2.16.840.1.113883.5.45	Religious
...			

**Table 312: EntityPersonNamePartQualifier**

Value Set: EntityPersonNamePartQualifier urn:oid:2.16.840.1.113883.11.20.9.26			
Value Set Source: <a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>			
Code	Code System	Code System OID	Print Name
AC	EntityNamePartQualifier	urn:oid:2.16.840.1.113883.5.43	academic
AD	EntityNamePartQualifier	urn:oid:2.16.840.1.113883.5.43	adopted
BR	EntityNamePartQualifier	urn:oid:2.16.840.1.113883.5.43	birth
CL	EntityNamePartQualifier	urn:oid:2.16.840.1.113883.5.43	callme
IN	EntityNamePartQualifier	urn:oid:2.16.840.1.113883.5.43	initial
NB	EntityNamePartQualifier	urn:oid:2.16.840.1.113883.5.43	nobility
PR	EntityNamePartQualifier	urn:oid:2.16.840.1.113883.5.43	professional
SP	EntityNamePartQualifier	urn:oid:2.16.840.1.113883.5.43	spouse
TITLE	EntityNamePartQualifier	urn:oid:2.16.840.1.113883.5.43	title
VV	EntityNamePartQualifier	urn:oid:2.16.840.1.113883.5.43	voorvoegsel

**Figure 148: US Realm Patient Name Example**

<pre> &lt;name use="L"&gt;   &lt;prefix qualifier="TITLE"&gt;Rep&lt;/suffix&gt;   &lt;given&gt;Evelyn&lt;/given&gt;   &lt;given qualifier="CL"&gt;Eve&lt;/given&gt;   &lt;family qualifier="BR"&gt;Everywoman&lt;/family&gt;   &lt;suffix qualifier="AC"&gt;J.D.&lt;/suffix&gt; &lt;/name&gt; </pre>
--

## 4.5 US Realm Person Name (PN.US.FIELDED)

[name: identifier urn:oid:2.16.840.1.113883.10.20.22.5.1.1 (open)]

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**Table 313: US Realm Person Name (PN.US.FIELDED) Contexts**

Contained By:	Contains:
<a href="#">US Realm Header (V2)</a> (required)	

The US Realm Clinical Document Person Name datatype flavor is a set of reusable constraints that can be used for Persons.

**Table 314: US Realm Person Name (PN.US.FIELDDED) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
name (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1)					
name	1..1	SHALL		<a href="#">81-9368</a>	

1. **SHALL** contain exactly one [1..1] **name** (CONF:81-9368).
  - a. The content of name **SHALL** be either a conformant Patient Name (PTN.US.FIELDDED), or a string (CONF:81-9371).
  - b. The string **SHALL NOT** contain name parts (CONF:81-9372).



## 5 TEMPLATE IDS IN THIS GUIDE

**Table 315: Template List**

Template Title	Template Type	templateId
<a href="#">Emergency Department Encounter (NHCS-ED, NHAMCS-ED) (V3)</a>	document	urn:hl7ii:2.16.840.1.113883.10.20.34.1.4:2016-07-01
<a href="#">Inpatient Encounter (NHCS-IP) (V3)</a>	document	urn:hl7ii:2.16.840.1.113883.10.20.34.1.2:2016-07-01
<a href="#">National Health Care Surveys (V2)</a>	document	urn:hl7ii:2.16.840.1.113883.10.20.34.1.1:2015-04-01
<a href="#">Outpatient Encounter (NHCS-OPD, NAMCS, NHAMCS-OPD) (V3)</a>	document	urn:hl7ii:2.16.840.1.113883.10.20.34.1.3:2016-07-01
<a href="#">US Realm Header (V2)</a>	document	urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2014-06-09
<a href="#">Chief Complaint and Reason for Visit Section</a>	section	urn:oid:2.16.840.1.113883.10.20.2.2.13
<a href="#">Emergency Department Encounters Section (V2)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.34.2.13:2016-07-01
<a href="#">Encounters Section (entries optional) (V2)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.22:2014-06-09
<a href="#">Immunizations Section</a>	section	urn:oid:2.16.840.1.113883.10.20.34.2.7
<a href="#">Inpatient Encounters Section (V2)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.34.2.12:2016-07-01
<a href="#">Medications Section</a>	section	urn:oid:2.16.840.1.113883.10.20.34.2.1
<a href="#">Medications Section (entries optional) (V2)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.1:2014-06-09
<a href="#">Outpatient Encounters Section (V3)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.34.2.8:2016-07-01
<a href="#">Patient Information Section (V3)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.34.2.5:2016-07-01
<a href="#">Payers Section (V2)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2014-06-09
<a href="#">Payment Sources Section</a>	section	urn:oid:2.16.840.1.113883.10.20.34.2.4
<a href="#">Problems Section (V3)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.34.2.2:2016-07-01
<a href="#">Reasons for Visit Section (V2)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.34.2.14:2016-07-01
<a href="#">Results Section (entries optional) (V2)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.3:2014-06-09
<a href="#">Services and Procedures Section</a>	section	urn:oid:2.16.840.1.113883.10.20.34.2.3
<a href="#">Social History Section (V2)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.

Template Title	Template Type	templateId
		22.2.17:2014-06-09
<a href="#">Triage Section</a>	section	urn:oid:2.16.840.1.113883.10.20.34.2.10
<a href="#">Vital Signs Section (entries optional) (V2)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.4:2014-06-09
<a href="#">Vital Signs Section (entries required) (V2)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2014-06-09
<a href="#">Admission Diagnosis Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.34:2015-04-01
<a href="#">Admission Priority Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.35:2015-04-01
<a href="#">Adverse Effect of Medical Treatment</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.14
<a href="#">Age Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.31
<a href="#">Assessment Scale Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.69
<a href="#">Assessment Scale Supporting Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.86
<a href="#">Asthma Diagnosis Observation (RETIRED)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.5:2016-07-01
<a href="#">Caregiver Characteristics</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.72
<a href="#">Cause of Injury, Poisoning, or Adverse Effect</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.27
<a href="#">Characteristics of Home Environment</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.109
<a href="#">Clinical Note and External Document Reference</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.44:2016-07-01
<a href="#">Co-morbid Condition Observation (RETIRED)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.4:2016-07-01
<a href="#">Condition Control Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.21
<a href="#">Coverage Activity (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.60:2014-06-09
<a href="#">Cultural and Religious Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.111
<a href="#">Current Emergency Department Visit (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.40:2016-07-01
<a href="#">Current Inpatient Visit</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.39:2015-04-01
<a href="#">Current Outpatient Visit (V3)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.10:2016-07-01
<a href="#">Discharge Status Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.28
<a href="#">Drug Monitoring Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.2

Template Title	Template Type	templateId
		2.4.123
<a href="#">Drug Vehicle</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.24
<a href="#">Encounter Activity (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2014-06-09
<a href="#">Encounter Diagnosis (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.80:2014-06-09
<a href="#">Episode of Care Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.32:2015-04-01
<a href="#">Estimated Date of Delivery</a>	entry	urn:oid:2.16.840.1.113883.10.20.15.3.1
<a href="#">Follow-up Attempt Outcome Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.43:2015-04-01
<a href="#">Hospital Admission Encounter</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.18
<a href="#">Hospital Discharge Diagnosis (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.33:2014-06-09
<a href="#">Immunization Activity (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.52:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Immunization Refusal Reason</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.53
<a href="#">Indication (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
<a href="#">Injury or Poisoning Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.17:2015-04-01
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Listed for Admission to Hospital Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.15
<a href="#">Major Reason for Visit</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.7
<a href="#">Medication Activity (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09
<a href="#">Medication Dispense (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2014-06-09
<a href="#">Medication Free Text Sig</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.147
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Medication Supply Order (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09
<a href="#">New Patient Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.9
<a href="#">Number of Visits in the Last 12</a>	entry	urn:oid:2.16.840.1.113883.10.20.3

Template Title	Template Type	templateId
<a href="#">Months</a>		4.3.26
<a href="#">Observation Unit Stay Encounter</a>	entry	urn:oid:2.16.840.1.113883.10.20.3 4.3.33
<a href="#">On Oxygen on Arrival Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.3 4.3.29
<a href="#">Ordered Service Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.3 4.3.19
<a href="#">Ordered Service Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.3 4.3.2
<a href="#">Ordered Service Procedure</a>	entry	urn:oid:2.16.840.1.113883.10.20.3 4.3.11
<a href="#">Pain Assessment Scale Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.3 4.3.22
<a href="#">Patient Residence Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.3 4.3.25
<a href="#">Patient Seen in this ED in last 72 Hours and Discharged</a>	entry	urn:oid:2.16.840.1.113883.10.20.3 4.3.31
<a href="#">Patient's Reason for Visit Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20. 34.3.41:2015-04-01
<a href="#">Planned Act (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20. 22.4.39:2014-06-09
<a href="#">Planned Coverage</a>	entry	urn:oid:2.16.840.1.113883.10.20.2 2.4.129
<a href="#">Planned Immunization Activity</a>	entry	urn:oid:2.16.840.1.113883.10.20.2 2.4.120
<a href="#">Planned Medication Activity (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20. 22.4.42:2014-06-09
<a href="#">Planned Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20. 22.4.44:2014-06-09
<a href="#">Planned Procedure (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20. 22.4.41:2014-06-09
<a href="#">Point of Origin Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20. 34.3.36:2015-04-01
<a href="#">Policy Activity (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20. 22.4.61:2014-06-09
<a href="#">Precondition for Substance Administration (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20. 22.4.25:2014-06-09
<a href="#">Pregnancy Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.1 5.3.8
<a href="#">Present on Admission Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20. 34.3.37:2015-04-01
<a href="#">Primary Diagnosis Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20. 34.3.6:2015-04-01
<a href="#">Priority Preference</a>	entry	urn:oid:2.16.840.1.113883.10.20.2 2.4.143
<a href="#">Problem Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.

Template Title	Template Type	templateId
		22.4.4:2014-06-09
<a href="#">Problem Status (DEPRECATED)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.6:2014-06-09
<a href="#">Problem/Diagnosis/Symptom/Condition Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.1:2015-04-01
<a href="#">Procedure Activity Act (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.12:2014-06-09
<a href="#">Procedure Activity Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.13:2014-06-09
<a href="#">Procedure Activity Procedure (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09
<a href="#">Procedure Follow-Up Attempt Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.42:2015-04-01
<a href="#">Product Instance</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.37
<a href="#">Prognosis Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.113
<a href="#">Provided Service Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.20
<a href="#">Provided Service Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.3
<a href="#">Provided Service Procedure</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.12
<a href="#">Reaction Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09
<a href="#">Result Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.2:2014-06-09
<a href="#">Result Organizer (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.1:2014-06-09
<a href="#">Service Delivery Location</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.32
<a href="#">Severity Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.8:2014-06-09
<a href="#">Smoking Status - Meaningful Use (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09
<a href="#">Social History Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2014-06-09
<a href="#">Specialty Unit Stay Encounter</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.38:2015-04-01
<a href="#">Substance Administered Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.118
<a href="#">Tobacco Use (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09
<a href="#">Transport Mode to Hospital Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.24
<a href="#">Triage Level Assigned Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.24

<b>Template Title</b>	<b>Template Type</b>	<b>templateId</b>
		4.3.23
<a href="#">Vital Sign Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.27:2014-06-09
<a href="#">Vital Signs Organizer (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.26:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">US Realm Address (AD.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.5.2
<a href="#">US Realm Date and Time (DTM.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.5.4
<a href="#">US Realm Patient Name (PTN.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.5.1
<a href="#">US Realm Person Name (PN.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.5.1.1

**Table 316: Template Containments**

<b>Template Title</b>	<b>Template Type</b>	<b>templateId</b>
<a href="#">Emergency Department Encounter (NHCS-ED, NHAMCS-ED) (V3)</a>	document	urn:hl7ii:2.16.840.1.113883.10.20.34.1.4:2016-07-01
<a href="#">Emergency Department Encounters Section (V2)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.34.2.13:2016-07-01
<a href="#">Current Emergency Department Visit (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.40:2016-07-01
<a href="#">Clinical Note and External Document Reference</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.44:2016-07-01
<a href="#">Episode of Care Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.32:2015-04-01
<a href="#">Major Reason for Visit</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.7
<a href="#">Patient Seen in this ED in last 72 Hours and Discharged</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.31
<a href="#">Point of Origin Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.36:2015-04-01
<a href="#">Transport Mode to Hospital Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.24
<a href="#">Hospital Admission Encounter</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.18
<a href="#">Discharge Status Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.28
<a href="#">Hospital Discharge Diagnosis (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.33:2014-06-09
<a href="#">Problem Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2014-06-09
<a href="#">Age Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.31
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.4.119
<a href="#">Priority Preference</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.143
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.4.119
<a href="#">Problem Status (DEPRECATED)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.6:2014-06-09
<a href="#">Prognosis Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.113
<a href="#">Listed for Admission to Hospital Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.15
<a href="#">Service Delivery Location</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.32
<a href="#">Observation Unit Stay Encounter</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.33

Template Title	Template Type	templateId
<a href="#">Immunizations Section</a>	section	urn:oid:2.16.840.1.113883.10.20.34.2.7
<a href="#">Immunization Activity (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.52:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.4.119
<a href="#">Drug Vehicle</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.24
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Immunization Refusal Reason</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.53
<a href="#">Indication (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Dispense (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Medication Supply Order (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">US Realm Address (AD.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.5.2
<a href="#">Medication Supply Order (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Precondition for Substance Administration (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09
<a href="#">Reaction Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09
<a href="#">Medication Activity (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09



Template Title	Template Type	templateId
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Drug Monitoring Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.123
<a href="#">US Realm Patient Name (PTN.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.5.1
<a href="#">Drug Vehicle</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.24
<a href="#">Indication (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Dispense (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Medication Supply Order (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">US Realm Address (AD.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.5.2
<a href="#">Medication Free Text Sig</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.147
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Medication Supply Order (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Precondition for Substance Administration (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09
<a href="#">Substance Administered Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.118
<a href="#">Procedure Activity Procedure</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.

Template Title	Template Type	templateId
<a href="#">(V2)</a>		22.4.14:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Indication (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Activity (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Drug Monitoring Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.123
<a href="#">US Realm Patient Name (PTN.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.5.1
<a href="#">Drug Vehicle</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.24
<a href="#">Indication (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Dispense (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Medication Supply Order (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">US Realm Address (AD.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.5.2
<a href="#">Medication Free Text Sig</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.147
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Medication Supply Order (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09
<a href="#">Immunization</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.

Template Title	Template Type	templateId
<a href="#">Medication Information (V2)</a>		22.4.54:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Precondition for Substance Administration (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09
<a href="#">Substance Administered Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.118
<a href="#">Product Instance</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.37
<a href="#">Service Delivery Location</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.32
<a href="#">Severity Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.8:2014-06-09
<a href="#">Substance Administered Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.118
<a href="#">Planned Immunization Activity</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.120
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Indication (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Precondition for Substance Administration (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09
<a href="#">Priority Preference</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.143
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Medications Section</a>	section	urn:oid:2.16.840.1.113883.10.20.3.4.2.1
<a href="#">Medication Activity (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Drug Monitoring Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.123
<a href="#">US Realm Patient Name (PTN.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.5.1
<a href="#">Drug Vehicle</a>	entry	urn:oid:2.16.840.1.113883.10.20.2

Template Title	Template Type	templateId
		2.4.24
<a href="#">Indication (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Dispense (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Medication Supply Order (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">US Realm Address (AD.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.5.2
<a href="#">Medication Free Text Sig</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.147
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Medication Supply Order (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Precondition for Substance Administration (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09
<a href="#">Reaction Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09
<a href="#">Procedure Activity Procedure (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.4.119
<a href="#">Indication (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Product Instance</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.119

Template Title	Template Type	templateId
		2.4.37
<a href="#">Service Delivery Location</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.32
<a href="#">Severity Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.8:2014-06-09
<a href="#">Substance Administered Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.118
<a href="#">Planned Medication Activity (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Indication (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Precondition for Substance Administration (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09
<a href="#">Priority Preference</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.143
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Patient Information Section (V3)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.34.2.5:2016-07-01
<a href="#">Patient Residence Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.3.4.3.25
<a href="#">Pregnancy Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.1.5.3.8
<a href="#">Estimated Date of Delivery</a>	entry	urn:oid:2.16.840.1.113883.10.20.1.5.3.1
<a href="#">Smoking Status - Meaningful Use (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Tobacco Use (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Payment Sources Section</a>	section	urn:oid:2.16.840.1.113883.10.20.3.4.2.4
<a href="#">Planned Coverage</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.129
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Problems Section (V3)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.

Template Title	Template Type	templateId
		34.2.2:2016-07-01
<a href="#">Admission Diagnosis Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.34:2015-04-01
<a href="#">Adverse Effect of Medical Treatment</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.14
<a href="#">Cause of Injury, Poisoning, or Adverse Effect</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.27
<a href="#">Injury or Poisoning Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.17:2015-04-01
<a href="#">Cause of Injury, Poisoning, or Adverse Effect</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.27
<a href="#">Present on Admission Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.37:2015-04-01
<a href="#">Primary Diagnosis Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.6:2015-04-01
<a href="#">Present on Admission Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.37:2015-04-01
<a href="#">Problem/Diagnosis/Symptom/Condition Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.1:2015-04-01
<a href="#">Present on Admission Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.37:2015-04-01
<a href="#">Reasons for Visit Section (V2)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.34.2.14:2016-07-01
<a href="#">Patient's Reason for Visit Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.41:2015-04-01
<a href="#">Results Section (entries optional) (V2)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.3:2014-06-09
<a href="#">Result Organizer (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.1:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.4.119
<a href="#">Result Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.2:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.4.119
<a href="#">Services and Procedures Section</a>	section	urn:oid:2.16.840.1.113883.10.20.34.2.3
<a href="#">Ordered Service Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.19
<a href="#">Ordered Service Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.2
<a href="#">Ordered Service Procedure</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.11
<a href="#">Provided Service Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.20
<a href="#">Provided Service Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.21

Template Title	Template Type	templateId
		4.3.3
<a href="#">Provided Service Procedure</a>	entry	urn:oid:2.16.840.1.113883.10.20.3.4.3.12
<a href="#">Triage Section</a>	section	urn:oid:2.16.840.1.113883.10.20.3.4.2.10
<a href="#">On Oxygen on Arrival Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.3.4.3.29
<a href="#">Pain Assessment Scale Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.3.4.3.22
<a href="#">Triage Level Assigned Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.3.4.3.23
<a href="#">Vital Signs Section (entries required) (V2)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2014-06-09
<a href="#">Vital Signs Organizer (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.26:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.2.4.119
<a href="#">Vital Sign Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.27:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.2.4.119
<a href="#">Inpatient Encounter (NHCS-IP) (V3)</a>	document	urn:hl7ii:2.16.840.1.113883.10.20.34.1.2:2016-07-01
<a href="#">Immunizations Section</a>	section	urn:oid:2.16.840.1.113883.10.20.3.4.2.7
<a href="#">Immunization Activity (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.52:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.2.4.119
<a href="#">Drug Vehicle</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.2.4.24
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Immunization Refusal Reason</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.2.4.53
<a href="#">Indication (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Dispense (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Medication Supply Order</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.



Template Title	Template Type	templateId
<a href="#">(V2)</a>		22.4.17:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">US Realm Address (AD.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.5.2
<a href="#">Medication Supply Order (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Precondition for Substance Administration (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09
<a href="#">Reaction Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09
<a href="#">Medication Activity (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Drug Monitoring Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.123
<a href="#">US Realm Patient Name (PTN.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.5.1
<a href="#">Drug Vehicle</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.24
<a href="#">Indication (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Dispense (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Medication Supply Order (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09



Template Title	Template Type	templateId
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">US Realm Address (AD.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.5.2
<a href="#">Medication Free Text Sig</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.147
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Medication Supply Order (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Precondition for Substance Administration (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09
<a href="#">Substance Administered Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.118
<a href="#">Procedure Activity Procedure (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.4.119
<a href="#">Indication (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Activity (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.4.119
<a href="#">Drug Monitoring Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.123
<a href="#">US Realm Patient Name (PTN.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.5.1
<a href="#">Drug Vehicle</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.24
<a href="#">Indication (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Dispense (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2014-06-09

Template Title	Template Type	templateId
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Medication Supply Order (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">US Realm Address (AD.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.5.2
<a href="#">Medication Free Text Sig</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.147
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Medication Supply Order (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Precondition for Substance Administration (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09
<a href="#">Substance Administered Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.118
<a href="#">Product Instance</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.37
<a href="#">Service Delivery Location</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.32
<a href="#">Severity Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.8:2014-06-09
<a href="#">Substance Administered Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.118
<a href="#">Planned Immunization Activity</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.120
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.4.119

Template Title	Template Type	templateId
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Indication (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Precondition for Substance Administration (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09
<a href="#">Priority Preference</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.143
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Inpatient Encounters Section (V2)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.34.2.12:2016-07-01
<a href="#">Current Inpatient Visit</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.39:2015-04-01
<a href="#">Admission Priority Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.35:2015-04-01
<a href="#">Point of Origin Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.36:2015-04-01
<a href="#">Specialty Unit Stay Encounter</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.38:2015-04-01
<a href="#">Medications Section</a>	section	urn:oid:2.16.840.1.113883.10.20.34.2.1
<a href="#">Medication Activity (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Drug Monitoring Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.123
<a href="#">US Realm Patient Name (PTN.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.5.1
<a href="#">Drug Vehicle</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.24
<a href="#">Indication (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Dispense (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Medication Supply Order (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09

Template Title	Template Type	templateId
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">US Realm Address (AD.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.5.2
<a href="#">Medication Free Text Sig</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.147
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Medication Supply Order (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Precondition for Substance Administration (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09
<a href="#">Reaction Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09
<a href="#">Procedure Activity Procedure (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.4.119
<a href="#">Indication (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Product Instance</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.37
<a href="#">Service Delivery Location</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.32
<a href="#">Severity Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.8:2014-06-09
<a href="#">Substance Administered Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.118
<a href="#">Planned Medication Activity (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.4.119
<a href="#">Indication (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09

Template Title	Template Type	templateId
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Precondition for Substance Administration (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09
<a href="#">Priority Preference</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.143
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Patient Information Section (V3)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.34.2.5:2016-07-01
<a href="#">Patient Residence Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.25
<a href="#">Pregnancy Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.15.3.8
<a href="#">Estimated Date of Delivery</a>	entry	urn:oid:2.16.840.1.113883.10.20.15.3.1
<a href="#">Smoking Status - Meaningful Use (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Tobacco Use (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Payment Sources Section</a>	section	urn:oid:2.16.840.1.113883.10.20.34.2.4
<a href="#">Planned Coverage</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.129
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Problems Section (V3)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.34.2.2:2016-07-01
<a href="#">Admission Diagnosis Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.34:2015-04-01
<a href="#">Adverse Effect of Medical Treatment</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.14
<a href="#">Cause of Injury, Poisoning, or Adverse Effect</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.27
<a href="#">Injury or Poisoning Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.17:2015-04-01
<a href="#">Cause of Injury, Poisoning, or Adverse Effect</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.27
<a href="#">Present on Admission Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.37:2015-04-01

<b>Template Title</b>	<b>Template Type</b>	<b>templateId</b>
<a href="#">Primary Diagnosis Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.6:2015-04-01
<a href="#">Present on Admission Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.37:2015-04-01
<a href="#">Problem/Diagnosis/Symptom/Condition Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.1:2015-04-01
<a href="#">Present on Admission Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.37:2015-04-01
<a href="#">Results Section (entries optional) (V2)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.3:2014-06-09
<a href="#">Result Organizer (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.1:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.4.119
<a href="#">Result Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.2:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.4.119
<a href="#">Services and Procedures Section</a>	section	urn:oid:2.16.840.1.113883.10.20.34.2.3
<a href="#">Ordered Service Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.19
<a href="#">Ordered Service Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.2
<a href="#">Ordered Service Procedure</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.11
<a href="#">Provided Service Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.20
<a href="#">Provided Service Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.3
<a href="#">Provided Service Procedure</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.12
<a href="#">Vital Signs Section (entries required) (V2)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2014-06-09
<a href="#">Vital Signs Organizer (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.26:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.4.119
<a href="#">Vital Sign Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.27:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.4.119
<a href="#">National Health Care Surveys (V2)</a>	document	urn:hl7ii:2.16.840.1.113883.10.20.34.1.1:2015-04-01
<a href="#">Outpatient Encounter (NHCS-OPD, NAMCS, NHAMCS-OPD) (V3)</a>	document	urn:hl7ii:2.16.840.1.113883.10.20.34.1.3:2016-07-01

Template Title	Template Type	templateId
<a href="#">Immunizations Section</a>	section	urn:oid:2.16.840.1.113883.10.20.34.2.7
<a href="#">Immunization Activity (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.52:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.4.119
<a href="#">Drug Vehicle</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.24
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Immunization Refusal Reason</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.53
<a href="#">Indication (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Dispense (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Medication Supply Order (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">US Realm Address (AD.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.5.2
<a href="#">Medication Supply Order (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Precondition for Substance Administration (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09
<a href="#">Reaction Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09
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Template Title	Template Type	templateId
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<a href="#">Drug Monitoring Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.123
<a href="#">US Realm Patient Name (PTN.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.5.1
<a href="#">Drug Vehicle</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.24
<a href="#">Indication (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Dispense (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Medication Supply Order (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">US Realm Address (AD.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.5.2
<a href="#">Medication Free Text Sig</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.147
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Medication Supply Order (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Precondition for Substance Administration (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09
<a href="#">Substance Administered Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.118
<a href="#">Procedure Activity Procedure</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.



Template Title	Template Type	templateId
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<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Activity (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Drug Monitoring Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.123
<a href="#">US Realm Patient Name (PTN.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.5.1
<a href="#">Drug Vehicle</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.24
<a href="#">Indication (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Dispense (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Medication Supply Order (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
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<a href="#">US Realm Address (AD.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.5.2
<a href="#">Medication Free Text Sig</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.147
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Medication Supply Order (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09
<a href="#">Immunization</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.

Template Title	Template Type	templateId
<a href="#">Medication Information (V2)</a>		22.4.54:2014-06-09
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<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Precondition for Substance Administration (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09
<a href="#">Substance Administered Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.118
<a href="#">Product Instance</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.37
<a href="#">Service Delivery Location</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.32
<a href="#">Severity Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.8:2014-06-09
<a href="#">Substance Administered Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.118
<a href="#">Planned Immunization Activity</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.120
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Indication (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Precondition for Substance Administration (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09
<a href="#">Priority Preference</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.143
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Medications Section</a>	section	urn:oid:2.16.840.1.113883.10.20.3.4.2.1
<a href="#">Medication Activity (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Drug Monitoring Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.123
<a href="#">US Realm Patient Name (PTN.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.5.1
<a href="#">Drug Vehicle</a>	entry	urn:oid:2.16.840.1.113883.10.20.2

Template Title	Template Type	templateId
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<a href="#">Medication Dispense (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Medication Supply Order (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">US Realm Address (AD.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.5.2
<a href="#">Medication Free Text Sig</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.147
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Medication Supply Order (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09
<a href="#">Immunization Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Precondition for Substance Administration (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09
<a href="#">Reaction Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09
<a href="#">Procedure Activity Procedure (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.4.119
<a href="#">Indication (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Product Instance</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.119

Template Title	Template Type	templateId
		2.4.37
<a href="#">Service Delivery Location</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.32
<a href="#">Severity Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.8:2014-06-09
<a href="#">Substance Administered Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.118
<a href="#">Planned Medication Activity (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Indication (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09
<a href="#">Instruction (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09
<a href="#">Medication Information (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09
<a href="#">Precondition for Substance Administration (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09
<a href="#">Priority Preference</a>	entry	urn:oid:2.16.840.1.113883.10.20.2.4.143
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Outpatient Encounters Section (V3)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.34.2.8:2016-07-01
<a href="#">Current Outpatient Visit (V3)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.10:2016-07-01
<a href="#">Clinical Note and External Document Reference</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.44:2016-07-01
<a href="#">Episode of Care Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.32:2015-04-01
<a href="#">Major Reason for Visit</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.7
<a href="#">New Patient Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.9
<a href="#">Number of Visits in the Last 12 Months</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.26
<a href="#">Procedure Follow-Up Attempt Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.42:2015-04-01
<a href="#">Follow-up Attempt Outcome Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.43:2015-04-01
<a href="#">Patient Information Section (V3)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.34.2.5:2016-07-01
<a href="#">Patient Residence Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.25
<a href="#">Pregnancy Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.1

Template Title	Template Type	templateId
		5.3.8
<a href="#">Estimated Date of Delivery</a>	entry	urn:oid:2.16.840.1.113883.10.20.15.3.1
<a href="#">Smoking Status - Meaningful Use (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.4.119
<a href="#">Tobacco Use (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.4.119
<a href="#">Payment Sources Section</a>	section	urn:oid:2.16.840.1.113883.10.20.34.2.4
<a href="#">Planned Coverage</a>	entry	urn:oid:2.16.840.1.113883.10.20.22.4.129
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.22.4.119
<a href="#">Problems Section (V3)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.34.2.2:2016-07-01
<a href="#">Admission Diagnosis Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.34:2015-04-01
<a href="#">Adverse Effect of Medical Treatment</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.14
<a href="#">Cause of Injury, Poisoning, or Adverse Effect</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.27
<a href="#">Injury or Poisoning Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.17:2015-04-01
<a href="#">Cause of Injury, Poisoning, or Adverse Effect</a>	entry	urn:oid:2.16.840.1.113883.10.20.34.3.27
<a href="#">Present on Admission Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.37:2015-04-01
<a href="#">Primary Diagnosis Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.6:2015-04-01
<a href="#">Present on Admission Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.37:2015-04-01
<a href="#">Problem/Diagnosis/Symptom/Condition Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.1:2015-04-01
<a href="#">Present on Admission Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.37:2015-04-01
<a href="#">Reasons for Visit Section (V2)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.34.2.14:2016-07-01
<a href="#">Patient's Reason for Visit Observation</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.41:2015-04-01
<a href="#">Results Section (entries optional) (V2)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.3:2014-06-09
<a href="#">Result Organizer (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.

Template Title	Template Type	templateId
		22.4.1:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Result Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.2:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Services and Procedures Section</a>	section	urn:oid:2.16.840.1.113883.10.20.3.4.2.3
<a href="#">Ordered Service Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.3.4.3.19
<a href="#">Ordered Service Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.3.4.3.2
<a href="#">Ordered Service Procedure</a>	entry	urn:oid:2.16.840.1.113883.10.20.3.4.3.11
<a href="#">Provided Service Act</a>	entry	urn:oid:2.16.840.1.113883.10.20.3.4.3.20
<a href="#">Provided Service Observation</a>	entry	urn:oid:2.16.840.1.113883.10.20.3.4.3.3
<a href="#">Provided Service Procedure</a>	entry	urn:oid:2.16.840.1.113883.10.20.3.4.3.12
<a href="#">Vital Signs Section (entries required) (V2)</a>	section	urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2014-06-09
<a href="#">Vital Signs Organizer (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.26:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">Vital Sign Observation (V2)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.22.4.27:2014-06-09
<a href="#">Author Participation</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.4.119
<a href="#">US Realm Header (V2)</a>	document	urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2014-06-09
<a href="#">US Realm Address (AD.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.5.2
<a href="#">US Realm Date and Time (DTM.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.5.4
<a href="#">US Realm Person Name (PN.US.FIELDDED)</a>	unspecified	urn:oid:2.16.840.1.113883.10.20.2.5.1.1
<a href="#">Asthma Diagnosis Observation (RETIRED)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.5:2016-07-01
<a href="#">Co-morbid Condition Observation (RETIRED)</a>	entry	urn:hl7ii:2.16.840.1.113883.10.20.34.3.4:2016-07-01

## 6 VALUE SETS IN THIS GUIDE

**Table 317: Value Sets**

Name	OID	URL
<a href="#">Act Priority</a>	urn:oid:2.16.840.1.113883.1.11.16866	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">ActStatus</a>	urn:oid:2.16.840.1.113883.1.11.159331	<a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.1.11.15933">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.1.11.15933</a>
<a href="#">AdministrationUnitDoseForm</a>	urn:oid:2.16.840.1.113762.1.4.1021.30	N/A
<a href="#">Administrative Gender (HL7 V3)</a>	urn:oid:2.16.840.1.113883.1.11.1	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">AgePQ_UCUM</a>	urn:oid:2.16.840.1.113883.11.20.9.21	<a href="http://unitsofmeasure.org/ucum.html">http://unitsofmeasure.org/ucum.html</a>
<a href="#">Body Site</a>	urn:oid:2.16.840.1.113883.3.88.12.3221.8.9	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Clinical Substance</a>	urn:oid:2.16.840.1.113762.1.4.1010.2	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Condition Control (NCHS)</a>	urn:oid:2.16.840.1.114222.4.11.7433	<a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7433">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7433</a>
<a href="#">Country</a>	urn:oid:2.16.840.1.113883.3.88.12.80.63	<a href="http://www.iso.org/iso/country_codes/iso_3166_code_lists.htm">http://www.iso.org/iso/country_codes/iso_3166_code_lists.htm</a>
<a href="#">Coverage Role Type</a>	urn:oid:2.16.840.1.113883.1.11.18877	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Current Smoking Status</a>	urn:oid:2.16.840.1.113883.11.20.9.38	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">CVX Vaccines Administered - Vaccine Set</a>	urn:oid:2.16.840.1.113762.1.4.1010.6	<a href="http://www2a.cdc.gov/vaccines/iis/iisstandards/vaccines.asp?rpt=cvx">http://www2a.cdc.gov/vaccines/iis/iisstandards/vaccines.asp?rpt=cvx</a>
<a href="#">Detailed Ethnicity</a>	urn:oid:2.16.840.1.114222.4.11.877	<a href="http://phinvads.cdc.gov/vads/ViewValueSet.action?pid=34D34BBC-617F-DD11-B38D-00188B398520#">http://phinvads.cdc.gov/vads/ViewValueSet.action?pid=34D34BBC-617F-DD11-B38D-00188B398520#</a>
<a href="#">Discharge Disposition IP (NCHS)</a>	urn:oid:2.16.840.1.114222.4.11.7360	<a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7360">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7360</a>
<a href="#">Disposition (NCHS)</a>	urn:oid:2.16.840.1.114222.4.11.7436	<a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7436">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7436</a>
<a href="#">Disposition ED (NCHS)</a>	urn:oid:2.16.840.1.114222.4.11.7437	<a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7437">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7437</a>
<a href="#">Disposition OPD (NCHS)</a>	urn:oid:2.16.840.1.114222.4.11.7361	<a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7361">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7361</a>



<b>Name</b>	<b>OID</b>	<b>URL</b>
<a href="#">EncounterTypeCode</a>	urn:oid:2.16.840.1.113883.3.88.12.80.32	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">EntityNameUse</a>	urn:oid:2.16.840.1.113883.1.11.15.913	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">EntityPersonNamePartQualifier</a>	urn:oid:2.16.840.1.113883.11.20.9.26	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Episode of Care (NCHS)</a>	urn:oid:2.16.840.1.114222.4.11.74.39	<a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7439">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7439</a>
<a href="#">Ethnicity</a>	urn:oid:2.16.840.1.114222.4.11.83.7	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Follow-up Attempt Outcome (NCHS)</a>	urn:oid:2.16.840.1.114222.4.11.73.62	<a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7362">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7362</a>
<a href="#">Healthcare Provider Taxonomy (HIPAA)</a>	urn:oid:2.16.840.1.114222.4.11.10.66	<a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.1066">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.1066</a>
<a href="#">HealthcareServiceLocation</a>	urn:oid:2.16.840.1.113883.1.11.20.275	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">HL7 BasicConfidentialityKind</a>	urn:oid:2.16.840.1.113883.1.11.16.926	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">HL7FinanciallyResponsiblePartyType</a>	urn:oid:2.16.840.1.113883.1.11.10.416	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Hospital Discharge Status (NCHS)</a>	urn:oid:2.16.840.1.114222.4.11.74.40	<a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7440">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7440</a>
<a href="#">INDRoleclassCodes</a>	urn:oid:2.16.840.1.113883.11.20.9.33	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Injury or Poisoning (NCHS)</a>	urn:oid:2.16.840.1.114222.4.11.74.03	<a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7403">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7403</a>
<a href="#">Language</a>	urn:oid:2.16.840.1.113883.1.11.11.526	<a href="http://www.loc.gov/standards/iso639-2/php/code_list.php">http://www.loc.gov/standards/iso639-2/php/code_list.php</a>
<a href="#">LanguageAbilityMode</a>	urn:oid:2.16.840.1.113883.1.11.12.249	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">LanguageAbilityProficiency</a>	urn:oid:2.16.840.1.113883.1.11.12.199	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Major Reason for Visit (NCHS)</a>	urn:oid:2.16.840.1.114222.4.11.74.04	<a href="https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7404">https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7404</a>
<a href="#">Marital Status</a>	urn:oid:2.16.840.1.113883.1.11.12.212	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Medication Clinical Drug</a>	urn:oid:2.16.840.1.113762.1.4.101.0.4	<a href="http://phinvads.cdc.gov/vads/ViewValueSet.action?pid=239BEF3E-971C-DF11-B334-0015173D1785">http://phinvads.cdc.gov/vads/ViewValueSet.action?pid=239BEF3E-971C-DF11-B334-0015173D1785</a>
<a href="#">Medication Fill Status</a>	urn:oid:2.16.840.1.113883.3.88.12.80.64	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>



<b>Name</b>	<b>OID</b>	<b>URL</b>
<a href="#">Medication Route FDA</a>	urn:oid:2.16.840.1.113883.3.88.12.3221.8.7	<a href="https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.3221.8.7">https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.3221.8.7</a>
<a href="#">MoodCodeEvnInt</a>	urn:oid:2.16.840.1.113883.11.20.9.18	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">No Immunization Reason Value Set</a>	urn:oid:2.16.840.1.113883.1.11.19.717	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">NullValues_UNK_OTH</a>	urn:oid:2.16.840.1.113883.10.20.5.9.1	N/A
<a href="#">Observation Interpretation (HL7)</a>	urn:oid:2.16.840.1.113883.1.11.78	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">ParticipationFunction</a>	urn:oid:2.16.840.1.113883.1.11.10.267	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Patient Education</a>	urn:oid:2.16.840.1.113883.11.20.9.34	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Patient Residence (NCHS)</a>	urn:oid:2.16.840.1.114222.4.11.74.02	<a href="https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7402">https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7402</a>
<a href="#">PatientLanguage</a>	urn:oid:2.16.840.1.113883.11.20.9.64	<a href="http://www.loc.gov/standards/iso639-2/php/code_list.php">http://www.loc.gov/standards/iso639-2/php/code_list.php</a>
<a href="#">Payer</a>	urn:oid:2.16.840.1.114222.4.11.35.91	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Personal And Legal Relationship Role Type</a>	urn:oid:2.16.840.1.113883.11.20.1.2.1	<a href="https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.11.20.12.1">https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.11.20.12.1</a>
<a href="#">Planned moodCode (Act/Encounter/Procedure)</a>	urn:oid:2.16.840.1.113883.11.20.9.23	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Planned moodCode (Observation)</a>	urn:oid:2.16.840.1.113883.11.20.9.25	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Planned moodCode (SubstanceAdministration/Supply)</a>	urn:oid:2.16.840.1.113883.11.20.9.24	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Point of Origin (NCHS)</a>	urn:oid:2.16.840.1.114222.4.11.73.59	<a href="https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7359">https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7359</a>
<a href="#">PostalAddressUse</a>	urn:oid:2.16.840.1.113883.1.11.10.637	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">PostalCode</a>	urn:oid:2.16.840.1.113883.3.88.12.80.2	<a href="http://ushik.ahrq.gov/ViewItemDetails?system=mdr&amp;itemKey=86671000">http://ushik.ahrq.gov/ViewItemDetails?system=mdr&amp;itemKey=86671000</a>
<a href="#">Priority (Type) of Admission or Visit (NCHS)</a>	urn:oid:2.16.840.1.114222.4.11.73.65	<a href="https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7365">https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7365</a>
<a href="#">Priority Level</a>	urn:oid:2.16.840.1.113883.11.20.9.60	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Problem</a>	urn:oid:2.16.840.1.113883.3.88.12.3221.7.4	<a href="http://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.3221.7.4">http://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.3221.7.4</a>
<a href="#">Problem Severity</a>	urn:oid:2.16.840.1.113883.3.88.12	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>

Name	OID	URL
	.3221.6.8	
<a href="#">Problem Status</a>	urn:oid:2.16.840.1.113883.3.88.12.80.68	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Problem Type</a>	urn:oid:2.16.840.1.113883.3.88.12.3221.7.2	<a href="http://www.loinc.org">http://www.loinc.org</a>
<a href="#">ProcedureAct statusCode</a>	urn:oid:2.16.840.1.113883.11.20.9.22	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Provider ED (NCHS)</a>	urn:oid:2.16.840.1.114222.4.11.74.19	<a href="https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.74.19">https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.74.19</a>
<a href="#">Race</a>	urn:oid:2.16.840.1.113883.1.11.14.914	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Race Category Excluding Nulls</a>	urn:oid:2.16.840.1.113883.3.2074.1.1.3	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Religious Affiliation</a>	urn:oid:2.16.840.1.113883.1.11.19.185	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Residence and Accommodation Type</a>	urn:oid:2.16.840.1.113883.11.20.9.49	<a href="https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.11.20.9.49">https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.11.20.9.49</a>
<a href="#">Result Status</a>	urn:oid:2.16.840.1.113883.11.20.9.39	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Specialty Unit Type (NCHS)</a>	urn:oid:2.16.840.1.114222.4.11.73.63	<a href="https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.73.63">https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.73.63</a>
<a href="#">Specific Vaccine Clinical Drug</a>	urn:oid:2.16.840.1.113762.1.4.101.0.10	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">StateValueSet</a>	urn:oid:2.16.840.1.113883.3.88.12.80.1	<a href="http://www.census.gov/geo/referece/ansi_statetables.html">http://www.census.gov/geo/referece/ansi_statetables.html</a>
<a href="#">Telecom Use (US Realm Header)</a>	urn:oid:2.16.840.1.113883.11.20.9.20	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Tobacco Use</a>	urn:oid:2.16.840.1.113883.11.20.9.41	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Transport Mode to Hospital (NCHS)</a>	urn:oid:2.16.840.1.114222.4.11.72.77	<a href="https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.72.77">https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.72.77</a>
<a href="#">Triage System (NCHS)</a>	urn:oid:2.16.840.1.114222.4.11.74.01	<a href="https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.74.01">https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.74.01</a>
<a href="#">Type of clinic/location (NCHS)</a>	urn:oid:2.16.840.1.114222.4.11.73.64	<a href="https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.73.64">https://phinivads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.73.64</a>
<a href="#">UnitsOfMeasureCaseSensitive</a>	urn:oid:2.16.840.1.113883.1.11.12.839	<a href="http://unitsofmeasure.org/ucum.html">http://unitsofmeasure.org/ucum.html</a>
<a href="#">Vaccine Clinical Drug</a>	urn:oid:2.16.840.1.113762.1.4.101.0.8	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>
<a href="#">Vital Sign Result</a>	urn:oid:2.16.840.1.113883.3.88.12.80.62	<a href="https://vsac.nlm.nih.gov/">https://vsac.nlm.nih.gov/</a>

Name	OID	URL
<a href="#">x_ServiceEventPerformer</a>	urn:oid:2.16.840.1.113883.1.11.19601	<a href="http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html">http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html</a>

## 7 CODE SYSTEMS IN THIS GUIDE

**Table 318: Code Systems**

<b>Name</b>	<b>OID</b>
ActCode	urn:oid:2.16.840.1.113883.5.4
ActMood	urn:oid:2.16.840.1.113883.5.1001
ActPriority	urn:oid:2.16.840.1.113883.5.7
ActReason	urn:oid:2.16.840.1.113883.5.8
ActStatus	urn:oid:2.16.840.1.113883.5.14
AddressUse	urn:oid:2.16.840.1.113883.5.1119
AdministrativeGender	urn:oid:2.16.840.1.113883.5.1
CDC Vaccine Code (CVX)	urn:oid:2.16.840.1.113883.12.292
ConfidentialityCode	urn:oid:2.16.840.1.113883.5.25
Country	urn:oid:2.16.840.1.113883.3.88.12.80.63
CPT4	urn:oid:2.16.840.1.113883.6.12
EntityClass	urn:oid:2.16.840.1.113883.5.41
EntityNamePartQualifier	urn:oid:2.16.840.1.113883.5.43
EntityNameUse	urn:oid:2.16.840.1.113883.5.45
FIPS 5-2 (State)	urn:oid:2.16.840.1.113883.6.92
Healthcare Provider Taxonomy (HIPAA)	urn:oid:2.16.840.1.113883.6.101
HITSP-CS-83	urn:oid:2.16.840.1.113883.5.83
HL7 Discharge disposition	urn:oid:2.16.840.1.113883.12.112
HL7 HealthcareServiceLocation	urn:oid:2.16.840.1.113883.6.259
HL7 Race	urn:oid:2.16.840.1.113883.5.104
HL7ActClass	urn:oid:2.16.840.1.113883.5.6
HL7ActRelationshipType	urn:oid:2.16.840.1.113883.5.1002
HL7NullFlavor	urn:oid:2.16.840.1.113883.5.1008
HL7ParticipationType	urn:oid:2.16.840.1.113883.5.90
ICD10	urn:oid:2.16.840.1.113883.6.3
ICD-10-CM	urn:oid:2.16.840.1.113883.6.90
Language	urn:oid:2.16.840.1.113883.6.121
LanguageAbilityMode	urn:oid:2.16.840.1.113883.5.60
LanguageAbilityProficiency	urn:oid:2.16.840.1.113883.5.61
LOINC	urn:oid:2.16.840.1.113883.6.1
MaritalStatus	urn:oid:2.16.840.1.113883.5.2
NCI Thesaurus (NCIt)	urn:oid:2.16.840.1.113883.3.26.1.1
participationFunction	urn:oid:2.16.840.1.113883.5.88
Participationsignature	urn:oid:2.16.840.1.113883.5.89
PHIN VADS code system	urn:oid:2.16.840.1.114222.4.5.274

Name	OID
Race & Ethnicity - CDC	urn:oid:2.16.840.1.113883.6.238
ReligiousAffiliation	urn:oid:2.16.840.1.113883.5.1076
RoleClass	urn:oid:2.16.840.1.113883.5.110
RoleCode	urn:oid:2.16.840.1.113883.5.111
RxNorm	urn:oid:2.16.840.1.113883.6.88
SNOMED CT	urn:oid:2.16.840.1.113883.6.96
Source of Payment Typology (PHDSC)	urn:oid:2.16.840.1.113883.3.221.5
UCUM	urn:oid:2.16.840.1.113883.6.8
Unique Ingredient Identifier (UNII)	urn:oid:2.16.840.1.113883.4.9
USPostalCodes	urn:oid:2.16.840.1.113883.6.231

## 8 CHANGES FROM PREVIOUS VERSION

### 8.1 Emergency Department Encounter (NHCS-ED, NHAMCS-ED) (V3)

Emergency Department Encounter (NHCS-ED, NHAMCS-ED) (V3)

(urn:hl7ii:2.16.840.1.113883.10.20.34.1.4:2016-07-01)

Change	Old	New
Name	Emergency Department Encounter (NHCS-ED, NHAMCS-ED) (V2)	Emergency Department Encounter (NHCS-ED, NHAMCS-ED) (V3)
Oid	urn:hl7ii:2.16.840.1.113883.10.20.34.1.4:2015-04-01	urn:hl7ii:2.16.840.1.113883.10.20.34.1.4:2016-07-01
CONF #: 3256-571 Modified	SHALL contain exactly one [1..1] component (CONF:1184-571).	Heading: component SHALL contain exactly one [1..1] component (CONF:3256-571).
CONF #: 3256-572 Modified	Heading: structuredBody This component SHALL contain exactly one [1..1] structuredBody (CONF:1184-572).	This component SHALL contain exactly one [1..1] structuredBody (CONF:3256-572).
CONF #: 3256-667 Modified	MAY contain zero or more [0..*] documentationOf (CONF:1184-667).	Heading: documentationOf MAY contain zero or more [0..*] documentationOf (CONF:3256-667).
CONF #: 3256-668 Modified	Heading: serviceEvent The documentationOf, if present, SHALL contain exactly one [1..1] serviceEvent (CONF:1184-668).	The documentationOf, if present, SHALL contain exactly one [1..1] serviceEvent (CONF:3256-668).
CONF #: 3256-671 Modified	SHALL contain exactly one [1..1] componentOf (CONF:1184-671).	Heading: componentOf SHALL contain exactly one [1..1] componentOf (CONF:3256-671).
CONF #: 3256-672 Modified	Heading: encompassingEncounter See National Health Care Surveys template for other encompassingEncounter elements. This componentOf SHALL contain exactly one [1..1] encompassingEncounter (CONF:1184-672).	See National Health Care Surveys template for other encompassingEncounter elements. This componentOf SHALL contain exactly one [1..1] encompassingEncounter (CONF:3256-672).
CONF #: 3256-585 Modified	SHALL contain exactly one [1..1] Patient's Reasons for Visit Section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.14:2015-04-01) (CONF:1184-585).	SHALL contain exactly one [1..1] Reasons for Visit Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.14:2016-07-01) (CONF:3256-585).
CONF #: 3256-586 Modified	SHALL contain exactly one [1..1] Problems Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.2:2015-04-01) (CONF:1184-586).	SHALL contain exactly one [1..1] Problems Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.2:2016-07-01) (CONF:3256-586).
CONF #: 3256-760 Modified	SHALL contain exactly one [1..1]	SHALL contain exactly one [1..1]

Change	Old	New
	Emergency Department Encounters Section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.13:2015-04-01) (CONF:1184-760).	Emergency Department Encounters Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.13:2016-07-01) (CONF:3256-760).
CONF #: 3256-810 Modified	SHALL contain exactly one [1..1] Patient Information Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.5:2015-04-01) (CONF:1184-810).	SHALL contain exactly one [1..1] Patient Information Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.5:2016-07-01) (CONF:3256-810).
CONF #: 3256-866 Modified	SHALL contain exactly one [1..1] @extension="2015-04-01" (CONF:1184-866).	SHALL contain exactly one [1..1] @extension="2016-07-01" (CONF:3256-866).

## 8.2 Inpatient Encounter (NHCS-IP) (V3)

Inpatient Encounter (NHCS-IP) (V3) (urn:hl7ii:2.16.840.1.113883.10.20.34.1.2:2016-07-01)

Change	Old	New
Name	Inpatient Encounter (NHCS-IP) (V2)	Inpatient Encounter (NHCS-IP) (V3)
Oid	urn:hl7ii:2.16.840.1.113883.10.20.34.1.2:2015-04-01	urn:hl7ii:2.16.840.1.113883.10.20.34.1.2:2016-07-01
CONF #: 3256-250 Modified	SHALL contain exactly one [1..1] componentOf (CONF:1184-250).	Heading: componentOf SHALL contain exactly one [1..1] componentOf (CONF:3256-250).
CONF #: 3256-251 Modified	Heading: encompassingEncounter See National Health Care Surveys template for other encompassingEncounter elements. This componentOf SHALL contain exactly one [1..1] encompassingEncounter (CONF:1184-251).	See National Health Care Surveys template for other encompassingEncounter elements. This componentOf SHALL contain exactly one [1..1] encompassingEncounter (CONF:3256-251).
CONF #: 3256-422 Modified	MAY contain zero or more [0..*] documentationOf (CONF:1184-422).	Heading: documentationOf MAY contain zero or more [0..*] documentationOf (CONF:3256-422).
CONF #: 3256-423 Modified	Heading: serviceEvent See National Health Care Surveys template for other serviceEvent elements. The documentationOf, if present, SHALL contain exactly one [1..1] serviceEvent (CONF:1184-423).	See National Health Care Surveys template for other serviceEvent elements. The documentationOf, if present, SHALL contain exactly one [1..1] serviceEvent (CONF:3256-423).
CONF #: 3256-247 Modified	SHALL contain exactly one [1..1] Patient Information Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.5:2015-04-01) (CONF:1184-247).	SHALL contain exactly one [1..1] Patient Information Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.5:2016-07-01) (CONF:3256-247).
CONF #: 3256-259 Modified	SHALL contain exactly one [1..1] Inpatient Encounters Section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.12:2015-04-01) (CONF:1184-259).	SHALL contain exactly one [1..1] Inpatient Encounters Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.12:2016-07-01) (CONF:3256-259).
CONF #: 3256-261 Modified	SHALL contain exactly one [1..1] Problems Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.2:2015-04-01) (CONF:1184-261).	SHALL contain exactly one [1..1] Problems Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.2:2016-07-01) (CONF:3256-261).
CONF #: 3256-767 Modified	SHALL contain exactly one [1..1] @extension="2015-04-01" (CONF:1184-767).	SHALL contain exactly one [1..1] @extension="2016-07-01" (CONF:3256-767).



### 8.3 Outpatient Encounter (NHCS-OPD, NAMCS, NHAMCS-OPD) (V3)

#### Outpatient Encounter (NHCS-OPD, NAMCS, NHAMCS-OPD) (V3)

(urn:hl7ii:2.16.840.1.113883.10.20.34.1.3:2016-07-01)

Change	Old	New
Name	Outpatient Encounter (NHCS-OPD, NAMCS, NHAMCS-OPD) (V2)	Outpatient Encounter (NHCS-OPD, NAMCS, NHAMCS-OPD) (V3)
Oid	urn:hl7ii:2.16.840.1.113883.10.20.34.1.3:2015-04-01	urn:hl7ii:2.16.840.1.113883.10.20.34.1.3:2016-07-01
CONF #: 3256-284 Modified	SHALL contain exactly one [1..1] component (CONF:1184-284).	Heading: component SHALL contain exactly one [1..1] component (CONF:3256-284).
CONF #: 3256-285 Modified	Heading: structuredBody This component SHALL contain exactly one [1..1] structuredBody (CONF:1184-285).	This component SHALL contain exactly one [1..1] structuredBody (CONF:3256-285).
CONF #: 3256-455 Modified	MAY contain zero or more [0..*] documentationOf (CONF:1184-455).	Heading: documentationOf MAY contain zero or more [0..*] documentationOf (CONF:3256-455).
CONF #: 3256-456 Modified	Heading: serviceEvent See National Health Care Surveys template for other serviceEvent elements. The documentationOf, if present, SHALL contain exactly one [1..1] serviceEvent (CONF:1184-456).	See National Health Care Surveys template for other serviceEvent elements. The documentationOf, if present, SHALL contain exactly one [1..1] serviceEvent (CONF:3256-456).
CONF #: 3256-287 Modified	SHALL contain exactly one [1..1] Patient Information Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.5:2015-04-01) (CONF:1184-287).	SHALL contain exactly one [1..1] Patient Information Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.5:2016-07-01) (CONF:3256-287).
CONF #: 3256-293 Modified	SHALL contain exactly one [1..1] Patient's Reasons for Visit Section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.14:2015-04-01) (CONF:1184-293).	SHALL contain exactly one [1..1] Reasons for Visit Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.14:2016-07-01) (CONF:3256-293).
CONF #: 3256-295 Modified	SHALL contain exactly one [1..1] Outpatient Encounters Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.8:2015-04-01) (CONF:1184-295).	SHALL contain exactly one [1..1] Outpatient Encounters Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.8:2016-07-01) (CONF:3256-295).
CONF #: 3256-297 Modified	SHALL contain exactly one [1..1] Problems Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.2:2015-04-01) (CONF:1184-297).	SHALL contain exactly one [1..1] Problems Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.2.2:2016-07-01) (CONF:3256-297).
CONF #: 3256-768 Modified	SHALL contain exactly one [1..1]	SHALL contain exactly one [1..1]

Change	Old	New
	@extension="2015-04-01" (CONF:1184-768).	@extension="2016-07-01" (CONF:3256-768).
CONF #: 3256-917 Modified	MAY contain zero or one [0..1] componentOf (CONF:1184-917).	Heading: componentOf MAY contain zero or one [0..1] componentOf (CONF:3256-917).
CONF #: 3256-918 Modified	Heading: encompassingEncounter The componentOf, if present, SHALL contain exactly one [1..1] encompassingEncounter (CONF:1184-918).	The componentOf, if present, SHALL contain exactly one [1..1] encompassingEncounter (CONF:3256-918).

## 8.4 Asthma Diagnosis Observation (RETIRED)

### Asthma Diagnosis Observation (RETIRED)

(urn:hl7ii:2.16.840.1.113883.10.20.34.3.5:2016-07-01)

Change	Old	New
Name	Asthma Diagnosis Observation (V2)	Asthma Diagnosis Observation (RETIRED)
Oid	urn:hl7ii:2.16.840.1.113883.10.20.34.3.5:2015-04-01	urn:hl7ii:2.16.840.1.113883.10.20.34.3.5:2016-07-01
Description	This template represents a diagnosis of Asthma.	This template represents a diagnosis of Asthma.  Retired as per STU Comment: <a href="http://www.hl7.org/dstucomments/showdetail_comment.cfm?commentid=925">http://www.hl7.org/dstucomments/showdetail_comment.cfm?commentid=925</a>  Asthma Diagnoses are now represented using the Problem/Diagnosis/Symptom/Condition Observation.
Implied Template	Diagnosis Observation (urn:oid:2.16.840.1.113883.10.20.34.3.1)	
CONF #: 1184-397 Removed	SHALL contain exactly one [1..1] Condition Control Observation (identifier: urn:oid:2.16.840.1.113883.10.20.34.3.21) (CONF:1184-397).	
CONF #: 1184-916 Removed	SHALL contain exactly one [1..1] Present on Admission Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.37:2015-04-01) (CONF:1184-916).	
CONF #: 1184-517 Removed	SHALL contain exactly one [1..1] Severity Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.8:2014-06-09) (CONF:1184-517).	
CONF #: 1184-394 Removed	MAY contain zero or one [0..1] entryRelationship (CONF:1184-394) such that it	
CONF #: 1184-443 Removed	SHALL contain exactly one [1..1] templateId (CONF:1184-443) such that it	
CONF #: 1184-515 Removed	MAY contain zero or one [0..1] entryRelationship (CONF:1184-515) such that it	

Change	Old	New
CONF #: 1184-334 Removed	SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1184-334).	
CONF #: 1184-335 Removed	SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1184-335).	
CONF #: 1184-336 Removed	SHALL contain exactly one [1..1] value with @xsi:type="CD", where the code SHALL be selected from ValueSet Asthma (NCHS) urn:oid:2.16.840.1.114222.4.11.74 32 DYNAMIC (CONF:1184-336).	
CONF #: 1184-395 Removed	SHALL contain exactly one [1..1] @typeCode="SUBJ" Subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1184-395).	
CONF #: 1184-396 Removed	SHALL contain exactly one [1..1] @inversionInd="true" True (CONF:1184-396).	
CONF #: 1184-444 Removed	SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.3 4.3.5" (CONF:1184-444).	
CONF #: 1184-516 Removed	SHALL contain exactly one [1..1] @typeCode="SUBJ" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1184-516).	
CONF #: 1184-913 Removed	MAY contain zero or one [0..1] entryRelationship (CONF:1184-913) such that it	
CONF #: 1184-914 Removed	SHALL contain exactly one [1..1] @typeCode="SUBJ" Has subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1184-914).	
CONF #: 1184-915 Removed	SHALL contain exactly one [1..1] @inversionInd="true" (CONF:1184-915).	

## 8.5 Co-morbid Condition Observation (RETIRED)

### Co-morbid Condition Observation (RETIRED)

([urn:hl7ii:2.16.840.1.113883.10.20.34.3.4:2016-07-01](http://hl7.org/urn:hl7ii:2.16.840.1.113883.10.20.34.3.4:2016-07-01))

Change	Old	New
Name	Co-morbid Condition Observation (V2)	Co-morbid Condition Observation (RETIRED)
Oid	urn:hl7ii:2.16.840.1.113883.10.20.34.3.4:2015-04-01	urn:hl7ii:2.16.840.1.113883.10.20.34.3.4:2016-07-01
Description	This template represents a co-morbid condition.	This template represents a co-morbid condition.  Retired as per STU Comment: <a href="http://www.hl7.org/dstucomments/showdetail_comment.cfm?commentid=921">http://www.hl7.org/dstucomments/showdetail_comment.cfm?commentid=921</a>  Co-morbid conditions are now represented using the Problem/Diagnosis/Symptom/Condition Observation.
Implied Template	Problem Observation (V2) (urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2014-06-09)	
CONF #: 1184-1090 Removed	The entryRelationship, if present, SHALL contain exactly one [1..1] Present on Admission Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.37:2015-04-01) (CONF:1184-1090).	
CONF #: 1184-328 Removed	SHALL contain exactly one [1..1] templateId (CONF:1184-328) such that it	
CONF #: 1184-402 Removed	SHALL contain exactly one [1..1] code (CONF:1184-402).	
CONF #: 1184-326 Removed	SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1184-326).	
CONF #: 1184-327 Removed	SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1184-327).	
CONF #: 1184-329 Removed	SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.34.3.4" (CONF:1184-329).	
CONF #: 1184-403 Removed	This code SHALL contain exactly	

Change	Old	New
	one [1..1] @code="75618-9" Comorbid condition (CONF:1184-403).	
CONF #: 1184-404 Removed	This code SHALL contain exactly one [1..1] @codeSystem="2.16.840.1.113883.6.1" (CONF:1184-404).	
CONF #: 1184-330 Removed	SHALL contain exactly one [1..1] value, which SHALL be selected from ValueSet Problem urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 DYNAMIC (CONF:1184-330).	
CONF #: 1184-1087 Removed	MAY contain zero or one [0..1] entryRelationship (CONF:1184-1087).	
CONF #: 1184-1088 Removed	The entryRelationship, if present, SHALL contain exactly one [1..1] @typeCode="SUBJ" Has subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1184-1088).	
CONF #: 1184-1089 Removed	The entryRelationship, if present, SHALL contain exactly one [1..1] @inversionInd="true" (CONF:1184-1089).	

## 8.6 Current Emergency Department Visit (V2)

### Current Emergency Department Visit (V2)

(urn:hl7ii:2.16.840.1.113883.10.20.34.3.40:2016-07-01)

Change	Old	New
Name	Current Emergency Department Visit	Current Emergency Department Visit (V2)
Oid	urn:hl7ii:2.16.840.1.113883.10.20.34.3.40:2015-04-01	urn:hl7ii:2.16.840.1.113883.10.20.34.3.40:2016-07-01
Description	This template represents the patient's current emergency department visit. The major reason for this visit is represented by the Major Reason for this Visit template. To indicate whether this is an initial or follow-up visit use the Episode of Care template. The method of transport to the hospital is recorded in the Transport Mode to Hospital Observation. The point of origin of the patient is entered in the Point of Origin Observation template. The External Document Reference is used to record clinician notes (e.g., physicians', nurses', P.A.s', N.P.s' and C.N.M.s' notes).	This template represents the patient's current emergency department visit. The major reason for this visit is represented by the Major Reason for this Visit template. To indicate whether this is an initial or follow-up visit use the Episode of Care template. The method of transport to the hospital is recorded in the Transport Mode to Hospital Observation. The point of origin of the patient is entered in the Point of Origin Observation template. The Clinical Note and External Document Reference template is used to record clinician notes (e.g., physicians', nurses', P.A.s', N.P.s' and C.N.M.s' notes) such as Triage, Intake, History of Present Illness, Clinical Impression and Discharge.
CONF #: 3256-1011 Modified	SHALL contain exactly one [1..1] @extension="2015-04-01" (CONF:1184-1011).	SHALL contain exactly one [1..1] @extension="2016-07-01" (CONF:3256-1011).
CONF #: 3256-1157 Modified	The reference, if present, SHALL contain exactly one [1..1] External Document Reference (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.115:2014-06-09) (CONF:1184-1157).	The reference, if present, SHALL contain exactly one [1..1] Clinical Note and External Document Reference (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.44:2016-07-01) (CONF:3256-1157).

## 8.7 Current Outpatient Visit (V3)

Current Outpatient Visit (V3) (urn:hl7ii:2.16.840.1.113883.10.20.34.3.10:2016-07-01)

Change	Old	New
Name	Current Outpatient Visit (V2)	Current Outpatient Visit (V3)
Oid	urn:hl7ii:2.16.840.1.113883.10.20.34.3.10:2015-04-01	urn:hl7ii:2.16.840.1.113883.10.20.34.3.10:2016-07-01
Description	This template represents the patient's current outpatient visit to the facility. If the current visit is the result of a referral, the referral document is referenced through the External Document Reference template. If the patient is an established patient, then a count of all visits in the last 12 months (excluding this visit) is entered in the Number of Visits in the Last 12 Months template. If the patient is a new patient, this is indicated using the New Patient Act template. The major reason for this visit is represented by the Major Reason for this Visit template. To indicate whether this is an initial or follow-up visit use the Episode of Care template. Information about follow-up after surgery is contained in the Procedure Follow-up Attempt Observation template.	This template represents the patient's current outpatient visit to the facility. If the current visit is the result of a referral, the referral document is referenced through the Clinical Note and External Document Reference template. If the patient is an established patient, then a count of all visits in the last 12 months (excluding this visit) is entered in the Number of Visits in the Last 12 Months template. If the patient is a new patient, this is indicated using the New Patient Act template. The major reason for this visit is represented by the Major Reason for this Visit template. To indicate whether this is an initial or follow-up visit use the Episode of Care template. Information about follow-up after surgery is contained in the Procedure Follow-up Attempt Observation template.
CONF #: 3256-993 Modified	SHALL contain exactly one [1..1] @extension="2015-04-01" (CONF:1184-993).	SHALL contain exactly one [1..1] @extension="2016-07-01" (CONF:3256-993).
CONF #: 3256-1160 Modified	The reference, if present, SHALL contain exactly one [1..1] External Document Reference (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.115:2014-06-09) (CONF:1184-1160).	The reference, if present, SHALL contain exactly one [1..1] Clinical Note and External Document Reference (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.44:2016-07-01) (CONF:3256-1160).



## 8.8 Emergency Department Encounters Section (V2)

### Emergency Department Encounters Section (V2)

(urn:hl7ii:2.16.840.1.113883.10.20.34.2.13:2016-07-01)

Change	Old	New
Name	Emergency Department Encounters Section	Emergency Department Encounters Section (V2)
Oid	urn:hl7ii:2.16.840.1.113883.10.20.34.2.13:2015-04-01	urn:hl7ii:2.16.840.1.113883.10.20.34.2.13:2016-07-01
CONF #: 3256-1051 Modified	SHALL contain exactly one [1..1] Current Emergency Department Visit (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.40:2015-04-01) (CONF:1184-1051).	SHALL contain exactly one [1..1] Current Emergency Department Visit (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.40:2016-07-01) (CONF:3256-1051).
CONF #: 3256-1053 Modified	SHALL contain exactly one [1..1] @extension="2015-04-01" (CONF:1184-1053).	SHALL contain exactly one [1..1] @extension="2016-07-01" (CONF:3256-1053).

## 8.9 Inpatient Encounters Section (V2)

Inpatient Encounters Section (V2) (urn:hl7ii:2.16.840.1.113883.10.20.34.2.12:2016-07-01)

Change	Old	New
Name	Inpatient Encounters Section	Inpatient Encounters Section (V2)
Oid	urn:hl7ii:2.16.840.1.113883.10.20.34.2.12:2015-04-01	urn:hl7ii:2.16.840.1.113883.10.20.34.2.12:2016-07-01
CONF #: 3256-1047 Modified	SHALL contain exactly one [1..1] @extension="2015-04-01" (CONF:1184-1047).	SHALL contain exactly one [1..1] @extension="2016-07-01" (CONF:3256-1047).
CONF #: 3256-1064 Modified	MAY contain zero or one [0..1] entry (CONF:1184-1064) such that it	MAY contain zero or more [0..*] entry (CONF:3256-1064) such that it

## 8.10 Outpatient Encounters Section (V3)

[Outpatient Encounters Section \(V3\) \(urn:hl7ii:2.16.840.1.113883.10.20.34.2.8:2016-07-01\)](#)

Change	Old	New
Name	Outpatient Encounters Section (V2)	Outpatient Encounters Section (V3)
Oid	urn:hl7ii:2.16.840.1.113883.10.20.34.2.8:2015-04-01	urn:hl7ii:2.16.840.1.113883.10.20.34.2.8:2016-07-01
CONF #: 3256-440 Modified	SHALL contain exactly one [1..1] Current Outpatient Visit (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.10:2015-04-01) (CONF:1184-440).	SHALL contain exactly one [1..1] Current Outpatient Visit (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.10:2016-07-01) (CONF:3256-440).
CONF #: 3256-1048 Modified	SHALL contain exactly one [1..1] @extension="2015-04-01" (CONF:1184-1048).	SHALL contain exactly one [1..1] @extension="2016-07-01" (CONF:3256-1048).

## 8.11 Patient Information Section (V3)

[Patient Information Section \(V3\) \(urn:hl7ii:2.16.840.1.113883.10.20.34.2.5:2016-07-01\)](#)

Change	Old	New
Name	Patient Information Section (V2)	Patient Information Section (V3)
Oid	urn:hl7ii:2.16.840.1.113883.10.20.34.2.5:2015-04-01	urn:hl7ii:2.16.840.1.113883.10.20.34.2.5:2016-07-01
CONF #: 3256-205 Modified	MAY contain zero or one [0..1] entry (CONF:1184-205) such that it	MAY contain zero or more [0..*] entry (CONF:3256-205) such that it
CONF #: 3256-663 Modified	If the document is an Outpatient Encounter then this entry SHALL be present (CONF:1184-663).	If the document is an Outpatient Encounter then at least one of this entry SHALL be present (CONF:3256-663).
CONF #: 3256-1108 Modified	SHALL contain exactly one [1..1] @extension="2015-04-01" (CONF:1184-1108).	SHALL contain exactly one [1..1] @extension="2016-07-01" (CONF:3256-1108).

## 8.12 Problems Section (V3)

[Problems Section \(V3\) \(urn:hl7ii:2.16.840.1.113883.10.20.34.2.2:2016-07-01\)](#)

Change	Old	New
Name	Problems Section (V2)	Problems Section (V3)
Oid	urn:hl7ii:2.16.840.1.113883.10.20.34.2.2:2015-04-01	urn:hl7ii:2.16.840.1.113883.10.20.34.2.2:2016-07-01
CONF #: 1184-337 Removed	SHOULD contain zero or more [0..*] entry (CONF:1184-337) such that it	
CONF #: 1184-346 Removed	MAY contain zero or one [0..1] entry (CONF:1184-346) such that it	
CONF #: 1184-338 Removed	SHALL contain exactly one [1..1] Co-morbid Condition Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.4:2015-04-01) (CONF:1184-338).	
CONF #: 1184-347 Removed	SHALL contain exactly one [1..1] Asthma Diagnosis Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.34.3.5:2015-04-01) (CONF:1184-347).	
CONF #: 3256-74 Modified	SHALL contain exactly one [1..1] entry (CONF:1184-74) such that it	If no other means of determination is possible, use first listed diagnosis as the primary diagnosis. SHALL contain exactly one [1..1] entry (CONF:3256-74) such that it
CONF #: 3256-1175 Modified	MAY contain zero or one [0..1] @extension (CONF:1184-1175).	MAY contain zero or one [0..1] @extension="2016-07-01" (CONF:3256-1175).

## 8.13 Reasons for Visit Section (V2)

Reasons for Visit Section (V2) (urn:hl7ii:2.16.840.1.113883.10.20.34.2.14:2016-07-01)

Change	Old	New
Name	Patient's Reasons for Visit Section	Reasons for Visit Section (V2)
Oid	urn:hl7ii:2.16.840.1.113883.10.20.34.2.14:2015-04-01	urn:hl7ii:2.16.840.1.113883.10.20.34.2.14:2016-07-01
Description	This section records the patient's reason for visit (the patient's own description).	This section records the patient's chief complaint (the NHCS calls this the "patient's reason for visit") in the patient's own words and/or the reason for the patient's visit in the provider's words. It can also contain a coded reason for visit in the contained Patient's Reason for Visit Observation.
Implied Template		Chief Complaint and Reason for Visit Section (urn:oid:2.16.840.1.113883.10.20.22.2.13)
CONF #: 1184-1067 Removed	SHALL contain exactly one [1..1] code (CONF:1184-1067).	
CONF #: 1184-1069 Removed	SHALL contain exactly one [1..1] title (CONF:1184-1069).	
CONF #: 1184-1070 Removed	SHALL contain exactly one [1..1] text (CONF:1184-1070).	
CONF #: 1184-1071 Removed	This code SHALL contain exactly one [1..1] @code=" 29298-7" Reason for Visit (CONF:1184-1071).	
CONF #: 1184-1072 Removed	This code SHALL contain exactly one [1..1] @codeSystem="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1184-1072).	
CONF #: 3256-1161 Modified	MAY contain zero or one [0..1] @extension="2015-04-01" (CONF:1184-1161).	MAY contain zero or one [0..1] @extension="2016-07-01" (CONF:3256-1161).