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**HL7 Implementation Guide for CDA® Release 2:**

**Consolidated CDA Templates for Clinical Notes**

**(US Realm)**

**Draft Standard for Trial Use Release 2.1**

**Volume 2 — Templates and Supporting Material**

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Structure of This Guide

Two volumes comprise this *HL7 Implementation Guide for CDA® Release 2: Consolidated CDA Templates for Clinical Notes R2.1.* Volume 1 provides narrative introductory and background material pertinent to this implementation guide, including information on how to understand and use the templates in Volume 2. Volume 2 contains the normative Clinical Document Architecture (CDA) templates for this guide along with lists of all templates, code systems, value sets, and changes from the previous version.

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# 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)  
• Header constraints (e.g., document type, template id, participants)  
• Required and optional section-level templates

Table 1: Required and Optional Sections for Each Document Type

| Document Type | Required Sections | Optional Sections |
| --- | --- | --- |
| [Care Plan (V2)](#D_Care_Plan_V2) urn:hl7ii:2.16.840.1.113883.10.20.22.1.15:2015-08-01 | [Health Concerns Section (V2)](#S_Health_Concerns_Section_V2) [Goals Section](#S_Goals_Section) | [Interventions Section (V3)](#S_Interventions_Section_V3) [Health Status Evaluations and Outcomes Section](#S_Health_Status_Evaluations_and_Outcome) |
| [Consultation Note (V3)](#D_Consultation_Note_V3) urn:hl7ii:2.16.840.1.113883.10.20.22.1.4:2015-08-01 | [History of Present Illness Section](#S_History_of_Present_Illness_Section) [Allergies and Intolerances Section (entries required) (V3)](#S_Allergies_and_Intolerances_Section_er) [Problem Section (entries required) (V3)](#S_Problem_Section_entries_required_V3) | [Assessment Section](#S_Assessment_Section) [Assessment and Plan Section (V2)](#S_Assessment_and_Plan_Section_V2) [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) [Reason for Visit Section](#S_Reason_for_Visit_Section) [Physical Exam Section (V3)](#S_Physical_Exam_Section_V3) [Chief Complaint Section](#S_Chief_Complaint_Section) [Chief Complaint and Reason for Visit Section](#S_Chief_Complaint_and_Reason_for_Visit_S) [Family History Section (V3)](#S_Family_History_Section_V3) [General Status Section](#S_General_Status_Section) [Past Medical History (V3)](#S_Past_Medical_History_V3) [Immunizations Section (entries optional) (V3)](#S_Immunizations_Section_entries_optiona) [Medications Section (entries required) (V2)](#S_Medications_Section_entries_required_) [Procedures Section (entries optional) (V2)](#Procedures_Section_entries_optional_V2) [Results Section (entries required) (V3)](#S_Results_Section_entries_required_V3) [Social History Section (V3)](#S_Social_History_Section_V3) [Vital Signs Section (entries required) (V3)](#S_Vital_Signs_Section_entries_required_) [Functional Status Section (V2)](#S_Functional_Status_Section_V2) [Review of Systems Section](#S_Review_of_Systems_Section) [Medical Equipment Section (V2)](#S_Medical_Equipment_Section_V2) [Mental Status Section (V2)](#S_Mental_Status_Section_V2) [Nutrition Section](#S_Nutrition_Section) [Advance Directives Section (entries optional) (V3)](#S_Advance_Directives_Section_entries_op) |
| [Continuity of Care Document (CCD) (V3)](#D_Continuity_of_Care_Document_CCD_V3) urn:hl7ii:2.16.840.1.113883.10.20.22.1.2:2015-08-01 | [Allergies and Intolerances Section (entries required) (V3)](#S_Allergies_and_Intolerances_Section_er) [Medications Section (entries required) (V2)](#S_Medications_Section_entries_required_) [Problem Section (entries required) (V3)](#S_Problem_Section_entries_required_V3) [Results Section (entries required) (V3)](#S_Results_Section_entries_required_V3) [Social History Section (V3)](#S_Social_History_Section_V3) [Vital Signs Section (entries required) (V3)](#S_Vital_Signs_Section_entries_required_) | [Procedures Section (entries required) (V2)](#S_Procedures_Section_entries_required_V) [Encounters Section (entries optional) (V3)](#S_Encounters_Section_entries_optional_V3) [Family History Section (V3)](#S_Family_History_Section_V3) [Functional Status Section (V2)](#S_Functional_Status_Section_V2) [Immunizations Section (entries required) (V3)](#S_Immunizations_Section_entries_require) [Medical Equipment Section (V2)](#S_Medical_Equipment_Section_V2) [Payers Section (V3)](#S_Payers_Section_V3) [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) [Mental Status Section (V2)](#S_Mental_Status_Section_V2) [Nutrition Section](#S_Nutrition_Section) [Advance Directives Section (entries optional) (V3)](#S_Advance_Directives_Section_entries_op) |
| [Diagnostic Imaging Report (V3)](#D_Diagnostic_Imaging_Report_V3) urn:hl7ii:2.16.840.1.113883.10.20.22.1.5:2015-08-01 | [Findings Section (DIR)](#S_Findings_Section_DIR) | [DICOM Object Catalog Section - DCM 121181](#S_DICOM_Object_Catalog_Section__DCM_121) [Fetus Subject Context](#S_Fetus_Subject_Context) [Observer Context](#S_Observer_Context) |
| [Discharge Summary (V3)](#D_Discharge_Summary_V3) urn:hl7ii:2.16.840.1.113883.10.20.22.1.8:2015-08-01 | [Allergies and Intolerances Section (entries optional) (V3)](#S_Allergies_and_Intolerances_Section_eo) [Hospital Course Section](#S_Hospital_Course_Section) [Discharge Diagnosis Section (V3)](#S_Discharge_Diagnosis_Section_V3) [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) | [Discharge Medications Section (entries optional) (V3)](#S_Discharge_Meds_Sec_entries_Opt) [Chief Complaint Section](#S_Chief_Complaint_Section) [Chief Complaint and Reason for Visit Section](#S_Chief_Complaint_and_Reason_for_Visit_S) [Nutrition Section](#S_Nutrition_Section) [Family History Section (V3)](#S_Family_History_Section_V3) [Functional Status Section (V2)](#S_Functional_Status_Section_V2) [Past Medical History (V3)](#S_Past_Medical_History_V3) [History of Present Illness Section](#S_History_of_Present_Illness_Section) [Admission Diagnosis Section (V3)](#S_Admission_Diagnosis_Section_V3) [Admission Medications Section (entries optional) (V3)](#S_Admission_Medications_Section_entries) [Hospital Consultations Section](#S_Hospital_Consultations_Section) [Hospital Discharge Instructions Section](#S_Hospital_Discharge_Instructions_Sectio) [Hospital Discharge Physical Section](#S_Hospital_Discharge_Physical_Section) [Hospital Discharge Studies Summary Section](#S_Hospital_Discharge_Studies_Summary_Sec) [Immunizations Section (entries optional) (V3)](#S_Immunizations_Section_entries_optiona) [Problem Section (entries optional) (V3)](#S_Problem_Section_entries_optional_V3) [Procedures Section (entries optional) (V2)](#Procedures_Section_entries_optional_V2) [Reason for Visit Section](#S_Reason_for_Visit_Section) [Review of Systems Section](#S_Review_of_Systems_Section) [Social History Section (V3)](#S_Social_History_Section_V3) [Vital Signs Section (entries optional) (V3)](#S_Vital_Signs_Section_entries_optional_) [Discharge Medications Section (entries required) (V3)](#S_Discharge_Meds_Section_entries_R) |
| [History and Physical (V3)](#D_History_and_Physical_V3) urn:hl7ii:2.16.840.1.113883.10.20.22.1.3:2015-08-01 | [Allergies and Intolerances Section (entries optional) (V3)](#S_Allergies_and_Intolerances_Section_eo) [Family History Section (V3)](#S_Family_History_Section_V3) [General Status Section](#S_General_Status_Section) [Past Medical History (V3)](#S_Past_Medical_History_V3) [Medications Section (entries optional) (V2)](#S_Medications_Section_entries_optional_) [Physical Exam Section (V3)](#S_Physical_Exam_Section_V3) [Results Section (entries optional) (V3)](#S_Results_Section_entries_optional_V3) [Review of Systems Section](#S_Review_of_Systems_Section) [Social History Section (V3)](#S_Social_History_Section_V3) [Vital Signs Section (entries optional) (V3)](#S_Vital_Signs_Section_entries_optional_) | [Assessment Section](#S_Assessment_Section) [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) [Assessment and Plan Section (V2)](#S_Assessment_and_Plan_Section_V2) [Chief Complaint Section](#S_Chief_Complaint_Section) [Chief Complaint and Reason for Visit Section](#S_Chief_Complaint_and_Reason_for_Visit_S) [History of Present Illness Section](#S_History_of_Present_Illness_Section) [Immunizations Section (entries optional) (V3)](#S_Immunizations_Section_entries_optiona) [Instructions Section (V2)](#Instructions_Section_V2) [Problem Section (entries optional) (V3)](#S_Problem_Section_entries_optional_V3) [Procedures Section (entries optional) (V2)](#Procedures_Section_entries_optional_V2) [Reason for Visit Section](#S_Reason_for_Visit_Section) |
| [Operative Note (V3)](#D_Operative_Note_V3) urn:hl7ii:2.16.840.1.113883.10.20.22.1.7:2015-08-01 | [Anesthesia Section (V2)](#S_Anesthesia_Section_V2) [Complications Section (V3)](#S_Complications_Section_V3) [Preoperative Diagnosis Section (V3)](#S_Preoperative_Diagnosis_Section_V3) [Procedure Estimated Blood Loss Section](#S_Procedure_Estimated_Blood_Loss_Section) [Procedure Findings Section (V3)](#S_Procedure_Findings_Section_V3) [Procedure Specimens Taken Section](#S_Procedure_Specimens_Taken_Section) [Procedure Description Section](#S_Procedure_Description_Section) [Postoperative Diagnosis Section](#S_Postoperative_Diagnosis_Section) | [Procedure Implants Section](#S_Procedure_Implants_Section) [Operative Note Fluids Section](#S_Operative_Note_Fluids_Section) [Operative Note Surgical Procedure Section](#S_Operative_Note_Surgical_Procedure_Sect) [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) [Planned Procedure Section (V2)](#Planned_Procedure_Section_V2) [Procedure Disposition Section](#S_Procedure_Disposition_Section) [Procedure Indications Section (V2)](#Procedure_Indications_Section_V2) [Surgical Drains Section](#S_Surgical_Drains_Section) |
| [Procedure Note (V3)](#D_Procedure_Note_V3) urn:hl7ii:2.16.840.1.113883.10.20.22.1.6:2015-08-01 | [Complications Section (V3)](#S_Complications_Section_V3) [Procedure Description Section](#S_Procedure_Description_Section) [Procedure Indications Section (V2)](#Procedure_Indications_Section_V2) [Postprocedure Diagnosis Section (V3)](#S_Postprocedure_Diagnosis_Section_V3) | [Assessment Section](#S_Assessment_Section) [Assessment and Plan Section (V2)](#S_Assessment_and_Plan_Section_V2) [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) [Allergies and Intolerances Section (entries optional) (V3)](#S_Allergies_and_Intolerances_Section_eo) [Anesthesia Section (V2)](#S_Anesthesia_Section_V2) [Chief Complaint Section](#S_Chief_Complaint_Section) [Chief Complaint and Reason for Visit Section](#S_Chief_Complaint_and_Reason_for_Visit_S) [Family History Section (V3)](#S_Family_History_Section_V3) [Past Medical History (V3)](#S_Past_Medical_History_V3) [History of Present Illness Section](#S_History_of_Present_Illness_Section) [Medical (General) History Section](#S_Medical_General_History_Section) [Medications Section (entries optional) (V2)](#S_Medications_Section_entries_optional_) [Medications Administered Section (V2)](#S_Medications_Administered_Section_V2) [Physical Exam Section (V3)](#S_Physical_Exam_Section_V3) [Planned Procedure Section (V2)](#Planned_Procedure_Section_V2) [Procedure Disposition Section](#S_Procedure_Disposition_Section) [Procedure Estimated Blood Loss Section](#S_Procedure_Estimated_Blood_Loss_Section) [Procedure Findings Section (V3)](#S_Procedure_Findings_Section_V3) [Procedure Implants Section](#S_Procedure_Implants_Section) [Procedure Specimens Taken Section](#S_Procedure_Specimens_Taken_Section) [Procedures Section (entries optional) (V2)](#Procedures_Section_entries_optional_V2) [Reason for Visit Section](#S_Reason_for_Visit_Section) [Review of Systems Section](#S_Review_of_Systems_Section) [Social History Section (V3)](#S_Social_History_Section_V3) |
| [Progress Note (V3)](#D_Progress_Note_V3) urn:hl7ii:2.16.840.1.113883.10.20.22.1.9:2015-08-01 | N/A | [Assessment Section](#S_Assessment_Section) [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) [Assessment and Plan Section (V2)](#S_Assessment_and_Plan_Section_V2) [Allergies and Intolerances Section (entries optional) (V3)](#S_Allergies_and_Intolerances_Section_eo) [Chief Complaint Section](#S_Chief_Complaint_Section) [Interventions Section (V3)](#S_Interventions_Section_V3) [Instructions Section (V2)](#Instructions_Section_V2) [Medications Section (entries optional) (V2)](#S_Medications_Section_entries_optional_) [Objective Section](#S_Objective_Section) [Physical Exam Section (V3)](#S_Physical_Exam_Section_V3) [Problem Section (entries optional) (V3)](#S_Problem_Section_entries_optional_V3) [Results Section (entries optional) (V3)](#S_Results_Section_entries_optional_V3) [Review of Systems Section](#S_Review_of_Systems_Section) [Subjective Section](#S_Subjective_Section) [Vital Signs Section (entries optional) (V3)](#S_Vital_Signs_Section_entries_optional_) [Nutrition Section](#S_Nutrition_Section) |
| [Referral Note (V2)](#D_Referral_Note_V2) urn:hl7ii:2.16.840.1.113883.10.20.22.1.14:2015-08-01 | [Problem Section (entries required) (V3)](#S_Problem_Section_entries_required_V3) [Allergies and Intolerances Section (entries required) (V3)](#S_Allergies_and_Intolerances_Section_er) [Medications Section (entries required) (V2)](#S_Medications_Section_entries_required_) [Reason for Referral Section (V2)](#Reason_for_Referral_Section_V2) | [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) [History of Present Illness Section](#S_History_of_Present_Illness_Section) [Family History Section (V3)](#S_Family_History_Section_V3) [Immunizations Section (entries required) (V3)](#S_Immunizations_Section_entries_require) [Procedures Section (entries optional) (V2)](#Procedures_Section_entries_optional_V2) [Results Section (entries required) (V3)](#S_Results_Section_entries_required_V3) [Review of Systems Section](#S_Review_of_Systems_Section) [Social History Section (V3)](#S_Social_History_Section_V3) [Vital Signs Section (entries required) (V3)](#S_Vital_Signs_Section_entries_required_) [Functional Status Section (V2)](#S_Functional_Status_Section_V2) [Physical Exam Section (V3)](#S_Physical_Exam_Section_V3) [Nutrition Section](#S_Nutrition_Section) [Mental Status Section (V2)](#S_Mental_Status_Section_V2) [Medical Equipment Section (V2)](#S_Medical_Equipment_Section_V2) [Assessment Section](#S_Assessment_Section) [Assessment and Plan Section (V2)](#S_Assessment_and_Plan_Section_V2) [Past Medical History (V3)](#S_Past_Medical_History_V3) [General Status Section](#S_General_Status_Section) [Advance Directives Section (entries optional) (V3)](#S_Advance_Directives_Section_entries_op) |
| [Transfer Summary (V2)](#D_Transfer_Summary_V2) urn:hl7ii:2.16.840.1.113883.10.20.22.1.13:2015-08-01 | [Allergies and Intolerances Section (entries required) (V3)](#S_Allergies_and_Intolerances_Section_er) [Medications Section (entries required) (V2)](#S_Medications_Section_entries_required_) [Problem Section (entries required) (V3)](#S_Problem_Section_entries_required_V3) [Results Section (entries required) (V3)](#S_Results_Section_entries_required_V3) [Vital Signs Section (entries required) (V3)](#S_Vital_Signs_Section_entries_required_) [Reason for Referral Section (V2)](#Reason_for_Referral_Section_V2) | [Physical Exam Section (V3)](#S_Physical_Exam_Section_V3) [Encounters Section (entries required) (V3)](#S_Encounters_Section_entries_required_V3) [Family History Section (V3)](#S_Family_History_Section_V3) [Functional Status Section (V2)](#S_Functional_Status_Section_V2) [Discharge Diagnosis Section (V3)](#S_Discharge_Diagnosis_Section_V3) [Immunizations Section (entries optional) (V3)](#S_Immunizations_Section_entries_optiona) [Medical Equipment Section (V2)](#S_Medical_Equipment_Section_V2) [Payers Section (V3)](#S_Payers_Section_V3) [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) [Procedures Section (entries required) (V2)](#S_Procedures_Section_entries_required_V) [Social History Section (V3)](#S_Social_History_Section_V3) [Mental Status Section (V2)](#S_Mental_Status_Section_V2) [General Status Section](#S_General_Status_Section) [Review of Systems Section](#S_Review_of_Systems_Section) [Nutrition Section](#S_Nutrition_Section) [Past Medical History (V3)](#S_Past_Medical_History_V3) [History of Present Illness Section](#S_History_of_Present_Illness_Section) [Assessment and Plan Section (V2)](#S_Assessment_and_Plan_Section_V2) [Assessment Section](#S_Assessment_Section) [Admission Medications Section (entries optional) (V3)](#S_Admission_Medications_Section_entries) [Admission Diagnosis Section (V3)](#S_Admission_Diagnosis_Section_V3) [Course of Care Section](#S_Course_of_Care_Section) [Advance Directives Section (entries required) (V3)](#S_Advance_Directives_Sect_entries_re) |
| [Unstructured Document (V3)](#D_Unstructured_Document_V3) urn:hl7ii:2.16.840.1.113883.10.20.22.1.10:2015-08-01 | N/A | N/A |
| [US Realm Header (V3)](#D_US_Realm_Header_V3) urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2015-08-01 | N/A | N/A |
| [US Realm Header for Patient Generated Document (V2)](#D_US_Realm_Header_for_Patient_Gen_V2) urn:hl7ii:2.16.840.1.113883.10.20.29.1:2015-08-01 | N/A | N/A |

US Realm Header (V3)

[ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2015-08-01 (open)]

Table 2: US Realm Header (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
|  | [US Realm Patient Name (PTN.US.FIELDED)](#U_US_Realm_Patient_Name_PTNUSFIELDED) (required)  [US Realm Address (AD.US.FIELDED)](#U_US_Realm_Address_ADUSFIELDED) (optional)  [US Realm Address (AD.US.FIELDED)](#U_US_Realm_Address_ADUSFIELDED) (required)  [US Realm Person Name (PN.US.FIELDED)](#U_US_Realm_Person_Name_PNUSFIELDED) (optional)  [US Realm Date and Time (DTM.US.FIELDED)](#U_US_Realm_Date_and_Time_DTMUSFIELDED) (optional)  [US Realm Date and Time (DTM.US.FIELDED)](#U_US_Realm_Date_and_Time_DTMUSFIELDED) (required) |

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 3: US Realm Header (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| ClinicalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2015-08-01) | | | | | |
| realmCode | 1..1 | SHALL |  | [1198-16791](#C_1198-16791) | US |
| typeId | 1..1 | SHALL |  | [1198-5361](#C_1198-5361) |  |
| @root | 1..1 | SHALL |  | [1198-5250](#C_1198-5250) | 2.16.840.1.113883.1.3 |
| @extension | 1..1 | SHALL |  | [1198-5251](#C_1198-5251) | POCD\_HD000040 |
| templateId | 1..1 | SHALL |  | [1198-5252](#C_1198-5252) |  |
| @root | 1..1 | SHALL |  | [1198-10036](#C_1198-10036) | 2.16.840.1.113883.10.20.22.1.1 |
| @extension | 1..1 | SHALL |  | [1198-32503](#C_1198-32503) | 2015-08-01 |
| id | 1..1 | SHALL |  | [1198-5363](#C_1198-5363) |  |
| code | 1..1 | SHALL |  | [1198-5253](#C_1198-5253) |  |
| title | 1..1 | SHALL |  | [1198-5254](#C_1198-5254) |  |
| effectiveTime | 1..1 | SHALL |  | [1198-5256](#C_1198-5256) | [US Realm Date and Time (DTM.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.4](#U_US_Realm_Date_and_Time_DTMUSFIELDED) |
| confidentialityCode | 1..1 | SHALL |  | [1198-5259](#C_1198-5259) | urn:oid:2.16.840.1.113883.1.11.16926 (HL7 BasicConfidentialityKind) |
| languageCode | 1..1 | SHALL |  | [1198-5372](#C_1198-5372) | urn:oid:2.16.840.1.113883.1.11.11526 (Language) |
| setId | 0..1 | MAY |  | [1198-5261](#C_1198-5261) |  |
| versionNumber | 0..1 | MAY |  | [1198-5264](#C_1198-5264) |  |
| recordTarget | 1..\* | SHALL |  | [1198-5266](#C_1198-5266) |  |
| patientRole | 1..1 | SHALL |  | [1198-5267](#C_1198-5267) |  |
| id | 1..\* | SHALL |  | [1198-5268](#C_1198-5268) |  |
| addr | 1..\* | SHALL |  | [1198-5271](#C_1198-5271) | [US Realm Address (AD.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2](#U_US_Realm_Address_ADUSFIELDED) |
| telecom | 1..\* | SHALL |  | [1198-5280](#C_1198-5280) |  |
| @use | 0..1 | SHOULD |  | [1198-5375](#C_1198-5375) | urn:oid:2.16.840.1.113883.11.20.9.20 (Telecom Use (US Realm Header)) |
| patient | 1..1 | SHALL |  | [1198-5283](#C_1198-5283) |  |
| name | 1..\* | SHALL |  | [1198-5284](#C_1198-5284) | [US Realm Patient Name (PTN.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1](#U_US_Realm_Patient_Name_PTNUSFIELDED) |
| administrativeGenderCode | 1..1 | SHALL |  | [1198-6394](#C_1198-6394) | urn:oid:2.16.840.1.113883.1.11.1 (Administrative Gender (HL7 V3)) |
| birthTime | 1..1 | SHALL |  | [1198-5298](#C_1198-5298) |  |
| maritalStatusCode | 0..1 | SHOULD |  | [1198-5303](#C_1198-5303) | urn:oid:2.16.840.1.113883.1.11.12212 (Marital Status) |
| religiousAffiliationCode | 0..1 | MAY |  | [1198-5317](#C_1198-5317) | urn:oid:2.16.840.1.113883.1.11.19185 (Religious Affiliation) |
| raceCode | 1..1 | SHALL |  | [1198-5322](#C_1198-5322) | urn:oid:2.16.840.1.113883.3.2074.1.1.3 (Race Category Excluding Nulls) |
| sdtc:raceCode | 0..\* | MAY |  | [1198-7263](#C_1198-7263) | urn:oid:2.16.840.1.113883.1.11.14914 (Race Value Set) |
| ethnicGroupCode | 1..1 | SHALL |  | [1198-5323](#C_1198-5323) | urn:oid:2.16.840.1.114222.4.11.837 (Ethnicity) |
| sdtc:ethnicGroupCode | 0..\* | MAY |  | [1198-32901](#C_1198-32901) | urn:oid:2.16.840.1.114222.4.11.877 (Detailed Ethnicity) |
| guardian | 0..\* | MAY |  | [1198-5325](#C_1198-5325) |  |
| code | 0..1 | SHOULD |  | [1198-5326](#C_1198-5326) | urn:oid:2.16.840.1.113883.11.20.12.1 (Personal And Legal Relationship Role Type) |
| addr | 0..\* | SHOULD |  | [1198-5359](#C_1198-5359) | [US Realm Address (AD.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2](#U_US_Realm_Address_ADUSFIELDED) |
| telecom | 0..\* | SHOULD |  | [1198-5382](#C_1198-5382) |  |
| @use | 0..1 | SHOULD |  | [1198-7993](#C_1198-7993) | urn:oid:2.16.840.1.113883.11.20.9.20 (Telecom Use (US Realm Header)) |
| guardianPerson | 1..1 | SHALL |  | [1198-5385](#C_1198-5385) |  |
| name | 1..\* | SHALL |  | [1198-5386](#C_1198-5386) | [US Realm Person Name (PN.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1](#U_US_Realm_Person_Name_PNUSFIELDED) |
| birthplace | 0..1 | MAY |  | [1198-5395](#C_1198-5395) |  |
| place | 1..1 | SHALL |  | [1198-5396](#C_1198-5396) |  |
| addr | 1..1 | SHALL |  | [1198-5397](#C_1198-5397) |  |
| country | 0..1 | SHOULD |  | [1198-5404](#C_1198-5404) | urn:oid:2.16.840.1.113883.3.88.12.80.63 (Country) |
| languageCommunication | 0..\* | SHOULD |  | [1198-5406](#C_1198-5406) |  |
| languageCode | 1..1 | SHALL |  | [1198-5407](#C_1198-5407) | urn:oid:2.16.840.1.113883.1.11.11526 (Language) |
| modeCode | 0..1 | MAY |  | [1198-5409](#C_1198-5409) | urn:oid:2.16.840.1.113883.1.11.12249 (LanguageAbilityMode) |
| proficiencyLevelCode | 0..1 | SHOULD |  | [1198-9965](#C_1198-9965) | urn:oid:2.16.840.1.113883.1.11.12199 (LanguageAbilityProficiency) |
| preferenceInd | 0..1 | SHOULD |  | [1198-5414](#C_1198-5414) |  |
| providerOrganization | 0..1 | MAY |  | [1198-5416](#C_1198-5416) |  |
| id | 1..\* | SHALL |  | [1198-5417](#C_1198-5417) |  |
| @root | 0..1 | SHOULD |  | [1198-16820](#C_1198-16820) | 2.16.840.1.113883.4.6 |
| name | 1..\* | SHALL |  | [1198-5419](#C_1198-5419) |  |
| telecom | 1..\* | SHALL |  | [1198-5420](#C_1198-5420) |  |
| @use | 0..1 | SHOULD |  | [1198-7994](#C_1198-7994) | urn:oid:2.16.840.1.113883.11.20.9.20 (Telecom Use (US Realm Header)) |
| addr | 1..\* | SHALL |  | [1198-5422](#C_1198-5422) | [US Realm Address (AD.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2](#U_US_Realm_Address_ADUSFIELDED) |
| author | 1..\* | SHALL |  | [1198-5444](#C_1198-5444) |  |
| time | 1..1 | SHALL |  | [1198-5445](#C_1198-5445) | [US Realm Date and Time (DTM.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.4](#U_US_Realm_Date_and_Time_DTMUSFIELDED) |
| assignedAuthor | 1..1 | SHALL |  | [1198-5448](#C_1198-5448) |  |
| id | 1..\* | SHALL |  | [1198-5449](#C_1198-5449) |  |
| id | 0..1 | SHOULD |  | [1198-32882](#C_1198-32882) |  |
| @nullFlavor | 0..1 | MAY |  | [1198-32883](#C_1198-32883) | urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = UNK |
| @root | 1..1 | SHALL |  | [1198-32884](#C_1198-32884) | 2.16.840.1.113883.4.6 |
| @extension | 0..1 | SHOULD |  | [1198-32885](#C_1198-32885) |  |
| code | 0..1 | SHOULD |  | [1198-16787](#C_1198-16787) |  |
| @code | 1..1 | SHALL |  | [1198-16788](#C_1198-16788) | urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy) |
| addr | 1..\* | SHALL |  | [1198-5452](#C_1198-5452) | [US Realm Address (AD.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2](#U_US_Realm_Address_ADUSFIELDED) |
| telecom | 1..\* | SHALL |  | [1198-5428](#C_1198-5428) |  |
| @use | 0..1 | SHOULD |  | [1198-7995](#C_1198-7995) | urn:oid:2.16.840.1.113883.11.20.9.20 (Telecom Use (US Realm Header)) |
| assignedPerson | 0..1 | SHOULD |  | [1198-5430](#C_1198-5430) |  |
| name | 1..\* | SHALL |  | [1198-16789](#C_1198-16789) | [US Realm Person Name (PN.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1](#U_US_Realm_Person_Name_PNUSFIELDED) |
| assignedAuthoringDevice | 0..1 | SHOULD |  | [1198-16783](#C_1198-16783) |  |
| manufacturerModelName | 1..1 | SHALL |  | [1198-16784](#C_1198-16784) |  |
| softwareName | 1..1 | SHALL |  | [1198-16785](#C_1198-16785) |  |
| dataEnterer | 0..1 | MAY |  | [1198-5441](#C_1198-5441) |  |
| assignedEntity | 1..1 | SHALL |  | [1198-5442](#C_1198-5442) |  |
| id | 1..\* | SHALL |  | [1198-5443](#C_1198-5443) |  |
| @root | 0..1 | SHOULD |  | [1198-16821](#C_1198-16821) | 2.16.840.1.113883.4.6 |
| code | 0..1 | MAY |  | [1198-32173](#C_1198-32173) | urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy) |
| addr | 1..\* | SHALL |  | [1198-5460](#C_1198-5460) | [US Realm Address (AD.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2](#U_US_Realm_Address_ADUSFIELDED) |
| telecom | 1..\* | SHALL |  | [1198-5466](#C_1198-5466) |  |
| @use | 0..1 | SHOULD |  | [1198-7996](#C_1198-7996) | urn:oid:2.16.840.1.113883.11.20.9.20 (Telecom Use (US Realm Header)) |
| assignedPerson | 1..1 | SHALL |  | [1198-5469](#C_1198-5469) |  |
| name | 1..\* | SHALL |  | [1198-5470](#C_1198-5470) | [US Realm Person Name (PN.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1](#U_US_Realm_Person_Name_PNUSFIELDED) |
| informant | 0..\* | MAY |  | [1198-8001](#C_1198-8001) |  |
| assignedEntity | 1..1 | SHALL |  | [1198-8002](#C_1198-8002) |  |
| id | 1..\* | SHALL |  | [1198-9945](#C_1198-9945) |  |
| code | 0..1 | MAY |  | [1198-32174](#C_1198-32174) | urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy) |
| addr | 1..\* | SHALL |  | [1198-8220](#C_1198-8220) | [US Realm Address (AD.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2](#U_US_Realm_Address_ADUSFIELDED) |
| assignedPerson | 1..1 | SHALL |  | [1198-8221](#C_1198-8221) |  |
| name | 1..\* | SHALL |  | [1198-8222](#C_1198-8222) | [US Realm Person Name (PN.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1](#U_US_Realm_Person_Name_PNUSFIELDED) |
| informant | 0..\* | MAY |  | [1198-31355](#C_1198-31355) |  |
| relatedEntity | 1..1 | SHALL |  | [1198-31356](#C_1198-31356) |  |
| custodian | 1..1 | SHALL |  | [1198-5519](#C_1198-5519) |  |
| assignedCustodian | 1..1 | SHALL |  | [1198-5520](#C_1198-5520) |  |
| representedCustodianOrganization | 1..1 | SHALL |  | [1198-5521](#C_1198-5521) |  |
| id | 1..\* | SHALL |  | [1198-5522](#C_1198-5522) |  |
| @root | 0..1 | SHOULD |  | [1198-16822](#C_1198-16822) | 2.16.840.1.113883.4.6 |
| name | 1..1 | SHALL |  | [1198-5524](#C_1198-5524) |  |
| telecom | 1..1 | SHALL |  | [1198-5525](#C_1198-5525) |  |
| @use | 0..1 | SHOULD |  | [1198-7998](#C_1198-7998) | urn:oid:2.16.840.1.113883.11.20.9.20 (Telecom Use (US Realm Header)) |
| addr | 1..1 | SHALL |  | [1198-5559](#C_1198-5559) | [US Realm Address (AD.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2](#U_US_Realm_Address_ADUSFIELDED) |
| informationRecipient | 0..\* | MAY |  | [1198-5565](#C_1198-5565) |  |
| intendedRecipient | 1..1 | SHALL |  | [1198-5566](#C_1198-5566) |  |
| id | 0..\* | MAY |  | [1198-32399](#C_1198-32399) |  |
| informationRecipient | 0..1 | MAY |  | [1198-5567](#C_1198-5567) |  |
| name | 1..\* | SHALL |  | [1198-5568](#C_1198-5568) | [US Realm Person Name (PN.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1](#U_US_Realm_Person_Name_PNUSFIELDED) |
| receivedOrganization | 0..1 | MAY |  | [1198-5577](#C_1198-5577) |  |
| name | 1..1 | SHALL |  | [1198-5578](#C_1198-5578) |  |
| legalAuthenticator | 0..1 | SHOULD |  | [1198-5579](#C_1198-5579) |  |
| time | 1..1 | SHALL |  | [1198-5580](#C_1198-5580) | [US Realm Date and Time (DTM.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.4](#U_US_Realm_Date_and_Time_DTMUSFIELDED) |
| signatureCode | 1..1 | SHALL |  | [1198-5583](#C_1198-5583) |  |
| @code | 1..1 | SHALL |  | [1198-5584](#C_1198-5584) | urn:oid:2.16.840.1.113883.5.89 (HL7ParticipationSignature) = S |
| sdtc:signatureText | 0..1 | MAY |  | [1198-30810](#C_1198-30810) |  |
| assignedEntity | 1..1 | SHALL |  | [1198-5585](#C_1198-5585) |  |
| id | 1..\* | SHALL |  | [1198-5586](#C_1198-5586) |  |
| @root | 0..1 | MAY |  | [1198-16823](#C_1198-16823) | 2.16.840.1.113883.4.6 |
| code | 0..1 | MAY |  | [1198-17000](#C_1198-17000) | urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy) |
| addr | 1..\* | SHALL |  | [1198-5589](#C_1198-5589) | [US Realm Address (AD.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2](#U_US_Realm_Address_ADUSFIELDED) |
| telecom | 1..\* | SHALL |  | [1198-5595](#C_1198-5595) |  |
| @use | 0..1 | SHOULD |  | [1198-7999](#C_1198-7999) | urn:oid:2.16.840.1.113883.11.20.9.20 (Telecom Use (US Realm Header)) |
| assignedPerson | 1..1 | SHALL |  | [1198-5597](#C_1198-5597) |  |
| name | 1..\* | SHALL |  | [1198-5598](#C_1198-5598) | [US Realm Person Name (PN.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1](#U_US_Realm_Person_Name_PNUSFIELDED) |
| authenticator | 0..\* | MAY |  | [1198-5607](#C_1198-5607) |  |
| time | 1..1 | SHALL |  | [1198-5608](#C_1198-5608) | [US Realm Date and Time (DTM.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.4](#U_US_Realm_Date_and_Time_DTMUSFIELDED) |
| signatureCode | 1..1 | SHALL |  | [1198-5610](#C_1198-5610) |  |
| @code | 1..1 | SHALL |  | [1198-5611](#C_1198-5611) | urn:oid:2.16.840.1.113883.5.89 (HL7ParticipationSignature) = S |
| sdtc:signatureText | 0..1 | MAY |  | [1198-30811](#C_1198-30811) |  |
| assignedEntity | 1..1 | SHALL |  | [1198-5612](#C_1198-5612) |  |
| id | 1..\* | SHALL |  | [1198-5613](#C_1198-5613) |  |
| @root | 0..1 | SHOULD |  | [1198-16824](#C_1198-16824) | 2.16.840.1.113883.4.6 |
| code | 0..1 | MAY |  | [1198-16825](#C_1198-16825) |  |
| @code | 0..1 | MAY |  | [1198-16826](#C_1198-16826) | urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy) |
| addr | 1..\* | SHALL |  | [1198-5616](#C_1198-5616) | [US Realm Address (AD.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2](#U_US_Realm_Address_ADUSFIELDED) |
| telecom | 1..\* | SHALL |  | [1198-5622](#C_1198-5622) |  |
| @use | 0..1 | SHOULD |  | [1198-8000](#C_1198-8000) | urn:oid:2.16.840.1.113883.11.20.9.20 (Telecom Use (US Realm Header)) |
| assignedPerson | 1..1 | SHALL |  | [1198-5624](#C_1198-5624) |  |
| name | 1..\* | SHALL |  | [1198-5625](#C_1198-5625) | [US Realm Person Name (PN.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1](#U_US_Realm_Person_Name_PNUSFIELDED) |
| participant | 0..\* | MAY |  | [1198-10003](#C_1198-10003) |  |
| time | 0..1 | MAY |  | [1198-10004](#C_1198-10004) |  |
| inFulfillmentOf | 0..\* | MAY |  | [1198-9952](#C_1198-9952) |  |
| order | 1..1 | SHALL |  | [1198-9953](#C_1198-9953) |  |
| id | 1..\* | SHALL |  | [1198-9954](#C_1198-9954) |  |
| documentationOf | 0..\* | MAY |  | [1198-14835](#C_1198-14835) |  |
| serviceEvent | 1..1 | SHALL |  | [1198-14836](#C_1198-14836) |  |
| effectiveTime | 1..1 | SHALL |  | [1198-14837](#C_1198-14837) |  |
| low | 1..1 | SHALL |  | [1198-14838](#C_1198-14838) |  |
| performer | 0..\* | SHOULD |  | [1198-14839](#C_1198-14839) |  |
| @typeCode | 1..1 | SHALL |  | [1198-14840](#C_1198-14840) | urn:oid:2.16.840.1.113883.1.11.19601 (x\_ServiceEventPerformer) |
| functionCode | 0..1 | MAY |  | [1198-16818](#C_1198-16818) |  |
| @code | 0..1 | SHOULD |  | [1198-32889](#C_1198-32889) | urn:oid:2.16.840.1.113762.1.4.1099.30 (Care Team Member Function) |
| assignedEntity | 1..1 | SHALL |  | [1198-14841](#C_1198-14841) |  |
| id | 1..\* | SHALL |  | [1198-14846](#C_1198-14846) |  |
| @root | 0..1 | SHOULD |  | [1198-14847](#C_1198-14847) | 2.16.840.1.113883.4.6 |
| code | 0..1 | SHOULD |  | [1198-14842](#C_1198-14842) | urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy) |
| authorization | 0..\* | MAY |  | [1198-16792](#C_1198-16792) |  |
| consent | 1..1 | SHALL |  | [1198-16793](#C_1198-16793) |  |
| id | 0..\* | MAY |  | [1198-16794](#C_1198-16794) |  |
| code | 0..1 | MAY |  | [1198-16795](#C_1198-16795) |  |
| statusCode | 1..1 | SHALL |  | [1198-16797](#C_1198-16797) |  |
| @code | 1..1 | SHALL |  | [1198-16798](#C_1198-16798) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = completed |
| componentOf | 0..1 | MAY |  | [1198-9955](#C_1198-9955) |  |
| encompassingEncounter | 1..1 | SHALL |  | [1198-9956](#C_1198-9956) |  |
| id | 1..\* | SHALL |  | [1198-9959](#C_1198-9959) |  |
| effectiveTime | 1..1 | SHALL |  | [1198-9958](#C_1198-9958) |  |

Properties

realmCode

1. SHALL contain exactly one [1..1] realmCode="US" (CONF:1198-16791).
2. SHALL contain exactly one [1..1] typeId (CONF:1198-5361).
   1. This typeId SHALL contain exactly one [1..1] @root="2.16.840.1.113883.1.3" (CONF:1198-5250).
   2. This typeId SHALL contain exactly one [1..1] @extension="POCD\_HD000040" (CONF:1198-5251).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-5252) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.1.1" (CONF:1198-10036).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32503).
4. SHALL contain exactly one [1..1] id (CONF:1198-5363).
   1. This id SHALL be a globally unique identifier for the document (CONF:1198-9991).
5. SHALL contain exactly one [1..1] code (CONF:1198-5253).
   1. This code SHALL specify the particular kind of document (e.g., History and Physical, Discharge Summary, Progress Note) (CONF:1198-9992).
   2. This code SHALL be drawn from the LOINC document type ontology (LOINC codes where SCALE = DOC) (CONF:1198-32948).
6. SHALL contain exactly one [1..1] title (CONF:1198-5254).  
   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.FIELDED)](#U_US_Realm_Date_and_Time_DTMUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.4) (CONF:1198-5256).
8. SHALL contain exactly one [1..1] confidentialityCode, which SHOULD be selected from ValueSet [HL7 BasicConfidentialityKind](#HL7_BasicConfidentialityKind) urn:oid:2.16.840.1.113883.1.11.16926 DYNAMIC (CONF:1198-5259).
9. SHALL contain exactly one [1..1] languageCode, which SHALL be selected from ValueSet [Language](#Language) urn:oid:2.16.840.1.113883.1.11.11526 DYNAMIC (CONF:1198-5372).
10. MAY contain zero or one [0..1] setId (CONF:1198-5261).
    1. If setId is present versionNumber SHALL be present (CONF:1198-6380).
11. MAY contain zero or one [0..1] versionNumber (CONF:1198-5264).
    1. If versionNumber is present setId SHALL be present (CONF:1198-6387).

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

1. SHALL contain at least one [1..\*] recordTarget (CONF:1198-5266).
   1. Such recordTargets SHALL contain exactly one [1..1] patientRole (CONF:1198-5267).
      1. This patientRole SHALL contain at least one [1..\*] id (CONF:1198-5268).
      2. This patientRole SHALL contain at least one [1..\*] [US Realm Address (AD.US.FIELDED)](#U_US_Realm_Address_ADUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1198-5271).
      3. This patientRole SHALL contain at least one [1..\*] telecom (CONF:1198-5280).
         1. Such telecoms SHOULD contain zero or one [0..1] @use, which SHALL be selected from ValueSet [Telecom Use (US Realm Header)](#Telecom_Use_US_Realm_Header) urn:oid:2.16.840.1.113883.11.20.9.20 DYNAMIC (CONF:1198-5375).
      4. This patientRole SHALL contain exactly one [1..1] patient (CONF:1198-5283).
         1. This patient SHALL contain at least one [1..\*] [US Realm Patient Name (PTN.US.FIELDED)](#U_US_Realm_Patient_Name_PTNUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1) (CONF:1198-5284).
         2. This patient SHALL contain exactly one [1..1] administrativeGenderCode, which SHALL be selected from ValueSet [Administrative Gender (HL7 V3)](#Administrative_Gender_HL7_V3) urn:oid:2.16.840.1.113883.1.11.1 DYNAMIC (CONF:1198-6394).
         3. This patient SHALL contain exactly one [1..1] birthTime (CONF:1198-5298).
            1. SHALL be precise to year (CONF:1198-5299).
            2. SHOULD be precise to day (CONF:1198-5300).

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

* + - * 1. MAY be precise to the minute (CONF:1198-32418).
      1. This patient SHOULD contain zero or one [0..1] maritalStatusCode, which SHALL be selected from ValueSet [Marital Status](#Marital_Status) urn:oid:2.16.840.1.113883.1.11.12212 DYNAMIC (CONF:1198-5303).
      2. This patient MAY contain zero or one [0..1] religiousAffiliationCode, which SHALL be selected from ValueSet [Religious Affiliation](#Religious_Affiliation) urn:oid:2.16.840.1.113883.1.11.19185 DYNAMIC (CONF:1198-5317).
      3. This patient SHALL contain exactly one [1..1] raceCode, which SHALL be selected from ValueSet [Race Category Excluding Nulls](#Race_Category_Excluding_Nulls) urn:oid:2.16.840.1.113883.3.2074.1.1.3 DYNAMIC (CONF:1198-5322).
      4. This patient MAY contain zero or more [0..\*] sdtc:raceCode, which SHALL be selected from ValueSet [Race Value Set](#Race_Value_Set) urn:oid:2.16.840.1.113883.1.11.14914 DYNAMIC (CONF:1198-7263).  
         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.
         1. If sdtc:raceCode is present, then the patient SHALL contain [1..1] raceCode (CONF:1198-31347).
      5. This patient SHALL contain exactly one [1..1] ethnicGroupCode, which SHALL be selected from ValueSet [Ethnicity](#Ethnicity) urn:oid:2.16.840.1.114222.4.11.837 DYNAMIC (CONF:1198-5323).
      6. This patient MAY contain zero or more [0..\*] sdtc:ethnicGroupCode, which SHALL be selected from ValueSet [Detailed Ethnicity](#Detailed_Ethnicity) urn:oid:2.16.840.1.114222.4.11.877 DYNAMIC (CONF:1198-32901).
      7. This patient MAY contain zero or more [0..\*] guardian (CONF:1198-5325).
         1. The guardian, if present, SHOULD contain zero or one [0..1] code, which SHALL be selected from ValueSet [Personal And Legal Relationship Role Type](#Personal_And_Legal_Relationship_Role_Ty) urn:oid:2.16.840.1.113883.11.20.12.1 DYNAMIC (CONF:1198-5326).
         2. The guardian, if present, SHOULD contain zero or more [0..\*] [US Realm Address (AD.US.FIELDED)](#U_US_Realm_Address_ADUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1198-5359).
         3. The guardian, if present, SHOULD contain zero or more [0..\*] telecom (CONF:1198-5382).

The telecom, if present, SHOULD contain zero or one [0..1] @use, which SHALL be selected from ValueSet [Telecom Use (US Realm Header)](#Telecom_Use_US_Realm_Header) urn:oid:2.16.840.1.113883.11.20.9.20 DYNAMIC (CONF:1198-7993).

* + - * 1. The guardian, if present, SHALL contain exactly one [1..1] guardianPerson (CONF:1198-5385).

This guardianPerson SHALL contain at least one [1..\*] [US Realm Person Name (PN.US.FIELDED)](#U_US_Realm_Person_Name_PNUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1198-5386).

* + - 1. This patient MAY contain zero or one [0..1] birthplace (CONF:1198-5395).
         1. The birthplace, if present, SHALL contain exactly one [1..1] place (CONF:1198-5396).

This place SHALL contain exactly one [1..1] addr (CONF:1198-5397).

This addr SHOULD contain zero or one [0..1] country, which SHALL be selected from ValueSet [Country](#Country) urn:oid:2.16.840.1.113883.3.88.12.80.63 DYNAMIC (CONF:1198-5404).

If country is US, this addr SHALL contain exactly one [1..1] state, which SHALL be selected from ValueSet StateValueSet 2.16.840.1.113883.3.88.12.80.1 *DYNAMIC* (CONF:1198-5402).  
Note: A nullFlavor of 'UNK' may be used if the state is unknown.

If country is US, this addr MAY contain zero or one [0..1] postalCode, which SHALL be selected from ValueSet PostalCode urn:oid:2.16.840.1.113883.3.88.12.80.2 *DYNAMIC* (CONF:1198-5403).

* + - 1. This patient SHOULD contain zero or more [0..\*] languageCommunication (CONF:1198-5406).
         1. The languageCommunication, if present, SHALL contain exactly one [1..1] languageCode, which SHALL be selected from ValueSet [Language](#Language) urn:oid:2.16.840.1.113883.1.11.11526 DYNAMIC (CONF:1198-5407).
         2. The languageCommunication, if present, MAY contain zero or one [0..1] modeCode, which SHALL be selected from ValueSet [LanguageAbilityMode](#LanguageAbilityMode) urn:oid:2.16.840.1.113883.1.11.12249 DYNAMIC (CONF:1198-5409).
         3. The languageCommunication, if present, SHOULD contain zero or one [0..1] proficiencyLevelCode, which SHALL be selected from ValueSet [LanguageAbilityProficiency](#LanguageAbilityProficiency) urn:oid:2.16.840.1.113883.1.11.12199 DYNAMIC (CONF:1198-9965).
         4. The languageCommunication, if present, SHOULD contain zero or one [0..1] preferenceInd (CONF:1198-5414).
    1. This patientRole MAY contain zero or one [0..1] providerOrganization (CONF:1198-5416).
       1. The providerOrganization, if present, SHALL contain at least one [1..\*] id (CONF:1198-5417).
          1. Such ids SHOULD contain zero or one [0..1] @root="2.16.840.1.113883.4.6" National Provider Identifier (CONF:1198-16820).
       2. The providerOrganization, if present, SHALL contain at least one [1..\*] name (CONF:1198-5419).
       3. The providerOrganization, if present, SHALL contain at least one [1..\*] telecom (CONF:1198-5420).
          1. Such telecoms SHOULD contain zero or one [0..1] @use, which SHALL be selected from ValueSet [Telecom Use (US Realm Header)](#Telecom_Use_US_Realm_Header) urn:oid:2.16.840.1.113883.11.20.9.20 DYNAMIC (CONF:1198-7994).
       4. The providerOrganization, if present, SHALL contain at least one [1..\*] [US Realm Address (AD.US.FIELDED)](#U_US_Realm_Address_ADUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1198-5422).

author

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

1. SHALL contain at least one [1..\*] author (CONF:1198-5444).
   1. Such authors SHALL contain exactly one [1..1] [US Realm Date and Time (DTM.US.FIELDED)](#U_US_Realm_Date_and_Time_DTMUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.4) (CONF:1198-5445).
   2. Such authors SHALL contain exactly one [1..1] assignedAuthor (CONF:1198-5448).
      1. This assignedAuthor SHALL contain at least one [1..\*] id (CONF:1198-5449).

If this assignedAuthor is an assignedPerson

* + 1. This assignedAuthor SHOULD contain zero or one [0..1] id (CONF:1198-32882) 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:1198-32883).
      2. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.4.6" National Provider Identifier (CONF:1198-32884).
      3. SHOULD contain zero or one [0..1] @extension (CONF:1198-32885).

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

* + 1. This assignedAuthor SHOULD contain zero or one [0..1] code (CONF:1198-16787).
       1. The code, if present, SHALL contain exactly one [1..1] @code, which SHOULD be selected from ValueSet [Healthcare Provider Taxonomy](#Healthcare_Provider_Taxonomy) urn:oid:2.16.840.1.114222.4.11.1066 DYNAMIC (CONF:1198-16788).
    2. This assignedAuthor SHALL contain at least one [1..\*] [US Realm Address (AD.US.FIELDED)](#U_US_Realm_Address_ADUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1198-5452).
    3. This assignedAuthor SHALL contain at least one [1..\*] telecom (CONF:1198-5428).
       1. Such telecoms SHOULD contain zero or one [0..1] @use, which SHALL be selected from ValueSet [Telecom Use (US Realm Header)](#Telecom_Use_US_Realm_Header) urn:oid:2.16.840.1.113883.11.20.9.20 DYNAMIC (CONF:1198-7995).
    4. This assignedAuthor SHOULD contain zero or one [0..1] assignedPerson (CONF:1198-5430).
       1. The assignedPerson, if present, SHALL contain at least one [1..\*] [US Realm Person Name (PN.US.FIELDED)](#U_US_Realm_Person_Name_PNUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1198-16789).
    5. This assignedAuthor SHOULD contain zero or one [0..1] assignedAuthoringDevice (CONF:1198-16783).
       1. The assignedAuthoringDevice, if present, SHALL contain exactly one [1..1] manufacturerModelName (CONF:1198-16784).
       2. The assignedAuthoringDevice, if present, SHALL contain exactly one [1..1] softwareName (CONF:1198-16785).
    6. There SHALL be exactly one assignedAuthor/assignedPerson or exactly one assignedAuthor/assignedAuthoringDevice (CONF:1198-16790).

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.

1. MAY contain zero or one [0..1] dataEnterer (CONF:1198-5441).
   1. The dataEnterer, if present, SHALL contain exactly one [1..1] assignedEntity (CONF:1198-5442).
      1. This assignedEntity SHALL contain at least one [1..\*] id (CONF:1198-5443).
         1. Such ids SHOULD contain zero or one [0..1] @root="2.16.840.1.113883.4.6" National Provider Identifier (CONF:1198-16821).
      2. This assignedEntity MAY contain zero or one [0..1] code, which SHOULD be selected from ValueSet [Healthcare Provider Taxonomy](#Healthcare_Provider_Taxonomy) urn:oid:2.16.840.1.114222.4.11.1066 DYNAMIC (CONF:1198-32173).
      3. This assignedEntity SHALL contain at least one [1..\*] [US Realm Address (AD.US.FIELDED)](#U_US_Realm_Address_ADUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1198-5460).
      4. This assignedEntity SHALL contain at least one [1..\*] telecom (CONF:1198-5466).
         1. Such telecoms SHOULD contain zero or one [0..1] @use, which SHALL be selected from ValueSet [Telecom Use (US Realm Header)](#Telecom_Use_US_Realm_Header) urn:oid:2.16.840.1.113883.11.20.9.20 DYNAMIC (CONF:1198-7996).
      5. This assignedEntity SHALL contain exactly one [1..1] assignedPerson (CONF:1198-5469).
         1. This assignedPerson SHALL contain at least one [1..\*] [US Realm Person Name (PN.US.FIELDED)](#U_US_Realm_Person_Name_PNUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1198-5470).

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.

1. MAY contain zero or more [0..\*] informant (CONF:1198-8001) such that it
   1. SHALL contain exactly one [1..1] assignedEntity (CONF:1198-8002).
      1. This assignedEntity SHALL contain at least one [1..\*] id (CONF:1198-9945).
         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:1198-9946).
      2. This assignedEntity MAY contain zero or one [0..1] code, which SHOULD be selected from ValueSet [Healthcare Provider Taxonomy](#Healthcare_Provider_Taxonomy) urn:oid:2.16.840.1.114222.4.11.1066 DYNAMIC (CONF:1198-32174).
      3. This assignedEntity SHALL contain at least one [1..\*] [US Realm Address (AD.US.FIELDED)](#U_US_Realm_Address_ADUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1198-8220).
      4. This assignedEntity SHALL contain exactly one [1..1] assignedPerson (CONF:1198-8221).
         1. This assignedPerson SHALL contain at least one [1..\*] [US Realm Person Name (PN.US.FIELDED)](#U_US_Realm_Person_Name_PNUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1198-8222).

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.

1. MAY contain zero or more [0..\*] informant (CONF:1198-31355) such that it
   1. SHALL contain exactly one [1..1] relatedEntity (CONF:1198-31356).

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.

1. SHALL contain exactly one [1..1] custodian (CONF:1198-5519).
   1. This custodian SHALL contain exactly one [1..1] assignedCustodian (CONF:1198-5520).
      1. This assignedCustodian SHALL contain exactly one [1..1] representedCustodianOrganization (CONF:1198-5521).
         1. This representedCustodianOrganization SHALL contain at least one [1..\*] id (CONF:1198-5522).
            1. Such ids SHOULD contain zero or one [0..1] @root="2.16.840.1.113883.4.6" National Provider Identifier (CONF:1198-16822).
         2. This representedCustodianOrganization SHALL contain exactly one [1..1] name (CONF:1198-5524).
         3. This representedCustodianOrganization SHALL contain exactly one [1..1] telecom (CONF:1198-5525).
            1. This telecom SHOULD contain zero or one [0..1] @use, which SHALL be selected from ValueSet [Telecom Use (US Realm Header)](#Telecom_Use_US_Realm_Header) urn:oid:2.16.840.1.113883.11.20.9.20 DYNAMIC (CONF:1198-7998).
         4. This representedCustodianOrganization SHALL contain exactly one [1..1] [US Realm Address (AD.US.FIELDED)](#U_US_Realm_Address_ADUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1198-5559).

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.

1. MAY contain zero or more [0..\*] informationRecipient (CONF:1198-5565).
   1. The informationRecipient, if present, SHALL contain exactly one [1..1] intendedRecipient (CONF:1198-5566).
      1. This intendedRecipient MAY contain zero or more [0..\*] id (CONF:1198-32399).
      2. This intendedRecipient MAY contain zero or one [0..1] informationRecipient (CONF:1198-5567).
         1. The informationRecipient, if present, SHALL contain at least one [1..\*] [US Realm Person Name (PN.US.FIELDED)](#U_US_Realm_Person_Name_PNUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1198-5568).
      3. This intendedRecipient MAY contain zero or one [0..1] receivedOrganization (CONF:1198-5577).
         1. The receivedOrganization, if present, SHALL contain exactly one [1..1] name (CONF:1198-5578).

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.

1. SHOULD contain zero or one [0..1] legalAuthenticator (CONF:1198-5579).
   1. The legalAuthenticator, if present, SHALL contain exactly one [1..1] [US Realm Date and Time (DTM.US.FIELDED)](#U_US_Realm_Date_and_Time_DTMUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.4) (CONF:1198-5580).
   2. The legalAuthenticator, if present, SHALL contain exactly one [1..1] signatureCode (CONF:1198-5583).
      1. This signatureCode SHALL contain exactly one [1..1] @code="S" (CodeSystem: HL7ParticipationSignature urn:oid:2.16.840.1.113883.5.89 STATIC) (CONF:1198-5584).

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 2013.

* 1. The legalAuthenticator, if present, MAY contain zero or one [0..1] sdtc:signatureText (CONF:1198-30810).  
     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.
  2. The legalAuthenticator, if present, SHALL contain exactly one [1..1] assignedEntity (CONF:1198-5585).
     1. This assignedEntity SHALL contain at least one [1..\*] id (CONF:1198-5586).
        1. Such ids MAY contain zero or one [0..1] @root="2.16.840.1.113883.4.6" National Provider Identifier (CONF:1198-16823).
     2. This assignedEntity MAY contain zero or one [0..1] code, which SHOULD be selected from ValueSet [Healthcare Provider Taxonomy](#Healthcare_Provider_Taxonomy) urn:oid:2.16.840.1.114222.4.11.1066 DYNAMIC (CONF:1198-17000).
     3. This assignedEntity SHALL contain at least one [1..\*] [US Realm Address (AD.US.FIELDED)](#U_US_Realm_Address_ADUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1198-5589).
     4. This assignedEntity SHALL contain at least one [1..\*] telecom (CONF:1198-5595).
        1. Such telecoms SHOULD contain zero or one [0..1] @use, which SHALL be selected from ValueSet [Telecom Use (US Realm Header)](#Telecom_Use_US_Realm_Header) urn:oid:2.16.840.1.113883.11.20.9.20 DYNAMIC (CONF:1198-7999).
     5. This assignedEntity SHALL contain exactly one [1..1] assignedPerson (CONF:1198-5597).
        1. This assignedPerson SHALL contain at least one [1..\*] [US Realm Person Name (PN.US.FIELDED)](#U_US_Realm_Person_Name_PNUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1198-5598).

authenticator

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

1. MAY contain zero or more [0..\*] authenticator (CONF:1198-5607) such that it
   1. SHALL contain exactly one [1..1] [US Realm Date and Time (DTM.US.FIELDED)](#U_US_Realm_Date_and_Time_DTMUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.4) (CONF:1198-5608).
   2. SHALL contain exactly one [1..1] signatureCode (CONF:1198-5610).
      1. This signatureCode SHALL contain exactly one [1..1] @code="S" (CodeSystem: HL7ParticipationSignature urn:oid:2.16.840.1.113883.5.89 STATIC) (CONF:1198-5611).

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.

* 1. MAY contain zero or one [0..1] sdtc:signatureText (CONF:1198-30811).  
     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.
  2. SHALL contain exactly one [1..1] assignedEntity (CONF:1198-5612).
     1. This assignedEntity SHALL contain at least one [1..\*] id (CONF:1198-5613).
        1. Such ids SHOULD contain zero or one [0..1] @root="2.16.840.1.113883.4.6" National Provider Identifier  (CONF:1198-16824).
     2. This assignedEntity MAY contain zero or one [0..1] code (CONF:1198-16825).
        1. The code, if present, MAY contain zero or one [0..1] @code, which SHOULD be selected from ValueSet [Healthcare Provider Taxonomy](#Healthcare_Provider_Taxonomy) urn:oid:2.16.840.1.114222.4.11.1066 DYNAMIC (CONF:1198-16826).
     3. This assignedEntity SHALL contain at least one [1..\*] [US Realm Address (AD.US.FIELDED)](#U_US_Realm_Address_ADUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1198-5616).
     4. This assignedEntity SHALL contain at least one [1..\*] telecom (CONF:1198-5622).
        1. Such telecoms SHOULD contain zero or one [0..1] @use, which SHALL be selected from ValueSet [Telecom Use (US Realm Header)](#Telecom_Use_US_Realm_Header) urn:oid:2.16.840.1.113883.11.20.9.20 DYNAMIC (CONF:1198-8000).
     5. This assignedEntity SHALL contain exactly one [1..1] assignedPerson (CONF:1198-5624).
        1. This assignedPerson SHALL contain at least one [1..\*] [US Realm Person Name (PN.US.FIELDED)](#U_US_Realm_Person_Name_PNUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1198-5625).

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).

1. MAY contain zero or more [0..\*] participant (CONF:1198-10003) such that it
   1. MAY contain zero or one [0..1] time (CONF:1198-10004).
   2. SHALL contain associatedEntity/associatedPerson *AND/OR* associatedEntity/scopingOrganization (CONF:1198-10006).
   3. When participant/@typeCode is *IND*, associatedEntity/@classCode SHOULD be selected from ValueSet 2.16.840.1.113883.11.20.9.33 INDRoleclassCodes *DYNAMIC* (CONF:1198-10007).

inFulfillmentOf

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

1. MAY contain zero or more [0..\*] inFulfillmentOf (CONF:1198-9952).
   1. The inFulfillmentOf, if present, SHALL contain exactly one [1..1] order (CONF:1198-9953).
      1. This order SHALL contain at least one [1..\*] id (CONF:1198-9954).

documentationOf

1. MAY contain zero or more [0..\*] documentationOf (CONF:1198-14835).

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.

* 1. The documentationOf, if present, SHALL contain exactly one [1..1] serviceEvent (CONF:1198-14836).
     1. This serviceEvent SHALL contain exactly one [1..1] effectiveTime (CONF:1198-14837).
        1. This effectiveTime SHALL contain exactly one [1..1] low (CONF:1198-14838).

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.

* + 1. This serviceEvent SHOULD contain zero or more [0..\*] performer (CONF:1198-14839).
       1. The performer, if present, SHALL contain exactly one [1..1] @typeCode, which SHALL be selected from ValueSet [x\_ServiceEventPerformer](#x_ServiceEventPerformer) urn:oid:2.16.840.1.113883.1.11.19601 STATIC (CONF:1198-14840).
       2. The performer, if present, MAY contain zero or one [0..1] functionCode (CONF:1198-16818).
          1. The functionCode, if present, SHOULD contain zero or one [0..1] @code, which SHOULD be selected from ValueSet [Care Team Member Function](#Care_Team_Member_Function) urn:oid:2.16.840.1.113762.1.4.1099.30 DYNAMIC (CONF:1198-32889).
       3. The performer, if present, SHALL contain exactly one [1..1] assignedEntity (CONF:1198-14841).
          1. This assignedEntity SHALL contain at least one [1..\*] id (CONF:1198-14846).

Such ids SHOULD contain zero or one [0..1] @root="2.16.840.1.113883.4.6" National Provider Identifier (CONF:1198-14847).

* + - * 1. This assignedEntity SHOULD contain zero or one [0..1] code, which SHOULD be selected from ValueSet [Healthcare Provider Taxonomy](#Healthcare_Provider_Taxonomy) urn:oid:2.16.840.1.114222.4.11.1066 DYNAMIC (CONF:1198-14842).

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.

1. MAY contain zero or more [0..\*] authorization (CONF:1198-16792) such that it
   1. SHALL contain exactly one [1..1] consent (CONF:1198-16793).
      1. This consent MAY contain zero or more [0..\*] id (CONF:1198-16794).
      2. This consent MAY contain zero or one [0..1] code (CONF:1198-16795).  
         Note: The type of consent (e.g., a consent to perform the related serviceEvent) is conveyed in consent/code.
      3. This consent SHALL contain exactly one [1..1] statusCode (CONF:1198-16797).
         1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1198-16798).

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.

1. MAY contain zero or one [0..1] componentOf (CONF:1198-9955).
   1. The componentOf, if present, SHALL contain exactly one [1..1] encompassingEncounter (CONF:1198-9956).
      1. This encompassingEncounter SHALL contain at least one [1..\*] id (CONF:1198-9959).
      2. This encompassingEncounter SHALL contain exactly one [1..1] effectiveTime (CONF:1198-9958).

Table 4: Race Value Set

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Race Value Set urn:oid:2.16.840.1.113883.1.11.14914  (Clinical Focus: All concepts that can describe a person's "race" as defined by the United States Bureau of Census),(Data Element Scope: Personal Demographic information, can be multiple.),(Inclusion Criteria: All descendant concepts from the concept "1000-9 Race", excluding that root concept, as derived from the Race and Ethnicity - CDC code system.),(Exclusion Criteria: Concepts that are not a descendant of "Race", therefore, no concepts descendant from "2133-7 Ethnicity". Also the root concept "Race".)  This value set was imported on 6/29/2019 with a version of 20190522.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.14914/expansion> | | | |
| 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 |
| 1004-1 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.113883.6.238 | American Indian |
| 1006-6 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.113883.6.238 | Abenaki |
| 1008-2 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.113883.6.238 | Algonquian |
| 1010-8 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.113883.6.238 | Apache |
| 1011-6 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.113883.6.238 | Chiricahua |
| 1012-4 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.113883.6.238 | Fort Sill Apache |
| 1013-2 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.113883.6.238 | Jicarilla Apache |
| 1014-0 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.113883.6.238 | Lipan Apache |
| 1015-7 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.113883.6.238 | Mescalero Apache |
| ... | | | |

Table 5: HL7 BasicConfidentialityKind

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: HL7 BasicConfidentialityKind urn:oid:2.16.840.1.113883.1.11.16926  (Clinical Focus: Commonly used confidentiality constraints placed upon clinical documents),(Data Element Scope: ),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 6/25/2019 with a version of 20190425.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.16926/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| N | HL7Confidentiality | urn:oid:2.16.840.1.113883.5.25 | normal |
| R | HL7Confidentiality | urn:oid:2.16.840.1.113883.5.25 | restricted |
| V | HL7Confidentiality | urn:oid:2.16.840.1.113883.5.25 | very restricted |

Table 6: Language

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Language urn:oid:2.16.840.1.113883.1.11.11526  A value set of codes defined by Internet RFC 5646.   Use 2 character code if one exists. Use 3 character code if a 2 character code does not exist. Including type = region is allowed  See http://www.iana.org/assignments/language-subtag-registry/language-subtag-registry  Value Set Source: <http://www.loc.gov/standards/iso639-2/php/code_list.php> | | | |
| 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 7: Telecom Use (US Realm Header)

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Telecom Use (US Realm Header) urn:oid:2.16.840.1.113883.11.20.9.20  (Clinical Focus: The purpose for which an entity is assigned a telecom address),(Data Element Scope: ),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 5/27/2022 with a version of Latest.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.20/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| AS | HL7AddressUse | urn:oid:2.16.840.1.113883.5.1119 | answering service |
| EC | HL7AddressUse | urn:oid:2.16.840.1.113883.5.1119 | emergency contact |
| HP | HL7AddressUse | urn:oid:2.16.840.1.113883.5.1119 | primary home |
| HV | HL7AddressUse | urn:oid:2.16.840.1.113883.5.1119 | vacation home |
| MC | HL7AddressUse | urn:oid:2.16.840.1.113883.5.1119 | mobile contact) |
| PG | HL7AddressUse | urn:oid:2.16.840.1.113883.5.1119 | pager |
| WP | HL7AddressUse | urn:oid:2.16.840.1.113883.5.1119 | work place |

Table 8: Administrative Gender (HL7 V3)

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Administrative Gender (HL7 V3) urn:oid:2.16.840.1.113883.1.11.1  (Clinical Focus: The gender of a person used for adminstrative purposes (as opposed to clinical gender)),(Data Element Scope: ),(Inclusion Criteria: All codes in the Hl7 V3 AdministrativeGender code system),(Exclusion Criteria: )  This value set was imported on 9/29/2020 with a version of Latest.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.1/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| F | Administrative Gender | urn:oid:2.16.840.1.113883.5.1 | Female |
| M | Administrative Gender | urn:oid:2.16.840.1.113883.5.1 | Male |
| UN | Administrative Gender | urn:oid:2.16.840.1.113883.5.1 | Undifferentiated |

Table 9: Marital Status

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Marital Status urn:oid:2.16.840.1.113883.1.11.12212  (Clinical Focus: The domestic partnership status of a person.),(Data Element Scope: Marital Status),(Inclusion Criteria: All codes in the HL7 MaritalStatus code system),(Exclusion Criteria: Any non-selectable codes)  This value set was imported on 6/25/2019 with a version of 20190517.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.12212/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| A | HL7MaritalStatus | urn:oid:2.16.840.1.113883.5.2 | Annulled |
| C | HL7MaritalStatus | urn:oid:2.16.840.1.113883.5.2 | Common Law |
| D | HL7MaritalStatus | urn:oid:2.16.840.1.113883.5.2 | Divorced |
| I | HL7MaritalStatus | urn:oid:2.16.840.1.113883.5.2 | Interlocutory |
| L | HL7MaritalStatus | urn:oid:2.16.840.1.113883.5.2 | Legally Separated |
| M | HL7MaritalStatus | urn:oid:2.16.840.1.113883.5.2 | Married |
| P | HL7MaritalStatus | urn:oid:2.16.840.1.113883.5.2 | Polygamous |
| S | HL7MaritalStatus | urn:oid:2.16.840.1.113883.5.2 | Never Married |
| T | HL7MaritalStatus | urn:oid:2.16.840.1.113883.5.2 | Domestic partner |
| U | HL7MaritalStatus | urn:oid:2.16.840.1.113883.5.2 | unmarried |
| ... | | | |

Table 10: Religious Affiliation

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Religious Affiliation urn:oid:2.16.840.1.113883.1.11.19185  (Clinical Focus: A person's faith affiliation),(Data Element Scope: ),(Inclusion Criteria: All codes in the HL7 ReligiousAffiliation code system),(Exclusion Criteria: )  This value set was imported on 6/29/2019 with a version of 20190425.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.19185/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 1001 | HL7ReligiousAffiliation | urn:oid:2.16.840.1.113883.5.1076 | Adventist |
| 1002 | HL7ReligiousAffiliation | urn:oid:2.16.840.1.113883.5.1076 | African Religions |
| 1003 | HL7ReligiousAffiliation | urn:oid:2.16.840.1.113883.5.1076 | Afro-Caribbean Religions |
| 1004 | HL7ReligiousAffiliation | urn:oid:2.16.840.1.113883.5.1076 | Agnosticism |
| 1005 | HL7ReligiousAffiliation | urn:oid:2.16.840.1.113883.5.1076 | Anglican |
| 1006 | HL7ReligiousAffiliation | urn:oid:2.16.840.1.113883.5.1076 | Animism |
| 1007 | HL7ReligiousAffiliation | urn:oid:2.16.840.1.113883.5.1076 | Atheism |
| 1008 | HL7ReligiousAffiliation | urn:oid:2.16.840.1.113883.5.1076 | Babi & Baha'I faiths |
| 1009 | HL7ReligiousAffiliation | urn:oid:2.16.840.1.113883.5.1076 | Baptist |
| 1010 | HL7ReligiousAffiliation | urn:oid:2.16.840.1.113883.5.1076 | Bon |
| ... | | | |

Table 11: Race Category Excluding Nulls

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Race Category Excluding Nulls urn:oid:2.16.840.1.113883.3.2074.1.1.3  (Clinical Focus: The top-level "Race" concepts as defined by US Office of Management and Budget (OMB), excluding "Other race". All "Race" concepts in the Race and Ethnicity - CDC code system roll-up to one of these codes.),(Data Element Scope: Demographic categorization of a person's race (can be multiple).),(Inclusion Criteria: Direct children of the "1000-9 Race" concept in the Race and Ethnicity Code system.),(Exclusion Criteria: Specifically exclude "2131-1 Other Race" and any descendant of the concepts defined in the inclusion criteria.)  This value set was imported on 6/18/2020 with a version of Latest.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.2074.1.1.3/expansion> | | | |
| 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 12: Ethnicity

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Ethnicity urn:oid:2.16.840.1.114222.4.11.837  (Clinical Focus: ),(Data Element Scope: ),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 10/14/2020 with a version of Latest.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.837/expansion> | | | |
| 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 13: 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  (Clinical Focus: 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.),(Data Element Scope: C-CDA v2.1 Any person role such as Guardian and associatedEntity. Many @code references.),(Inclusion Criteria: Union of: (Descendants of \_PersonalRelationshipRoleType  OR Descendants of RESPRSN)),(Exclusion Criteria: not in the inclusion criteria)  This value set was imported on 6/26/2019 with a version of 20190425.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.12.1/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| ADOPTF | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | adoptive father |
| ADOPTM | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | adoptive mother |
| ADOPTP | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | adoptive parent |
| AUNT | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | aunt |
| BRO | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | brother |
| BROINLAW | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | brother-in-law |
| CHILD | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | child |
| CHLDADOPT | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | adopted child |
| CHLDFOST | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | foster child |
| CHLDINLAW | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | child-in-law |
| ... | | | |

Table 14: 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. Contains the ISO 3166-1 code elements available in the alpha-2 code of ISOs country code standard.  Value Set Source: <http://hl7.org/fhir/ValueSet/iso3166-1-2> | | | |
| Code | Code System | Code System OID | Print Name |
| AD | ISO 3166 Part 1 Country Codes, 2nd Edition, Alpha-2 | urn:oid:1.0.3166.1.2.2 | Andorra |
| AE | ISO 3166 Part 1 Country Codes, 2nd Edition, Alpha-2 | urn:oid:1.0.3166.1.2.2 | United Arab Emirates |
| AF | ISO 3166 Part 1 Country Codes, 2nd Edition, Alpha-2 | urn:oid:1.0.3166.1.2.2 | Afghanistan |
| AG | ISO 3166 Part 1 Country Codes, 2nd Edition, Alpha-2 | urn:oid:1.0.3166.1.2.2 | Antigua and Barbuda |
| AI | ISO 3166 Part 1 Country Codes, 2nd Edition, Alpha-2 | urn:oid:1.0.3166.1.2.2 | Anguilla |
| AL | ISO 3166 Part 1 Country Codes, 2nd Edition, Alpha-2 | urn:oid:1.0.3166.1.2.2 | Albania |
| AM | ISO 3166 Part 1 Country Codes, 2nd Edition, Alpha-2 | urn:oid:1.0.3166.1.2.2 | Armenia |
| AO | ISO 3166 Part 1 Country Codes, 2nd Edition, Alpha-2 | urn:oid:1.0.3166.1.2.2 | Angola |
| AQ | ISO 3166 Part 1 Country Codes, 2nd Edition, Alpha-2 | urn:oid:1.0.3166.1.2.2 | Antarctica |
| AR | ISO 3166 Part 1 Country Codes, 2nd Edition, Alpha-2 | urn:oid:1.0.3166.1.2.2 | Argentina |
| ... | | | |

Table 15: LanguageAbilityMode

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: LanguageAbilityMode urn:oid:2.16.840.1.113883.1.11.12249  (Clinical Focus: Channels for expressing and receiving human language),(Data Element Scope: ),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 6/25/2019 with a version of 20190425.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.12249/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| ESGN | HL7LanguageAbilityMode | urn:oid:2.16.840.1.113883.5.60 | Expressed signed |
| ESP | HL7LanguageAbilityMode | urn:oid:2.16.840.1.113883.5.60 | Expressed spoken |
| EWR | HL7LanguageAbilityMode | urn:oid:2.16.840.1.113883.5.60 | Expressed written |
| RSGN | HL7LanguageAbilityMode | urn:oid:2.16.840.1.113883.5.60 | Received signed |
| RSP | HL7LanguageAbilityMode | urn:oid:2.16.840.1.113883.5.60 | Received spoken |
| RWR | HL7LanguageAbilityMode | 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  (Clinical Focus: A person's level of proficiency in a language),(Data Element Scope: ),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 6/25/2019 with a version of 20190425.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.12199/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| E | HL7LanguageAbilityProficiency | urn:oid:2.16.840.1.113883.5.61 | Excellent |
| F | HL7LanguageAbilityProficiency | urn:oid:2.16.840.1.113883.5.61 | Fair |
| G | HL7LanguageAbilityProficiency | urn:oid:2.16.840.1.113883.5.61 | Good |
| P | HL7LanguageAbilityProficiency | urn:oid:2.16.840.1.113883.5.61 | Poor |

Table 17: Detailed Ethnicity

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Detailed Ethnicity urn:oid:2.16.840.1.114222.4.11.877  (Clinical Focus: All concepts that can describe a person's "ethnicity" as defined by the United States Bureau of Census. This includes the US Office of Management and Budget (OMB) two top-level ethnicity categories, plus all the more detailed descendant ethnicity concepts used by the US Bureau of Census.),(Data Element Scope: Personal Demographic information, can be multiple.),(Inclusion Criteria: All descendant concepts from the concept "2133-7 Ethnicity", excluding that root concept, as derived from the Race and Ethnicity - CDC code system.),(Exclusion Criteria: Concepts that are not a descendant of "2133-7 Ethnicity", therefore, no concepts descendant from "1000-9 Race". Also the root concept "Ethnicity".)  This value set was imported on 6/24/2019 with a version of 20190518.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.877/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 2137-8 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.113883.6.238 | Spaniard |
| 2138-6 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.113883.6.238 | Andalusian |
| 2139-4 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.113883.6.238 | Asturian |
| 2140-2 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.113883.6.238 | Castillian |
| 2141-0 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.113883.6.238 | Catalonian |
| 2142-8 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.113883.6.238 | Belearic Islander |
| 2143-6 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.113883.6.238 | Gallego |
| 2144-4 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.113883.6.238 | Valencian |
| 2145-1 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.113883.6.238 | Canarian |
| 2146-9 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.113883.6.238 | Spanish Basque |
| ... | | | |

Table 18: Healthcare Provider Taxonomy

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Healthcare Provider Taxonomy urn:oid:2.16.840.1.114222.4.11.1066  (Clinical Focus: Represent the "type" of health care provider individual or organization using the National Uniform Claims Committee (NUCC) code system),(Data Element Scope: The assignedEntity attribute),(Inclusion Criteria: All codes in the NUCC Provider Taxonomy code system),(Exclusion Criteria: None)  This value set was imported on 6/24/2019 with a version of 20190521.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.1066/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 10 | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.113883.6.101 | Provider has a medical condition that impairs or limits him/her to practice |
| 101Y00000X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.113883.6.101 | Behavioral Health & Social Service Providers; Counselor |
| 101YA0400X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.113883.6.101 | Behavioral Health & Social Service Providers; Counselor, Addiction (Substance Use Disorder) |
| 101YM0800X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.113883.6.101 | Behavioral Health & Social Service Providers; Counselor, Mental Health |
| 101YP1600X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.113883.6.101 | Behavioral Health & Social Service Providers; Counselor, Pastoral |
| 101YP2500X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.113883.6.101 | Behavioral Health & Social Service Providers; Counselor, Professional |
| 101YS0200X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.113883.6.101 | Behavioral Health & Social Service Providers; Counselor, School |
| 102L00000X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.113883.6.101 | Behavioral Health & Social Service Providers; Psychoanalyst |
| 102X00000X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.113883.6.101 | Behavioral Health & Social Service Providers; Poetry Therapist |
| 103G00000X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.113883.6.101 | Behavioral Health & Social Service Providers; Clinical Neuropsychologist |
| ... | | | |

Table 19: INDRoleclassCodes

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: INDRoleclassCodes urn:oid:2.16.840.1.113883.11.20.9.33  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.33/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| PRS | HL7RoleClass | urn:oid:2.16.840.1.113883.5.110 | personal relationship |
| NOK | HL7RoleClass | urn:oid:2.16.840.1.113883.5.110 | next of kin |
| CAREGIVER | HL7RoleClass | urn:oid:2.16.840.1.113883.5.110 | caregiver |
| AGNT | HL7RoleClass | urn:oid:2.16.840.1.113883.5.110 | agent |
| GUAR | HL7RoleClass | urn:oid:2.16.840.1.113883.5.110 | guarantor |
| ECON | HL7RoleClass | 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  (Clinical Focus: Characterize the degree of responsibility of the event performer),(Data Element Scope: Performer type code per C-CDA r2.1 CONF:1198- 14840),(Inclusion Criteria: only selected codes),(Exclusion Criteria: only selected codes)  This value set was imported on 5/27/2022 with a version of Latest.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.19601/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| PPRF | HL7ParticipationType | urn:oid:2.16.840.1.113883.5.90 | primary performer |
| 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 |

Table 21: Care Team Member Function

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Care Team Member Function urn:oid:2.16.840.1.113762.1.4.1099.30  (Clinical Focus: This set of concepts describes the function performed on a patient-centered care team. This value set contains concepts that describe a functional role played by a member of a care team on a particular care team.),(Data Element Scope: A functional role on a patient's care team.),(Inclusion Criteria: The set of commonly played roles on a patient-centered care team.),(Exclusion Criteria: Functional roles on care teams that are not patient-centered. For example, hospital's may define teams of practitioners who fill roles that are relevant to the function of the hospital's operation. These roles would not be included when they are not roles that would be played on a patient-centered care team.)  This value set was imported on 10/17/2019 with a version of 20191016.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1099.30/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 106289002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Dentist (occupation) |
| 106292003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Professional nurse (occupation) |
| 106328005 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Social worker (occupation) |
| 116154003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Patient (person) |
| 11911009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Nephrologist (occupation) |
| 11935004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Obstetrician (occupation) |
| 133932002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Caregiver (person) |
| 158965000 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Medical practitioner (occupation) |
| 158967008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Consultant physician (occupation) |
| 159003003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | School nurse (occupation) |
| ... | | | |

Figure 1: US Realm Header (V3) 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="2015-08-01" />

<!-- 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>

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="1.1.1.1.1.1.1.1.2" />

<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>

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>

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>

Figure 5: Assigned Health Care Provider informant Example

<informant>

<assignedEntity>

<id extension="888888888" 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>

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>

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>

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>

Figure 9: Digital signature Example

<sdtc:signatureText mediaType="text/xml" representation="B64">omSJUEdmde9j44zmMiromSJUEdmde9j44zmMirdMDSsWdIJdksIJR3373jeu83

6edjzMMIjdMDSsWdIJdksIJR3373jeu83MNYD83jmMdomSJUEdmde9j44zmMir

... MNYD83jmMdomSJUEdmde9j44zmMir6edjzMMIjdMDSsWdIJdksIJR3373jeu83

4zmMir6edjzMMIjdMDSsWdIJdksIJR3373jeu83==</sdtc:signatureText>

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>

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>

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>

Figure 13: inFulfillmentOf Example

<inFulfillmentOf typeCode="FLFS">

<order classCode="ACT" moodCode="RQO">

<id root="629deb70-5306-11df-9879-0800200c9a66" extension="1298989898" />

<code code="1011220" displayName="Clinical pathology consultation" codeSystem="2.16.840.1.113883.6.12" codeSystemName="CPT />

</order>

</inFulfillmentOf>

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="1.1.1.1.1.1.1.1.2" />

<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>

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>

Care Plan (V2)

[ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.1.15:2015-08-01 (open)]

Table 22: Care Plan (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
|  | [US Realm Person Name (PN.US.FIELDED)](#U_US_Realm_Person_Name_PNUSFIELDED) (optional)  [US Realm Person Name (PN.US.FIELDED)](#U_US_Realm_Person_Name_PNUSFIELDED) (required)  [Health Status Evaluations and Outcomes Section](#S_Health_Status_Evaluations_and_Outcome) (optional)  [Goals Section](#S_Goals_Section) (required)  [Health Concerns Section (V2)](#S_Health_Concerns_Section_V2) (required)  [Interventions Section (V3)](#S_Interventions_Section_V3) (optional) |

CARE PLAN FRAMEWORK

A Care Plan (including Home Health Plan of Care (HHPoC)) is a consensus-driven dynamic plan that represents a patient’s and Care Team Members’ prioritized concerns, goals, and planned interventions. It serves as a blueprint shared by all Care Team Members (including the patient, their caregivers and providers), to guide the patient’s care. A Care Plan integrates multiple interventions proposed by multiple providers and disciplines for multiple conditions.

A Care Plan represents one or more Plan(s) of Care and serves to reconcile and resolve conflicts between the various Plans of Care developed for a specific patient by different providers. While both a plan of care and a care plan include the patient’s life goals and require Care Team Members (including patients) to prioritize goals and interventions, the reconciliation process becomes more complex as the number of plans of care increases. The Care Plan also serves to enable longitudinal coordination of care.

The CDA Care Plan represents an instance of this dynamic Care Plan at a point in time. The CDA document itself is NOT dynamic.

Key differentiators between a Care Plan CDA and CCD (another “snapshot in time” document):  
There are 2 required sections:  
o Health Concerns  
o Goals  
There are 2 optional sections:  
o Interventions  
o Outcomes  
• Provides the ability to identify patient and provider priorities with each act  
• Provides a header participant to indicate occurrences of Care Plan review  
A care plan document can include entry references from the information in these sections to the information (entries) in other sections.

Please see Volume 1 of this guide to view a Care Plan Relationship diagram and story board.

Table 23: Care Plan (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| ClinicalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.15:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-28741](#C_1198-28741) |  |
| @root | 1..1 | SHALL |  | [1198-28742](#C_1198-28742) | 2.16.840.1.113883.10.20.22.1.15 |
| @extension | 1..1 | SHALL |  | [1198-32877](#C_1198-32877) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-28745](#C_1198-28745) |  |
| @code | 1..1 | SHALL |  | [1198-32959](#C_1198-32959) | urn:oid:2.16.840.1.113762.1.4.1099.10 (Care Plan Document Type) |
| setId | 0..1 | SHOULD |  | [1198-32321](#C_1198-32321) |  |
| versionNumber | 0..1 | SHOULD |  | [1198-32322](#C_1198-32322) |  |
| informationRecipient | 0..\* | SHOULD |  | [1198-31993](#C_1198-31993) |  |
| intendedRecipient | 1..1 | SHALL |  | [1198-31994](#C_1198-31994) |  |
| id | 1..\* | SHALL |  | [1198-31996](#C_1198-31996) |  |
| addr | 0..\* | SHOULD |  | [1198-31997](#C_1198-31997) |  |
| telecom | 0..\* | SHOULD |  | [1198-31998](#C_1198-31998) |  |
| informationRecipient | 0..1 | SHOULD |  | [1198-31999](#C_1198-31999) |  |
| name | 1..1 | SHALL |  | [1198-32320](#C_1198-32320) | [US Realm Person Name (PN.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1](#U_US_Realm_Person_Name_PNUSFIELDED) |
| receivedOrganization | 0..1 | SHOULD |  | [1198-32000](#C_1198-32000) |  |
| id | 0..\* | SHOULD |  | [1198-32001](#C_1198-32001) |  |
| name | 1..\* | SHALL |  | [1198-32002](#C_1198-32002) |  |
| standardIndustryClassCode | 0..1 | SHOULD |  | [1198-32003](#C_1198-32003) | urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy) |
| authenticator | 0..1 | SHOULD |  | [1198-31910](#C_1198-31910) |  |
| time | 1..1 | SHALL |  | [1198-31911](#C_1198-31911) |  |
| signatureCode | 1..1 | SHALL |  | [1198-31912](#C_1198-31912) |  |
| sdtc:signatureText | 0..1 | MAY |  | [1198-31913](#C_1198-31913) |  |
| assignedEntity | 1..1 | SHALL |  | [1198-31914](#C_1198-31914) |  |
| id | 1..\* | SHALL |  | [1198-31915](#C_1198-31915) |  |
| code | 1..1 | SHALL |  | [1198-31916](#C_1198-31916) |  |
| @code | 1..1 | SHALL |  | [1198-31917](#C_1198-31917) | ONESELF |
| @codeSystem | 1..1 | SHALL |  | [1198-31918](#C_1198-31918) | urn:oid:2.16.840.1.113883.5.111 (HL7RoleCode) = 2.16.840.1.113883.5.111 |
| participant | 0..\* | SHOULD |  | [1198-31677](#C_1198-31677) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31678](#C_1198-31678) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = VRF |
| functionCode | 1..1 | SHALL |  | [1198-31679](#C_1198-31679) |  |
| @code | 1..1 | SHALL |  | [1198-31680](#C_1198-31680) | 425268008 |
| @codeSystem | 1..1 | SHALL |  | [1198-31681](#C_1198-31681) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.6.96 |
| time | 1..1 | SHALL |  | [1198-31682](#C_1198-31682) |  |
| associatedEntity | 1..1 | SHALL |  | [1198-31683](#C_1198-31683) |  |
| @classCode | 1..1 | SHALL |  | [1198-31686](#C_1198-31686) | urn:oid:2.16.840.1.113883.5.110 (HL7RoleClass) = ASSIGNED |
| id | 1..\* | SHALL |  | [1198-31684](#C_1198-31684) |  |
| code | 0..1 | SHOULD |  | [1198-31685](#C_1198-31685) |  |
| @code | 1..1 | SHALL |  | [1198-32367](#C_1198-32367) | urn:oid:2.16.840.1.113883.11.20.12.1 (Personal And Legal Relationship Role Type) |
| participant | 0..\* | SHOULD |  | [1198-31895](#C_1198-31895) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31896](#C_1198-31896) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = IND |
| associatedEntity | 1..1 | SHALL |  | [1198-31897](#C_1198-31897) |  |
| @classCode | 1..1 | SHALL |  | [1198-31898](#C_1198-31898) | urn:oid:2.16.840.1.113883.11.20.9.33 (INDRoleclassCodes) |
| associatedPerson | 1..1 | SHALL |  | [1198-31899](#C_1198-31899) |  |
| name | 1..\* | SHALL |  | [1198-31900](#C_1198-31900) |  |
| documentationOf | 1..1 | SHALL |  | [1198-31901](#C_1198-31901) |  |
| serviceEvent | 1..1 | SHALL |  | [1198-31902](#C_1198-31902) |  |
| @classCode | 1..1 | SHALL |  | [1198-31903](#C_1198-31903) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = PCPR |
| effectiveTime | 1..1 | SHALL |  | [1198-31904](#C_1198-31904) |  |
| low | 1..1 | SHALL |  | [1198-32330](#C_1198-32330) |  |
| high | 0..1 | MAY |  | [1198-32331](#C_1198-32331) |  |
| performer | 1..\* | SHALL |  | [1198-31905](#C_1198-31905) |  |
| assignedEntity | 1..1 | SHALL |  | [1198-31907](#C_1198-31907) |  |
| id | 1..\* | SHALL |  | [1198-31908](#C_1198-31908) |  |
| code | 0..1 | MAY |  | [1198-31909](#C_1198-31909) |  |
| assignedPerson | 1..1 | SHALL |  | [1198-32328](#C_1198-32328) |  |
| name | 1..1 | SHALL |  | [1198-32329](#C_1198-32329) | [US Realm Person Name (PN.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1](#U_US_Realm_Person_Name_PNUSFIELDED) |
| relatedDocument | 0..\* | MAY |  | [1198-29893](#C_1198-29893) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31889](#C_1198-31889) | urn:oid:2.16.840.1.113883.1.11.11610 (x\_ActRelationshipDocument) |
| parentDocument | 1..1 | SHALL |  | [1198-29894](#C_1198-29894) |  |
| id | 1..\* | SHALL |  | [1198-32949](#C_1198-32949) |  |
| setId | 1..1 | SHALL |  | [1198-29895](#C_1198-29895) |  |
| versionNumber | 1..1 | SHALL |  | [1198-29896](#C_1198-29896) |  |
| componentOf | 0..1 | SHOULD |  | [1198-32004](#C_1198-32004) |  |
| encompassingEncounter | 1..1 | SHALL |  | [1198-32005](#C_1198-32005) |  |
| effectiveTime | 1..1 | SHALL |  | [1198-32007](#C_1198-32007) |  |
| component | 1..1 | SHALL |  | [1198-28753](#C_1198-28753) |  |
| structuredBody | 1..1 | SHALL |  | [1198-28754](#C_1198-28754) |  |
| component | 1..1 | SHALL |  | [1198-28755](#C_1198-28755) |  |
| section | 1..1 | SHALL |  | [1198-28756](#C_1198-28756) | [Health Concerns Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.58:2015-08-01](#S_Health_Concerns_Section_V2) |
| component | 1..1 | SHALL |  | [1198-28761](#C_1198-28761) |  |
| section | 1..1 | SHALL |  | [1198-28762](#C_1198-28762) | [Goals Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.60](#S_Goals_Section) |
| component | 0..1 | SHOULD |  | [1198-28763](#C_1198-28763) |  |
| section | 1..1 | SHALL |  | [1198-28764](#C_1198-28764) | [Interventions Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.21.2.3:2015-08-01](#S_Interventions_Section_V3) |
| component | 0..1 | SHOULD |  | [1198-29596](#C_1198-29596) |  |
| section | 1..1 | SHALL |  | [1198-29597](#C_1198-29597) | [Health Status Evaluations and Outcomes Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.61](#S_Health_Status_Evaluations_and_Outcome) |

Properties

1. Conforms to [US Realm Header (V3)](#D_US_Realm_Header_V3) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2015-08-01).
2. SHALL contain exactly one [1..1] templateId (CONF:1198-28741) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.1.15" (CONF:1198-28742).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32877).
   3. When asserting this templateId, all C-CDA 2.1 section and entry templates that had a previous version in C-CDA R1.1 SHALL include both the C-CDA 2.1 templateId and the C-CDA R1.1 templateId root without an extension. See C-CDA R2.1 Volume 1 - Design Considerations for additional detail (CONF:1198-32934).
3. SHALL contain exactly one [1..1] code (CONF:1198-28745).
   1. This code SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [Care Plan Document Type](#Care_Plan_Document_Type) urn:oid:2.16.840.1.113762.1.4.1099.10 DYNAMIC (CONF:1198-32959).
4. SHOULD contain zero or one [0..1] setId (CONF:1198-32321).
5. SHOULD contain zero or one [0..1] versionNumber (CONF:1198-32322).

informationRecipient

1. SHOULD contain zero or more [0..\*] informationRecipient (CONF:1198-31993) such that it
   1. SHALL contain exactly one [1..1] intendedRecipient (CONF:1198-31994).
      1. This intendedRecipient SHALL contain at least one [1..\*] id (CONF:1198-31996).
      2. This intendedRecipient SHOULD contain zero or more [0..\*] addr (CONF:1198-31997).
      3. This intendedRecipient SHOULD contain zero or more [0..\*] telecom (CONF:1198-31998).
      4. This intendedRecipient SHOULD contain zero or one [0..1] informationRecipient (CONF:1198-31999).
         1. The informationRecipient, if present, SHALL contain exactly one [1..1] [US Realm Person Name (PN.US.FIELDED)](#U_US_Realm_Person_Name_PNUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1198-32320).
      5. This intendedRecipient SHOULD contain zero or one [0..1] receivedOrganization (CONF:1198-32000).
         1. The receivedOrganization, if present, SHOULD contain zero or more [0..\*] id (CONF:1198-32001).
         2. The receivedOrganization, if present, SHALL contain at least one [1..\*] name (CONF:1198-32002).
         3. The receivedOrganization, if present, SHOULD contain zero or one [0..1] standardIndustryClassCode, which SHALL be selected from ValueSet [Healthcare Provider Taxonomy](#Healthcare_Provider_Taxonomy) urn:oid:2.16.840.1.114222.4.11.1066 DYNAMIC (CONF:1198-32003).

authenticator

1. SHOULD contain zero or one [0..1] authenticator (CONF:1198-31910) such that it
   1. SHALL contain exactly one [1..1] time (CONF:1198-31911).
   2. SHALL contain exactly one [1..1] signatureCode (CONF:1198-31912).
   3. MAY contain zero or one [0..1] sdtc:signatureText (CONF:1198-31913).
   4. SHALL contain exactly one [1..1] assignedEntity (CONF:1198-31914).
      1. This assignedEntity SHALL contain at least one [1..\*] id (CONF:1198-31915).
      2. This assignedEntity SHALL contain exactly one [1..1] code (CONF:1198-31916).
         1. This code SHALL contain exactly one [1..1] @code="ONESELF" Self (CONF:1198-31917).
         2. This code SHALL contain exactly one [1..1] @codeSystem="2.16.840.1.113883.5.111" (CodeSystem: HL7RoleCode urn:oid:2.16.840.1.113883.5.111) (CONF:1198-31918).

participant

1. SHOULD contain zero or more [0..\*] participant (CONF:1198-31677) such that it
   1. SHALL contain exactly one [1..1] @typeCode="VRF" Verifier (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90) (CONF:1198-31678).
   2. SHALL contain exactly one [1..1] functionCode (CONF:1198-31679).
      1. This functionCode SHALL contain exactly one [1..1] @code="425268008" Review of Care Plan (CONF:1198-31680).
      2. This functionCode 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:1198-31681).
   3. SHALL contain exactly one [1..1] time (CONF:1198-31682).
   4. SHALL contain exactly one [1..1] associatedEntity (CONF:1198-31683).
      1. This associatedEntity SHALL contain exactly one [1..1] @classCode="ASSIGNED" (CodeSystem: HL7RoleClass urn:oid:2.16.840.1.113883.5.110) (CONF:1198-31686).
      2. This associatedEntity SHALL contain at least one [1..\*] id (CONF:1198-31684).
      3. This associatedEntity SHOULD contain zero or one [0..1] code (CONF:1198-31685).
         1. The code, if present, SHALL contain exactly one [1..1] @code, which SHOULD be selected from ValueSet [Personal And Legal Relationship Role Type](#Personal_And_Legal_Relationship_Role_Ty) urn:oid:2.16.840.1.113883.11.20.12.1 DYNAMIC (CONF:1198-32367).

participant

1. SHOULD contain zero or more [0..\*] participant (CONF:1198-31895) such that it
   1. SHALL contain exactly one [1..1] @typeCode="IND" Indirect (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90) (CONF:1198-31896).
   2. SHALL contain exactly one [1..1] associatedEntity (CONF:1198-31897).
      1. This associatedEntity SHALL contain exactly one [1..1] @classCode, which SHALL be selected from ValueSet [INDRoleclassCodes](#INDRoleclassCodes) urn:oid:2.16.840.1.113883.11.20.9.33 DYNAMIC (CONF:1198-31898).
      2. This associatedEntity SHALL contain exactly one [1..1] associatedPerson (CONF:1198-31899).
         1. This associatedPerson SHALL contain at least one [1..\*] name (CONF:1198-31900).

documentationOf

The serviceEvent describes the provision of healthcare over a period of time. The duration over which care was provided is indicated in serviceEvent/effectiveTime. Additional data from outside this duration may also be included if it is relevant to care provided during that time range (e.g., reviewed during the stated time range).

1. SHALL contain exactly one [1..1] documentationOf (CONF:1198-31901) such that it
   1. SHALL contain exactly one [1..1] serviceEvent (CONF:1198-31902).
      1. This serviceEvent SHALL contain exactly one [1..1] @classCode="PCPR" Care Provision (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1198-31903).
      2. This serviceEvent SHALL contain exactly one [1..1] effectiveTime (CONF:1198-31904).
         1. This effectiveTime SHALL contain exactly one [1..1] low (CONF:1198-32330).
         2. This effectiveTime MAY contain zero or one [0..1] high (CONF:1198-32331).
      3. This serviceEvent SHALL contain at least one [1..\*] performer (CONF:1198-31905) such that it
         1. SHALL contain exactly one [1..1] assignedEntity (CONF:1198-31907).
            1. This assignedEntity SHALL contain at least one [1..\*] id (CONF:1198-31908).
            2. This assignedEntity MAY contain zero or one [0..1] code (CONF:1198-31909).
            3. This assignedEntity SHALL contain exactly one [1..1] assignedPerson (CONF:1198-32328).

This assignedPerson SHALL contain exactly one [1..1] [US Realm Person Name (PN.US.FIELDED)](#U_US_Realm_Person_Name_PNUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1198-32329).

relatedDocument

1. MAY contain zero or more [0..\*] relatedDocument (CONF:1198-29893) such that it
   1. SHALL contain exactly one [1..1] @typeCode, which SHALL be selected from ValueSet [x\_ActRelationshipDocument](#x_ActRelationshipDocument) urn:oid:2.16.840.1.113883.1.11.11610 STATIC (CONF:1198-31889).
   2. SHALL contain exactly one [1..1] parentDocument (CONF:1198-29894).
      1. This parentDocument SHALL contain at least one [1..\*] id (CONF:1198-32949).
      2. This parentDocument SHALL contain exactly one [1..1] setId (CONF:1198-29895).
      3. This parentDocument SHALL contain exactly one [1..1] versionNumber (CONF:1198-29896).

componentOf

1. SHOULD contain zero or one [0..1] componentOf (CONF:1198-32004) such that it
   1. SHALL contain exactly one [1..1] encompassingEncounter (CONF:1198-32005).
      1. This encompassingEncounter SHALL contain exactly one [1..1] effectiveTime (CONF:1198-32007).

component

1. SHALL contain exactly one [1..1] component (CONF:1198-28753).
   1. This component SHALL contain exactly one [1..1] structuredBody (CONF:1198-28754).
      1. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-28755) such that it
         1. SHALL contain exactly one [1..1] [Health Concerns Section (V2)](#S_Health_Concerns_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.58:2015-08-01) (CONF:1198-28756).
      2. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-28761) such that it
         1. SHALL contain exactly one [1..1] [Goals Section](#S_Goals_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.60) (CONF:1198-28762).
      3. This structuredBody SHOULD contain zero or one [0..1] component (CONF:1198-28763) such that it
         1. SHALL contain exactly one [1..1] [Interventions Section (V3)](#S_Interventions_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.21.2.3:2015-08-01) (CONF:1198-28764).
      4. This structuredBody SHOULD contain zero or one [0..1] component (CONF:1198-29596) such that it
         1. SHALL contain exactly one [1..1] [Health Status Evaluations and Outcomes Section](#S_Health_Status_Evaluations_and_Outcome) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.61) (CONF:1198-29597).
      5. This structuredBody SHALL NOT contain a Plan of Treatment Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09) (CONF:1198-31044).

Table 24: x\_ActRelationshipDocument

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: x\_ActRelationshipDocument urn:oid:2.16.840.1.113883.1.11.11610  Used to enumerate the relationships between two clinical documents for document management. | | | |
| Code | Code System | Code System OID | Print Name |
| RPLC | HL7ActRelationshipType | urn:oid:2.16.840.1.113883.5.1002 | Replaces |
| APND | HL7ActRelationshipType | urn:oid:2.16.840.1.113883.5.1002 | Is appendage |
| XFRM | HL7ActRelationshipType | urn:oid:2.16.840.1.113883.5.1002 | Transformation |

Table 25: Care Plan Document Type

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Care Plan Document Type urn:oid:2.16.840.1.113762.1.4.1099.10  (Clinical Focus: Terms used to identify documents that represent a Care Plan),(Data Element Scope: ),(Inclusion Criteria: This value set expansion is currently missing two pending LOINC concepts:  93023-0 Pharmacist Plan of care note and 93024-8 Pharmacist Consult Note.),(Exclusion Criteria: )  This value set was imported on 6/24/2019 with a version of 20190425.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1099.10/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 18776-5 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Plan of care note |
| 64295-9 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Nurse Plan of care note |
| 74156-1 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Oncology Plan of care and summary note |
| 77442-2 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Cardiology Plan of care note |
| 77443-0 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Allergy and immunology Plan of care note |
| 77444-8 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Audiology Plan of care note |
| 77445-5 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Critical care medicine Plan of care note |
| 77446-3 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Child and adolescent psychiatry Plan of care note |
| 80739-6 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Infectious disease Plan of care note |
| 80740-4 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Hematology Plan of care note |
| ... | | | |

Figure 17: Care Plan Patient authenticator Example

<!-- This authenticator represents patient agreement or

sign-off of the Care Plan-->

<authenticator>

<time value="20130802" />

<signatureCode code="S" />

<sdtc:signatureText mediaType="text/xml" representation="B64">omSJUEdmde9j44zmMiromSJUEdmde9j44zmMirdMDSsWdIJdksIJR3373jeu83

6edjzMMIjdMDSsWdIJdksIJR3373jeu83MNYD83jmMdomSJUEdmde9j44zmMir ...

MNYD83jmMdomSJUEdmde9j44zmMir6edjzMMIjdMDSsWdIJdksIJR3373jeu83

4zmMir6edjzMMIjdMDSsWdIJdksIJR3373jeu83==</sdtc:signatureText>

<assignedEntity>

<id extension="996-756-495" root="2.16.840.1.113883.19.5" />

<code code="ONESELF" displayName="Self" codeSystem="2.16.840.1.113883.5.111" codeSystemName="HL7 Role code" />

</assignedEntity>

</authenticator>

Figure 18: Care Plan Review Example

<!-- This participant represents the Care Plan review.

If the date in the time element is in the past,

then this review has already taken place.

If the date in the time element is in the future,

then this is the date of the next scheduled review. -->

<!-- This example shows a Care Plan Review that has already taken place -->

<participant typeCode="IND">

<functionCode code="425268008" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Review of Care Plan" />

<time value="20130801" />

<associatedEntity classCode="ASSIGNED">

<id root="20cf14fb-b65c-4c8c-a54d-b0cca834c18c" />

</associatedEntity>

</participant>

Figure 19: Care Plan Caregiver participant Example

<participant typeCode="IND">

<functionCode code="407543004" displayName="Primary Carer" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT" />

<!-- Caregiver -->

<associatedEntity classCode="CAREGIVER">

<code code="MTH" codeSystem="2.16.840.1.113883.5.111" />

<addr>

<streetAddressLine>17 Daws Rd.</streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>97857</postalCode>

<country>US</country>

</addr>

<telecom value="tel:(999)555-1212" use="WP" />

<associatedPerson>

<name>

<prefix>Mrs.</prefix>

<given>Martha</given>

<family>Jones</family>

</name>

</associatedPerson>

</associatedEntity>

</participant>

Figure 20: Care Plan performer Example

<performer typeCode="PRF">

<time value="20130715223615-0800" />

<assignedEntity>

<id extension="5555555555" root="2.16.840.1.113883.4.6" />

<code code="59058001" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="General Physician" />

<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)-1004" />

<assignedPerson>

<name>

<given>Patricia</given>

<given qualifier="CL">Patty</given>

<family>Primary</family>

<suffix qualifier="AC">M.D.</suffix>

</name>

</assignedPerson>

</assignedEntity>

</performer>

Figure 21: Care Plan relatedDocument Example

<!-- This document is the second in a set - relatedDocument

describes the parent document-->

<relatedDocument typeCode="RPLC">

<parentDocument>

<id root="223769be-f6ee-4b04-a0ce-b56ae998c880" />

<code code="18776-5" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Care Plan" />

<setId root="004bb033-b948-4f4c-b5bf-a8dbd7d8dd40" />

<versionNumber value="1" />

</parentDocument>

</relatedDocument>

Consultation Note (V3)

[ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.1.4:2015-08-01 (open)]

Table 26: Consultation Note (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
|  | [Assessment Section](#S_Assessment_Section) (optional)  [Review of Systems Section](#S_Review_of_Systems_Section) (optional)  [Chief Complaint Section](#S_Chief_Complaint_Section) (optional)  [Reason for Visit Section](#S_Reason_for_Visit_Section) (optional)  [Chief Complaint and Reason for Visit Section](#S_Chief_Complaint_and_Reason_for_Visit_S) (optional)  [History of Present Illness Section](#S_History_of_Present_Illness_Section) (required)  [General Status Section](#S_General_Status_Section) (optional)  [Medications Section (entries required) (V2)](#S_Medications_Section_entries_required_) (optional)  [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (optional)  [Medical Equipment Section (V2)](#S_Medical_Equipment_Section_V2) (optional)  [Nutrition Section](#S_Nutrition_Section) (optional)  [Procedures Section (entries optional) (V2)](#Procedures_Section_entries_optional_V2) (optional)  [Functional Status Section (V2)](#S_Functional_Status_Section_V2) (optional)  [Assessment and Plan Section (V2)](#S_Assessment_and_Plan_Section_V2) (optional)  [US Realm Date and Time (DT.US.FIELDED)](#U_US_Realm_Date_and_Time_DTUSFIELDED) (required)  [Mental Status Section (V2)](#S_Mental_Status_Section_V2) (optional)  [Immunizations Section (entries optional) (V3)](#S_Immunizations_Section_entries_optiona) (optional)  [Results Section (entries required) (V3)](#S_Results_Section_entries_required_V3) (optional)  [Past Medical History (V3)](#S_Past_Medical_History_V3) (optional)  [Vital Signs Section (entries required) (V3)](#S_Vital_Signs_Section_entries_required_) (optional)  [Problem Section (entries required) (V3)](#S_Problem_Section_entries_required_V3) (required)  [Physical Exam Section (V3)](#S_Physical_Exam_Section_V3) (optional)  [Social History Section (V3)](#S_Social_History_Section_V3) (optional)  [Advance Directives Section (entries optional) (V3)](#S_Advance_Directives_Section_entries_op) (optional)  [Family History Section (V3)](#S_Family_History_Section_V3) (optional)  [Allergies and Intolerances Section (entries required) (V3)](#S_Allergies_and_Intolerances_Section_er) (required) |

The Consultation Note is generated by a request from a clinician for an opinion or advice from another clinician. Consultations may involve face-to-face time with the patient or may fall under the auspices of telemedicine visits. Consultations may occur while the patient is inpatient or ambulatory. The Consultation Note should also be used to summarize an Emergency Room or Urgent Care encounter.

A Consultation Note includes the reason for the referral, history of present illness, physical examination, and decision-making components (Assessment and Plan).

Table 27: Consultation Note (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| ClinicalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.4:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-8375](#C_1198-8375) |  |
| @root | 1..1 | SHALL |  | [1198-10040](#C_1198-10040) | 2.16.840.1.113883.10.20.22.1.4 |
| @extension | 1..1 | SHALL |  | [1198-32502](#C_1198-32502) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-17176](#C_1198-17176) |  |
| @code | 1..1 | SHALL |  | [1198-32969](#C_1198-32969) | urn:oid:2.16.840.1.113883.11.20.9.31 (ConsultDocumentType) |
| participant | 0..\* | SHOULD |  | [1198-31656](#C_1198-31656) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31657](#C_1198-31657) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = CALLBCK |
| associatedEntity | 1..1 | SHALL |  | [1198-31658](#C_1198-31658) |  |
| @classCode | 1..1 | SHALL |  | [1198-31659](#C_1198-31659) | urn:oid:2.16.840.1.113883.5.110 (HL7RoleClass) = ASSIGNED |
| id | 1..\* | SHALL |  | [1198-31660](#C_1198-31660) |  |
| addr | 0..\* | SHOULD |  | [1198-31661](#C_1198-31661) |  |
| telecom | 1..\* | SHALL |  | [1198-31662](#C_1198-31662) |  |
| associatedPerson | 1..1 | SHALL |  | [1198-31663](#C_1198-31663) |  |
| name | 1..\* | SHALL |  | [1198-31664](#C_1198-31664) |  |
| scopingOrganization | 0..1 | MAY |  | [1198-31665](#C_1198-31665) |  |
| inFulfillmentOf | 1..\* | SHALL |  | [1198-8382](#C_1198-8382) |  |
| order | 1..1 | SHALL |  | [1198-29923](#C_1198-29923) |  |
| id | 1..\* | SHALL |  | [1198-29924](#C_1198-29924) |  |
| componentOf | 1..1 | SHALL |  | [1198-8386](#C_1198-8386) |  |
| encompassingEncounter | 1..1 | SHALL |  | [1198-8387](#C_1198-8387) |  |
| id | 1..\* | SHALL |  | [1198-8388](#C_1198-8388) |  |
| effectiveTime | 1..1 | SHALL |  | [1198-8389](#C_1198-8389) | [US Realm Date and Time (DT.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3](#U_US_Realm_Date_and_Time_DTUSFIELDED) |
| responsibleParty | 0..1 | MAY |  | [1198-8391](#C_1198-8391) |  |
| assignedEntity | 1..1 | SHALL |  | [1198-32904](#C_1198-32904) |  |
| encounterParticipant | 0..\* | MAY |  | [1198-8392](#C_1198-8392) |  |
| assignedEntity | 1..1 | SHALL |  | [1198-32902](#C_1198-32902) |  |
| component | 1..1 | SHALL |  | [1198-8397](#C_1198-8397) |  |
| structuredBody | 1..1 | SHALL |  | [1198-28895](#C_1198-28895) |  |
| component | 0..1 | MAY |  | [1198-28896](#C_1198-28896) |  |
| section | 1..1 | SHALL |  | [1198-28897](#C_1198-28897) | [Assessment Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.8](#S_Assessment_Section) |
| component | 0..1 | MAY |  | [1198-28898](#C_1198-28898) |  |
| section | 1..1 | SHALL |  | [1198-28899](#C_1198-28899) | [Assessment and Plan Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09](#S_Assessment_and_Plan_Section_V2) |
| component | 0..1 | MAY |  | [1198-28900](#C_1198-28900) |  |
| section | 1..1 | SHALL |  | [1198-28901](#C_1198-28901) | [Plan of Treatment Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09](#S_Plan_of_Treatment_Section_V2) |
| component | 0..1 | MAY |  | [1198-28904](#C_1198-28904) |  |
| section | 1..1 | SHALL |  | [1198-28905](#C_1198-28905) | [Reason for Visit Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.12](#S_Reason_for_Visit_Section) |
| component | 1..1 | SHALL |  | [1198-28906](#C_1198-28906) |  |
| section | 1..1 | SHALL |  | [1198-28907](#C_1198-28907) | [History of Present Illness Section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.4](#S_History_of_Present_Illness_Section) |
| component | 0..1 | SHOULD |  | [1198-28908](#C_1198-28908) |  |
| section | 1..1 | SHALL |  | [1198-28909](#C_1198-28909) | [Physical Exam Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.2.10:2015-08-01](#S_Physical_Exam_Section_V3) |
| component | 1..1 | SHALL |  | [1198-28910](#C_1198-28910) |  |
| section | 1..1 | SHALL |  | [1198-28911](#C_1198-28911) | [Allergies and Intolerances Section (entries required) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6.1:2015-08-01](#S_Allergies_and_Intolerances_Section_er) |
| component | 0..1 | MAY |  | [1198-28912](#C_1198-28912) |  |
| section | 1..1 | SHALL |  | [1198-28913](#C_1198-28913) | [Chief Complaint Section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1](#S_Chief_Complaint_Section) |
| component | 0..1 | MAY |  | [1198-28915](#C_1198-28915) |  |
| section | 1..1 | SHALL |  | [1198-28916](#C_1198-28916) | [Chief Complaint and Reason for Visit Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.13](#S_Chief_Complaint_and_Reason_for_Visit_S) |
| component | 0..1 | MAY |  | [1198-28917](#C_1198-28917) |  |
| section | 1..1 | SHALL |  | [1198-28918](#C_1198-28918) | [Family History Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2015-08-01](#S_Family_History_Section_V3) |
| component | 0..1 | MAY |  | [1198-28919](#C_1198-28919) |  |
| section | 1..1 | SHALL |  | [1198-28920](#C_1198-28920) | [General Status Section (identifier: urn:oid:2.16.840.1.113883.10.20.2.5](#S_General_Status_Section) |
| component | 0..1 | MAY |  | [1198-28921](#C_1198-28921) |  |
| section | 1..1 | SHALL |  | [1198-28922](#C_1198-28922) | [Past Medical History (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.20:2015-08-01](#S_Past_Medical_History_V3) |
| component | 0..1 | MAY |  | [1198-28923](#C_1198-28923) |  |
| section | 1..1 | SHALL |  | [1198-28924](#C_1198-28924) | [Immunizations Section (entries optional) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.2:2015-08-01](#S_Immunizations_Section_entries_optiona) |
| component | 0..1 | SHOULD |  | [1198-28925](#C_1198-28925) |  |
| section | 1..1 | SHALL |  | [1198-28926](#C_1198-28926) | [Medications Section (entries required) (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1.1:2014-06-09](#S_Medications_Section_entries_required_) |
| component | 1..1 | SHALL |  | [1198-28928](#C_1198-28928) |  |
| section | 1..1 | SHALL |  | [1198-28929](#C_1198-28929) | [Problem Section (entries required) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.5.1:2015-08-01](#S_Problem_Section_entries_required_V3) |
| component | 0..1 | MAY |  | [1198-28930](#C_1198-28930) |  |
| section | 1..1 | SHALL |  | [1198-28931](#C_1198-28931) | [Procedures Section (entries optional) (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.7:2014-06-09](#Procedures_Section_entries_optional_V2) |
| component | 0..1 | SHOULD |  | [1198-28932](#C_1198-28932) |  |
| section | 1..1 | SHALL |  | [1198-28933](#C_1198-28933) | [Results Section (entries required) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3.1:2015-08-01](#S_Results_Section_entries_required_V3) |
| component | 0..1 | MAY |  | [1198-28934](#C_1198-28934) |  |
| section | 1..1 | SHALL |  | [1198-28935](#C_1198-28935) | [Social History Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2015-08-01](#S_Social_History_Section_V3) |
| component | 0..1 | MAY |  | [1198-28936](#C_1198-28936) |  |
| section | 1..1 | SHALL |  | [1198-28937](#C_1198-28937) | [Vital Signs Section (entries required) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2015-08-01](#S_Vital_Signs_Section_entries_required_) |
| component | 0..1 | MAY |  | [1198-28942](#C_1198-28942) |  |
| section | 1..1 | SHALL |  | [1198-28943](#C_1198-28943) | [Advance Directives Section (entries optional) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.21:2015-08-01](#S_Advance_Directives_Section_entries_op) |
| component | 0..1 | MAY |  | [1198-28944](#C_1198-28944) |  |
| section | 1..1 | SHALL |  | [1198-28945](#C_1198-28945) | [Functional Status Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.14:2014-06-09](#S_Functional_Status_Section_V2) |
| component | 0..1 | MAY |  | [1198-30237](#C_1198-30237) |  |
| section | 1..1 | SHALL |  | [1198-30238](#C_1198-30238) | [Review of Systems Section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.18](#S_Review_of_Systems_Section) |
| component | 0..1 | MAY |  | [1198-30904](#C_1198-30904) |  |
| section | 1..1 | SHALL |  | [1198-30905](#C_1198-30905) | [Medical Equipment Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.23:2014-06-09](#S_Medical_Equipment_Section_V2) |
| component | 0..1 | MAY |  | [1198-30906](#C_1198-30906) |  |
| section | 1..1 | SHALL |  | [1198-30907](#C_1198-30907) | [Mental Status Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.56:2015-08-01](#S_Mental_Status_Section_V2) |
| component | 0..1 | MAY |  | [1198-30909](#C_1198-30909) |  |
| section | 1..1 | SHALL |  | [1198-30910](#C_1198-30910) | [Nutrition Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.57](#S_Nutrition_Section) |

Properties

1. Conforms to [US Realm Header (V3)](#D_US_Realm_Header_V3) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2015-08-01).
2. SHALL contain exactly one [1..1] templateId (CONF:1198-8375) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.1.4" (CONF:1198-10040).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32502).
   3. When asserting this templateId, all C-CDA 2.1 section and entry templates that had a previous version in C-CDA R1.1 SHALL include both the C-CDA 2.1 templateId and the C-CDA R1.1 templateId root without an extension. See C-CDA R2.1 Volume 1 - Design Considerations for additional detail (CONF:1198-32935).
3. SHALL contain exactly one [1..1] code (CONF:1198-17176).

The Consultation Note recommends use of the document type code 11488-4 "Consult Note", with further specification provided by author or performer, setting, or specialty. When pre-coordinated codes are used, any coded values describing the author or performer of the service act or the practice setting must be consistent with the LOINC document type.

* 1. This code SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [ConsultDocumentType](#ConsultDocumentType) urn:oid:2.16.840.1.113883.11.20.9.31 DYNAMIC (CONF:1198-32969).

participant

This participant represents the person to contact for questions about the consult summary. This call back contact individual may be a different person than the individual(s) identified in the author or legalAuthenticator participant.

1. SHOULD contain zero or more [0..\*] participant (CONF:1198-31656) such that it
   1. SHALL contain exactly one [1..1] @typeCode="CALLBCK" call back contact (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 DYNAMIC) (CONF:1198-31657).
   2. SHALL contain exactly one [1..1] associatedEntity (CONF:1198-31658).
      1. This associatedEntity SHALL contain exactly one [1..1] @classCode="ASSIGNED" assigned entity (CodeSystem: HL7RoleClass urn:oid:2.16.840.1.113883.5.110 DYNAMIC) (CONF:1198-31659).
      2. This associatedEntity SHALL contain at least one [1..\*] id (CONF:1198-31660).
      3. This associatedEntity SHOULD contain zero or more [0..\*] addr (CONF:1198-31661).
      4. This associatedEntity SHALL contain at least one [1..\*] telecom (CONF:1198-31662).
      5. This associatedEntity SHALL contain exactly one [1..1] associatedPerson (CONF:1198-31663).
         1. This associatedPerson SHALL contain at least one [1..\*] name (CONF:1198-31664).
      6. This associatedEntity MAY contain zero or one [0..1] scopingOrganization (CONF:1198-31665).

inFulfillmentOf

The inFulfillmentOf element describes prior orders that are fulfilled (in whole or part) by the service events described in the Consultation Note. For example, a prior order might be the consultation that is being reported in the note.

1. SHALL contain at least one [1..\*] inFulfillmentOf (CONF:1198-8382).
   1. Such inFulfillmentOfs SHALL contain exactly one [1..1] order (CONF:1198-29923).

Where a referral is being fulfilled by this consultation, this id would be the same as the id in the Patient Referral Act template.

* + 1. This order SHALL contain at least one [1..\*] id (CONF:1198-29924).

componentOf

A Consultation Note is always associated with an encounter; the id element of the encompassingEncounter is required to be present and represents the identifier for the encounter.

1. SHALL contain exactly one [1..1] componentOf (CONF:1198-8386).
   1. This componentOf SHALL contain exactly one [1..1] encompassingEncounter (CONF:1198-8387).
      1. This encompassingEncounter SHALL contain at least one [1..\*] id (CONF:1198-8388).
      2. This encompassingEncounter SHALL contain exactly one [1..1] [US Realm Date and Time (DT.US.FIELDED)](#U_US_Realm_Date_and_Time_DTUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3) (CONF:1198-8389).
      3. This encompassingEncounter MAY contain zero or one [0..1] responsibleParty (CONF:1198-8391).
         1. The responsibleParty, if present, SHALL contain exactly one [1..1] assignedEntity (CONF:1198-32904).
            1. This assignedEntity SHALL contain an assignedPerson or a representedOrganization or both (CONF:1198-32905).

The encounterParticipant element represents persons who participated in the encounter and not necessarily the entire episode of care.

* + 1. This encompassingEncounter MAY contain zero or more [0..\*] encounterParticipant (CONF:1198-8392).
       1. The encounterParticipant, if present, SHALL contain exactly one [1..1] assignedEntity (CONF:1198-32902).
          1. This assignedEntity SHALL contain an assignedPerson or a representedOrganization or both (CONF:1198-32906).

component

1. SHALL contain exactly one [1..1] component (CONF:1198-8397).
   1. This component SHALL contain exactly one [1..1] structuredBody (CONF:1198-28895).
      1. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-28896) such that it
         1. SHALL contain exactly one [1..1] [Assessment Section](#S_Assessment_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.8) (CONF:1198-28897).
      2. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-28898) such that it
         1. SHALL contain exactly one [1..1] [Assessment and Plan Section (V2)](#S_Assessment_and_Plan_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09) (CONF:1198-28899).
      3. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-28900) such that it
         1. SHALL contain exactly one [1..1] [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09) (CONF:1198-28901).
      4. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-28904) such that it
         1. SHALL contain exactly one [1..1] [Reason for Visit Section](#S_Reason_for_Visit_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.12) (CONF:1198-28905).
      5. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-28906) such that it
         1. SHALL contain exactly one [1..1] [History of Present Illness Section](#S_History_of_Present_Illness_Section) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.4) (CONF:1198-28907).
      6. This structuredBody SHOULD contain zero or one [0..1] component (CONF:1198-28908) such that it
         1. SHALL contain exactly one [1..1] [Physical Exam Section (V3)](#S_Physical_Exam_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.2.10:2015-08-01) (CONF:1198-28909).
      7. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-28910) such that it
         1. SHALL contain exactly one [1..1] [Allergies and Intolerances Section (entries required) (V3)](#S_Allergies_and_Intolerances_Section_er) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6.1:2015-08-01) (CONF:1198-28911).
      8. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-28912) such that it
         1. SHALL contain exactly one [1..1] [Chief Complaint Section](#S_Chief_Complaint_Section) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1) (CONF:1198-28913).
      9. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-28915) such that it
         1. SHALL contain exactly one [1..1] [Chief Complaint and Reason for Visit Section](#S_Chief_Complaint_and_Reason_for_Visit_S) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.13) (CONF:1198-28916).
      10. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-28917) such that it
          1. SHALL contain exactly one [1..1] [Family History Section (V3)](#S_Family_History_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2015-08-01) (CONF:1198-28918).
      11. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-28919) such that it
          1. SHALL contain exactly one [1..1] [General Status Section](#S_General_Status_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.2.5) (CONF:1198-28920).
      12. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-28921) such that it
          1. SHALL contain exactly one [1..1] [Past Medical History (V3)](#S_Past_Medical_History_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.20:2015-08-01) (CONF:1198-28922).
      13. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-28923) such that it
          1. SHALL contain exactly one [1..1] [Immunizations Section (entries optional) (V3)](#S_Immunizations_Section_entries_optiona) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.2:2015-08-01) (CONF:1198-28924).
      14. This structuredBody SHOULD contain zero or one [0..1] component (CONF:1198-28925) such that it
          1. SHALL contain exactly one [1..1] [Medications Section (entries required) (V2)](#S_Medications_Section_entries_required_) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1.1:2014-06-09) (CONF:1198-28926).
      15. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-28928) such that it
          1. SHALL contain exactly one [1..1] [Problem Section (entries required) (V3)](#S_Problem_Section_entries_required_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.5.1:2015-08-01) (CONF:1198-28929).
      16. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-28930) such that it
          1. SHALL contain exactly one [1..1] [Procedures Section (entries optional) (V2)](#Procedures_Section_entries_optional_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.7:2014-06-09) (CONF:1198-28931).
      17. This structuredBody SHOULD contain zero or one [0..1] component (CONF:1198-28932) such that it
          1. SHALL contain exactly one [1..1] [Results Section (entries required) (V3)](#S_Results_Section_entries_required_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3.1:2015-08-01) (CONF:1198-28933).
      18. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-28934) such that it
          1. SHALL contain exactly one [1..1] [Social History Section (V3)](#S_Social_History_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2015-08-01) (CONF:1198-28935).
      19. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-28936) such that it
          1. SHALL contain exactly one [1..1] [Vital Signs Section (entries required) (V3)](#S_Vital_Signs_Section_entries_required_) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2015-08-01) (CONF:1198-28937).
      20. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-28942) such that it
          1. SHALL contain exactly one [1..1] [Advance Directives Section (entries optional) (V3)](#S_Advance_Directives_Section_entries_op) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.21:2015-08-01) (CONF:1198-28943).
      21. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-28944) such that it
          1. SHALL contain exactly one [1..1] [Functional Status Section (V2)](#S_Functional_Status_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.14:2014-06-09) (CONF:1198-28945).
      22. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30237) such that it
          1. SHALL contain exactly one [1..1] [Review of Systems Section](#S_Review_of_Systems_Section) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.18) (CONF:1198-30238).
      23. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30904) such that it
          1. SHALL contain exactly one [1..1] [Medical Equipment Section (V2)](#S_Medical_Equipment_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.23:2014-06-09) (CONF:1198-30905).
      24. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30906) such that it
          1. SHALL contain exactly one [1..1] [Mental Status Section (V2)](#S_Mental_Status_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.56:2015-08-01) (CONF:1198-30907).
      25. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30909) such that it
          1. SHALL contain exactly one [1..1] [Nutrition Section](#S_Nutrition_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.57) (CONF:1198-30910).
      26. This structuredBody SHALL NOT contain an Assessment and Plan Section (V2) (2.16.840.1.113883.10.20.22.2.9:2014-06-09) when either an Assessment Section (2.16.840.1.113883.10.20.22.2.8) or a Plan of Treatment Section (V2) (2.16.840.1.113883.10.20.22.2.10:2014-06-09) is present (CONF:1198-28939).
      27. This structuredBody SHALL NOT contain a Chief Complaint and Reason for Visit Section (2.16.840.1.113883.10.20.22.2.13) when either a Chief Complaint Section (1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1) or a Reason for Visit Section (2.16.840.1.113883.10.20.22.2.12) is present (CONF:1198-28940).
      28. SHALL include a Reason for Referral or Reason for Visit section (CONF:1198-9504).
      29. SHALL include an Assessment and Plan Section, or both an Assessment Section and a Plan of Treatment Section (CONF:1198-9501).

Table 28: ConsultDocumentType

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: ConsultDocumentType urn:oid:2.16.840.1.113883.11.20.9.31  (Clinical Focus: A classification of a document by the author's specialty, role, setting, or some combination of these properties to find documents that are consider a consultation.),(Data Element Scope: ),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 6/24/2019 with a version of 20190516.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.31/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 11488-4 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Consult note |
| 34099-2 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Cardiology Consult note |
| 34100-8 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Intensive care unit Consult note |
| 34101-6 | LOINC | urn:oid:2.16.840.1.113883.6.1 | General medicine Outpatient Consult note |
| 34102-4 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Psychiatry Hospital Consult note |
| 34103-2 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Pulmonary Consult note |
| 34104-0 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Hospital Consult note |
| 34749-2 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Anesthesiology Outpatient Consult note |
| 34756-7 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Dentistry Consult note |
| 34758-3 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Dermatology Consult note |
| ... | | | |

Figure 22: Consultation Note Callback participant Example

<participant typeCode="CALLBCK">

<time value="20050329224411+0500" />

<associatedEntity classCode="ASSIGNED">

<id extension="99999999" root="2.16.840.1.113883.4.6" />

<code code="200000000X" codeSystem="2.16.840.1.113883.6.101" displayName="Allopathic & Osteopathic Physicians" />

<addr>

<streetAddressLine>1002 Healthcare Drive </streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>97857</postalCode>

<country>US</country>

</addr>

<telecom use="WP" value="tel:555-555-1002" />

<associatedPerson>

<name>

<given>Henry</given>

<family>Seven</family>

<suffix>DO</suffix>

</name>

</associatedPerson>

</associatedEntity>

</participant>

Figure 23: Consultation Note (V2) inFulfillmentOf Example

<inFulfillmentOf typeCode="FLFS">

<order classCode="ACT" moodCode="RQO">

<id root="629deb70-5306-11df-9879-0800200c9a66" extension="1298989898" />

<code code="1011220" displayName="Clinical pathology consultation" codeSystem="2.16.840.1.113883.6.12" codeSystemName="CPT />

</order>

</inFulfillmentOf>

Figure 24: Consultation Note structuredBody Example

<component>

<structuredBody>

<component>

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.6.1"

extension="2015-08-01" />

<!-- Allergies section template -->

<code code="48765-2" codeSystem="2.16.840.1.113883.6.1"

displayName="Allergies, adverse reactions, alerts" codeSystemName="LOINC" />

<title>Allergies, Adverse Reactions, Alerts</title>

...

</section>

</component>

<component>

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.8" />

<!-- Assessment-->

<code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"

code="51848-0" displayName="ASSESSMENT" />

<title>ASSESSMENT</title>

...

</section>

</component>

<component>

<section>

<templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.4" />

<!-- History of Present Illness -->

<code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"

code="10164-2" displayName="HISTORY OF PRESENT ILLNESS" />

<title>HISTORY OF PRESENT ILLNESS</title>

...

</section>

</component>

<component>

<section>

<!--MEDICATION SECTION (V2) (coded entries required) -->

<templateId root="2.16.840.1.113883.10.20.22.2.1.1" extension="2014-06-09" />

<code code="10160-0" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="HISTORY OF MEDICATION USE" />

<title>MEDICATIONS</title>

...

</section>

</component>

<component>

<section>

<templateId root="2.16.840.1.113883.10.20.2.10" extension="2015-08-01" />

<!-- Physical Exam (V3) -->

<code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"

code="29545-1" displayName="PHYSICAL FINDINGS" />

<title>PHYSICAL EXAMINATION</title>

...

</section>

</component>

<component>

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.10"

extension="2014-06-09" />

<!-- Plan of Treatment Section (V2) template -->

<code code="18776-5" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="Treatment plan" />

<title>PLAN OF CARE</title>

...

</section>

</component>

<component>

<section>

<!-- Problem Section (entries required) (V3) -->

<templateId root="2.16.840.1.113883.10.20.22.2.5.1" extension="2015-08-01" />

<code code="11450-4" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="PROBLEM LIST" />

<title>PROBLEMS</title>

...

</section>

</component>

<component>

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.7"

extension="2014-06-09" />

<!-- Procedures Section (entries optional) (V2) -->

<code code="47519-4" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="HISTORY OF PROCEDURES" />

<title>PROCEDURES</title>

...

</section>

</component>

<component>

<section>

<templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.1"

extension="2014-06-09" />

<!-- Reason for Referral Section V2 -->

<code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"

code="42349-1" displayName="REASON FOR REFERRAL" />

<title>REASON FOR REFERRAL</title>

...

</section>

</component>

<component>

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.3.1" extension="2015-08-01" />

<!-- Results Section (entries required) (V3) -->

<code code="30954-2" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="RESULTS" />

<title>RESULTS</title>

...

</section>

</component>

<component>

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.17" extension="2015-08-01" />

<!-- Social history section (V3)-->

<code code="29762-2" codeSystem="2.16.840.1.113883.6.1"

displayName="Social History" />

<title>SOCIAL HISTORY</title>

...

</section>

</component>

<component>

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.4.1" extension="2015-08-01" />

<!-- Vital Signs Section (V3)-->

<code code="8716-3" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="VITAL SIGNS" />

<title>VITAL SIGNS</title>

...

</section>

</component>

</structuredBody>

</component>

Continuity of Care Document (CCD) (V3)

[ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.1.2:2015-08-01 (open)]

Table 29: Continuity of Care Document (CCD) (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
|  | [Medications Section (entries required) (V2)](#S_Medications_Section_entries_required_) (required)  [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (optional)  [Medical Equipment Section (V2)](#S_Medical_Equipment_Section_V2) (optional)  [Nutrition Section](#S_Nutrition_Section) (optional)  [Procedures Section (entries required) (V2)](#S_Procedures_Section_entries_required_V) (optional)  [Functional Status Section (V2)](#S_Functional_Status_Section_V2) (optional)  [Mental Status Section (V2)](#S_Mental_Status_Section_V2) (optional)  [Immunizations Section (entries required) (V3)](#S_Immunizations_Section_entries_require) (optional)  [Results Section (entries required) (V3)](#S_Results_Section_entries_required_V3) (required)  [Vital Signs Section (entries required) (V3)](#S_Vital_Signs_Section_entries_required_) (required)  [Problem Section (entries required) (V3)](#S_Problem_Section_entries_required_V3) (required)  [Payers Section (V3)](#S_Payers_Section_V3) (optional)  [Social History Section (V3)](#S_Social_History_Section_V3) (required)  [Advance Directives Section (entries optional) (V3)](#S_Advance_Directives_Section_entries_op) (optional)  [Family History Section (V3)](#S_Family_History_Section_V3) (optional)  [Allergies and Intolerances Section (entries required) (V3)](#S_Allergies_and_Intolerances_Section_er) (required)  [Encounters Section (entries optional) (V3)](#S_Encounters_Section_entries_optional_V3) (optional) |

This document type was originally based on the Continuity of Care Document (CCD) Release 1.1 which itself was derived from HITSP C32 and CCD Release 1.0.

The Continuity of Care Document (CCD) represents a core data set of the most relevant administrative, demographic, and clinical information facts about a patient's healthcare, covering one or more healthcare encounters. It provides a means for one healthcare practitioner, system, or setting to aggregate all of the pertinent data about a patient and forward it to another to support the continuity of care.

The primary use case for the CCD is to provide a snapshot in time containing the germane clinical, demographic, and administrative data for a specific patient. The key characteristic of a CCD is that the ServiceEvent is constrained to "PCPR". This means it does not function to report new ServiceEvents associated with performing care. It reports on care that has already been provided. The CCD provides a historical tally of the care over a range of time and is not a record of new services delivered.

More specific use cases, such as a Discharge Summary, Transfer Summary, Referral Note, Consultation Note, or Progress Note, are available as alternative documents in this guide.

Table 30: Continuity of Care Document (CCD) (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| ClinicalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.2:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-8450](#C_1198-8450) |  |
| @root | 1..1 | SHALL |  | [1198-10038](#C_1198-10038) | 2.16.840.1.113883.10.20.22.1.2 |
| @extension | 1..1 | SHALL |  | [1198-32516](#C_1198-32516) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-17180](#C_1198-17180) |  |
| @code | 1..1 | SHALL |  | [1198-17181](#C_1198-17181) | 34133-9 |
| @codeSystem | 1..1 | SHALL |  | [1198-32138](#C_1198-32138) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| author | 1..\* | SHALL |  | [1198-9442](#C_1198-9442) |  |
| assignedAuthor | 1..1 | SHALL |  | [1198-9443](#C_1198-9443) |  |
| documentationOf | 1..1 | SHALL |  | [1198-8452](#C_1198-8452) |  |
| serviceEvent | 1..1 | SHALL |  | [1198-8480](#C_1198-8480) |  |
| @classCode | 1..1 | SHALL |  | [1198-8453](#C_1198-8453) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = PCPR |
| effectiveTime | 1..1 | SHALL |  | [1198-8481](#C_1198-8481) |  |
| low | 1..1 | SHALL |  | [1198-8454](#C_1198-8454) |  |
| high | 1..1 | SHALL |  | [1198-8455](#C_1198-8455) |  |
| performer | 0..\* | SHOULD |  | [1198-8482](#C_1198-8482) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8458](#C_1198-8458) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = PRF |
| assignedEntity | 0..1 | MAY |  | [1198-8459](#C_1198-8459) |  |
| id | 1..\* | SHALL |  | [1198-30882](#C_1198-30882) |  |
| assignedPerson | 0..1 | MAY |  | [1198-32467](#C_1198-32467) |  |
| component | 1..1 | SHALL |  | [1198-30659](#C_1198-30659) |  |
| structuredBody | 1..1 | SHALL |  | [1198-30660](#C_1198-30660) |  |
| component | 1..1 | SHALL |  | [1198-30661](#C_1198-30661) |  |
| section | 1..1 | SHALL |  | [1198-30662](#C_1198-30662) | [Allergies and Intolerances Section (entries required) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6.1:2015-08-01](#S_Allergies_and_Intolerances_Section_er) |
| component | 1..1 | SHALL |  | [1198-30663](#C_1198-30663) |  |
| section | 1..1 | SHALL |  | [1198-30664](#C_1198-30664) | [Medications Section (entries required) (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1.1:2014-06-09](#S_Medications_Section_entries_required_) |
| component | 1..1 | SHALL |  | [1198-30665](#C_1198-30665) |  |
| section | 1..1 | SHALL |  | [1198-30666](#C_1198-30666) | [Problem Section (entries required) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.5.1:2015-08-01](#S_Problem_Section_entries_required_V3) |
| component | 0..1 | SHOULD |  | [1198-30667](#C_1198-30667) |  |
| section | 1..1 | SHALL |  | [1198-30668](#C_1198-30668) | [Procedures Section (entries required) (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.7.1:2014-06-09](#S_Procedures_Section_entries_required_V) |
| component | 1..1 | SHALL |  | [1198-30669](#C_1198-30669) |  |
| section | 1..1 | SHALL |  | [1198-30670](#C_1198-30670) | [Results Section (entries required) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3.1:2015-08-01](#S_Results_Section_entries_required_V3) |
| component | 0..1 | MAY |  | [1198-30671](#C_1198-30671) |  |
| section | 1..1 | SHALL |  | [1198-30672](#C_1198-30672) | [Advance Directives Section (entries optional) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.21:2015-08-01](#S_Advance_Directives_Section_entries_op) |
| component | 0..1 | MAY |  | [1198-30673](#C_1198-30673) |  |
| section | 1..1 | SHALL |  | [1198-30674](#C_1198-30674) | [Encounters Section (entries optional) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.22:2015-08-01](#S_Encounters_Section_entries_optional_V3) |
| component | 0..1 | MAY |  | [1198-30675](#C_1198-30675) |  |
| section | 1..1 | SHALL |  | [1198-30676](#C_1198-30676) | [Family History Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2015-08-01](#S_Family_History_Section_V3) |
| component | 0..1 | MAY |  | [1198-30677](#C_1198-30677) |  |
| section | 1..1 | SHALL |  | [1198-30678](#C_1198-30678) | [Functional Status Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.14:2014-06-09](#S_Functional_Status_Section_V2) |
| component | 0..1 | MAY |  | [1198-30679](#C_1198-30679) |  |
| section | 1..1 | SHALL |  | [1198-30680](#C_1198-30680) | [Immunizations Section (entries required) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.2.1:2015-08-01](#S_Immunizations_Section_entries_require) |
| component | 0..1 | MAY |  | [1198-30681](#C_1198-30681) |  |
| section | 1..1 | SHALL |  | [1198-30682](#C_1198-30682) | [Medical Equipment Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.23:2014-06-09](#S_Medical_Equipment_Section_V2) |
| component | 0..1 | MAY |  | [1198-30683](#C_1198-30683) |  |
| section | 1..1 | SHALL |  | [1198-30684](#C_1198-30684) | [Payers Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2015-08-01](#S_Payers_Section_V3) |
| component | 0..1 | SHOULD |  | [1198-30685](#C_1198-30685) |  |
| section | 1..1 | SHALL |  | [1198-30686](#C_1198-30686) | [Plan of Treatment Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09](#S_Plan_of_Treatment_Section_V2) |
| component | 1..1 | SHALL |  | [1198-30687](#C_1198-30687) |  |
| section | 1..1 | SHALL |  | [1198-30688](#C_1198-30688) | [Social History Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2015-08-01](#S_Social_History_Section_V3) |
| component | 1..1 | SHALL |  | [1198-30689](#C_1198-30689) |  |
| section | 1..1 | SHALL |  | [1198-30690](#C_1198-30690) | [Vital Signs Section (entries required) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2015-08-01](#S_Vital_Signs_Section_entries_required_) |
| component | 0..1 | MAY |  | [1198-32143](#C_1198-32143) |  |
| section | 1..1 | SHALL |  | [1198-32144](#C_1198-32144) | [Mental Status Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.56:2015-08-01](#S_Mental_Status_Section_V2) |
| component | 0..1 | MAY |  | [1198-32624](#C_1198-32624) |  |
| section | 1..1 | SHALL |  | [1198-32625](#C_1198-32625) | [Nutrition Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.57](#S_Nutrition_Section) |

Properties

1. Conforms to [US Realm Header (V3)](#D_US_Realm_Header_V3) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2015-08-01).
2. SHALL contain exactly one [1..1] templateId (CONF:1198-8450) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.1.2" (CONF:1198-10038).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32516).
   3. When asserting this templateId, all C-CDA 2.1 section and entry templates that had a previous version in C-CDA R1.1 SHALL include both the C-CDA 2.1 templateId and the C-CDA R1.1 templateId root without an extension. See C-CDA R2.1 Volume 1 - Design Considerations for additional detail (CONF:1198-32936).
3. SHALL contain exactly one [1..1] code (CONF:1198-17180).
   1. This code SHALL contain exactly one [1..1] @code="34133-9" Summarization of Episode Note (CONF:1198-17181).
   2. 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:1198-32138).

author

1. SHALL contain at least one [1..\*] author (CONF:1198-9442).
   1. Such authors SHALL contain exactly one [1..1] assignedAuthor (CONF:1198-9443).
      1. Such assignedAuthors SHALL contain (exactly one [1..1] assignedPerson) or (exactly one [1..1] assignedAuthoringDevice and exactly one [1..1] representedOrganization) (CONF:1198-8456).
      2. If assignedAuthor has an associated representedOrganization with no assignedPerson or assignedAuthoringDevice, then the value for “ClinicalDocument/author/assignedAuthor/id/@NullFlavor” SHALL be “NA” “Not applicable” 2.16.840.1.113883.5.1008 NullFlavor STATIC (CONF:1198-8457).

documentationOf

The documentationOf relationship in a Continuity Care Document contains the representation of providers who are wholly or partially responsible for the safety and well-being of a subject of care.

1. SHALL contain exactly one [1..1] documentationOf (CONF:1198-8452).

The main activity being described by a CCD is the provision of healthcare over a period of time. This is shown by setting the value of serviceEvent/@classCode to “PCPR” (care provision) and indicating the duration over which care was provided in serviceEvent/effectiveTime. Additional data from outside this duration may also be included if it is relevant to care provided during that time range (e.g., reviewed during the stated time range).

NOTE: Implementations originating a CCD should take care to discover what the episode of care being summarized is. For example, when a patient fills out a form providing relevant health history, the episode of care being documented might be from birth to the present.

* 1. This documentationOf SHALL contain exactly one [1..1] serviceEvent (CONF:1198-8480).
     1. This serviceEvent SHALL contain exactly one [1..1] @classCode="PCPR" Care Provision (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-8453).
     2. This serviceEvent SHALL contain exactly one [1..1] effectiveTime (CONF:1198-8481).
        1. This effectiveTime SHALL contain exactly one [1..1] low (CONF:1198-8454).
        2. This effectiveTime SHALL contain exactly one [1..1] high (CONF:1198-8455).

performer

The serviceEvent/performer represents the healthcare providers involved in the current or pertinent historical care of the patient. Preferably, the patient’s key healthcare providers would be listed, particularly their primary physician and any active consulting physicians, therapists, and counselors.

* + 1. This serviceEvent SHOULD contain zero or more [0..\*] performer (CONF:1198-8482).
       1. The performer, if present, SHALL contain exactly one [1..1] @typeCode="PRF" Participation physical performer (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 STATIC) (CONF:1198-8458).
       2. The performer, if present, MAY contain zero or one [0..1] assignedEntity (CONF:1198-8459).
          1. The assignedEntity, if present, SHALL contain at least one [1..\*] id (CONF:1198-30882) such that it

If this assignedEntity is an assignedPerson, the assignedEntity/id SHOULD contain zero or one [0..1] @root="2.16.840.1.113883.4.6" National Provider Identifier (CONF:1198-32466).

* + - * 1. The assignedEntity, if present, MAY contain zero or one [0..1] assignedPerson (CONF:1198-32467).

component

1. SHALL contain exactly one [1..1] component (CONF:1198-30659).
   1. This component SHALL contain exactly one [1..1] structuredBody (CONF:1198-30660).
      1. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30661) such that it
         1. SHALL contain exactly one [1..1] [Allergies and Intolerances Section (entries required) (V3)](#S_Allergies_and_Intolerances_Section_er) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6.1:2015-08-01) (CONF:1198-30662).
      2. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30663) such that it
         1. SHALL contain exactly one [1..1] [Medications Section (entries required) (V2)](#S_Medications_Section_entries_required_) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1.1:2014-06-09) (CONF:1198-30664).
      3. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30665) such that it
         1. SHALL contain exactly one [1..1] [Problem Section (entries required) (V3)](#S_Problem_Section_entries_required_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.5.1:2015-08-01) (CONF:1198-30666).
      4. This structuredBody SHOULD contain zero or one [0..1] component (CONF:1198-30667) such that it
         1. SHALL contain exactly one [1..1] [Procedures Section (entries required) (V2)](#S_Procedures_Section_entries_required_V) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.7.1:2014-06-09) (CONF:1198-30668).
      5. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30669) such that it
         1. SHALL contain exactly one [1..1] [Results Section (entries required) (V3)](#S_Results_Section_entries_required_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3.1:2015-08-01) (CONF:1198-30670).
      6. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30671) such that it
         1. SHALL contain exactly one [1..1] [Advance Directives Section (entries optional) (V3)](#S_Advance_Directives_Section_entries_op) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.21:2015-08-01) (CONF:1198-30672).
      7. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30673) such that it
         1. SHALL contain exactly one [1..1] [Encounters Section (entries optional) (V3)](#S_Encounters_Section_entries_optional_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.22:2015-08-01) (CONF:1198-30674).
      8. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30675) such that it
         1. SHALL contain exactly one [1..1] [Family History Section (V3)](#S_Family_History_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2015-08-01) (CONF:1198-30676).
      9. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30677) such that it
         1. SHALL contain exactly one [1..1] [Functional Status Section (V2)](#S_Functional_Status_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.14:2014-06-09) (CONF:1198-30678).
      10. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30679) such that it
          1. SHALL contain exactly one [1..1] [Immunizations Section (entries required) (V3)](#S_Immunizations_Section_entries_require) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.2.1:2015-08-01) (CONF:1198-30680).
      11. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30681) such that it
          1. SHALL contain exactly one [1..1] [Medical Equipment Section (V2)](#S_Medical_Equipment_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.23:2014-06-09) (CONF:1198-30682).
      12. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30683) such that it
          1. SHALL contain exactly one [1..1] [Payers Section (V3)](#S_Payers_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2015-08-01) (CONF:1198-30684).
      13. This structuredBody SHOULD contain zero or one [0..1] component (CONF:1198-30685) such that it
          1. SHALL contain exactly one [1..1] [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09) (CONF:1198-30686).
      14. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30687) such that it
          1. SHALL contain exactly one [1..1] [Social History Section (V3)](#S_Social_History_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2015-08-01) (CONF:1198-30688).
      15. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30689) such that it
          1. SHALL contain exactly one [1..1] [Vital Signs Section (entries required) (V3)](#S_Vital_Signs_Section_entries_required_) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2015-08-01) (CONF:1198-30690).
      16. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-32143) such that it
          1. SHALL contain exactly one [1..1] [Mental Status Section (V2)](#S_Mental_Status_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.56:2015-08-01) (CONF:1198-32144).
      17. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-32624) such that it
          1. SHALL contain exactly one [1..1] [Nutrition Section](#S_Nutrition_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.57) (CONF:1198-32625).

Figure 25: CCD (V2) author Example

<author>

<time value="201209151030-0800" />

<assignedAuthor>

<id extension="5555555555" 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" />

<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>

Figure 26: CCD (V2) Performer Example

<performer typeCode="PRF">

<functionCode code="PCP" displayName="Primary Care Physician" codeSystem="2.16.840.1.113883.5.88" codeSystemName="HL7ParticipationFunction">

<originalText>Primary Care Physician</originalText>

</functionCode>

<assignedEntity>

<id extension="5555555555" root="2.16.840.1.113883.4.6" />

<code code="207QA0505X" displayName="Adult Medicine" codeSystem="2.16.840.1.113883.6.101" codeSystemName="NUCC" />

<addr>

...

</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>

...

</representedOrganization>

</assignedEntity>

</performer>

Figure 27: CCD (V2) serviceEvent 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">

....

</performer>

</serviceEvent>

</documentationOf>

Diagnostic Imaging Report (V3)

[ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.1.5:2015-08-01 (open)]

Table 31: Diagnostic Imaging Report (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
|  | [DICOM Object Catalog Section - DCM 121181](#S_DICOM_Object_Catalog_Section__DCM_121) (optional)  [Findings Section (DIR)](#S_Findings_Section_DIR) (required)  [Fetus Subject Context](#S_Fetus_Subject_Context) (optional)  [Observer Context](#S_Observer_Context) (optional)  [Procedure Context](#E_Procedure_Context) (optional)  [SOP Instance Observation](#E_SOP_Instance_Observation) (optional)  [Text Observation](#E_Text_Observation) (optional)  [Code Observations](#E_Code_Observations) (optional)  [Quantity Measurement Observation](#E_Quantity_Measurement_Observation) (optional)  [US Realm Person Name (PN.US.FIELDED)](#U_US_Realm_Person_Name_PNUSFIELDED) (optional)  [Physician Reading Study Performer (V2)](#U_Physician_Reading_Study_Performer_V2) (optional)  [Physician of Record Participant (V2)](#U_Physician_of_Record_Participant_V2) (optional)  [US Realm Date and Time (DT.US.FIELDED)](#U_US_Realm_Date_and_Time_DTUSFIELDED) (optional) |

A Diagnostic Imaging Report (DIR) is a document that contains a consulting specialist’s interpretation of image data. It conveys the interpretation to the referring (ordering) physician and becomes part of the patient’s medical record. It is for use in Radiology, Endoscopy, Cardiology, and other imaging specialties.

Table 32: Diagnostic Imaging Report (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| ClinicalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.5:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-8404](#C_1198-8404) |  |
| @root | 1..1 | SHALL |  | [1198-10042](#C_1198-10042) | 2.16.840.1.113883.10.20.22.1.5 |
| @extension | 1..1 | SHALL |  | [1198-32515](#C_1198-32515) | 2015-08-01 |
| id | 1..1 | SHALL |  | [1198-30932](#C_1198-30932) |  |
| @root | 1..1 | SHALL |  | [1198-30933](#C_1198-30933) |  |
| code | 1..1 | SHALL |  | [1198-14833](#C_1198-14833) |  |
| @code | 1..1 | SHALL |  | [1198-14834](#C_1198-14834) | urn:oid:1.3.6.1.4.1.12009.10.2.5 (LOINC Imaging Document Codes) |
| informant | 0..0 | SHALL NOT |  | [1198-8410](#C_1198-8410) |  |
| informationRecipient | 0..\* | MAY |  | [1198-8411](#C_1198-8411) |  |
| participant | 0..1 | MAY |  | [1198-8414](#C_1198-8414) |  |
| associatedEntity | 1..1 | SHALL |  | [1198-31198](#C_1198-31198) |  |
| associatedPerson | 1..1 | SHALL |  | [1198-31199](#C_1198-31199) |  |
| name | 1..1 | SHALL |  | [1198-31200](#C_1198-31200) | [US Realm Person Name (PN.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1](#U_US_Realm_Person_Name_PNUSFIELDED) |
| inFulfillmentOf | 0..\* | MAY |  | [1198-30936](#C_1198-30936) |  |
| order | 1..1 | SHALL |  | [1198-30937](#C_1198-30937) |  |
| id | 1..\* | SHALL |  | [1198-30938](#C_1198-30938) |  |
| documentationOf | 1..1 | SHALL |  | [1198-8416](#C_1198-8416) |  |
| serviceEvent | 1..1 | SHALL |  | [1198-8431](#C_1198-8431) |  |
| @classCode | 1..1 | SHALL |  | [1198-8430](#C_1198-8430) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| id | 0..\* | SHOULD |  | [1198-8418](#C_1198-8418) |  |
| code | 1..1 | SHALL |  | [1198-8419](#C_1198-8419) |  |
| performer | 0..\* | SHOULD |  | [1198-8422](#C_1198-8422) | [Physician Reading Study Performer (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.6.2.1:2014-06-09](#U_Physician_Reading_Study_Performer_V2) |
| relatedDocument | 0..1 | MAY |  | [1198-8432](#C_1198-8432) |  |
| parentDocument | 1..1 | SHALL |  | [1198-32089](#C_1198-32089) |  |
| id | 1..1 | SHALL |  | [1198-32090](#C_1198-32090) |  |
| componentOf | 0..1 | MAY |  | [1198-30939](#C_1198-30939) |  |
| encompassingEncounter | 1..1 | SHALL |  | [1198-30940](#C_1198-30940) |  |
| id | 1..\* | SHALL |  | [1198-30941](#C_1198-30941) |  |
| effectiveTime | 1..1 | SHALL |  | [1198-30943](#C_1198-30943) | [US Realm Date and Time (DT.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3](#U_US_Realm_Date_and_Time_DTUSFIELDED) |
| responsibleParty | 0..1 | MAY |  | [1198-30945](#C_1198-30945) |  |
| assignedEntity | 1..1 | SHALL |  | [1198-30946](#C_1198-30946) |  |
| encounterParticipant | 0..1 | SHOULD |  | [1198-30948](#C_1198-30948) | [Physician of Record Participant (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.6.2.2:2014-06-09](#U_Physician_of_Record_Participant_V2) |
| component | 1..1 | SHALL |  | [1198-14907](#C_1198-14907) |  |
| structuredBody | 1..1 | SHALL |  | [1198-30695](#C_1198-30695) |  |
| component | 1..1 | SHALL |  | [1198-30696](#C_1198-30696) |  |
| section | 1..1 | SHALL |  | [1198-30697](#C_1198-30697) | [Findings Section (DIR) (identifier: urn:oid:2.16.840.1.113883.10.20.6.1.2](#S_Findings_Section_DIR) |
| component | 0..1 | SHOULD |  | [1198-30698](#C_1198-30698) |  |
| section | 1..1 | SHALL |  | [1198-30699](#C_1198-30699) | [DICOM Object Catalog Section - DCM 121181 (identifier: urn:oid:2.16.840.1.113883.10.20.6.1.1](#S_DICOM_Object_Catalog_Section__DCM_121) |
| component | 0..\* | MAY |  | [1198-31055](#C_1198-31055) |  |
| section | 1..1 | SHALL |  | [1198-31056](#C_1198-31056) |  |
| code | 1..1 | SHALL |  | [1198-31057](#C_1198-31057) |  |
| @code | 1..1 | SHALL |  | [1198-31207](#C_1198-31207) | urn:oid:2.16.840.1.113883.11.20.9.59 (DIRSectionTypeCodes) |
| title | 0..1 | SHOULD |  | [1198-31058](#C_1198-31058) |  |
| text | 0..1 | SHOULD |  | [1198-31059](#C_1198-31059) |  |
| subject | 0..1 | MAY |  | [1198-31215](#C_1198-31215) |  |
| relatedSubject | 1..1 | SHALL |  | [1198-31216](#C_1198-31216) | [Fetus Subject Context (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.3](#S_Fetus_Subject_Context) |
| author | 0..\* | MAY |  | [1198-31217](#C_1198-31217) |  |
| assignedAuthor | 1..1 | SHALL |  | [1198-31218](#C_1198-31218) | [Observer Context (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.4](#S_Observer_Context) |
| entry | 0..\* | MAY |  | [1198-31213](#C_1198-31213) |  |
| act | 1..1 | SHALL |  | [1198-31214](#C_1198-31214) | [Procedure Context (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.5](#E_Procedure_Context) |
| entry | 0..\* | MAY |  | [1198-31357](#C_1198-31357) |  |
| observation | 1..1 | SHALL |  | [1198-31358](#C_1198-31358) | [Text Observation (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.12](#E_Text_Observation) |
| entry | 0..\* | MAY |  | [1198-31359](#C_1198-31359) |  |
| observation | 1..1 | SHALL |  | [1198-31360](#C_1198-31360) | [Code Observations (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.13](#E_Code_Observations) |
| entry | 0..\* | MAY |  | [1198-31361](#C_1198-31361) |  |
| observation | 1..1 | SHALL |  | [1198-31362](#C_1198-31362) | [Quantity Measurement Observation (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.14](#E_Quantity_Measurement_Observation) |
| entry | 0..\* | MAY |  | [1198-31363](#C_1198-31363) |  |
| observation | 1..1 | SHALL |  | [1198-31364](#C_1198-31364) | [SOP Instance Observation (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.8](#E_SOP_Instance_Observation) |
| component | 0..\* | MAY |  | [1198-31208](#C_1198-31208) |  |

Properties

1. Conforms to [US Realm Header (V3)](#D_US_Realm_Header_V3) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2015-08-01).
2. SHALL contain exactly one [1..1] templateId (CONF:1198-8404) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.1.5" (CONF:1198-10042).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32515).
   3. When asserting this templateId, all C-CDA 2.1 section and entry templates that had a previous version in C-CDA R1.1 SHALL include both the C-CDA 2.1 templateId and the C-CDA R1.1 templateId root without an extension. See C-CDA R2.1 Volume 1 - Design Considerations for additional detail (CONF:1198-32937).
3. SHALL contain exactly one [1..1] id (CONF:1198-30932).
   1. This id SHALL contain exactly one [1..1] @root (CONF:1198-30933).

OIDs SHALL be represented in dotted decimal notation, where each decimal number is either 0 or starts with a nonzero digit. More formally, an OID SHALL be in the form of the regular expression: ([0-2])(.([1-9][0-9]\*|0))+

* + 1. The ClinicalDocument/id/@root attribute SHALL be a syntactically correct OID, and SHALL NOT be a UUID (CONF:1198-30934).
    2. OIDs SHALL be no more than 64 characters in length (CONF:1198-30935).

Preferred code is 18748-4 LOINC Diagnostic Imaging Report

1. SHALL contain exactly one [1..1] code (CONF:1198-14833).
   1. This code SHALL contain exactly one [1..1] @code, which SHOULD be selected from ValueSet [LOINC Imaging Document Codes](#LOINC_Imaging_Document_Codes) urn:oid:1.3.6.1.4.1.12009.10.2.5 DYNAMIC (CONF:1198-14834).
2. SHALL NOT contain [0..0] informant (CONF:1198-8410).

informationRecipient

1. MAY contain zero or more [0..\*] informationRecipient (CONF:1198-8411).
   1. The physician requesting the imaging procedure (ClinicalDocument/participant[@typeCode=REF]/associatedEntity), if present, SHOULD also be recorded as an informationRecipient, unless in the local setting another physician (such as the attending physician for an inpatient) is known to be the appropriate recipient of the report (CONF:1198-8412).
   2. When no referring physician is present, as in the case of self-referred screening examinations allowed by law, the intendedRecipient MAY be absent. The intendedRecipient MAY also be the health chart of the patient, in which case the receivedOrganization SHALL be the scoping organization of that chart (CONF:1198-8413).

participant

If participant is present, the associatedEntity/associatedPerson element SHALL be present and SHALL represent the physician requesting the imaging procedure (the referring physician AssociatedEntity that is the target of ClincalDocument/participant@typeCode=REF).

1. MAY contain zero or one [0..1] participant (CONF:1198-8414) such that it
   1. SHALL contain exactly one [1..1] associatedEntity (CONF:1198-31198).
      1. This associatedEntity SHALL contain exactly one [1..1] associatedPerson (CONF:1198-31199).
         1. This associatedPerson SHALL contain exactly one [1..1] [US Realm Person Name (PN.US.FIELDED)](#U_US_Realm_Person_Name_PNUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1198-31200).

inFulfillmentOf

An inFulfillmentOf element represents the Placer Order that is either a group of orders (modeled as PlacerGroup in the Placer Order RMIM of the Orders & Observations domain) or a single order item (modeled as ObservationRequest in the same RMIM). This optionality reflects two major approaches to the grouping of procedures as implemented in the installed base of imaging information systems. These approaches differ in their handling of grouped procedures and how they are mapped to identifiers in the Digital Imaging and Communications in Medicine (DICOM) image and structured reporting data. The example of a CT examination covering chest, abdomen, and pelvis will be used in the discussion below. In the IHE Scheduled Workflow model, the Chest CT, Abdomen CT, and Pelvis CT each represent a Requested Procedure, and all three procedures are grouped under a single Filler Order. The Filler Order number maps directly to the DICOM Accession Number in the DICOM imaging and report data. A widely deployed alternative approach maps the requested procedure identifiers directly to the DICOM Accession Number. The Requested Procedure ID in such implementations may or may not be different from the Accession Number, but is of little identifying importance because there is only one Requested Procedure per Accession Number. There is no identifier that formally connects the requested procedures ordered in this group.

1. MAY contain zero or more [0..\*] inFulfillmentOf (CONF:1198-30936).
   1. The inFulfillmentOf, if present, SHALL contain exactly one [1..1] order (CONF:1198-30937).
      1. This order SHALL contain at least one [1..\*] id (CONF:1198-30938).  
         Note: DICOM Accession Number in the DICOM imaging and report data

documentationOf

Each serviceEvent indicates an imaging procedure that the provider describes and interprets in the content of the DIR. The main activity being described by this document is the interpretation of the imaging procedure. This is shown by setting the value of the @classCode attribute of the serviceEvent element to ACT, and indicating the duration over which care was provided in the effectiveTime element. Within each documentationOf element, there is one serviceEvent element. This event is the unit imaging procedure corresponding to a billable item. The type of imaging procedure may be further described in the serviceEvent/code element. This guide makes no specific recommendations about the vocabulary to use for describing this event. In IHE Scheduled Workflow environments, one serviceEvent/id element contains the DICOM Study Instance UID from the Modality Worklist, and the second serviceEvent/id element contains the DICOM Requested Procedure ID from the Modality Worklist. These two ids are in a single serviceEvent. The effectiveTime for the serviceEvent covers the duration of the imaging procedure being reported. This event should have one or more performers, which may participate at the same or different periods of time. Service events map to DICOM Requested Procedures. That is, serviceEvent/id is the ID of the Requested Procedure.

1. SHALL contain exactly one [1..1] documentationOf (CONF:1198-8416) such that it
   1. SHALL contain exactly one [1..1] serviceEvent (CONF:1198-8431) such that it
      1. SHALL contain exactly one [1..1] @classCode="ACT" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-8430).
      2. SHOULD contain zero or more [0..\*] id (CONF:1198-8418).
      3. SHALL contain exactly one [1..1] code (CONF:1198-8419).
         1. The value of serviceEvent/code SHALL NOT conflict with the ClininicalDocument/code. When transforming from DICOM SR documents that do not contain a procedure code, an appropriate nullFlavor SHALL be used on serviceEvent/code (CONF:1198-8420).

The performer is the Physician Reading Study Performer defined in serviceEvent and is usually different from the attending physician. The reading physician interprets the images and evidence of the study (DICOM Definition).

* + 1. SHOULD contain zero or more [0..\*] [Physician Reading Study Performer (V2)](#U_Physician_Reading_Study_Performer_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.6.2.1:2014-06-09) (CONF:1198-8422).

relatedDocument

A DIR may have three types of parent document: • A superseded version that the present document wholly replaces (typeCode = RPLC). DIRs may go through stages of revision prior to being legally authenticated. Such early stages may be drafts from transcription, those created by residents, or other preliminary versions. Policies not covered by this specification may govern requirements for retention of such earlier versions. Except for forensic purposes, the latest version in a chain of revisions represents the complete and current report. • An original version that the present document appends (typeCode = APND). When a DIR is legally authenticated, it can be amended by a separate addendum document that references the original. • A source document from which the present document is transformed (typeCode = XFRM). A DIR may be created by transformation from a DICOM Structured Report (SR) document or from another DIR. An example of the latter case is the creation of a derived document for inclusion of imaging results in a clinical document.

1. MAY contain zero or one [0..1] relatedDocument (CONF:1198-8432).
   1. The relatedDocument, if present, SHALL contain exactly one [1..1] parentDocument (CONF:1198-32089).
      1. This parentDocument SHALL contain exactly one [1..1] id (CONF:1198-32090).
         1. OIDs SHALL be represented in dotted decimal notation, where each decimal number is either 0 or starts with a nonzero digit. More formally, an OID SHALL be in the form of the regular expression: ([0-2])(.([1-9][0-9][\*]|0))+ (CONF:1198-10031).
         2. OIDs SHALL be no more than 64 characters in length (CONF:1198-10032).
   2. When a Diagnostic Imaging Report has been transformed from a DICOM SR document, relatedDocument/@typeCode SHALL be XFRM, and relatedDocument/parentDocument/id SHALL contain the SOP Instance UID of the original DICOM SR document (CONF:1198-8433).

componentOf

The id element of the encompassingEncounter represents the identifier for the encounter. When the diagnostic imaging procedure is performed in the context of a hospital stay or an outpatient visit for which there is an Encounter Number, that number should be present as the ID of the encompassingEncounter. The effectiveTime represents the time interval or point in time in which the encounter took place. The encompassing encounter might be that of the hospital or office visit in which the diagnostic imaging procedure was performed. If the effective time is unknown, a nullFlavor attribute can be used.

1. MAY contain zero or one [0..1] componentOf (CONF:1198-30939).

The id element of the encompassingEncounter represents the identifier for the encounter. When the diagnostic imaging procedure is performed in the context of a hospital stay or an outpatient visit for which there is an Encounter Number, that number should be present as the ID of the encompassingEncounter.

The effectiveTime represents the time interval or point in time in which the encounter took place. The encompassing encounter might be that of the hospital or office visit in which the diagnostic imaging procedure was performed. If the effective time is unknown, a nullFlavor attribute can be used.

* 1. The componentOf, if present, SHALL contain exactly one [1..1] encompassingEncounter (CONF:1198-30940).
     1. This encompassingEncounter SHALL contain at least one [1..\*] id (CONF:1198-30941).
        1. In the case of transformed DICOM SR documents, an appropriate null flavor MAY be used if the id is unavailable (CONF:1198-30942).
     2. This encompassingEncounter SHALL contain exactly one [1..1] [US Realm Date and Time (DT.US.FIELDED)](#U_US_Realm_Date_and_Time_DTUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3) (CONF:1198-30943).
     3. This encompassingEncounter MAY contain zero or one [0..1] responsibleParty (CONF:1198-30945).
        1. The responsibleParty, if present, SHALL contain exactly one [1..1] assignedEntity (CONF:1198-30946).
           1. SHOULD contain zero or one [0..1] assignedPerson *OR* contain zero or one [0..1] representedOrganization (CONF:1198-30947).
     4. This encompassingEncounter SHOULD contain zero or one [0..1] [Physician of Record Participant (V2)](#U_Physician_of_Record_Participant_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.6.2.2:2014-06-09) (CONF:1198-30948).

component

1. SHALL contain exactly one [1..1] component (CONF:1198-14907).
   1. This component SHALL contain exactly one [1..1] structuredBody (CONF:1198-30695).
      1. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30696) such that it
         1. SHALL contain exactly one [1..1] [Findings Section (DIR)](#S_Findings_Section_DIR) (identifier: urn:oid:2.16.840.1.113883.10.20.6.1.2) (CONF:1198-30697).
      2. This structuredBody SHOULD contain zero or one [0..1] component (CONF:1198-30698) such that it
         1. SHALL contain exactly one [1..1] [DICOM Object Catalog Section - DCM 121181](#S_DICOM_Object_Catalog_Section__DCM_121) (identifier: urn:oid:2.16.840.1.113883.10.20.6.1.1) (CONF:1198-30699).
            1. The DICOM Object Catalog section (templateId 2.16.840.1.113883.10.20.6.1.1), if present, SHALL be the first section in the document Body (CONF:1198-31206).
      3. This structuredBody MAY contain zero or more [0..\*] component (CONF:1198-31055) such that it
         1. SHALL contain exactly one [1..1] section (CONF:1198-31056).
            1. This section SHALL contain exactly one [1..1] code (CONF:1198-31057).

For sections listed in the DIR Section Type Codes table, the code element must contain a LOINC code or DCM code for sections that have no LOINC equivalent

This code SHALL contain exactly one [1..1] @code, which SHOULD be selected from ValueSet [DIRSectionTypeCodes](#DIRSectionTypeCodes) urn:oid:2.16.840.1.113883.11.20.9.59 DYNAMIC (CONF:1198-31207).  
Note: The section/code SHOULD be selected from LOINC or DICOM for sections not listed in the DIR Section Type Codes table

There is no equivalent to section/title in DICOM SR, so for a CDA to SR transformation, the section/code will be transferred and the title element will be dropped.

* + - * 1. This section SHOULD contain zero or one [0..1] title (CONF:1198-31058).
        2. This section SHOULD contain zero or one [0..1] text (CONF:1198-31059).

If clinical statements are present, the section/text SHALL represent faithfully all such statements and MAY contain additional text (CONF:1198-31060).

All text elements SHALL contain content. Text elements SHALL contain PCDATA or child elements (CONF:1198-31061).

The text elements (and their children) MAY contain Web Access to DICOM Persistent Object (WADO) references to DICOM objects by including a linkHtml element where @href is a valid WADO URL and the text content of linkHtml is the visible text of the hyperlink (CONF:1198-31062).

* + - * 1. This section MAY contain zero or one [0..1] subject (CONF:1198-31215) such that it

SHALL contain exactly one [1..1] [Fetus Subject Context](#S_Fetus_Subject_Context) (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.3) (CONF:1198-31216).

This author element is used when the author of a section is different from the author(s) listed in the Header

* + - * 1. This section MAY contain zero or more [0..\*] author (CONF:1198-31217) such that it

SHALL contain exactly one [1..1] [Observer Context](#S_Observer_Context) (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.4) (CONF:1198-31218).

If the service context of a section is different from the value specified in documentationOf/serviceEvent, then the section SHALL contain one or more entries containing Procedure Context (templateId 2.16.840.1.113883.10.20.6.2.5), which will reset the context for any clinical statements nested within those elements

* + - * 1. This section MAY contain zero or more [0..\*] entry (CONF:1198-31213) such that it

SHALL contain exactly one [1..1] [Procedure Context](#E_Procedure_Context) (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.5) (CONF:1198-31214).

* + - * 1. This section MAY contain zero or more [0..\*] entry (CONF:1198-31357) such that it

SHALL contain exactly one [1..1] [Text Observation](#E_Text_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.12) (CONF:1198-31358).

* + - * 1. This section MAY contain zero or more [0..\*] entry (CONF:1198-31359) such that it

SHALL contain exactly one [1..1] [Code Observations](#E_Code_Observations) (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.13) (CONF:1198-31360).

* + - * 1. This section MAY contain zero or more [0..\*] entry (CONF:1198-31361) such that it

SHALL contain exactly one [1..1] [Quantity Measurement Observation](#E_Quantity_Measurement_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.14) (CONF:1198-31362).

* + - * 1. This section MAY contain zero or more [0..\*] entry (CONF:1198-31363) such that it

SHALL contain exactly one [1..1] [SOP Instance Observation](#E_SOP_Instance_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.8) (CONF:1198-31364).

* + - * 1. This section MAY contain zero or more [0..\*] component (CONF:1198-31208).

SHALL contain child elements (CONF:1198-31210).

* + - * 1. All sections defined in the DIR Section Type Codes table SHALL be top-level sections (CONF:1198-31211).
        2. SHALL contain at least one text element or one or more component elements (CONF:1198-31212).

Table 33: LOINC Imaging Document Codes

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: LOINC Imaging Document Codes urn:oid:1.3.6.1.4.1.12009.10.2.5  (Clinical Focus: The subset of document codes in LOINC that represent imaging procedures/reports. Such documents contain a consulting specialist’s interpretation of image data and are used in Radiology, Endoscopy, Cardiology, and other imaging specialties.),(Data Element Scope: Document type),(Inclusion Criteria: As Defined and managed by LOINC at https://loinc.org/oids/1.3.6.1.4.1.12009.10.2.5/),(Exclusion Criteria: Only codes in inclusion criteria)  This value set was imported on 6/25/2019 with a version of 20190517.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/1.3.6.1.4.1.12009.10.2.5/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 11525-3 | LOINC | urn:oid:2.16.840.1.113883.6.1 | US Pelvis Fetus for pregnancy |
| 18742-7 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Arthroscopy study |
| 18744-3 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Bronchoscopy study |
| 18745-0 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Cardiac catheterization study |
| 18746-8 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Colonoscopy study |
| 18748-4 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Diagnostic imaging study |
| 18751-8 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Endoscopy study |
| 18753-4 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Flexible sigmoidoscopy study |
| 18756-7 | LOINC | urn:oid:2.16.840.1.113883.6.1 | MR Spine study |
| 24531-6 | LOINC | urn:oid:2.16.840.1.113883.6.1 | US Retroperitoneum |
| ... | | | |

Table 34: DIRSectionTypeCodes

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: DIRSectionTypeCodes urn:oid:2.16.840.1.113883.11.20.9.59  The Section Type codes used by DIR are all narrative document sections. The codes in this table are drawn from LOINC (http://www.loinc.org/) and DICOM (http://medical.nema.org/). The section/code should be selected from LOINC or DICOM for sections not listed in this table.  Value Set Source: <http://www.loinc.org/> | | | |
| Code | Code System | Code System OID | Print Name |
| 121181 | DCM | urn:oid:1.2.840.10008.2.16.4 | DICOM Object Catalog |
| 121060 | DCM | urn:oid:1.2.840.10008.2.16.4 | History |
| 121062 | DCM | urn:oid:1.2.840.10008.2.16.4 | Request |
| 121064 | DCM | urn:oid:1.2.840.10008.2.16.4 | Current Procedure Descriptions |
| 121066 | DCM | urn:oid:1.2.840.10008.2.16.4 | Prior Procedure Descriptions |
| 121068 | DCM | urn:oid:1.2.840.10008.2.16.4 | Previous Findings |
| 121070 | DCM | urn:oid:1.2.840.10008.2.16.4 | Findings (DIR) |
| 121072 | DCM | urn:oid:1.2.840.10008.2.16.4 | Impressions |
| 121074 | DCM | urn:oid:1.2.840.10008.2.16.4 | Recommendations |
| 121076 | DCM | urn:oid:1.2.840.10008.2.16.4 | Conclusions |
| ... | | | |

Figure 28: DIR Participant Example

<participant typeCode="REF">

<associatedEntity classCode="PROV">

<id nullFlavor="NI" />

<addr nullFlavor="NI" />

<telecom nullFlavor="NI" />

<associatedPerson>

<name>

<given>Amanda</given>

<family>Assigned</family>

<suffix>MD</suffix>

</name>

</associatedPerson>

</associatedEntity>

</participant>

Discharge Summary (V3)

[ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.1.8:2015-08-01 (open)]

Table 35: Discharge Summary (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
|  | [Review of Systems Section](#S_Review_of_Systems_Section) (optional)  [Chief Complaint Section](#S_Chief_Complaint_Section) (optional)  [Reason for Visit Section](#S_Reason_for_Visit_Section) (optional)  [Chief Complaint and Reason for Visit Section](#S_Chief_Complaint_and_Reason_for_Visit_S) (optional)  [History of Present Illness Section](#S_History_of_Present_Illness_Section) (optional)  [Hospital Course Section](#S_Hospital_Course_Section) (required)  [Hospital Discharge Studies Summary Section](#S_Hospital_Discharge_Studies_Summary_Sec) (optional)  [Hospital Discharge Physical Section](#S_Hospital_Discharge_Physical_Section) (optional)  [Hospital Discharge Instructions Section](#S_Hospital_Discharge_Instructions_Sectio) (optional)  [Hospital Consultations Section](#S_Hospital_Consultations_Section) (optional)  [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (required)  [Nutrition Section](#S_Nutrition_Section) (optional)  [Procedures Section (entries optional) (V2)](#Procedures_Section_entries_optional_V2) (optional)  [Functional Status Section (V2)](#S_Functional_Status_Section_V2) (optional)  [Admission Diagnosis Section (V3)](#S_Admission_Diagnosis_Section_V3) (optional)  [Immunizations Section (entries optional) (V3)](#S_Immunizations_Section_entries_optiona) (optional)  [Discharge Diagnosis Section (V3)](#S_Discharge_Diagnosis_Section_V3) (required)  [Discharge Medications Section (entries optional) (V3)](#S_Discharge_Meds_Sec_entries_Opt) (optional)  [Discharge Medications Section (entries required) (V3)](#S_Discharge_Meds_Section_entries_R) (optional)  [Admission Medications Section (entries optional) (V3)](#S_Admission_Medications_Section_entries) (optional)  [Past Medical History (V3)](#S_Past_Medical_History_V3) (optional)  [Vital Signs Section (entries optional) (V3)](#S_Vital_Signs_Section_entries_optional_) (optional)  [Problem Section (entries optional) (V3)](#S_Problem_Section_entries_optional_V3) (optional)  [Social History Section (V3)](#S_Social_History_Section_V3) (optional)  [Family History Section (V3)](#S_Family_History_Section_V3) (optional)  [Allergies and Intolerances Section (entries optional) (V3)](#S_Allergies_and_Intolerances_Section_eo) (required) |

The Discharge Summary is a document which synopsizes a patient's admission to a hospital, LTPAC provider, or other setting. It provides information for the continuation of care following discharge. The Joint Commission requires the following information to be included in the Discharge Summary (<http://www.jointcommission.org/>):  
• The reason for hospitalization (the admission)  
• The procedures performed, as applicable  
• The care, treatment, and services provided  
• The patient’s condition and disposition at discharge  
• Information provided to the patient and family  
• Provisions for follow-up care

The best practice for a Discharge Summary is to include the discharge disposition in the display of the header.

Table 36: Discharge Summary (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| ClinicalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.8:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-8463](#C_1198-8463) |  |
| @root | 1..1 | SHALL |  | [1198-10044](#C_1198-10044) | 2.16.840.1.113883.10.20.22.1.8 |
| @extension | 1..1 | SHALL |  | [1198-32517](#C_1198-32517) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-17178](#C_1198-17178) |  |
| @code | 1..1 | SHALL |  | [1198-17179](#C_1198-17179) | urn:oid:2.16.840.1.113883.11.20.4.1 (DischargeSummaryDocumentTypeCode) |
| participant | 0..\* | MAY |  | [1198-8467](#C_1198-8467) |  |
| componentOf | 1..1 | SHALL |  | [1198-8471](#C_1198-8471) |  |
| encompassingEncounter | 1..1 | SHALL |  | [1198-8472](#C_1198-8472) |  |
| effectiveTime | 1..1 | SHALL |  | [1198-32611](#C_1198-32611) |  |
| low | 1..1 | SHALL |  | [1198-8473](#C_1198-8473) |  |
| high | 1..1 | SHALL |  | [1198-8475](#C_1198-8475) |  |
| dischargeDispositionCode | 1..1 | SHALL |  | [1198-8476](#C_1198-8476) | urn:oid:2.16.840.1.113883.3.88.12.80.33 (NUBC UB-04 FL17 Patient Status) |
| responsibleParty | 0..1 | MAY |  | [1198-8479](#C_1198-8479) |  |
| assignedEntity | 1..1 | SHALL |  | [1198-32613](#C_1198-32613) |  |
| encounterParticipant | 0..\* | MAY |  | [1198-8478](#C_1198-8478) |  |
| assignedEntity | 1..1 | SHALL |  | [1198-32615](#C_1198-32615) |  |
| component | 1..1 | SHALL |  | [1198-9539](#C_1198-9539) |  |
| structuredBody | 1..1 | SHALL |  | [1198-30518](#C_1198-30518) |  |
| component | 1..1 | SHALL |  | [1198-30519](#C_1198-30519) |  |
| section | 1..1 | SHALL |  | [1198-30520](#C_1198-30520) | [Allergies and Intolerances Section (entries optional) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6:2015-08-01](#S_Allergies_and_Intolerances_Section_eo) |
| component | 1..1 | SHALL |  | [1198-30521](#C_1198-30521) |  |
| section | 1..1 | SHALL |  | [1198-30522](#C_1198-30522) | [Hospital Course Section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.5](#S_Hospital_Course_Section) |
| component | 1..1 | SHALL |  | [1198-30523](#C_1198-30523) |  |
| section | 1..1 | SHALL |  | [1198-30524](#C_1198-30524) | [Discharge Diagnosis Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.24:2015-08-01](#S_Discharge_Diagnosis_Section_V3) |
| component | 0..1 | SHOULD |  | [1198-30525](#C_1198-30525) |  |
| section | 1..1 | SHALL |  | [1198-30526](#C_1198-30526) | [Discharge Medications Section (entries optional) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.11:2015-08-01](#S_Discharge_Meds_Sec_entries_Opt) |
| component | 1..1 | SHALL |  | [1198-30527](#C_1198-30527) |  |
| section | 1..1 | SHALL |  | [1198-30528](#C_1198-30528) | [Plan of Treatment Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09](#S_Plan_of_Treatment_Section_V2) |
| component | 0..1 | MAY |  | [1198-30529](#C_1198-30529) |  |
| section | 1..1 | SHALL |  | [1198-30530](#C_1198-30530) | [Chief Complaint Section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1](#S_Chief_Complaint_Section) |
| component | 0..1 | MAY |  | [1198-30531](#C_1198-30531) |  |
| section | 1..1 | SHALL |  | [1198-30532](#C_1198-30532) | [Chief Complaint and Reason for Visit Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.13](#S_Chief_Complaint_and_Reason_for_Visit_S) |
| component | 0..1 | MAY |  | [1198-30533](#C_1198-30533) |  |
| section | 1..1 | SHALL |  | [1198-30534](#C_1198-30534) | [Nutrition Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.57](#S_Nutrition_Section) |
| component | 0..1 | MAY |  | [1198-30535](#C_1198-30535) |  |
| section | 1..1 | SHALL |  | [1198-30536](#C_1198-30536) | [Family History Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2015-08-01](#S_Family_History_Section_V3) |
| component | 0..1 | MAY |  | [1198-30537](#C_1198-30537) |  |
| section | 1..1 | SHALL |  | [1198-30538](#C_1198-30538) | [Functional Status Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.14:2014-06-09](#S_Functional_Status_Section_V2) |
| component | 0..1 | MAY |  | [1198-30539](#C_1198-30539) |  |
| section | 1..1 | SHALL |  | [1198-30540](#C_1198-30540) | [Past Medical History (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.20:2015-08-01](#S_Past_Medical_History_V3) |
| component | 0..1 | MAY |  | [1198-30541](#C_1198-30541) |  |
| section | 1..1 | SHALL |  | [1198-30542](#C_1198-30542) | [History of Present Illness Section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.4](#S_History_of_Present_Illness_Section) |
| component | 0..1 | MAY |  | [1198-30543](#C_1198-30543) |  |
| section | 1..1 | SHALL |  | [1198-30544](#C_1198-30544) | [Admission Diagnosis Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.43:2015-08-01](#S_Admission_Diagnosis_Section_V3) |
| component | 0..1 | MAY |  | [1198-30545](#C_1198-30545) |  |
| section | 1..1 | SHALL |  | [1198-30546](#C_1198-30546) | [Admission Medications Section (entries optional) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.44:2015-08-01](#S_Admission_Medications_Section_entries) |
| component | 0..1 | MAY |  | [1198-30547](#C_1198-30547) |  |
| section | 1..1 | SHALL |  | [1198-30548](#C_1198-30548) | [Hospital Consultations Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.42](#S_Hospital_Consultations_Section) |
| component | 0..1 | MAY |  | [1198-30549](#C_1198-30549) |  |
| section | 1..1 | SHALL |  | [1198-30550](#C_1198-30550) | [Hospital Discharge Instructions Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.41](#S_Hospital_Discharge_Instructions_Sectio) |
| component | 0..1 | MAY |  | [1198-30551](#C_1198-30551) |  |
| section | 1..1 | SHALL |  | [1198-30552](#C_1198-30552) | [Hospital Discharge Physical Section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.26](#S_Hospital_Discharge_Physical_Section) |
| component | 0..1 | MAY |  | [1198-30553](#C_1198-30553) |  |
| section | 1..1 | SHALL |  | [1198-30554](#C_1198-30554) | [Hospital Discharge Studies Summary Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.16](#S_Hospital_Discharge_Studies_Summary_Sec) |
| component | 0..1 | MAY |  | [1198-30555](#C_1198-30555) |  |
| section | 1..1 | SHALL |  | [1198-30556](#C_1198-30556) | [Immunizations Section (entries optional) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.2:2015-08-01](#S_Immunizations_Section_entries_optiona) |
| component | 0..1 | MAY |  | [1198-30557](#C_1198-30557) |  |
| section | 1..1 | SHALL |  | [1198-30558](#C_1198-30558) | [Problem Section (entries optional) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.5:2015-08-01](#S_Problem_Section_entries_optional_V3) |
| component | 0..1 | MAY |  | [1198-30559](#C_1198-30559) |  |
| section | 1..1 | SHALL |  | [1198-30560](#C_1198-30560) | [Procedures Section (entries optional) (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.7:2014-06-09](#Procedures_Section_entries_optional_V2) |
| component | 0..1 | MAY |  | [1198-30561](#C_1198-30561) |  |
| section | 1..1 | SHALL |  | [1198-30562](#C_1198-30562) | [Reason for Visit Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.12](#S_Reason_for_Visit_Section) |
| component | 0..1 | MAY |  | [1198-30563](#C_1198-30563) |  |
| section | 1..1 | SHALL |  | [1198-30564](#C_1198-30564) | [Review of Systems Section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.18](#S_Review_of_Systems_Section) |
| component | 0..1 | MAY |  | [1198-30565](#C_1198-30565) |  |
| section | 1..1 | SHALL |  | [1198-30566](#C_1198-30566) | [Social History Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2015-08-01](#S_Social_History_Section_V3) |
| component | 0..1 | MAY |  | [1198-30567](#C_1198-30567) |  |
| section | 1..1 | SHALL |  | [1198-30568](#C_1198-30568) | [Vital Signs Section (entries optional) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4:2015-08-01](#S_Vital_Signs_Section_entries_optional_) |
| component | 0..1 | MAY |  | [1198-31586](#C_1198-31586) |  |
| section | 1..1 | SHALL |  | [1198-31587](#C_1198-31587) | [Discharge Medications Section (entries required) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.11.1:2015-08-01](#S_Discharge_Meds_Section_entries_R) |

Properties

1. Conforms to [US Realm Header (V3)](#D_US_Realm_Header_V3) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2015-08-01).
2. SHALL contain exactly one [1..1] templateId (CONF:1198-8463) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.1.8" (CONF:1198-10044).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32517).
   3. When asserting this templateId, all C-CDA 2.1 section and entry templates that had a previous version in C-CDA R1.1 SHALL include both the C-CDA 2.1 templateId and the C-CDA R1.1 templateId root without an extension. See C-CDA R2.1 Volume 1 - Design Considerations for additional detail (CONF:1198-32938).

The Discharge Summary recommends use of a single document type code, 18842-5 "Discharge summary", with further specification provided by author or performer, setting, or specialty. When pre-coordinated codes are used, any coded values describing the author or performer of the service act or the practice setting must be consistent with the LOINC document type.

1. SHALL contain exactly one [1..1] code (CONF:1198-17178).
   1. This code SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [DischargeSummaryDocumentTypeCode](#DischargeSummaryDocumentTypeCode) urn:oid:2.16.840.1.113883.11.20.4.1 DYNAMIC (CONF:1198-17179).

participant

The participant element in the Discharge Summary header follows the General Header Constraints for participants. Discharge Summary does not specify any use for functionCode for participants. Local policies will determine how this element should be used in implementations.

1. MAY contain zero or more [0..\*] participant (CONF:1198-8467).
   1. When participant/@typeCode is IND, associatedEntity/@classCode SHALL be selected from ValueSet 2.16.840.1.113883.11.20.9.33 INDRoleclassCodes DYNAMIC 2011-09-30 (CONF:1198-8469).

componentOf

The Discharge Summary is always associated with a Hospital Admission using the encompassingEncounter element in the header.

1. SHALL contain exactly one [1..1] componentOf (CONF:1198-8471).
   1. This componentOf SHALL contain exactly one [1..1] encompassingEncounter (CONF:1198-8472).
      1. This encompassingEncounter SHALL contain exactly one [1..1] effectiveTime (CONF:1198-32611).

The admission date is recorded in the componentOf/encompassingEncounter/effectiveTime/low.

* + - 1. This effectiveTime SHALL contain exactly one [1..1] low (CONF:1198-8473).

The discharge date is recorded in the componentOf/encompassingEncounter/effectiveTime/high.

* + - 1. This effectiveTime SHALL contain exactly one [1..1] high (CONF:1198-8475).

The dischargeDispositionCode records the disposition of the patient at time of discharge. Access to the National Uniform Billing Committee (NUBC) code system requires a membership. The following conformance statement aligns with HITSP C80 requirements.  
The dischargeDispositionCode, @displayName, or NUBC UB-04 Print Name, must be displayed when the document is rendered.

* + 1. This encompassingEncounter SHALL contain exactly one [1..1] dischargeDispositionCode, which SHOULD be selected from ValueSet [NUBC UB-04 FL17 Patient Status](#NUBC_UB04_FL17_Patient_Status) urn:oid:2.16.840.1.113883.3.88.12.80.33 DYNAMIC (CONF:1198-8476).

The responsibleParty element represents only the party responsible for the encounter, not necessarily the entire episode of care.

* + 1. This encompassingEncounter MAY contain zero or one [0..1] responsibleParty (CONF:1198-8479).
       1. The responsibleParty, if present, SHALL contain exactly one [1..1] assignedEntity (CONF:1198-32613).
          1. This assignedEntity SHALL contain an assignedPerson or a representedOrganization or both (CONF:1198-32898).

The encounterParticipant element represents persons who participated in the encounter and not necessarily the entire episode of care.

* + 1. This encompassingEncounter MAY contain zero or more [0..\*] encounterParticipant (CONF:1198-8478).
       1. The encounterParticipant, if present, SHALL contain exactly one [1..1] assignedEntity (CONF:1198-32615).
          1. This assignedEntity SHALL contain an assignedPerson or a representedOrganization or both (CONF:1198-32899).

component

1. SHALL contain exactly one [1..1] component (CONF:1198-9539).

In this template (templateId 2.16.840.1.113883.10.20.22.1.8.2), coded entries are optional.

* 1. This component SHALL contain exactly one [1..1] structuredBody (CONF:1198-30518).
     1. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30519) such that it
        1. SHALL contain exactly one [1..1] [Allergies and Intolerances Section (entries optional) (V3)](#S_Allergies_and_Intolerances_Section_eo) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6:2015-08-01) (CONF:1198-30520).
     2. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30521) such that it
        1. SHALL contain exactly one [1..1] [Hospital Course Section](#S_Hospital_Course_Section) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.5) (CONF:1198-30522).
     3. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30523) such that it
        1. SHALL contain exactly one [1..1] [Discharge Diagnosis Section (V3)](#S_Discharge_Diagnosis_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.24:2015-08-01) (CONF:1198-30524).
     4. This structuredBody SHOULD contain zero or one [0..1] component (CONF:1198-30525) such that it
        1. SHALL contain exactly one [1..1] [Discharge Medications Section (entries optional) (V3)](#S_Discharge_Meds_Sec_entries_Opt) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.11:2015-08-01) (CONF:1198-30526).
     5. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30527) such that it
        1. SHALL contain exactly one [1..1] [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09) (CONF:1198-30528).
     6. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30529) such that it
        1. SHALL contain exactly one [1..1] [Chief Complaint Section](#S_Chief_Complaint_Section) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1) (CONF:1198-30530).
     7. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30531) such that it
        1. SHALL contain exactly one [1..1] [Chief Complaint and Reason for Visit Section](#S_Chief_Complaint_and_Reason_for_Visit_S) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.13) (CONF:1198-30532).
     8. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30533) such that it
        1. SHALL contain exactly one [1..1] [Nutrition Section](#S_Nutrition_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.57) (CONF:1198-30534).
     9. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30535) such that it
        1. SHALL contain exactly one [1..1] [Family History Section (V3)](#S_Family_History_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2015-08-01) (CONF:1198-30536).
     10. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30537) such that it
         1. SHALL contain exactly one [1..1] [Functional Status Section (V2)](#S_Functional_Status_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.14:2014-06-09) (CONF:1198-30538).
     11. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30539) such that it
         1. SHALL contain exactly one [1..1] [Past Medical History (V3)](#S_Past_Medical_History_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.20:2015-08-01) (CONF:1198-30540).
     12. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30541) such that it
         1. SHALL contain exactly one [1..1] [History of Present Illness Section](#S_History_of_Present_Illness_Section) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.4) (CONF:1198-30542).
     13. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30543) such that it
         1. SHALL contain exactly one [1..1] [Admission Diagnosis Section (V3)](#S_Admission_Diagnosis_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.43:2015-08-01) (CONF:1198-30544).
     14. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30545) such that it
         1. SHALL contain exactly one [1..1] [Admission Medications Section (entries optional) (V3)](#S_Admission_Medications_Section_entries) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.44:2015-08-01) (CONF:1198-30546).
     15. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30547) such that it
         1. SHALL contain exactly one [1..1] [Hospital Consultations Section](#S_Hospital_Consultations_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.42) (CONF:1198-30548).
     16. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30549) such that it
         1. SHALL contain exactly one [1..1] [Hospital Discharge Instructions Section](#S_Hospital_Discharge_Instructions_Sectio) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.41) (CONF:1198-30550).
     17. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30551) such that it
         1. SHALL contain exactly one [1..1] [Hospital Discharge Physical Section](#S_Hospital_Discharge_Physical_Section) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.26) (CONF:1198-30552).
     18. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30553) such that it
         1. SHALL contain exactly one [1..1] [Hospital Discharge Studies Summary Section](#S_Hospital_Discharge_Studies_Summary_Sec) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.16) (CONF:1198-30554).
     19. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30555) such that it
         1. SHALL contain exactly one [1..1] [Immunizations Section (entries optional) (V3)](#S_Immunizations_Section_entries_optiona) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.2:2015-08-01) (CONF:1198-30556).
     20. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30557) such that it
         1. SHALL contain exactly one [1..1] [Problem Section (entries optional) (V3)](#S_Problem_Section_entries_optional_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.5:2015-08-01) (CONF:1198-30558).
     21. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30559) such that it
         1. SHALL contain exactly one [1..1] [Procedures Section (entries optional) (V2)](#Procedures_Section_entries_optional_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.7:2014-06-09) (CONF:1198-30560).
     22. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30561) such that it
         1. SHALL contain exactly one [1..1] [Reason for Visit Section](#S_Reason_for_Visit_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.12) (CONF:1198-30562).
     23. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30563) such that it
         1. SHALL contain exactly one [1..1] [Review of Systems Section](#S_Review_of_Systems_Section) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.18) (CONF:1198-30564).
     24. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30565) such that it
         1. SHALL contain exactly one [1..1] [Social History Section (V3)](#S_Social_History_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2015-08-01) (CONF:1198-30566).
     25. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30567) such that it
         1. SHALL contain exactly one [1..1] [Vital Signs Section (entries optional) (V3)](#S_Vital_Signs_Section_entries_optional_) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4:2015-08-01) (CONF:1198-30568).
     26. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-31586) such that it
         1. SHALL contain exactly one [1..1] [Discharge Medications Section (entries required) (V3)](#S_Discharge_Meds_Section_entries_R) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.11.1:2015-08-01) (CONF:1198-31587).
     27. This structuredBody SHALL NOT contain a Chief Complaint and Reason for Visit Section (2.16.840.1.113883.10.20.22.2.13) when either a Chief Complaint Section (1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1) or a Reason for Visit Section (2.16.840.1.113883.10.20.22.2.12) is present (CONF:1198-30569).

Table 37: DischargeSummaryDocumentTypeCode

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: DischargeSummaryDocumentTypeCode urn:oid:2.16.840.1.113883.11.20.4.1  (Clinical Focus: Kind of discharge summary document classified by author role),(Data Element Scope: ),(Inclusion Criteria: A list of LOINC terms, intended to identify Discharge Summary Notes where component contains "Discharge Summary Note", Timing = "Patient", Property = Find" , scale = "Doc"),(Exclusion Criteria: )  This value set was imported on 6/24/2019 with a version of 20190425.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.4.1/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 11490-0 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Physician Discharge summary |
| 18842-5 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Discharge summary |
| 28655-9 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Attending Discharge summary |
| 29761-4 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Dentistry Discharge summary |
| 34105-7 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Hospital Discharge summary |
| 34106-5 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Physician Hospital Discharge summary |
| 34745-0 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Nurse Discharge summary |
| 57058-0 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Maternal discharge summary note |
| 59258-4 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Emergency department Discharge summary |
| 59259-2 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Psychiatry Discharge summary |
| ... | | | |

Table 38: NUBC UB-04 FL17 Patient Status

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: NUBC UB-04 FL17 Patient Status urn:oid:2.16.840.1.113883.3.88.12.80.33  National Uniform Billing Committee (NUBC) code system.  Value Set Source: <http://www.nubc.org> | | | |
| Code | Code System | Code System OID | Print Name |
| 01 | NUBC UB-04 Patient Discharge Status code set | urn:oid:2.16.840.1.113883.6.301.5 | Discharged to Home or Self Care (Routine Discharge) |
| 02 | NUBC UB-04 Patient Discharge Status code set | urn:oid:2.16.840.1.113883.6.301.5 | Discharged/transferred to a Short-Term General Hospital for Inpatient Care |
| 03 | NUBC UB-04 Patient Discharge Status code set | urn:oid:2.16.840.1.113883.6.301.5 | Discharged/transferred to Skilled Nursing Facility (SNF) with Medicare Certification in Anticipation of Skilled Care |
| 04 | NUBC UB-04 Patient Discharge Status code set | urn:oid:2.16.840.1.113883.6.301.5 | Discharged/transferred to a Facility that Provides Custodial or Supportive Care |
| 05 | NUBC UB-04 Patient Discharge Status code set | urn:oid:2.16.840.1.113883.6.301.5 | Discharged/transferred to a Designated Cancer Center or Children’s Hospital |
| 06 | NUBC UB-04 Patient Discharge Status code set | urn:oid:2.16.840.1.113883.6.301.5 | Discharged/transferred to Home Under Care of an Organized Home Health Service Organization in Anticipation of Covered Skilled Care |
| 07 | NUBC UB-04 Patient Discharge Status code set | urn:oid:2.16.840.1.113883.6.301.5 | Left Against Medical Advice or Discontinued Care |
| 08 | NUBC UB-04 Patient Discharge Status code set | urn:oid:2.16.840.1.113883.6.301.5 | Reserved for Assignment by the NUBC |
| 09 | NUBC UB-04 Patient Discharge Status code set | urn:oid:2.16.840.1.113883.6.301.5 | Admitted as an Inpatient to this Hospital |
| 20 | NUBC UB-04 Patient Discharge Status code set | urn:oid:2.16.840.1.113883.6.301.5 | Expired |
| ... | | | |

Figure 29: Discharge Summary encompassingEncounter Example

<componentOf>

<encompassingEncounter>

<id extension="9937012" root="2.16.840.1.113883.19" />

<code codeSystem="2.16.840.1.113883.6.12" codeSystemName="CPT" code="99213" displayName="Evaluation and Management" />

<effectiveTime>

<low value="20090227130000+0500" />

<high value="20090227130000+0500" />

</effectiveTime>

<dischargeDispositionCode code="01" codeSystem="2.16.840.1.113883.12.112" displayName="Routine Discharge" codeSystemName="HL7 Discharge Disposition" />

<location>

<healthCareFacility>

<id root="2.16.540.1.113883.19.2" />

</healthCareFacility>

</location>

</encompassingEncounter>

</componentOf>

History and Physical (V3)

[ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.1.3:2015-08-01 (open)]

Table 39: History and Physical (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
|  | [Assessment Section](#S_Assessment_Section) (optional)  [Review of Systems Section](#S_Review_of_Systems_Section) (required)  [Chief Complaint Section](#S_Chief_Complaint_Section) (optional)  [Reason for Visit Section](#S_Reason_for_Visit_Section) (optional)  [Chief Complaint and Reason for Visit Section](#S_Chief_Complaint_and_Reason_for_Visit_S) (optional)  [History of Present Illness Section](#S_History_of_Present_Illness_Section) (optional)  [General Status Section](#S_General_Status_Section) (required)  [Medications Section (entries optional) (V2)](#S_Medications_Section_entries_optional_) (required)  [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (optional)  [Procedures Section (entries optional) (V2)](#Procedures_Section_entries_optional_V2) (optional)  [Assessment and Plan Section (V2)](#S_Assessment_and_Plan_Section_V2) (optional)  [Instructions Section (V2)](#Instructions_Section_V2) (optional)  [US Realm Date and Time (DT.US.FIELDED)](#U_US_Realm_Date_and_Time_DTUSFIELDED) (required)  [Immunizations Section (entries optional) (V3)](#S_Immunizations_Section_entries_optiona) (optional)  [Results Section (entries optional) (V3)](#S_Results_Section_entries_optional_V3) (required)  [Past Medical History (V3)](#S_Past_Medical_History_V3) (required)  [Vital Signs Section (entries optional) (V3)](#S_Vital_Signs_Section_entries_optional_) (required)  [Problem Section (entries optional) (V3)](#S_Problem_Section_entries_optional_V3) (optional)  [Physical Exam Section (V3)](#S_Physical_Exam_Section_V3) (required)  [Social History Section (V3)](#S_Social_History_Section_V3) (required)  [Family History Section (V3)](#S_Family_History_Section_V3) (required)  [Allergies and Intolerances Section (entries optional) (V3)](#S_Allergies_and_Intolerances_Section_eo) (required) |

A History and Physical (H&P) note is a medical report that documents the current and past conditions of the patient. It contains essential information that helps determine an individual's health status.  
The first portion of the report is a current collection of organized information unique to an individual. This is typically supplied by the patient or the caregiver, concerning the current medical problem or the reason for the patient encounter. This information is followed by a description of any past or ongoing medical issues, including current medications and allergies. Information is also obtained about the patient's lifestyle, habits, and diseases among family members.  
The next portion of the report contains information obtained by physically examining the patient and gathering diagnostic information in the form of laboratory tests, imaging, or other diagnostic procedures.  
The report ends with the clinician's assessment of the patient's situation and the intended plan to address those issues.  
A History and Physical Examination is required upon hospital admission as well as before operative procedures. An initial evaluation in an ambulatory setting is often documented in the form of an H&P note.

Table 40: History and Physical (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| ClinicalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.3:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-8283](#C_1198-8283) |  |
| @root | 1..1 | SHALL |  | [1198-10046](#C_1198-10046) | 2.16.840.1.113883.10.20.22.1.3 |
| @extension | 1..1 | SHALL |  | [1198-32518](#C_1198-32518) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-17185](#C_1198-17185) |  |
| @code | 1..1 | SHALL |  | [1198-17186](#C_1198-17186) | urn:oid:2.16.840.1.113883.1.11.20.22 (HPDocumentType) |
| informationRecipient | 0..\* | MAY |  | [1198-32482](#C_1198-32482) |  |
| intendedRecipient | 1..1 | SHALL |  | [1198-32483](#C_1198-32483) |  |
| participant | 0..\* | MAY |  | [1198-8286](#C_1198-8286) |  |
| inFulfillmentOf | 0..\* | MAY |  | [1198-8336](#C_1198-8336) |  |
| componentOf | 1..1 | SHALL |  | [1198-8338](#C_1198-8338) |  |
| encompassingEncounter | 1..1 | SHALL |  | [1198-8339](#C_1198-8339) |  |
| id | 1..\* | SHALL |  | [1198-8340](#C_1198-8340) |  |
| effectiveTime | 1..1 | SHALL |  | [1198-8341](#C_1198-8341) | [US Realm Date and Time (DT.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3](#U_US_Realm_Date_and_Time_DTUSFIELDED) |
| responsibleParty | 0..1 | MAY |  | [1198-8345](#C_1198-8345) |  |
| encounterParticipant | 0..\* | MAY |  | [1198-8342](#C_1198-8342) |  |
| location | 0..1 | MAY |  | [1198-8344](#C_1198-8344) |  |
| component | 1..1 | SHALL |  | [1198-8349](#C_1198-8349) |  |
| structuredBody | 1..1 | SHALL |  | [1198-30570](#C_1198-30570) |  |
| component | 1..1 | SHALL |  | [1198-30571](#C_1198-30571) |  |
| section | 1..1 | SHALL |  | [1198-30572](#C_1198-30572) | [Allergies and Intolerances Section (entries optional) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6:2015-08-01](#S_Allergies_and_Intolerances_Section_eo) |
| component | 0..1 | MAY |  | [1198-30573](#C_1198-30573) |  |
| section | 1..1 | SHALL |  | [1198-30574](#C_1198-30574) | [Assessment Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.8](#S_Assessment_Section) |
| component | 0..1 | MAY |  | [1198-30575](#C_1198-30575) |  |
| section | 1..1 | SHALL |  | [1198-30576](#C_1198-30576) | [Plan of Treatment Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09](#S_Plan_of_Treatment_Section_V2) |
| component | 0..1 | MAY |  | [1198-30577](#C_1198-30577) |  |
| section | 1..1 | SHALL |  | [1198-30578](#C_1198-30578) | [Assessment and Plan Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09](#S_Assessment_and_Plan_Section_V2) |
| component | 0..1 | MAY |  | [1198-30579](#C_1198-30579) |  |
| section | 1..1 | SHALL |  | [1198-30580](#C_1198-30580) | [Chief Complaint Section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1](#S_Chief_Complaint_Section) |
| component | 0..1 | MAY |  | [1198-30581](#C_1198-30581) |  |
| section | 1..1 | SHALL |  | [1198-30582](#C_1198-30582) | [Chief Complaint and Reason for Visit Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.13](#S_Chief_Complaint_and_Reason_for_Visit_S) |
| component | 1..1 | SHALL |  | [1198-30583](#C_1198-30583) |  |
| section | 1..1 | SHALL |  | [1198-30584](#C_1198-30584) | [Family History Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2015-08-01](#S_Family_History_Section_V3) |
| component | 1..1 | SHALL |  | [1198-30585](#C_1198-30585) |  |
| section | 1..1 | SHALL |  | [1198-30586](#C_1198-30586) | [General Status Section (identifier: urn:oid:2.16.840.1.113883.10.20.2.5](#S_General_Status_Section) |
| component | 1..1 | SHALL |  | [1198-30587](#C_1198-30587) |  |
| section | 1..1 | SHALL |  | [1198-30588](#C_1198-30588) | [Past Medical History (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.20:2015-08-01](#S_Past_Medical_History_V3) |
| component | 0..1 | SHOULD |  | [1198-30589](#C_1198-30589) |  |
| section | 1..1 | SHALL |  | [1198-30590](#C_1198-30590) | [History of Present Illness Section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.4](#S_History_of_Present_Illness_Section) |
| component | 0..1 | MAY |  | [1198-30591](#C_1198-30591) |  |
| section | 1..1 | SHALL |  | [1198-30592](#C_1198-30592) | [Immunizations Section (entries optional) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.2:2015-08-01](#S_Immunizations_Section_entries_optiona) |
| component | 0..1 | MAY |  | [1198-30593](#C_1198-30593) |  |
| section | 1..1 | SHALL |  | [1198-31385](#C_1198-31385) | [Instructions Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.45:2014-06-09](#Instructions_Section_V2) |
| component | 1..1 | SHALL |  | [1198-30595](#C_1198-30595) |  |
| section | 1..1 | SHALL |  | [1198-30596](#C_1198-30596) | [Medications Section (entries optional) (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1:2014-06-09](#S_Medications_Section_entries_optional_) |
| component | 1..1 | SHALL |  | [1198-30597](#C_1198-30597) |  |
| section | 1..1 | SHALL |  | [1198-30598](#C_1198-30598) | [Physical Exam Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.2.10:2015-08-01](#S_Physical_Exam_Section_V3) |
| component | 0..1 | MAY |  | [1198-30599](#C_1198-30599) |  |
| section | 1..1 | SHALL |  | [1198-30600](#C_1198-30600) | [Problem Section (entries optional) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.5:2015-08-01](#S_Problem_Section_entries_optional_V3) |
| component | 0..1 | MAY |  | [1198-30601](#C_1198-30601) |  |
| section | 1..1 | SHALL |  | [1198-30602](#C_1198-30602) | [Procedures Section (entries optional) (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.7:2014-06-09](#Procedures_Section_entries_optional_V2) |
| component | 0..1 | MAY |  | [1198-30603](#C_1198-30603) |  |
| section | 1..1 | SHALL |  | [1198-30604](#C_1198-30604) | [Reason for Visit Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.12](#S_Reason_for_Visit_Section) |
| component | 1..1 | SHALL |  | [1198-30605](#C_1198-30605) |  |
| section | 1..1 | SHALL |  | [1198-30606](#C_1198-30606) | [Results Section (entries optional) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3:2015-08-01](#S_Results_Section_entries_optional_V3) |
| component | 1..1 | SHALL |  | [1198-30607](#C_1198-30607) |  |
| section | 1..1 | SHALL |  | [1198-30608](#C_1198-30608) | [Review of Systems Section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.18](#S_Review_of_Systems_Section) |
| component | 1..1 | SHALL |  | [1198-30609](#C_1198-30609) |  |
| section | 1..1 | SHALL |  | [1198-30610](#C_1198-30610) | [Social History Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2015-08-01](#S_Social_History_Section_V3) |
| component | 1..1 | SHALL |  | [1198-30611](#C_1198-30611) |  |
| section | 1..1 | SHALL |  | [1198-30612](#C_1198-30612) | [Vital Signs Section (entries optional) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4:2015-08-01](#S_Vital_Signs_Section_entries_optional_) |

Properties

1. Conforms to [US Realm Header (V3)](#D_US_Realm_Header_V3) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2015-08-01).
2. SHALL contain exactly one [1..1] templateId (CONF:1198-8283) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.1.3" (CONF:1198-10046).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32518).
   3. When asserting this templateId, all C-CDA 2.1 section and entry templates that had a previous version in C-CDA R1.1 SHALL include both the C-CDA 2.1 templateId and the C-CDA R1.1 templateId root without an extension. See C-CDA R2.1 Volume 1 - Design Considerations for additional detail (CONF:1198-32939).

The H&P Note recommends use of a single document type code, 34117-2 "History and physical note”, with further specification provided by author or performer, setting, or specialty. When pre-coordinated codes are used, any coded values describing the author or performer of the service act or the practice setting must be consistent with the LOINC document type.

1. SHALL contain exactly one [1..1] code (CONF:1198-17185).
   1. This code SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [HPDocumentType](#HPDocumentType) urn:oid:2.16.840.1.113883.1.11.20.22 DYNAMIC (CONF:1198-17186).
2. MAY contain zero or more [0..\*] informationRecipient (CONF:1198-32482).
   1. The informationRecipient, if present, SHALL contain exactly one [1..1] intendedRecipient (CONF:1198-32483).

participant

The participant element in the H&P header follows the General Header Constraints for participants. H&P Note does not specify any use for functionCode for participants. Local policies will determine how this element should be used in implementations.

1. MAY contain zero or more [0..\*] participant (CONF:1198-8286).

A special class of participant is the supporting person or organization: an individual or an organization that has a relationship to the patient, including parents, relatives, caregivers, insurance policyholders, and guarantors. In the case of a supporting person who is also an emergency contact or next-of-kin, a participant element should be present for each role recorded.

* 1. When participant/@typeCode is IND, associatedEntity/@classCode SHALL be selected from ValueSet 2.16.840.1.113883.11.20.9.33 INDRoleclassCodes DYNAMIC (CONF:1198-8333).

inFulfillmentOf

inFulfillmentOf elements describe the prior orders that are fulfilled (in whole or part) by the service events described in this document. For example, the prior order might be a referral and the H&P Note may be in partial fulfillment of that referral.

1. MAY contain zero or more [0..\*] inFulfillmentOf (CONF:1198-8336).

componentOf

The H&P Note is always associated with an encounter.

1. SHALL contain exactly one [1..1] componentOf (CONF:1198-8338).
   1. This componentOf SHALL contain exactly one [1..1] encompassingEncounter (CONF:1198-8339).
      1. This encompassingEncounter SHALL contain at least one [1..\*] id (CONF:1198-8340).

The effectiveTime represents the time interval or point in time in which the encounter took place.

* + 1. This encompassingEncounter SHALL contain exactly one [1..1] [US Realm Date and Time (DT.US.FIELDED)](#U_US_Realm_Date_and_Time_DTUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3) (CONF:1198-8341).

The responsibleParty element records only the party responsible for the encounter, not necessarily the entire episode of care.

* + 1. This encompassingEncounter MAY contain zero or one [0..1] responsibleParty (CONF:1198-8345).
       1. The responsibleParty element, if present, SHALL contain an assignedEntity element, which SHALL contain an assignedPerson element, a representedOrganization element, or both (CONF:1198-8348).

The encounterParticipant elements represent only those participants in the encounter, not necessarily the entire episode of care.

* + 1. This encompassingEncounter MAY contain zero or more [0..\*] encounterParticipant (CONF:1198-8342).
       1. An encounterParticipant element, if present, SHALL contain an assignedEntity element, which SHALL contain an assignedPerson element, a representedOrganization element, or both (CONF:1198-8343).
    2. This encompassingEncounter MAY contain zero or one [0..1] location (CONF:1198-8344).

component

1. SHALL contain exactly one [1..1] component (CONF:1198-8349).

In this template (templateId 2.16.840.1.113883.10.20.22.1.3.2), coded entries are optional.

* 1. This component SHALL contain exactly one [1..1] structuredBody (CONF:1198-30570).
     1. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30571) such that it
        1. SHALL contain exactly one [1..1] [Allergies and Intolerances Section (entries optional) (V3)](#S_Allergies_and_Intolerances_Section_eo) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6:2015-08-01) (CONF:1198-30572).
     2. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30573) such that it
        1. SHALL contain exactly one [1..1] [Assessment Section](#S_Assessment_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.8) (CONF:1198-30574).
     3. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30575) such that it
        1. SHALL contain exactly one [1..1] [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09) (CONF:1198-30576).
     4. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30577) such that it
        1. SHALL contain exactly one [1..1] [Assessment and Plan Section (V2)](#S_Assessment_and_Plan_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09) (CONF:1198-30578).
     5. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30579) such that it
        1. SHALL contain exactly one [1..1] [Chief Complaint Section](#S_Chief_Complaint_Section) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1) (CONF:1198-30580).
     6. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30581) such that it
        1. SHALL contain exactly one [1..1] [Chief Complaint and Reason for Visit Section](#S_Chief_Complaint_and_Reason_for_Visit_S) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.13) (CONF:1198-30582).
     7. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30583) such that it
        1. SHALL contain exactly one [1..1] [Family History Section (V3)](#S_Family_History_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2015-08-01) (CONF:1198-30584).
     8. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30585) such that it
        1. SHALL contain exactly one [1..1] [General Status Section](#S_General_Status_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.2.5) (CONF:1198-30586).
     9. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30587) such that it
        1. SHALL contain exactly one [1..1] [Past Medical History (V3)](#S_Past_Medical_History_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.20:2015-08-01) (CONF:1198-30588).
     10. This structuredBody SHOULD contain zero or one [0..1] component (CONF:1198-30589) such that it
         1. SHALL contain exactly one [1..1] [History of Present Illness Section](#S_History_of_Present_Illness_Section) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.4) (CONF:1198-30590).
     11. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30591) such that it
         1. SHALL contain exactly one [1..1] [Immunizations Section (entries optional) (V3)](#S_Immunizations_Section_entries_optiona) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.2:2015-08-01) (CONF:1198-30592).
     12. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30593) such that it
         1. SHALL contain exactly one [1..1] [Instructions Section (V2)](#Instructions_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.45:2014-06-09) (CONF:1198-31385).
     13. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30595) such that it
         1. SHALL contain exactly one [1..1] [Medications Section (entries optional) (V2)](#S_Medications_Section_entries_optional_) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1:2014-06-09) (CONF:1198-30596).
     14. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30597) such that it
         1. SHALL contain exactly one [1..1] [Physical Exam Section (V3)](#S_Physical_Exam_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.2.10:2015-08-01) (CONF:1198-30598).
     15. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30599) such that it
         1. SHALL contain exactly one [1..1] [Problem Section (entries optional) (V3)](#S_Problem_Section_entries_optional_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.5:2015-08-01) (CONF:1198-30600).
     16. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30601) such that it
         1. SHALL contain exactly one [1..1] [Procedures Section (entries optional) (V2)](#Procedures_Section_entries_optional_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.7:2014-06-09) (CONF:1198-30602).
     17. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30603) such that it
         1. SHALL contain exactly one [1..1] [Reason for Visit Section](#S_Reason_for_Visit_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.12) (CONF:1198-30604).
     18. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30605) such that it
         1. SHALL contain exactly one [1..1] [Results Section (entries optional) (V3)](#S_Results_Section_entries_optional_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3:2015-08-01) (CONF:1198-30606).
     19. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30607) such that it
         1. SHALL contain exactly one [1..1] [Review of Systems Section](#S_Review_of_Systems_Section) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.18) (CONF:1198-30608).
     20. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30609) such that it
         1. SHALL contain exactly one [1..1] [Social History Section (V3)](#S_Social_History_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2015-08-01) (CONF:1198-30610).
     21. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30611) such that it
         1. SHALL contain exactly one [1..1] [Vital Signs Section (entries optional) (V3)](#S_Vital_Signs_Section_entries_optional_) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4:2015-08-01) (CONF:1198-30612).
     22. This structuredBody SHALL contain a Chief Complaint and Reason for Visit Section (2.16.840.1.113883.10.20.22.2.13) or a Chief Complaint Section (1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1) or a Reason for Visit Section (2.16.840.1.113883.10.20.22.2.12) (CONF:1198-30613).
     23. This structuredBody SHALL contain an Assessment and Plan Section (V2) (2.16.840.1.113883.10.20.22.2.9:2014-06-09), or an Assessment Section (2.16.840.1.113883.10.20.22.2.8) and a Plan of Treatment Section (V2) (2.16.840.1.113883.10.20.22.2.10:2014-06-09) (CONF:1198-30614).
     24. This structuredBody SHALL NOT contain an Assessment and Plan Section (V2) (2.16.840.1.113883.10.20.22.2.9:2014-06-09) when either an Assessment Section (2.16.840.1.113883.10.20.22.2.8) or a Plan of Treatment Section (V2) (2.16.840.1.113883.10.20.22.2.10:2014-06-09) is present (CONF:1198-30615).
     25. This structuredBody SHALL NOT contain a Chief Complaint and Reason for Visit Section (2.16.840.1.113883.10.20.22.2.13) when either a Chief Complaint Section (1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1) or a Reason for Visit Section (2.16.840.1.113883.10.20.22.2.12) is present (CONF:1198-30616).

Table 41: HPDocumentType

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: HPDocumentType urn:oid:2.16.840.1.113883.1.11.20.22  (Clinical Focus: Subclassification of history & physical document by setting, author role, and author specialty),(Data Element Scope: ClinicalDocument.code@code in H&P Document template in C-CDA R2.1),(Inclusion Criteria: Some selected LOINC codes for information that uses H&P Document template to represent the information in CDA),(Exclusion Criteria: )  This value set was imported on 6/25/2019 with a version of 20190517.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.20.22/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 11492-6 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Provider-unspecifed, History and physical note |
| 28626-0 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Physician History and physical note |
| 34094-3 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Cardiology Hospital Admission history and physical note |
| 34095-0 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Comprehensive history and physical note |
| 34096-8 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Nursing facility Comprehensive history and physical note |
| 34115-6 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Medical student Hospital History and physical note |
| 34116-4 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Physician Nursing facility History and physical note |
| 34117-2 | LOINC | urn:oid:2.16.840.1.113883.6.1 | History and physical note |
| 34138-8 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Targeted history and physical note |
| 34763-3 | LOINC | urn:oid:2.16.840.1.113883.6.1 | General medicine Admission history and physical note |
| ... | | | |

Figure 30: H&P encompassingEncounter Example

<componentOf>

<encompassingEncounter>

<id extension="9937012" root="2.16.840.1.113883.19" />

<code codeSystem="2.16.840.1.113883.6.12" codeSystemName="CPT"

code="99213" displayName="Evaluation and Management" />

<effectiveTime>

<low value="20090227130000+0500" />

<high value="20090227130000+0500" />

</effectiveTime>

<location>

<healthCareFacility>

<id root="2.16.540.1.113883.19.2" />

</healthCareFacility>

</location>

</encompassingEncounter>

</componentOf>

Operative Note (V3)

[ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.1.7:2015-08-01 (open)]

Table 42: Operative Note (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
|  | [Operative Note Fluids Section](#S_Operative_Note_Fluids_Section) (optional)  [Operative Note Surgical Procedure Section](#S_Operative_Note_Surgical_Procedure_Sect) (optional)  [Surgical Drains Section](#S_Surgical_Drains_Section) (optional)  [Procedure Description Section](#S_Procedure_Description_Section) (required)  [Procedure Disposition Section](#S_Procedure_Disposition_Section) (optional)  [Procedure Estimated Blood Loss Section](#S_Procedure_Estimated_Blood_Loss_Section) (required)  [Procedure Specimens Taken Section](#S_Procedure_Specimens_Taken_Section) (required)  [Postoperative Diagnosis Section](#S_Postoperative_Diagnosis_Section) (required)  [Procedure Implants Section](#S_Procedure_Implants_Section) (optional)  [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (optional)  [Anesthesia Section (V2)](#S_Anesthesia_Section_V2) (required)  [Procedure Indications Section (V2)](#Procedure_Indications_Section_V2) (optional)  [Planned Procedure Section (V2)](#Planned_Procedure_Section_V2) (optional)  [US Realm Date and Time (DT.US.FIELDED)](#U_US_Realm_Date_and_Time_DTUSFIELDED) (required)  [Complications Section (V3)](#S_Complications_Section_V3) (required)  [Procedure Findings Section (V3)](#S_Procedure_Findings_Section_V3) (required)  [Preoperative Diagnosis Section (V3)](#S_Preoperative_Diagnosis_Section_V3) (required) |

The Operative Note is a frequently used type of procedure note with specific requirements set forth by regulatory agencies.  
The Operative Note is created immediately following a surgical or other high-risk procedure. It records the pre- and post-surgical diagnosis, pertinent events of the procedure, as well as the condition of the patient following the procedure. The report should be sufficiently detailed to support the diagnoses, justify the treatment, document the course of the procedure, and provide continuity of care.

Table 43: Operative Note (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| ClinicalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.7:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-8483](#C_1198-8483) |  |
| @root | 1..1 | SHALL |  | [1198-10048](#C_1198-10048) | 2.16.840.1.113883.10.20.22.1.7 |
| @extension | 1..1 | SHALL |  | [1198-32519](#C_1198-32519) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-17187](#C_1198-17187) |  |
| @code | 1..1 | SHALL |  | [1198-17188](#C_1198-17188) | urn:oid:2.16.840.1.113883.11.20.1.1 (SurgicalOperationNoteDocumentTypeCode) |
| documentationOf | 1..\* | SHALL |  | [1198-8486](#C_1198-8486) |  |
| serviceEvent | 1..1 | SHALL |  | [1198-8493](#C_1198-8493) |  |
| code | 0..1 | MAY |  | [1198-32982](#C_1198-32982) |  |
| effectiveTime | 1..1 | SHALL |  | [1198-8494](#C_1198-8494) | [US Realm Date and Time (DT.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3](#U_US_Realm_Date_and_Time_DTUSFIELDED) |
| performer | 1..1 | SHALL |  | [1198-8489](#C_1198-8489) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8495](#C_1198-8495) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = PPRF |
| functionCode | 0..1 | MAY |  | [1198-32963](#C_1198-32963) | urn:oid:2.16.840.1.113762.1.4.1099.30 (Care Team Member Function) |
| assignedEntity | 1..1 | SHALL |  | [1198-10917](#C_1198-10917) |  |
| code | 0..1 | SHOULD |  | [1198-8490](#C_1198-8490) | urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy) |
| performer | 0..\* | MAY |  | [1198-32736](#C_1198-32736) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32738](#C_1198-32738) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = SPRF |
| functionCode | 0..1 | MAY |  | [1198-32964](#C_1198-32964) | urn:oid:2.16.840.1.113762.1.4.1099.30 (Care Team Member Function) |
| assignedEntity | 1..1 | SHALL |  | [1198-32737](#C_1198-32737) |  |
| code | 0..1 | SHOULD |  | [1198-32739](#C_1198-32739) | urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy) |
| authorization | 0..1 | MAY |  | [1198-32404](#C_1198-32404) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32408](#C_1198-32408) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = AUTH |
| consent | 1..1 | SHALL |  | [1198-32405](#C_1198-32405) |  |
| @classCode | 1..1 | SHALL |  | [1198-32409](#C_1198-32409) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = CONS |
| @moodCode | 1..1 | SHALL |  | [1198-32410](#C_1198-32410) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| statusCode | 1..1 | SHALL |  | [1198-32411](#C_1198-32411) |  |
| component | 1..1 | SHALL |  | [1198-9585](#C_1198-9585) |  |
| structuredBody | 1..1 | SHALL |  | [1198-30485](#C_1198-30485) |  |
| component | 1..1 | SHALL |  | [1198-30486](#C_1198-30486) |  |
| section | 1..1 | SHALL |  | [1198-30487](#C_1198-30487) | [Anesthesia Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.25:2014-06-09](#S_Anesthesia_Section_V2) |
| component | 1..1 | SHALL |  | [1198-30488](#C_1198-30488) |  |
| section | 1..1 | SHALL |  | [1198-30489](#C_1198-30489) | [Complications Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.37:2015-08-01](#S_Complications_Section_V3) |
| component | 1..1 | SHALL |  | [1198-30490](#C_1198-30490) |  |
| section | 1..1 | SHALL |  | [1198-30491](#C_1198-30491) | [Preoperative Diagnosis Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.34:2015-08-01](#S_Preoperative_Diagnosis_Section_V3) |
| component | 1..1 | SHALL |  | [1198-30492](#C_1198-30492) |  |
| section | 1..1 | SHALL |  | [1198-30493](#C_1198-30493) | [Procedure Estimated Blood Loss Section (identifier: urn:oid:2.16.840.1.113883.10.20.18.2.9](#S_Procedure_Estimated_Blood_Loss_Section) |
| component | 1..1 | SHALL |  | [1198-30494](#C_1198-30494) |  |
| section | 1..1 | SHALL |  | [1198-30495](#C_1198-30495) | [Procedure Findings Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.28:2015-08-01](#S_Procedure_Findings_Section_V3) |
| component | 1..1 | SHALL |  | [1198-30496](#C_1198-30496) |  |
| section | 1..1 | SHALL |  | [1198-30497](#C_1198-30497) | [Procedure Specimens Taken Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.31](#S_Procedure_Specimens_Taken_Section) |
| component | 1..1 | SHALL |  | [1198-30498](#C_1198-30498) |  |
| section | 1..1 | SHALL |  | [1198-30499](#C_1198-30499) | [Procedure Description Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.27](#S_Procedure_Description_Section) |
| component | 1..1 | SHALL |  | [1198-30500](#C_1198-30500) |  |
| section | 1..1 | SHALL |  | [1198-30501](#C_1198-30501) | [Postoperative Diagnosis Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.35](#S_Postoperative_Diagnosis_Section) |
| component | 0..1 | MAY |  | [1198-30502](#C_1198-30502) |  |
| section | 1..1 | SHALL |  | [1198-30503](#C_1198-30503) | [Procedure Implants Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.40](#S_Procedure_Implants_Section) |
| component | 0..1 | MAY |  | [1198-30504](#C_1198-30504) |  |
| section | 1..1 | SHALL |  | [1198-30505](#C_1198-30505) | [Operative Note Fluids Section (identifier: urn:oid:2.16.840.1.113883.10.20.7.12](#S_Operative_Note_Fluids_Section) |
| component | 0..1 | MAY |  | [1198-30506](#C_1198-30506) |  |
| section | 1..1 | SHALL |  | [1198-30507](#C_1198-30507) | [Operative Note Surgical Procedure Section (identifier: urn:oid:2.16.840.1.113883.10.20.7.14](#S_Operative_Note_Surgical_Procedure_Sect) |
| component | 0..1 | MAY |  | [1198-30508](#C_1198-30508) |  |
| section | 1..1 | SHALL |  | [1198-30509](#C_1198-30509) | [Plan of Treatment Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09](#S_Plan_of_Treatment_Section_V2) |
| component | 0..1 | MAY |  | [1198-30510](#C_1198-30510) |  |
| section | 1..1 | SHALL |  | [1198-30511](#C_1198-30511) | [Planned Procedure Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.30:2014-06-09](#Planned_Procedure_Section_V2) |
| component | 0..1 | MAY |  | [1198-30512](#C_1198-30512) |  |
| section | 1..1 | SHALL |  | [1198-30513](#C_1198-30513) | [Procedure Disposition Section (identifier: urn:oid:2.16.840.1.113883.10.20.18.2.12](#S_Procedure_Disposition_Section) |
| component | 0..1 | MAY |  | [1198-30514](#C_1198-30514) |  |
| section | 1..1 | SHALL |  | [1198-30515](#C_1198-30515) | [Procedure Indications Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.29:2014-06-09](#Procedure_Indications_Section_V2) |
| component | 0..1 | MAY |  | [1198-30516](#C_1198-30516) |  |
| section | 1..1 | SHALL |  | [1198-30517](#C_1198-30517) | [Surgical Drains Section (identifier: urn:oid:2.16.840.1.113883.10.20.7.13](#S_Surgical_Drains_Section) |

Properties

1. Conforms to [US Realm Header (V3)](#D_US_Realm_Header_V3) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2015-08-01).
2. SHALL contain exactly one [1..1] templateId (CONF:1198-8483) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.1.7" (CONF:1198-10048).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32519).
   3. When asserting this templateId, all C-CDA 2.1 section and entry templates that had a previous version in C-CDA R1.1 SHALL include both the C-CDA 2.1 templateId and the C-CDA R1.1 templateId root without an extension. See C-CDA R2.1 Volume 1 - Design Considerations for additional detail (CONF:1198-32940).

The Operative Note recommends use of a single document type code, 11504-8 "Provider-unspecified Operation Note", with further specification provided by author or performer, setting, or specialty data in the CDA header. Some of the LOINC codes in the Surgical Operation Note Document Type Code table are pre-coordinated with the practice setting or the training or professional level of the author. Use of pre-coordinated codes is not recommended because of potential conflict with other information in the header. When these codes are used, any coded values describing the author or performer of the service act or the practice setting must be consistent with the LOINC document type.

1. SHALL contain exactly one [1..1] code (CONF:1198-17187).
   1. This code SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [SurgicalOperationNoteDocumentTypeCode](#SurgicalOperationNoteDocumentTypeCode) urn:oid:2.16.840.1.113883.11.20.1.1 DYNAMIC (CONF:1198-17188).

documentationOf

A serviceEvent represents the main act, such as a colonoscopy or an appendectomy, being documented. A serviceEvent can further specialize the act inherent in the ClinicalDocument/code, such as where the ClinicalDocument/code is simply "Surgical Operation Note" and the procedure is "Appendectomy." serviceEvent is required in the Operative Note and it must be equivalent to or further specialize the value inherent in the ClinicalDocument/code; it shall not conflict with the value inherent in the ClinicalDocument/code, as such a conflict would create ambiguity. serviceEvent/effectiveTime can be used to indicate the time the actual event (as opposed to the encounter surrounding the event) took place. If the date and the duration of the procedure is known, serviceEvent/effectiveTime/low is used with a width element that describes the duration; no high element is used. However, if only the date is known, the date is placed in both the low and high elements.

1. SHALL contain at least one [1..\*] documentationOf (CONF:1198-8486).
   1. Such documentationOfs SHALL contain exactly one [1..1] serviceEvent (CONF:1198-8493).
      1. This serviceEvent MAY contain zero or one [0..1] code (CONF:1198-32982).
         1. This code, if present, SHALL be selected from ICD-9-CM Procedures (codeSystem 2.16.840.1.113883.6.104), ICD-10-PCS (codeSystem 2.16.840.1.113883.6.4), CPT (codeSystem 2.16.840.1.113883.6.12), or values descending from 71388002 (Procedure) from the SNOMED CT (codeSystem 2.16.840.1.113883.6.96) ValueSet 2.16.840.1.113883.3.88.12.80.28 Procedure *DYNAMIC* (CONF:1198-8487).
      2. This serviceEvent SHALL contain exactly one [1..1] [US Realm Date and Time (DT.US.FIELDED)](#U_US_Realm_Date_and_Time_DTUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3) (CONF:1198-8494).
         1. The serviceEvent/effectiveTime SHALL be present with effectiveTime/low (CONF:1198-8488).
         2. If a width is not present, the serviceEvent/effectiveTime SHALL include effectiveTime/high (CONF:1198-10058).
         3. When only the date and the length of the procedure are known a width element SHALL be present and the serviceEvent/effectiveTime/high SHALL NOT be present (CONF:1198-10060).

performer

This performer represents a clinicians who actually and principally carry out the serviceEvent. Typically, these are clinicians who have surgical privileges in their institutions such as Surgeons, Obstetrician/Gynecologists, and Family Practice Physicians. The performer may also be non-physician providers (NPPs) who have surgical privileges. There may be more than one primary performer in the case of complicated surgeries. There are occasionally co-surgeons. Usually they will be billing separately and will each dictate their own notes. An example may be spinal surgery , where a general surgeon and an orthopedic surgeon both are present and billing off the same Current Procedural Terminology (CPT) codes. Typically two Operative Notes are generated; however, each will list the other as a co-surgeon. Any assistants are identified as a secondary performer (SPRF) in a second performer participant.

* + 1. This serviceEvent SHALL contain exactly one [1..1] performer (CONF:1198-8489) such that it
       1. SHALL contain exactly one [1..1] @typeCode="PPRF" Primary performer (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 STATIC) (CONF:1198-8495).
       2. MAY contain zero or one [0..1] functionCode, which SHOULD be selected from ValueSet [Care Team Member Function](#Care_Team_Member_Function) urn:oid:2.16.840.1.113762.1.4.1099.30 DYNAMIC (CONF:1198-32963).
       3. SHALL contain exactly one [1..1] assignedEntity (CONF:1198-10917).
          1. This assignedEntity SHOULD contain zero or one [0..1] code, which SHALL be selected from ValueSet [Healthcare Provider Taxonomy](#Healthcare_Provider_Taxonomy) urn:oid:2.16.840.1.114222.4.11.1066 DYNAMIC (CONF:1198-8490).

performer

This performer represents any assistants.

* + 1. This serviceEvent MAY contain zero or more [0..\*] performer (CONF:1198-32736) such that it
       1. SHALL contain exactly one [1..1] @typeCode="SPRF" Secondary performer (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90) (CONF:1198-32738).
       2. MAY contain zero or one [0..1] functionCode, which SHOULD be selected from ValueSet [Care Team Member Function](#Care_Team_Member_Function) urn:oid:2.16.840.1.113762.1.4.1099.30 DYNAMIC (CONF:1198-32964).
       3. SHALL contain exactly one [1..1] assignedEntity (CONF:1198-32737).
          1. This assignedEntity SHOULD contain zero or one [0..1] code, which SHALL be selected from ValueSet [Healthcare Provider Taxonomy](#Healthcare_Provider_Taxonomy) urn:oid:2.16.840.1.114222.4.11.1066 DYNAMIC (CONF:1198-32739).

Authorization represents consent. Consent, if present, shall be represented by authorization/consent.

1. MAY contain zero or one [0..1] authorization (CONF:1198-32404).
   1. The authorization, if present, SHALL contain exactly one [1..1] @typeCode="AUTH" authorized by (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32408).
   2. The authorization, if present, SHALL contain exactly one [1..1] consent (CONF:1198-32405).
      1. This consent SHALL contain exactly one [1..1] @classCode="CONS" consent (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1198-32409).
      2. This consent SHALL contain exactly one [1..1] @moodCode="EVN" event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1198-32410).
      3. This consent SHALL contain exactly one [1..1] statusCode (CONF:1198-32411).

component

1. SHALL contain exactly one [1..1] component (CONF:1198-9585).
   1. This component SHALL contain exactly one [1..1] structuredBody (CONF:1198-30485).
      1. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30486) such that it
         1. SHALL contain exactly one [1..1] [Anesthesia Section (V2)](#S_Anesthesia_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.25:2014-06-09) (CONF:1198-30487).
      2. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30488) such that it
         1. SHALL contain exactly one [1..1] [Complications Section (V3)](#S_Complications_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.37:2015-08-01) (CONF:1198-30489).
      3. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30490) such that it
         1. SHALL contain exactly one [1..1] [Preoperative Diagnosis Section (V3)](#S_Preoperative_Diagnosis_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.34:2015-08-01) (CONF:1198-30491).
      4. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30492) such that it
         1. SHALL contain exactly one [1..1] [Procedure Estimated Blood Loss Section](#S_Procedure_Estimated_Blood_Loss_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.18.2.9) (CONF:1198-30493).
      5. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30494) such that it
         1. SHALL contain exactly one [1..1] [Procedure Findings Section (V3)](#S_Procedure_Findings_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.28:2015-08-01) (CONF:1198-30495).
      6. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30496) such that it
         1. SHALL contain exactly one [1..1] [Procedure Specimens Taken Section](#S_Procedure_Specimens_Taken_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.31) (CONF:1198-30497).
      7. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30498) such that it
         1. SHALL contain exactly one [1..1] [Procedure Description Section](#S_Procedure_Description_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.27) (CONF:1198-30499).
      8. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30500) such that it
         1. SHALL contain exactly one [1..1] [Postoperative Diagnosis Section](#S_Postoperative_Diagnosis_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.35) (CONF:1198-30501).
      9. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30502) such that it
         1. SHALL contain exactly one [1..1] [Procedure Implants Section](#S_Procedure_Implants_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.40) (CONF:1198-30503).
      10. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30504) such that it
          1. SHALL contain exactly one [1..1] [Operative Note Fluids Section](#S_Operative_Note_Fluids_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.7.12) (CONF:1198-30505).
      11. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30506) such that it
          1. SHALL contain exactly one [1..1] [Operative Note Surgical Procedure Section](#S_Operative_Note_Surgical_Procedure_Sect) (identifier: urn:oid:2.16.840.1.113883.10.20.7.14) (CONF:1198-30507).
      12. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30508) such that it
          1. SHALL contain exactly one [1..1] [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09) (CONF:1198-30509).
      13. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30510) such that it
          1. SHALL contain exactly one [1..1] [Planned Procedure Section (V2)](#Planned_Procedure_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.30:2014-06-09) (CONF:1198-30511).
      14. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30512) such that it
          1. SHALL contain exactly one [1..1] [Procedure Disposition Section](#S_Procedure_Disposition_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.18.2.12) (CONF:1198-30513).
      15. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30514) such that it
          1. SHALL contain exactly one [1..1] [Procedure Indications Section (V2)](#Procedure_Indications_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.29:2014-06-09) (CONF:1198-30515).
      16. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30516) such that it
          1. SHALL contain exactly one [1..1] [Surgical Drains Section](#S_Surgical_Drains_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.7.13) (CONF:1198-30517).

Table 44: SurgicalOperationNoteDocumentTypeCode

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: SurgicalOperationNoteDocumentTypeCode urn:oid:2.16.840.1.113883.11.20.1.1  (Clinical Focus: Surgical operation note kind classified by author specialization),(Data Element Scope: ),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 6/29/2019 with a version of 20190516.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.1.1/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 11504-8 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Surgical operation note |
| 28573-4 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Physician, Operation note |
| 28583-3 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Dentist Operation note |
| 28624-5 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Podiatry Operation note |
| 34137-0 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Outpatient Surgical operation note |
| 34818-5 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Otolaryngology Surgical operation note |
| 34868-0 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Orthopaedic surgery Surgical operation note |
| 34870-6 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Plastic surgery Surgical operation note |
| 34874-8 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Surgery Surgical operation note |
| 34877-1 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Urology Surgical operation note |
| ... | | | |

Figure 31: Operative Note performer Example

<performer typeCode="PPRF">

<assignedEntity>

<id extension="1" root="2.16.840.1.113883.19" />

<code code="2086S0120X" codeSystem="2.16.840.1.113883.6.101" codeSystemName="NUCC" displayName="Pediatric Surgeon" />

<addr>

<streetAddressLine>1013 Healthcare Drive</streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>99999</postalCode>

<country>US</country>

</addr>

<telecom value="tel:(555)555-1013" />

<assignedPerson>

<name>

<prefix>Dr.</prefix>

<given>Carl</given>

<family>Cutter</family>

</name>

</assignedPerson>

</assignedEntity>

</performer>

Figure 32: Operative Note serviceEvent Example

<serviceEvent classCode="PROC">

<code code="801460020" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Laparoscopic Appendectomy" />

<effectiveTime>

<low value="201003292240" />

<width value="15" unit="m" />

</effectiveTime>

...

</serviceEvent>

Procedure Note (V3)

[ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.1.6:2015-08-01 (open)]

Table 45: Procedure Note (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
|  | [Assessment Section](#S_Assessment_Section) (optional)  [Review of Systems Section](#S_Review_of_Systems_Section) (optional)  [Chief Complaint Section](#S_Chief_Complaint_Section) (optional)  [Reason for Visit Section](#S_Reason_for_Visit_Section) (optional)  [Chief Complaint and Reason for Visit Section](#S_Chief_Complaint_and_Reason_for_Visit_S) (optional)  [History of Present Illness Section](#S_History_of_Present_Illness_Section) (optional)  [Procedure Description Section](#S_Procedure_Description_Section) (required)  [Procedure Disposition Section](#S_Procedure_Disposition_Section) (optional)  [Procedure Estimated Blood Loss Section](#S_Procedure_Estimated_Blood_Loss_Section) (optional)  [Procedure Specimens Taken Section](#S_Procedure_Specimens_Taken_Section) (optional)  [Medical (General) History Section](#S_Medical_General_History_Section) (optional)  [Procedure Implants Section](#S_Procedure_Implants_Section) (optional)  [Medications Section (entries optional) (V2)](#S_Medications_Section_entries_optional_) (optional)  [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (optional)  [Medications Administered Section (V2)](#S_Medications_Administered_Section_V2) (optional)  [Anesthesia Section (V2)](#S_Anesthesia_Section_V2) (optional)  [Procedures Section (entries optional) (V2)](#Procedures_Section_entries_optional_V2) (optional)  [Procedure Indications Section (V2)](#Procedure_Indications_Section_V2) (required)  [Assessment and Plan Section (V2)](#S_Assessment_and_Plan_Section_V2) (optional)  [Planned Procedure Section (V2)](#Planned_Procedure_Section_V2) (optional)  [US Realm Date and Time (DT.US.FIELDED)](#U_US_Realm_Date_and_Time_DTUSFIELDED) (required)  [Complications Section (V3)](#S_Complications_Section_V3) (required)  [Past Medical History (V3)](#S_Past_Medical_History_V3) (optional)  [Procedure Findings Section (V3)](#S_Procedure_Findings_Section_V3) (optional)  [Postprocedure Diagnosis Section (V3)](#S_Postprocedure_Diagnosis_Section_V3) (required)  [Physical Exam Section (V3)](#S_Physical_Exam_Section_V3) (optional)  [Social History Section (V3)](#S_Social_History_Section_V3) (optional)  [Family History Section (V3)](#S_Family_History_Section_V3) (optional)  [Allergies and Intolerances Section (entries optional) (V3)](#S_Allergies_and_Intolerances_Section_eo) (optional) |

A Procedure Note encompasses many types of non-operative procedures including interventional cardiology, gastrointestinal endoscopy, osteopathic manipulation, and many other specialty fields. Procedure Notes are differentiated from Operative Notes because they do not involve incision or excision as the primary act.  
The Procedure Note is created immediately following a non-operative procedure. It records the indications for the procedure and, when applicable, postprocedure diagnosis, pertinent events of the procedure, and the patient’s tolerance for the procedure. It should be detailed enough to justify the procedure, describe the course of the procedure, and provide continuity of care.

Table 46: Procedure Note (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| ClinicalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.6:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-8496](#C_1198-8496) |  |
| @root | 1..1 | SHALL |  | [1198-10050](#C_1198-10050) | 2.16.840.1.113883.10.20.22.1.6 |
| @extension | 1..1 | SHALL |  | [1198-32520](#C_1198-32520) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-17182](#C_1198-17182) |  |
| @code | 1..1 | SHALL |  | [1198-17183](#C_1198-17183) | urn:oid:2.16.840.1.113883.11.20.6.1 (ProcedureNoteDocumentTypeCodes) |
| participant | 0..\* | MAY |  | [1198-8504](#C_1198-8504) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8505](#C_1198-8505) | urn:oid:2.16.840.1.113883.5.88 (HL7ParticipationFunction) = IND |
| functionCode | 1..1 | SHALL |  | [1198-8506](#C_1198-8506) | urn:oid:2.16.840.1.113883.5.88 (HL7ParticipationFunction) = PCP |
| associatedEntity | 1..1 | SHALL |  | [1198-32973](#C_1198-32973) |  |
| @classCode | 1..1 | SHALL |  | [1198-32974](#C_1198-32974) | PROV |
| associatedPerson | 1..1 | SHALL |  | [1198-32975](#C_1198-32975) |  |
| documentationOf | 1..\* | SHALL |  | [1198-8510](#C_1198-8510) |  |
| serviceEvent | 1..1 | SHALL |  | [1198-10061](#C_1198-10061) |  |
| code | 1..1 | MAY |  | [1198-32977](#C_1198-32977) |  |
| effectiveTime | 1..1 | SHALL |  | [1198-10062](#C_1198-10062) | [US Realm Date and Time (DT.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3](#U_US_Realm_Date_and_Time_DTUSFIELDED) |
| low | 1..1 | SHALL |  | [1198-26449](#C_1198-26449) |  |
| performer | 1..1 | SHALL |  | [1198-8520](#C_1198-8520) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8521](#C_1198-8521) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = PPRF |
| assignedEntity | 1..1 | SHALL |  | [1198-14911](#C_1198-14911) |  |
| code | 0..1 | SHOULD |  | [1198-14912](#C_1198-14912) | urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy) |
| performer | 0..\* | MAY |  | [1198-32732](#C_1198-32732) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32734](#C_1198-32734) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = SPRF |
| assignedEntity | 1..1 | SHALL |  | [1198-32733](#C_1198-32733) |  |
| code | 0..1 | SHOULD |  | [1198-32735](#C_1198-32735) | urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy) |
| authorization | 0..1 | MAY |  | [1198-32412](#C_1198-32412) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32413](#C_1198-32413) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = AUTH |
| consent | 1..1 | SHALL |  | [1198-32414](#C_1198-32414) |  |
| @classCode | 1..1 | SHALL |  | [1198-32415](#C_1198-32415) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = CONS |
| @moodCode | 1..1 | SHALL |  | [1198-32416](#C_1198-32416) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| statusCode | 1..1 | SHALL |  | [1198-32417](#C_1198-32417) |  |
| componentOf | 0..1 | SHOULD |  | [1198-30871](#C_1198-30871) |  |
| encompassingEncounter | 1..1 | SHALL |  | [1198-30872](#C_1198-30872) |  |
| id | 0..\* | SHOULD |  | [1198-32395](#C_1198-32395) |  |
| code | 1..1 | SHALL |  | [1198-30873](#C_1198-30873) |  |
| encounterParticipant | 0..1 | MAY |  | [1198-30874](#C_1198-30874) |  |
| @typeCode | 1..1 | SHALL |  | [1198-30875](#C_1198-30875) | REF |
| location | 1..1 | SHALL |  | [1198-30876](#C_1198-30876) |  |
| healthCareFacility | 1..1 | SHALL |  | [1198-30877](#C_1198-30877) |  |
| id | 1..\* | SHALL |  | [1198-30878](#C_1198-30878) |  |
| component | 1..1 | SHALL |  | [1198-9588](#C_1198-9588) |  |
| structuredBody | 1..1 | SHALL |  | [1198-30352](#C_1198-30352) |  |
| component | 1..1 | SHALL |  | [1198-30353](#C_1198-30353) |  |
| section | 1..1 | SHALL |  | [1198-30387](#C_1198-30387) | [Complications Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.37:2015-08-01](#S_Complications_Section_V3) |
| component | 1..1 | SHALL |  | [1198-30355](#C_1198-30355) |  |
| section | 1..1 | SHALL |  | [1198-30356](#C_1198-30356) | [Procedure Description Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.27](#S_Procedure_Description_Section) |
| component | 1..1 | SHALL |  | [1198-30357](#C_1198-30357) |  |
| section | 1..1 | SHALL |  | [1198-30358](#C_1198-30358) | [Procedure Indications Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.29:2014-06-09](#Procedure_Indications_Section_V2) |
| component | 1..1 | SHALL |  | [1198-30359](#C_1198-30359) |  |
| section | 1..1 | SHALL |  | [1198-30360](#C_1198-30360) | [Postprocedure Diagnosis Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.36:2015-08-01](#S_Postprocedure_Diagnosis_Section_V3) |
| component | 0..1 | MAY |  | [1198-30361](#C_1198-30361) |  |
| section | 1..1 | SHALL |  | [1198-30362](#C_1198-30362) | [Assessment Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.8](#S_Assessment_Section) |
| component | 0..1 | MAY |  | [1198-30363](#C_1198-30363) |  |
| section | 1..1 | SHALL |  | [1198-30364](#C_1198-30364) | [Assessment and Plan Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09](#S_Assessment_and_Plan_Section_V2) |
| component | 0..1 | MAY |  | [1198-30365](#C_1198-30365) |  |
| section | 1..1 | SHALL |  | [1198-30366](#C_1198-30366) | [Plan of Treatment Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09](#S_Plan_of_Treatment_Section_V2) |
| component | 0..1 | MAY |  | [1198-30367](#C_1198-30367) |  |
| section | 1..1 | SHALL |  | [1198-30368](#C_1198-30368) | [Allergies and Intolerances Section (entries optional) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6:2015-08-01](#S_Allergies_and_Intolerances_Section_eo) |
| component | 0..1 | MAY |  | [1198-30369](#C_1198-30369) |  |
| section | 1..1 | SHALL |  | [1198-30370](#C_1198-30370) | [Anesthesia Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.25:2014-06-09](#S_Anesthesia_Section_V2) |
| component | 0..1 | MAY |  | [1198-30371](#C_1198-30371) |  |
| section | 1..1 | SHALL |  | [1198-30372](#C_1198-30372) | [Chief Complaint Section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1](#S_Chief_Complaint_Section) |
| component | 0..1 | MAY |  | [1198-30373](#C_1198-30373) |  |
| section | 1..1 | SHALL |  | [1198-30374](#C_1198-30374) | [Chief Complaint and Reason for Visit Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.13](#S_Chief_Complaint_and_Reason_for_Visit_S) |
| component | 0..1 | MAY |  | [1198-30375](#C_1198-30375) |  |
| section | 1..1 | SHALL |  | [1198-30376](#C_1198-30376) | [Family History Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2015-08-01](#S_Family_History_Section_V3) |
| component | 0..1 | MAY |  | [1198-30377](#C_1198-30377) |  |
| section | 1..1 | SHALL |  | [1198-30378](#C_1198-30378) | [Past Medical History (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.20:2015-08-01](#S_Past_Medical_History_V3) |
| component | 0..1 | MAY |  | [1198-30379](#C_1198-30379) |  |
| section | 1..1 | SHALL |  | [1198-30380](#C_1198-30380) | [History of Present Illness Section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.4](#S_History_of_Present_Illness_Section) |
| component | 0..1 | MAY |  | [1198-30381](#C_1198-30381) |  |
| section | 1..1 | SHALL |  | [1198-30382](#C_1198-30382) | [Medical (General) History Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.39](#S_Medical_General_History_Section) |
| component | 0..1 | MAY |  | [1198-30383](#C_1198-30383) |  |
| section | 1..1 | SHALL |  | [1198-30384](#C_1198-30384) | [Medications Section (entries optional) (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1:2014-06-09](#S_Medications_Section_entries_optional_) |
| component | 0..1 | MAY |  | [1198-30388](#C_1198-30388) |  |
| section | 1..1 | SHALL |  | [1198-30389](#C_1198-30389) | [Medications Administered Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.38:2014-06-09](#S_Medications_Administered_Section_V2) |
| component | 0..1 | MAY |  | [1198-30390](#C_1198-30390) |  |
| section | 1..1 | SHALL |  | [1198-30391](#C_1198-30391) | [Physical Exam Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.2.10:2015-08-01](#S_Physical_Exam_Section_V3) |
| component | 0..1 | MAY |  | [1198-30392](#C_1198-30392) |  |
| section | 1..1 | SHALL |  | [1198-30393](#C_1198-30393) | [Planned Procedure Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.30:2014-06-09](#Planned_Procedure_Section_V2) |
| component | 0..1 | MAY |  | [1198-30394](#C_1198-30394) |  |
| section | 1..1 | SHALL |  | [1198-30395](#C_1198-30395) | [Procedure Disposition Section (identifier: urn:oid:2.16.840.1.113883.10.20.18.2.12](#S_Procedure_Disposition_Section) |
| component | 0..1 | MAY |  | [1198-30396](#C_1198-30396) |  |
| section | 1..1 | SHALL |  | [1198-30397](#C_1198-30397) | [Procedure Estimated Blood Loss Section (identifier: urn:oid:2.16.840.1.113883.10.20.18.2.9](#S_Procedure_Estimated_Blood_Loss_Section) |
| component | 0..1 | MAY |  | [1198-30398](#C_1198-30398) |  |
| section | 1..1 | SHALL |  | [1198-30399](#C_1198-30399) | [Procedure Findings Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.28:2015-08-01](#S_Procedure_Findings_Section_V3) |
| component | 0..1 | MAY |  | [1198-30400](#C_1198-30400) |  |
| section | 1..1 | SHALL |  | [1198-30401](#C_1198-30401) | [Procedure Implants Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.40](#S_Procedure_Implants_Section) |
| component | 0..1 | MAY |  | [1198-30402](#C_1198-30402) |  |
| section | 1..1 | SHALL |  | [1198-30403](#C_1198-30403) | [Procedure Specimens Taken Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.31](#S_Procedure_Specimens_Taken_Section) |
| component | 0..1 | MAY |  | [1198-30404](#C_1198-30404) |  |
| section | 1..1 | SHALL |  | [1198-30405](#C_1198-30405) | [Procedures Section (entries optional) (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.7:2014-06-09](#Procedures_Section_entries_optional_V2) |
| component | 0..1 | MAY |  | [1198-30406](#C_1198-30406) |  |
| section | 1..1 | SHALL |  | [1198-30407](#C_1198-30407) | [Reason for Visit Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.12](#S_Reason_for_Visit_Section) |
| component | 0..1 | MAY |  | [1198-30408](#C_1198-30408) |  |
| section | 1..1 | SHALL |  | [1198-30409](#C_1198-30409) | [Review of Systems Section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.18](#S_Review_of_Systems_Section) |
| component | 0..1 | MAY |  | [1198-30410](#C_1198-30410) |  |
| section | 1..1 | SHALL |  | [1198-30411](#C_1198-30411) | [Social History Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2015-08-01](#S_Social_History_Section_V3) |

Properties

1. Conforms to [US Realm Header (V3)](#D_US_Realm_Header_V3) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2015-08-01).
2. SHALL contain exactly one [1..1] templateId (CONF:1198-8496) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.1.6" (CONF:1198-10050).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32520).
   3. When asserting this templateId, all C-CDA 2.1 section and entry templates that had a previous version in C-CDA R1.1 SHALL include both the C-CDA 2.1 templateId and the C-CDA R1.1 templateId root without an extension. See C-CDA R2.1 Volume 1 - Design Considerations for additional detail (CONF:1198-32941).

The Procedure Note recommends use of a single document type code, 28570-0 "Procedure Note", with further specification provided by author or performer, setting, or specialty. When pre-coordinated codes are used, any coded values describing the author or performer of the service act or the practice setting must be consistent with the LOINC document type.

1. SHALL contain exactly one [1..1] code (CONF:1198-17182).
   1. This code SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [ProcedureNoteDocumentTypeCodes](#ProcedureNoteDocumentTypeCodes) urn:oid:2.16.840.1.113883.11.20.6.1 DYNAMIC (CONF:1198-17183).

participant

The participant element in the Procedure Note header follows the General Header Constraints for participants.

1. MAY contain zero or more [0..\*] participant (CONF:1198-8504) such that it
   1. SHALL contain exactly one [1..1] @typeCode="IND" Individual (CodeSystem: HL7ParticipationFunction urn:oid:2.16.840.1.113883.5.88 STATIC) (CONF:1198-8505).
   2. SHALL contain exactly one [1..1] functionCode="PCP" Primary Care Physician (CodeSystem: HL7ParticipationFunction urn:oid:2.16.840.1.113883.5.88 STATIC) (CONF:1198-8506).
   3. SHALL contain exactly one [1..1] associatedEntity (CONF:1198-32973).
      1. This associatedEntity SHALL contain exactly one [1..1] @classCode="PROV" Provider (CONF:1198-32974).
      2. This associatedEntity SHALL contain exactly one [1..1] associatedPerson (CONF:1198-32975).

documentationOf

A serviceEvent is required in the Procedure Note to represent the main act, such as a colonoscopy or a cardiac stress study, being documented. It must be equivalent to or further specialize the value inherent in the ClinicalDocument/@code (such as where the ClinicalDocument/@code is simply "Procedure Note" and the procedure is "colonoscopy"), and it shall not conflict with the value inherent in the ClinicalDocument/@code, as such a conflict would create ambiguity. A serviceEvent/effectiveTime element indicates the time the actual event (as opposed to the encounter surrounding the event) took place. serviceEvent/effectiveTime may be represented two different ways in the Procedure Note. For accuracy to the second, the best method is effectiveTime/low together with effectiveTime/high. If a more general time, such as minutes or hours, is acceptable OR if the duration is unknown, an effectiveTime/low with a width element may be used. If the duration is unknown, the appropriate HL7 null value such as "NI" or "NA" must be used for the width element.

1. SHALL contain at least one [1..\*] documentationOf (CONF:1198-8510) such that it
   1. SHALL contain exactly one [1..1] serviceEvent (CONF:1198-10061).
      1. This serviceEvent MAY contain exactly one [1..1] code (CONF:1198-32977).
         1. This code, if present, SHALL be selected from ICD-9-CM Procedures (codeSystem 2.16.840.1.113883.6.104), ICD-10-PCS (codeSystem 2.16.840.1.113883.6.4), CPT (codeSystem 2.16.840.1.113883.6.12), or values descending from 71388002 (Procedure) from the SNOMED CT (codeSystem 2.16.840.1.113883.6.96) ValueSet 2.16.840.1.113883.3.88.12.80.28 Procedure DYNAMIC (CONF:1198-8511).
      2. This serviceEvent SHALL contain exactly one [1..1] [US Realm Date and Time (DT.US.FIELDED)](#U_US_Realm_Date_and_Time_DTUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3) (CONF:1198-10062).
         1. This effectiveTime SHALL contain exactly one [1..1] low (CONF:1198-26449).
         2. The serviceEvent/effectiveTime SHALL be present with effectiveTime/low (CONF:1198-8513).
         3. If a width is not present, the serviceEvent/effectiveTime SHALL include effectiveTime/high (CONF:1198-8514).
         4. When only the date and the length of the procedure are known a width element SHALL be present and the serviceEvent/effectiveTime/high SHALL NOT be present (CONF:1198-8515).

performer

This performer participant represents clinicians who actually and principally carry out the serviceEvent. Typically, these are clinicians who have the appropriate privileges in their institutions such as gastroenterologists, interventional radiologists, and family practice physicians. Performers may also be non-physician providers (NPPs) who have other significant roles in the procedure such as a radiology technician, dental assistant, or nurse. Any assistants are identified as a secondary performer (SPRF) in a second performer participant.

* + 1. This serviceEvent SHALL contain exactly one [1..1] performer (CONF:1198-8520) such that it
       1. SHALL contain exactly one [1..1] @typeCode="PPRF" Primary Performer (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 STATIC) (CONF:1198-8521).
       2. SHALL contain exactly one [1..1] assignedEntity (CONF:1198-14911).
          1. This assignedEntity SHOULD contain zero or one [0..1] code, which SHALL be selected from ValueSet [Healthcare Provider Taxonomy](#Healthcare_Provider_Taxonomy) urn:oid:2.16.840.1.114222.4.11.1066 DYNAMIC (CONF:1198-14912).

performer

This performer identifies any assistants.

* + 1. This serviceEvent MAY contain zero or more [0..\*] performer (CONF:1198-32732) such that it
       1. SHALL contain exactly one [1..1] @typeCode="SPRF" Secondary Performer (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90) (CONF:1198-32734).
       2. SHALL contain exactly one [1..1] assignedEntity (CONF:1198-32733).
          1. This assignedEntity SHOULD contain zero or one [0..1] code, which SHALL be selected from ValueSet [Healthcare Provider Taxonomy](#Healthcare_Provider_Taxonomy) urn:oid:2.16.840.1.114222.4.11.1066 DYNAMIC (CONF:1198-32735).

Authorization represents consent. Consent, if present, shall be represented by authorization/consent.

1. MAY contain zero or one [0..1] authorization (CONF:1198-32412).
   1. The authorization, if present, SHALL contain exactly one [1..1] @typeCode="AUTH" authorized by (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32413).
   2. The authorization, if present, SHALL contain exactly one [1..1] consent (CONF:1198-32414).
      1. This consent SHALL contain exactly one [1..1] @classCode="CONS" consent (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1198-32415).
      2. This consent SHALL contain exactly one [1..1] @moodCode="EVN" event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1198-32416).
      3. This consent SHALL contain exactly one [1..1] statusCode (CONF:1198-32417).

componentOf

1. SHOULD contain zero or one [0..1] componentOf (CONF:1198-30871).
   1. The componentOf, if present, SHALL contain exactly one [1..1] encompassingEncounter (CONF:1198-30872).
      1. This encompassingEncounter SHOULD contain zero or more [0..\*] id (CONF:1198-32395).
      2. This encompassingEncounter SHALL contain exactly one [1..1] code (CONF:1198-30873).
      3. This encompassingEncounter MAY contain zero or one [0..1] encounterParticipant (CONF:1198-30874) such that it
         1. SHALL contain exactly one [1..1] @typeCode="REF" Referrer (CONF:1198-30875).
      4. This encompassingEncounter SHALL contain exactly one [1..1] location (CONF:1198-30876).
         1. This location SHALL contain exactly one [1..1] healthCareFacility (CONF:1198-30877).
            1. This healthCareFacility SHALL contain at least one [1..\*] id (CONF:1198-30878).

component

1. SHALL contain exactly one [1..1] component (CONF:1198-9588).
   1. This component SHALL contain exactly one [1..1] structuredBody (CONF:1198-30352).
      1. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30353) such that it
         1. SHALL contain exactly one [1..1] [Complications Section (V3)](#S_Complications_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.37:2015-08-01) (CONF:1198-30387).
      2. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30355) such that it
         1. SHALL contain exactly one [1..1] [Procedure Description Section](#S_Procedure_Description_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.27) (CONF:1198-30356).
      3. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30357) such that it
         1. SHALL contain exactly one [1..1] [Procedure Indications Section (V2)](#Procedure_Indications_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.29:2014-06-09) (CONF:1198-30358).
      4. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30359) such that it
         1. SHALL contain exactly one [1..1] [Postprocedure Diagnosis Section (V3)](#S_Postprocedure_Diagnosis_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.36:2015-08-01) (CONF:1198-30360).
      5. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30361) such that it
         1. SHALL contain exactly one [1..1] [Assessment Section](#S_Assessment_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.8) (CONF:1198-30362).
      6. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30363) such that it
         1. SHALL contain exactly one [1..1] [Assessment and Plan Section (V2)](#S_Assessment_and_Plan_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09) (CONF:1198-30364).
      7. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30365) such that it
         1. SHALL contain exactly one [1..1] [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09) (CONF:1198-30366).
      8. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30367) such that it
         1. SHALL contain exactly one [1..1] [Allergies and Intolerances Section (entries optional) (V3)](#S_Allergies_and_Intolerances_Section_eo) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6:2015-08-01) (CONF:1198-30368).
      9. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30369) such that it
         1. SHALL contain exactly one [1..1] [Anesthesia Section (V2)](#S_Anesthesia_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.25:2014-06-09) (CONF:1198-30370).
      10. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30371) such that it
          1. SHALL contain exactly one [1..1] [Chief Complaint Section](#S_Chief_Complaint_Section) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1) (CONF:1198-30372).
      11. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30373) such that it
          1. SHALL contain exactly one [1..1] [Chief Complaint and Reason for Visit Section](#S_Chief_Complaint_and_Reason_for_Visit_S) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.13) (CONF:1198-30374).
      12. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30375) such that it
          1. SHALL contain exactly one [1..1] [Family History Section (V3)](#S_Family_History_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2015-08-01) (CONF:1198-30376).
      13. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30377) such that it
          1. SHALL contain exactly one [1..1] [Past Medical History (V3)](#S_Past_Medical_History_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.20:2015-08-01) (CONF:1198-30378).
      14. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30379) such that it
          1. SHALL contain exactly one [1..1] [History of Present Illness Section](#S_History_of_Present_Illness_Section) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.4) (CONF:1198-30380).
      15. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30381) such that it
          1. SHALL contain exactly one [1..1] [Medical (General) History Section](#S_Medical_General_History_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.39) (CONF:1198-30382).
      16. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30383) such that it
          1. SHALL contain exactly one [1..1] [Medications Section (entries optional) (V2)](#S_Medications_Section_entries_optional_) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1:2014-06-09) (CONF:1198-30384).
      17. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30388) such that it
          1. SHALL contain exactly one [1..1] [Medications Administered Section (V2)](#S_Medications_Administered_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.38:2014-06-09) (CONF:1198-30389).
      18. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30390) such that it
          1. SHALL contain exactly one [1..1] [Physical Exam Section (V3)](#S_Physical_Exam_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.2.10:2015-08-01) (CONF:1198-30391).
      19. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30392) such that it
          1. SHALL contain exactly one [1..1] [Planned Procedure Section (V2)](#Planned_Procedure_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.30:2014-06-09) (CONF:1198-30393).
      20. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30394) such that it
          1. SHALL contain exactly one [1..1] [Procedure Disposition Section](#S_Procedure_Disposition_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.18.2.12) (CONF:1198-30395).
      21. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30396) such that it
          1. SHALL contain exactly one [1..1] [Procedure Estimated Blood Loss Section](#S_Procedure_Estimated_Blood_Loss_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.18.2.9) (CONF:1198-30397).
      22. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30398) such that it
          1. SHALL contain exactly one [1..1] [Procedure Findings Section (V3)](#S_Procedure_Findings_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.28:2015-08-01) (CONF:1198-30399).
      23. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30400) such that it
          1. SHALL contain exactly one [1..1] [Procedure Implants Section](#S_Procedure_Implants_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.40) (CONF:1198-30401).
      24. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30402) such that it
          1. SHALL contain exactly one [1..1] [Procedure Specimens Taken Section](#S_Procedure_Specimens_Taken_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.31) (CONF:1198-30403).
      25. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30404) such that it
          1. SHALL contain exactly one [1..1] [Procedures Section (entries optional) (V2)](#Procedures_Section_entries_optional_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.7:2014-06-09) (CONF:1198-30405).
      26. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30406) such that it
          1. SHALL contain exactly one [1..1] [Reason for Visit Section](#S_Reason_for_Visit_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.12) (CONF:1198-30407).
      27. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30408) such that it
          1. SHALL contain exactly one [1..1] [Review of Systems Section](#S_Review_of_Systems_Section) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.18) (CONF:1198-30409).
      28. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30410) such that it
          1. SHALL contain exactly one [1..1] [Social History Section (V3)](#S_Social_History_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2015-08-01) (CONF:1198-30411).
      29. This structuredBody SHALL contain an Assessment and Plan Section (V2) (2.16.840.1.113883.10.20.22.2.9:2014-06-09), or an Assessment Section (2.16.840.1.113883.10.20.22.2.8) and a Plan of Treatment Section (V2) (2.16.840.1.113883.10.20.22.2.10:2014-06-09) (CONF:1198-30412).
      30. This structuredBody SHALL NOT contain an Assessment and Plan Section (V2) (2.16.840.1.113883.10.20.22.2.9:2014-06-09) when either an Assessment Section (2.16.840.1.113883.10.20.22.2.8) or a Plan of Treatment Section (V2) (2.16.840.1.113883.10.20.22.2.10:2014-06-09) is present (CONF:1198-30414).
      31. This structuredBody SHALL NOT contain a Chief Complaint and Reason for Visit Section (2.16.840.1.113883.10.20.22.2.13) when either a Chief Complaint Section (1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1) or a Reason for Visit Section (2.16.840.1.113883.10.20.22.2.12) is present (CONF:1198-30415).

Table 47: ProcedureNoteDocumentTypeCodes

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: ProcedureNoteDocumentTypeCodes urn:oid:2.16.840.1.113883.11.20.6.1  A value set of LOINC document codes for Procedure Notes.    Specific URL Pending  Value Set Source: <http://search.loinc.org> | | | |
| Code | Code System | Code System OID | Print Name |
| 28570-0 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Provider-unspecified Procedure note |
| 11505-5 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Physician procedure note |
| 18744-3 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Bronchoscopy study |
| 18745-0 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Cardiac catheterization study |
| 18746-8 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Colonoscopy study |
| 18751-8 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Endoscopy study |
| 18753-4 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Flexible sigmoidoscopy study |
| 18836-7 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Cardiac stress study Procedure |
| 28577-5 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Dentist procedure note |
| 28625-2 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Podiatry procedure note |
| ... | | | |

Figure 33: Procedure Note performer Example

<performer typeCode="PPRF">

<assignedEntity>

<id extension="IO00017" root="2.16.840.1.113883.19.5" />

<code code="207RG0100X" codeSystem="2.16.840.1.113883.6.101" codeSystemName="NUCC" displayName="Gastroenterologist" />

<addr>

<streetAddressLine>1001 Hospital Lane</streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>99999</postalCode>

<country>US</country>

</addr>

<telecom value="tel:(999)555-1212" />

<assignedPerson>

<name>

<prefix>Dr.</prefix>

<given>Tony</given>

<family>Tum</family>

</name>

</assignedPerson>

</assignedEntity>

</performer>

Figure 34: Procedure Note serviceEvent Example

<documentationOf>

<serviceEvent classCode="PROC">

<code code="118155006" codeSystem="2.16.840.1.113883.6.96"

codeSystemName="SNOMED CT" displayName="Gastrointestinal tract endoscopy" />

<effectiveTime>

<low value="201003292240" />

<width value="15" unit="m" />

</effectiveTime>

...

</serviceEvent>

</documentationOf>

Progress Note (V3)

[ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.1.9:2015-08-01 (open)]

Table 48: Progress Note (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
|  | [Assessment Section](#S_Assessment_Section) (optional)  [Review of Systems Section](#S_Review_of_Systems_Section) (optional)  [Chief Complaint Section](#S_Chief_Complaint_Section) (optional)  [Objective Section](#S_Objective_Section) (optional)  [Subjective Section](#S_Subjective_Section) (optional)  [Medications Section (entries optional) (V2)](#S_Medications_Section_entries_optional_) (optional)  [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (optional)  [Nutrition Section](#S_Nutrition_Section) (optional)  [Assessment and Plan Section (V2)](#S_Assessment_and_Plan_Section_V2) (optional)  [Instructions Section (V2)](#Instructions_Section_V2) (optional)  [US Realm Date and Time (DT.US.FIELDED)](#U_US_Realm_Date_and_Time_DTUSFIELDED) (optional)  [US Realm Date and Time (DT.US.FIELDED)](#U_US_Realm_Date_and_Time_DTUSFIELDED) (required)  [Results Section (entries optional) (V3)](#S_Results_Section_entries_optional_V3) (optional)  [Vital Signs Section (entries optional) (V3)](#S_Vital_Signs_Section_entries_optional_) (optional)  [Problem Section (entries optional) (V3)](#S_Problem_Section_entries_optional_V3) (optional)  [Physical Exam Section (V3)](#S_Physical_Exam_Section_V3) (optional)  [Interventions Section (V3)](#S_Interventions_Section_V3) (optional)  [Allergies and Intolerances Section (entries optional) (V3)](#S_Allergies_and_Intolerances_Section_eo) (optional) |

This template represents a patient’s clinical status during a hospitalization, outpatient visit, treatment with a LTPAC provider, or other healthcare encounter.

Taber’s medical dictionary defines a Progress Note as “An ongoing record of a patient's illness and treatment. Physicians, nurses, consultants, and therapists record their notes concerning the progress or lack of progress made by the patient between the time of the previous note and the most recent note.”

Mosby’s medical dictionary defines a Progress Note as “Notes made by a nurse, physician, social worker, physical therapist, and other health care professionals that describe the patient's condition and the treatment given or planned.”

A Progress Note is not a re-evaluation note. A Progress Note is not intended to be a Progress Report for Medicare. Medicare B Section 1833(e) defines the requirements of a Medicare Progress Report.

Table 49: Progress Note (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| ClinicalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.9:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-7588](#C_1198-7588) |  |
| @root | 1..1 | SHALL |  | [1198-10052](#C_1198-10052) | 2.16.840.1.113883.10.20.22.1.9 |
| @extension | 1..1 | SHALL |  | [1198-32521](#C_1198-32521) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-17189](#C_1198-17189) |  |
| @code | 1..1 | SHALL |  | [1198-17190](#C_1198-17190) | urn:oid:2.16.840.1.113883.11.20.8.1 (ProgressNoteDocumentTypeCode) |
| documentationOf | 0..1 | SHOULD |  | [1198-7603](#C_1198-7603) |  |
| serviceEvent | 1..1 | SHALL |  | [1198-7604](#C_1198-7604) |  |
| @classCode | 1..1 | SHALL |  | [1198-26420](#C_1198-26420) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = PCPR |
| templateId | 1..1 | SHALL |  | [1198-9480](#C_1198-9480) |  |
| @root | 1..1 | SHALL |  | [1198-10068](#C_1198-10068) | 2.16.840.1.113883.10.20.21.3.1 |
| effectiveTime | 1..1 | SHALL |  | [1198-9481](#C_1198-9481) | [US Realm Date and Time (DT.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3](#U_US_Realm_Date_and_Time_DTUSFIELDED) |
| low | 1..1 | SHALL |  | [1198-32976](#C_1198-32976) |  |
| componentOf | 1..1 | SHALL |  | [1198-7595](#C_1198-7595) |  |
| encompassingEncounter | 1..1 | SHALL |  | [1198-7596](#C_1198-7596) |  |
| id | 1..\* | SHALL |  | [1198-7597](#C_1198-7597) |  |
| effectiveTime | 1..1 | SHALL |  | [1198-7598](#C_1198-7598) | [US Realm Date and Time (DT.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3](#U_US_Realm_Date_and_Time_DTUSFIELDED) |
| low | 1..1 | SHALL |  | [1198-7599](#C_1198-7599) |  |
| location | 1..1 | SHALL |  | [1198-30879](#C_1198-30879) |  |
| healthCareFacility | 1..1 | SHALL |  | [1198-30880](#C_1198-30880) |  |
| id | 1..\* | SHALL |  | [1198-30881](#C_1198-30881) |  |
| component | 1..1 | SHALL |  | [1198-9591](#C_1198-9591) |  |
| structuredBody | 1..1 | SHALL |  | [1198-30617](#C_1198-30617) |  |
| component | 0..1 | MAY |  | [1198-30618](#C_1198-30618) |  |
| section | 1..1 | SHALL |  | [1198-30619](#C_1198-30619) | [Assessment Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.8](#S_Assessment_Section) |
| component | 0..1 | MAY |  | [1198-30620](#C_1198-30620) |  |
| section | 1..1 | SHALL |  | [1198-30621](#C_1198-30621) | [Plan of Treatment Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09](#S_Plan_of_Treatment_Section_V2) |
| component | 0..1 | MAY |  | [1198-30622](#C_1198-30622) |  |
| section | 1..1 | SHALL |  | [1198-30623](#C_1198-30623) | [Assessment and Plan Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09](#S_Assessment_and_Plan_Section_V2) |
| component | 0..1 | MAY |  | [1198-30624](#C_1198-30624) |  |
| section | 1..1 | SHALL |  | [1198-30625](#C_1198-30625) | [Allergies and Intolerances Section (entries optional) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6:2015-08-01](#S_Allergies_and_Intolerances_Section_eo) |
| component | 0..1 | MAY |  | [1198-30626](#C_1198-30626) |  |
| section | 1..1 | SHALL |  | [1198-30627](#C_1198-30627) | [Chief Complaint Section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1](#S_Chief_Complaint_Section) |
| component | 0..1 | MAY |  | [1198-30628](#C_1198-30628) |  |
| section | 1..1 | SHALL |  | [1198-30629](#C_1198-30629) | [Interventions Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.21.2.3:2015-08-01](#S_Interventions_Section_V3) |
| component | 0..1 | MAY |  | [1198-30639](#C_1198-30639) |  |
| section | 1..1 | SHALL |  | [1198-31386](#C_1198-31386) | [Instructions Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.45:2014-06-09](#Instructions_Section_V2) |
| component | 0..1 | MAY |  | [1198-30641](#C_1198-30641) |  |
| section | 1..1 | SHALL |  | [1198-30642](#C_1198-30642) | [Medications Section (entries optional) (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1:2014-06-09](#S_Medications_Section_entries_optional_) |
| component | 0..1 | MAY |  | [1198-30643](#C_1198-30643) |  |
| section | 1..1 | SHALL |  | [1198-30644](#C_1198-30644) | [Objective Section (identifier: urn:oid:2.16.840.1.113883.10.20.21.2.1](#S_Objective_Section) |
| component | 0..1 | MAY |  | [1198-30645](#C_1198-30645) |  |
| section | 1..1 | SHALL |  | [1198-30646](#C_1198-30646) | [Physical Exam Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.2.10:2015-08-01](#S_Physical_Exam_Section_V3) |
| component | 0..1 | MAY |  | [1198-30647](#C_1198-30647) |  |
| section | 1..1 | SHALL |  | [1198-30648](#C_1198-30648) | [Problem Section (entries optional) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.5:2015-08-01](#S_Problem_Section_entries_optional_V3) |
| component | 0..1 | MAY |  | [1198-30649](#C_1198-30649) |  |
| section | 1..1 | SHALL |  | [1198-30650](#C_1198-30650) | [Results Section (entries optional) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3:2015-08-01](#S_Results_Section_entries_optional_V3) |
| component | 0..1 | MAY |  | [1198-30651](#C_1198-30651) |  |
| section | 1..1 | SHALL |  | [1198-30652](#C_1198-30652) | [Review of Systems Section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.18](#S_Review_of_Systems_Section) |
| component | 0..1 | MAY |  | [1198-30653](#C_1198-30653) |  |
| section | 1..1 | SHALL |  | [1198-30654](#C_1198-30654) | [Subjective Section (identifier: urn:oid:2.16.840.1.113883.10.20.21.2.2](#S_Subjective_Section) |
| component | 0..1 | MAY |  | [1198-30655](#C_1198-30655) |  |
| section | 1..1 | SHALL |  | [1198-30656](#C_1198-30656) | [Vital Signs Section (entries optional) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4:2015-08-01](#S_Vital_Signs_Section_entries_optional_) |
| component | 0..1 | MAY |  | [1198-32626](#C_1198-32626) |  |
| section | 1..1 | SHALL |  | [1198-32627](#C_1198-32627) | [Nutrition Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.57](#S_Nutrition_Section) |

Properties

1. Conforms to [US Realm Header (V3)](#D_US_Realm_Header_V3) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2015-08-01).
2. SHALL contain exactly one [1..1] templateId (CONF:1198-7588) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.1.9" (CONF:1198-10052).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32521).
   3. When asserting this templateId, all C-CDA 2.1 section and entry templates that had a previous version in C-CDA R1.1 SHALL include both the C-CDA 2.1 templateId and the C-CDA R1.1 templateId root without an extension. See C-CDA R2.1 Volume 1 - Design Considerations for additional detail (CONF:1198-32942).

The Progress Note recommends use of a single document type code, 11506-3 "Subsequent evaluation note", with further specification provided by author or performer, setting, or specialty. When pre-coordinated codes are used, any coded values describing the author or performer of the service act or the practice setting must be consistent with the LOINC document type.

1. SHALL contain exactly one [1..1] code (CONF:1198-17189).
   1. This code SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [ProgressNoteDocumentTypeCode](#ProgressNoteDocumentTypeCode) urn:oid:2.16.840.1.113883.11.20.8.1 DYNAMIC (CONF:1198-17190).

documentationOf

A documentationOf can contain a serviceEvent to further specialize the act inherent in the ClinicalDocument/code. In a Progress Note, a serviceEvent can represent the event of writing the Progress Note. The serviceEvent/effectiveTime is the time period the note documents.

1. SHOULD contain zero or one [0..1] documentationOf (CONF:1198-7603).
   1. The documentationOf, if present, SHALL contain exactly one [1..1] serviceEvent (CONF:1198-7604).
      1. This serviceEvent SHALL contain exactly one [1..1] @classCode="PCPR" Care Provision (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-26420).
      2. This serviceEvent SHALL contain exactly one [1..1] templateId (CONF:1198-9480) such that it
         1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.21.3.1" (CONF:1198-10068).
      3. This serviceEvent SHALL contain exactly one [1..1] [US Realm Date and Time (DT.US.FIELDED)](#U_US_Realm_Date_and_Time_DTUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3) (CONF:1198-9481).
         1. This effectiveTime SHALL contain exactly one [1..1] low (CONF:1198-32976).
         2. If a width element is not present, the serviceEvent SHALL include effectiveTime/high (CONF:1198-10066).

componentOf

The Progress Note is always associated with an encounter by the componentOf/encompassingEncounter element in the header. The effectiveTime element for an encompassingEncounter represents the time or time interval in which the encounter took place. A single encounter may contain multiple Progress Notes; hence the effectiveTime elements for a Progress Note (recorded in serviceEvent) and for an encounter (recorded in encompassingEncounter) represent different time intervals. For outpatient encounters that are a point in time, set effectiveTime/high, effectiveTime/low, and effectiveTime/@value to the same time. All visits take place at a specific location. When available, the location ID is included in the encompassingEncounter/location/healthCareFacility/id element.

1. SHALL contain exactly one [1..1] componentOf (CONF:1198-7595).
   1. This componentOf SHALL contain exactly one [1..1] encompassingEncounter (CONF:1198-7596).
      1. This encompassingEncounter SHALL contain at least one [1..\*] id (CONF:1198-7597).
      2. This encompassingEncounter SHALL contain exactly one [1..1] [US Realm Date and Time (DT.US.FIELDED)](#U_US_Realm_Date_and_Time_DTUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3) (CONF:1198-7598).
         1. This effectiveTime SHALL contain exactly one [1..1] low (CONF:1198-7599).
      3. This encompassingEncounter SHALL contain exactly one [1..1] location (CONF:1198-30879).
         1. This location SHALL contain exactly one [1..1] healthCareFacility (CONF:1198-30880).
            1. This healthCareFacility SHALL contain at least one [1..\*] id (CONF:1198-30881).

component

1. SHALL contain exactly one [1..1] component (CONF:1198-9591).

In this template (templateId 2.16.840.1.113883.10.20.22.1.9.2), coded entries are optional

* 1. This component SHALL contain exactly one [1..1] structuredBody (CONF:1198-30617).
     1. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30618) such that it
        1. SHALL contain exactly one [1..1] [Assessment Section](#S_Assessment_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.8) (CONF:1198-30619).
     2. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30620) such that it
        1. SHALL contain exactly one [1..1] [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09) (CONF:1198-30621).
     3. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30622) such that it
        1. SHALL contain exactly one [1..1] [Assessment and Plan Section (V2)](#S_Assessment_and_Plan_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09) (CONF:1198-30623).
     4. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30624) such that it
        1. SHALL contain exactly one [1..1] [Allergies and Intolerances Section (entries optional) (V3)](#S_Allergies_and_Intolerances_Section_eo) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6:2015-08-01) (CONF:1198-30625).
     5. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30626) such that it
        1. SHALL contain exactly one [1..1] [Chief Complaint Section](#S_Chief_Complaint_Section) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1) (CONF:1198-30627).
     6. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30628) such that it
        1. SHALL contain exactly one [1..1] [Interventions Section (V3)](#S_Interventions_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.21.2.3:2015-08-01) (CONF:1198-30629).
     7. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30639) such that it
        1. SHALL contain exactly one [1..1] [Instructions Section (V2)](#Instructions_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.45:2014-06-09) (CONF:1198-31386).
     8. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30641) such that it
        1. SHALL contain exactly one [1..1] [Medications Section (entries optional) (V2)](#S_Medications_Section_entries_optional_) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1:2014-06-09) (CONF:1198-30642).
     9. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30643) such that it
        1. SHALL contain exactly one [1..1] [Objective Section](#S_Objective_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.21.2.1) (CONF:1198-30644).
     10. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30645) such that it
         1. SHALL contain exactly one [1..1] [Physical Exam Section (V3)](#S_Physical_Exam_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.2.10:2015-08-01) (CONF:1198-30646).
     11. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30647) such that it
         1. SHALL contain exactly one [1..1] [Problem Section (entries optional) (V3)](#S_Problem_Section_entries_optional_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.5:2015-08-01) (CONF:1198-30648).
     12. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30649) such that it
         1. SHALL contain exactly one [1..1] [Results Section (entries optional) (V3)](#S_Results_Section_entries_optional_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3:2015-08-01) (CONF:1198-30650).
     13. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30651) such that it
         1. SHALL contain exactly one [1..1] [Review of Systems Section](#S_Review_of_Systems_Section) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.18) (CONF:1198-30652).
     14. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30653) such that it
         1. SHALL contain exactly one [1..1] [Subjective Section](#S_Subjective_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.21.2.2) (CONF:1198-30654).
     15. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30655) such that it
         1. SHALL contain exactly one [1..1] [Vital Signs Section (entries optional) (V3)](#S_Vital_Signs_Section_entries_optional_) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4:2015-08-01) (CONF:1198-30656).
     16. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-32626) such that it
         1. SHALL contain exactly one [1..1] [Nutrition Section](#S_Nutrition_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.57) (CONF:1198-32627).
     17. This structuredBody SHALL contain an Assessment and Plan Section (V2) (2.16.840.1.113883.10.20.22.2.9:2014-06-09), or an Assessment Section (2.16.840.1.113883.10.20.22.2.8) and a Plan of Treatment Section (V2) (2.16.840.1.113883.10.20.22.2.10:2014-06-09) (CONF:1198-30657).
     18. This structuredBody SHALL NOT contain an Assessment and Plan Section (V2) (2.16.840.1.113883.10.20.22.2.9:2014-06-09) when either an Assessment Section (2.16.840.1.113883.10.20.22.2.8) or a Plan of Treatment Section (V2) (2.16.840.1.113883.10.20.22.2.10:2014-06-09) is present (CONF:1198-30658).

Table 50: ProgressNoteDocumentTypeCode

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: ProgressNoteDocumentTypeCode urn:oid:2.16.840.1.113883.11.20.8.1  (Clinical Focus: Progress note kind classified by setting, author role, and author specialization),(Data Element Scope: ClinicalDocument.code@code in Progress Note Document template in C-CDA R2.1),(Inclusion Criteria: LOINC document concepts representing a transfer summary where component = 'progress note' and scale = 'DOC),(Exclusion Criteria: )  This value set was imported on 6/29/2019 with a version of 20190516.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.8.1/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 11506-3 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Progress note |
| 11507-1 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Occupational therapy Progress note |
| 11508-9 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Physical therapy Progress note |
| 11509-7 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Podiatry Progress note |
| 11510-5 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Psychology Progress note |
| 11512-1 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Speech-language pathology Progress note |
| 15507-7 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Emergency department Progress note |
| 18733-6 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Attending Progress note |
| 28569-2 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Consultant Progress note |
| 28575-9 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Nurse practitioner Progress note |
| ... | | | |

Figure 35: Progress Note serviceEvent Example

<documentationOf>

<serviceEvent classCode="PCPR">

<templateId root="2.16.840.1.113883.10.20.21.3.1" />

<effectiveTime>

<low value="200503291200" />

<high value="200503291400" />

</effectiveTime>

...

</serviceEvent>

</documentationOf>

Figure 36: Progress Note encompassingEncounter Example

<componentOf>

<encompassingEncounter>

<id extension="9937012" root="2.16.840.1.113883.19" />

<code codeSystem="2.16.840.1.113883.6.12" codeSystemName="CPT" code="99213"

displayName="Evaluation and Management" />

<effectiveTime>

<low value="20090227130000+0500" />

<high value="20090227130000+0500" />

</effectiveTime>

<location>

<healthCareFacility>

<id root="2.16.540.1.113883.19.2" />

</healthCareFacility>

</location>

</encompassingEncounter>

</componentOf>

Referral Note (V2)

[ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.1.14:2015-08-01 (open)]

Table 51: Referral Note (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
|  | [Assessment Section](#S_Assessment_Section) (optional)  [Review of Systems Section](#S_Review_of_Systems_Section) (optional)  [History of Present Illness Section](#S_History_of_Present_Illness_Section) (optional)  [General Status Section](#S_General_Status_Section) (optional)  [US Realm Person Name (PN.US.FIELDED)](#U_US_Realm_Person_Name_PNUSFIELDED) (optional)  [US Realm Person Name (PN.US.FIELDED)](#U_US_Realm_Person_Name_PNUSFIELDED) (required)  [Medications Section (entries required) (V2)](#S_Medications_Section_entries_required_) (required)  [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (optional)  [Medical Equipment Section (V2)](#S_Medical_Equipment_Section_V2) (optional)  [Nutrition Section](#S_Nutrition_Section) (optional)  [Procedures Section (entries optional) (V2)](#Procedures_Section_entries_optional_V2) (optional)  [Functional Status Section (V2)](#S_Functional_Status_Section_V2) (optional)  [Reason for Referral Section (V2)](#Reason_for_Referral_Section_V2) (required)  [Assessment and Plan Section (V2)](#S_Assessment_and_Plan_Section_V2) (optional)  [Mental Status Section (V2)](#S_Mental_Status_Section_V2) (optional)  [Immunizations Section (entries required) (V3)](#S_Immunizations_Section_entries_require) (optional)  [Results Section (entries required) (V3)](#S_Results_Section_entries_required_V3) (optional)  [Past Medical History (V3)](#S_Past_Medical_History_V3) (optional)  [Vital Signs Section (entries required) (V3)](#S_Vital_Signs_Section_entries_required_) (optional)  [Problem Section (entries required) (V3)](#S_Problem_Section_entries_required_V3) (required)  [Physical Exam Section (V3)](#S_Physical_Exam_Section_V3) (optional)  [Social History Section (V3)](#S_Social_History_Section_V3) (optional)  [Advance Directives Section (entries optional) (V3)](#S_Advance_Directives_Section_entries_op) (optional)  [Family History Section (V3)](#S_Family_History_Section_V3) (optional)  [Allergies and Intolerances Section (entries required) (V3)](#S_Allergies_and_Intolerances_Section_er) (required) |

A Referral Note communicates pertinent information from a provider who is requesting services of another provider of clinical or non-clinical services. The information in this document includes the reason for the referral and additional information that would augment decision making and care delivery.  
Examples of referral situations are when a patient is referred from a family physician to a cardiologist for cardiac evaluation or when patient is sent by a cardiologist to an emergency department for angina or when a patient is referred by a nurse practitioner to an audiologist for hearing screening or when a patient is referred by a hospitalist to social services.

Table 52: Referral Note (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| ClinicalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.14:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-28947](#C_1198-28947) |  |
| @root | 1..1 | SHALL |  | [1198-28948](#C_1198-28948) | 2.16.840.1.113883.10.20.22.1.14 |
| @extension | 1..1 | SHALL |  | [1198-32911](#C_1198-32911) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-28949](#C_1198-28949) |  |
| @code | 1..1 | SHALL |  | [1198-32967](#C_1198-32967) | urn:oid:2.16.840.1.113883.1.11.20.2.3 (ReferralDocumentType) |
| informationRecipient | 1..1 | SHALL |  | [1198-31589](#C_1198-31589) |  |
| intendedRecipient | 1..1 | SHALL |  | [1198-31590](#C_1198-31590) |  |
| addr | 0..\* | SHOULD |  | [1198-31591](#C_1198-31591) |  |
| telecom | 0..\* | SHOULD |  | [1198-31592](#C_1198-31592) |  |
| informationRecipient | 1..1 | SHALL |  | [1198-31593](#C_1198-31593) |  |
| name | 1..\* | SHALL |  | [1198-31594](#C_1198-31594) | [US Realm Person Name (PN.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1](#U_US_Realm_Person_Name_PNUSFIELDED) |
| participant | 0..\* | SHOULD |  | [1198-31642](#C_1198-31642) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31924](#C_1198-31924) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = IND |
| associatedEntity | 1..1 | SHALL |  | [1198-31643](#C_1198-31643) |  |
| @classCode | 1..1 | SHALL |  | [1198-31925](#C_1198-31925) | urn:oid:2.16.840.1.113883.11.20.9.33 (INDRoleclassCodes) |
| associatedPerson | 1..1 | SHALL |  | [1198-31644](#C_1198-31644) |  |
| name | 1..\* | SHALL |  | [1198-31645](#C_1198-31645) | [US Realm Person Name (PN.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1](#U_US_Realm_Person_Name_PNUSFIELDED) |
| participant | 0..\* | SHOULD |  | [1198-31647](#C_1198-31647) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31648](#C_1198-31648) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = CALLBCK |
| associatedEntity | 1..1 | SHALL |  | [1198-31649](#C_1198-31649) |  |
| @classCode | 1..1 | SHALL |  | [1198-32419](#C_1198-32419) | urn:oid:2.16.840.1.113883.5.110 (HL7RoleClass) = ASSIGNED |
| id | 1..\* | SHALL |  | [1198-31650](#C_1198-31650) |  |
| addr | 0..\* | SHOULD |  | [1198-31651](#C_1198-31651) |  |
| telecom | 1..\* | SHALL |  | [1198-31652](#C_1198-31652) |  |
| associatedPerson | 1..1 | SHALL |  | [1198-31653](#C_1198-31653) |  |
| name | 1..\* | SHALL |  | [1198-31654](#C_1198-31654) |  |
| scopingOrganization | 0..1 | MAY |  | [1198-31655](#C_1198-31655) |  |
| component | 1..1 | SHALL |  | [1198-29062](#C_1198-29062) |  |
| structuredBody | 1..1 | SHALL |  | [1198-29063](#C_1198-29063) |  |
| component | 0..1 | SHOULD |  | [1198-29066](#C_1198-29066) |  |
| section | 1..1 | SHALL |  | [1198-29067](#C_1198-29067) | [Plan of Treatment Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09](#S_Plan_of_Treatment_Section_V2) |
| component | 0..1 | MAY |  | [1198-29068](#C_1198-29068) |  |
| section | 1..1 | SHALL |  | [1198-29069](#C_1198-29069) | [Advance Directives Section (entries optional) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.21:2015-08-01](#S_Advance_Directives_Section_entries_op) |
| component | 0..1 | MAY |  | [1198-29074](#C_1198-29074) |  |
| section | 1..1 | SHALL |  | [1198-29075](#C_1198-29075) | [History of Present Illness Section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.4](#S_History_of_Present_Illness_Section) |
| component | 0..1 | MAY |  | [1198-29076](#C_1198-29076) |  |
| section | 1..1 | SHALL |  | [1198-29077](#C_1198-29077) | [Family History Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2015-08-01](#S_Family_History_Section_V3) |
| component | 0..1 | MAY |  | [1198-29082](#C_1198-29082) |  |
| section | 1..1 | SHALL |  | [1198-29083](#C_1198-29083) | [Immunizations Section (entries required) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.2.1:2015-08-01](#S_Immunizations_Section_entries_require) |
| component | 1..1 | SHALL |  | [1198-29086](#C_1198-29086) |  |
| section | 1..1 | SHALL |  | [1198-29087](#C_1198-29087) | [Problem Section (entries required) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.5.1:2015-08-01](#S_Problem_Section_entries_required_V3) |
| component | 0..1 | MAY |  | [1198-29088](#C_1198-29088) |  |
| section | 1..1 | SHALL |  | [1198-29089](#C_1198-29089) | [Procedures Section (entries optional) (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.7:2014-06-09](#Procedures_Section_entries_optional_V2) |
| component | 0..1 | SHOULD |  | [1198-29090](#C_1198-29090) |  |
| section | 1..1 | SHALL |  | [1198-29091](#C_1198-29091) | [Results Section (entries required) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3.1:2015-08-01](#S_Results_Section_entries_required_V3) |
| component | 0..1 | MAY |  | [1198-29092](#C_1198-29092) |  |
| section | 1..1 | SHALL |  | [1198-29093](#C_1198-29093) | [Review of Systems Section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.18](#S_Review_of_Systems_Section) |
| component | 0..1 | MAY |  | [1198-29094](#C_1198-29094) |  |
| section | 1..1 | SHALL |  | [1198-29095](#C_1198-29095) | [Social History Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2015-08-01](#S_Social_History_Section_V3) |
| component | 0..1 | MAY |  | [1198-29096](#C_1198-29096) |  |
| section | 1..1 | SHALL |  | [1198-29097](#C_1198-29097) | [Vital Signs Section (entries required) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2015-08-01](#S_Vital_Signs_Section_entries_required_) |
| component | 0..1 | SHOULD |  | [1198-29098](#C_1198-29098) |  |
| section | 1..1 | SHALL |  | [1198-29099](#C_1198-29099) | [Functional Status Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.14:2014-06-09](#S_Functional_Status_Section_V2) |
| component | 0..1 | MAY |  | [1198-29100](#C_1198-29100) |  |
| section | 1..1 | SHALL |  | [1198-29101](#C_1198-29101) | [Physical Exam Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.2.10:2015-08-01](#S_Physical_Exam_Section_V3) |
| component | 0..1 | SHOULD |  | [1198-30780](#C_1198-30780) |  |
| section | 1..1 | SHALL |  | [1198-30781](#C_1198-30781) | [Nutrition Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.57](#S_Nutrition_Section) |
| component | 0..1 | SHOULD |  | [1198-30796](#C_1198-30796) |  |
| section | 1..1 | SHALL |  | [1198-30926](#C_1198-30926) | [Mental Status Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.56:2015-08-01](#S_Mental_Status_Section_V2) |
| component | 0..1 | MAY |  | [1198-30798](#C_1198-30798) |  |
| section | 1..1 | SHALL |  | [1198-30799](#C_1198-30799) | [Medical Equipment Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.23:2014-06-09](#S_Medical_Equipment_Section_V2) |
| component | 1..1 | SHALL |  | [1198-30911](#C_1198-30911) |  |
| section | 1..1 | SHALL |  | [1198-30912](#C_1198-30912) | [Allergies and Intolerances Section (entries required) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6.1:2015-08-01](#S_Allergies_and_Intolerances_Section_er) |
| component | 0..1 | MAY |  | [1198-30913](#C_1198-30913) |  |
| section | 1..1 | SHALL |  | [1198-30914](#C_1198-30914) | [Assessment Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.8](#S_Assessment_Section) |
| component | 0..1 | MAY |  | [1198-30915](#C_1198-30915) |  |
| section | 1..1 | SHALL |  | [1198-30916](#C_1198-30916) | [Assessment and Plan Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09](#S_Assessment_and_Plan_Section_V2) |
| component | 0..1 | MAY |  | [1198-30917](#C_1198-30917) |  |
| section | 1..1 | SHALL |  | [1198-30918](#C_1198-30918) | [Past Medical History (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.20:2015-08-01](#S_Past_Medical_History_V3) |
| component | 0..1 | MAY |  | [1198-30919](#C_1198-30919) |  |
| section | 1..1 | SHALL |  | [1198-30920](#C_1198-30920) | [General Status Section (identifier: urn:oid:2.16.840.1.113883.10.20.2.5](#S_General_Status_Section) |
| component | 1..1 | SHALL |  | [1198-30922](#C_1198-30922) |  |
| section | 1..1 | SHALL |  | [1198-30923](#C_1198-30923) | [Medications Section (entries required) (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1.1:2014-06-09](#S_Medications_Section_entries_required_) |
| component | 1..1 | SHALL |  | [1198-30924](#C_1198-30924) |  |
| section | 1..1 | SHALL |  | [1198-30925](#C_1198-30925) | [Reason for Referral Section (V2) (identifier: urn:hl7ii:1.3.6.1.4.1.19376.1.5.3.1.3.1:2014-06-09](#Reason_for_Referral_Section_V2) |

1. Conforms to [US Realm Header (V3)](#D_US_Realm_Header_V3) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2015-08-01).
2. SHALL contain exactly one [1..1] templateId (CONF:1198-28947) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.1.14" (CONF:1198-28948).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32911).
   3. When asserting this templateId, all C-CDA 2.1 section and entry templates that had a previous version in C-CDA R1.1 SHALL include both the C-CDA 2.1 templateId and the C-CDA R1.1 templateId root without an extension. See C-CDA R2.1 Volume 1 - Design Considerations for additional detail (CONF:1198-32943).

The Referral Note recommends use of the document type code 57133-1 "Referral Note", with further specification provided by author or performer, setting, or specialty. When pre-coordinated codes are used, any coded values describing the author or performer of the service act or the practice setting must be consistent with the LOINC document type. For example, an Obstetrics and Gynecology Referral note would not be authored by a Pediatric Cardiologist. The type of referral and the target of the referral are specified via the participant (and not via the author).

1. SHALL contain exactly one [1..1] code (CONF:1198-28949).
   1. This code SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [ReferralDocumentType](#ReferralDocumentType) urn:oid:2.16.840.1.113883.1.11.20.2.3 DYNAMIC (CONF:1198-32967).
2. SHALL contain exactly one [1..1] informationRecipient (CONF:1198-31589).
   1. This informationRecipient SHALL contain exactly one [1..1] intendedRecipient (CONF:1198-31590).
      1. This intendedRecipient SHOULD contain zero or more [0..\*] addr (CONF:1198-31591).
      2. This intendedRecipient SHOULD contain zero or more [0..\*] telecom (CONF:1198-31592).
      3. This intendedRecipient SHALL contain exactly one [1..1] informationRecipient (CONF:1198-31593).
         1. This informationRecipient SHALL contain at least one [1..\*] [US Realm Person Name (PN.US.FIELDED)](#U_US_Realm_Person_Name_PNUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1198-31594).
3. SHOULD contain zero or more [0..\*] participant (CONF:1198-31642) such that it
   1. SHALL contain exactly one [1..1] @typeCode="IND" Indirect (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90) (CONF:1198-31924).
   2. SHALL contain exactly one [1..1] associatedEntity (CONF:1198-31643).
      1. This associatedEntity SHALL contain exactly one [1..1] @classCode, which SHALL be selected from ValueSet [INDRoleclassCodes](#INDRoleclassCodes) urn:oid:2.16.840.1.113883.11.20.9.33 DYNAMIC (CONF:1198-31925).
      2. This associatedEntity SHALL contain exactly one [1..1] associatedPerson (CONF:1198-31644).
         1. This associatedPerson SHALL contain at least one [1..\*] [US Realm Person Name (PN.US.FIELDED)](#U_US_Realm_Person_Name_PNUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1198-31645).

This participant represents the clinician to contact for questions about the referral note. This call back contact individual may be a different person than the individual(s) identified in the author or legalAuthenticator participant.

1. SHOULD contain zero or more [0..\*] participant (CONF:1198-31647) such that it
   1. SHALL contain exactly one [1..1] @typeCode="CALLBCK" call back contact (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 DYNAMIC) (CONF:1198-31648).
   2. SHALL contain exactly one [1..1] associatedEntity (CONF:1198-31649).
      1. This associatedEntity SHALL contain exactly one [1..1] @classCode="ASSIGNED" assigned entity (CodeSystem: HL7RoleClass urn:oid:2.16.840.1.113883.5.110) (CONF:1198-32419).
      2. This associatedEntity SHALL contain at least one [1..\*] id (CONF:1198-31650).
      3. This associatedEntity SHOULD contain zero or more [0..\*] addr (CONF:1198-31651).
      4. This associatedEntity SHALL contain at least one [1..\*] telecom (CONF:1198-31652).
      5. This associatedEntity SHALL contain exactly one [1..1] associatedPerson (CONF:1198-31653).
         1. This associatedPerson SHALL contain at least one [1..\*] name (CONF:1198-31654).
      6. This associatedEntity MAY contain zero or one [0..1] scopingOrganization (CONF:1198-31655).
2. SHALL contain exactly one [1..1] component (CONF:1198-29062).
   1. This component SHALL contain exactly one [1..1] structuredBody (CONF:1198-29063).
      1. This structuredBody SHOULD contain zero or one [0..1] component (CONF:1198-29066) such that it
         1. SHALL contain exactly one [1..1] [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09) (CONF:1198-29067).
      2. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-29068) such that it
         1. SHALL contain exactly one [1..1] [Advance Directives Section (entries optional) (V3)](#S_Advance_Directives_Section_entries_op) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.21:2015-08-01) (CONF:1198-29069).
      3. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-29074) such that it
         1. SHALL contain exactly one [1..1] [History of Present Illness Section](#S_History_of_Present_Illness_Section) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.4) (CONF:1198-29075).
      4. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-29076) such that it
         1. SHALL contain exactly one [1..1] [Family History Section (V3)](#S_Family_History_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2015-08-01) (CONF:1198-29077).
      5. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-29082) such that it
         1. SHALL contain exactly one [1..1] [Immunizations Section (entries required) (V3)](#S_Immunizations_Section_entries_require) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.2.1:2015-08-01) (CONF:1198-29083).
      6. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-29086) such that it
         1. SHALL contain exactly one [1..1] [Problem Section (entries required) (V3)](#S_Problem_Section_entries_required_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.5.1:2015-08-01) (CONF:1198-29087).
      7. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-29088) such that it
         1. SHALL contain exactly one [1..1] [Procedures Section (entries optional) (V2)](#Procedures_Section_entries_optional_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.7:2014-06-09) (CONF:1198-29089).
      8. This structuredBody SHOULD contain zero or one [0..1] component (CONF:1198-29090) such that it
         1. SHALL contain exactly one [1..1] [Results Section (entries required) (V3)](#S_Results_Section_entries_required_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3.1:2015-08-01) (CONF:1198-29091).
      9. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-29092) such that it
         1. SHALL contain exactly one [1..1] [Review of Systems Section](#S_Review_of_Systems_Section) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.18) (CONF:1198-29093).
      10. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-29094) such that it
          1. SHALL contain exactly one [1..1] [Social History Section (V3)](#S_Social_History_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2015-08-01) (CONF:1198-29095).
      11. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-29096) such that it
          1. SHALL contain exactly one [1..1] [Vital Signs Section (entries required) (V3)](#S_Vital_Signs_Section_entries_required_) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2015-08-01) (CONF:1198-29097).
      12. This structuredBody SHOULD contain zero or one [0..1] component (CONF:1198-29098) such that it
          1. SHALL contain exactly one [1..1] [Functional Status Section (V2)](#S_Functional_Status_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.14:2014-06-09) (CONF:1198-29099).
      13. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-29100) such that it
          1. SHALL contain exactly one [1..1] [Physical Exam Section (V3)](#S_Physical_Exam_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.2.10:2015-08-01) (CONF:1198-29101).
      14. This structuredBody SHOULD contain zero or one [0..1] component (CONF:1198-30780) such that it
          1. SHALL contain exactly one [1..1] [Nutrition Section](#S_Nutrition_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.57) (CONF:1198-30781).
      15. This structuredBody SHOULD contain zero or one [0..1] component (CONF:1198-30796) such that it
          1. SHALL contain exactly one [1..1] [Mental Status Section (V2)](#S_Mental_Status_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.56:2015-08-01) (CONF:1198-30926).
      16. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30798) such that it
          1. SHALL contain exactly one [1..1] [Medical Equipment Section (V2)](#S_Medical_Equipment_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.23:2014-06-09) (CONF:1198-30799).
      17. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30911) such that it
          1. SHALL contain exactly one [1..1] [Allergies and Intolerances Section (entries required) (V3)](#S_Allergies_and_Intolerances_Section_er) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6.1:2015-08-01) (CONF:1198-30912).
      18. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30913) such that it
          1. SHALL contain exactly one [1..1] [Assessment Section](#S_Assessment_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.8) (CONF:1198-30914).
      19. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30915) such that it
          1. SHALL contain exactly one [1..1] [Assessment and Plan Section (V2)](#S_Assessment_and_Plan_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09) (CONF:1198-30916).
      20. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30917) such that it
          1. SHALL contain exactly one [1..1] [Past Medical History (V3)](#S_Past_Medical_History_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.20:2015-08-01) (CONF:1198-30918).
      21. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30919) such that it
          1. SHALL contain exactly one [1..1] [General Status Section](#S_General_Status_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.2.5) (CONF:1198-30920).
      22. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30922) such that it
          1. SHALL contain exactly one [1..1] [Medications Section (entries required) (V2)](#S_Medications_Section_entries_required_) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1.1:2014-06-09) (CONF:1198-30923).
      23. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-30924) such that it
          1. SHALL contain exactly one [1..1] [Reason for Referral Section (V2)](#Reason_for_Referral_Section_V2) (identifier: urn:hl7ii:1.3.6.1.4.1.19376.1.5.3.1.3.1:2014-06-09) (CONF:1198-30925).
      24. This structuredBody SHALL contain an Assessment and Plan Section (V2) (2.16.840.1.113883.10.20.22.2.9:2014-06-09), or an Assessment Section (2.16.840.1.113883.10.20.22.2.8) and a Plan of Treatment Section (V2) (2.16.840.1.113883.10.20.22.2.10:2014-06-09) (CONF:1198-29102).
      25. This structuredBody SHALL NOT contain an Assessment and Plan Section (V2) (2.16.840.1.113883.10.20.22.2.9:2014-06-09) when either an Assessment Section (2.16.840.1.113883.10.20.22.2.8) or a Plan of Treatment Section (V2) (2.16.840.1.113883.10.20.22.2.10:2014-06-09) is present (CONF:1198-29103).

Table 53: ReferralDocumentType

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: ReferralDocumentType urn:oid:2.16.840.1.113883.1.11.20.2.3  (Clinical Focus: A LOINC concept that indicates the focus of the referral note),(Data Element Scope: C-CDA r2.1 @code in ReferralNote(V2) [ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.1.14:2015- 08-01 (open)] DYNAMIC),(Inclusion Criteria: LOINC document concepts for referral notes),(Exclusion Criteria: only those in the inclusion criteria)  This value set was imported on 6/29/2019 with a version of 20190516.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.20.2.3/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 57133-1 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Referral note |
| 57134-9 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Dentistry Referral note |
| 57135-6 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Dermatology Referral note |
| 57136-4 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Diabetology Referral note |
| 57137-2 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Endocrinology Referral note |
| 57138-0 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Gastroenterology Referral note |
| 57139-8 | LOINC | urn:oid:2.16.840.1.113883.6.1 | General medicine Referral note |
| 57141-4 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Infectious disease Referral note |
| 57142-2 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Kinesiotherapy Referral note |
| 57143-0 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Mental health Referral note |
| ... | | | |

Figure 37: Referral Note informationRecipient Example

<informationRecipient>

<intendedRecipient>

<informationRecipient>

<name>

<given>Nancy</given>

<family>Nightingale</family>

<suffix qualifier="AC">RN</suffix>

</name>

</informationRecipient>

<receivedOrganization>

<name>Community Health and Hospitals</name>

<telecom value="tel:+1(555)-555-1002" use="WP" />

<addr use="WP">

<streetAddressLine>Cardiac Stepdown Unit, 4B </streetAddressLine>

<streetAddressLine>1002 Healthcare Drive </streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>97857</postalCode>

<country>US</country>

</addr>

</receivedOrganization>

</intendedRecipient>

</informationRecipient>

Figure 38: Referral Note Caregiver Example

<participant typeCode="IND">

<functionCode code="407543004" displayName="Primary Carer" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT" />

<!-- Caregiver -->

<associatedEntity classCode="CAREGIVER">

<code code="MTH" codeSystem="2.16.840.1.113883.5.111" />

<addr>

<streetAddressLine>17 Daws Rd.</streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>97857</postalCode>

<country>US</country>

</addr>

<telecom value="tel: 1+(555)555-1212" use="WP" />

<associatedPerson>

<name>

<prefix>Mrs.</prefix>

<given>Martha</given>

<family>Jones</family>

</name>

</associatedPerson>

</associatedEntity>

</participant>

Figure 39: Referral Note Callback Contact Example

<participant typeCode="CALLBCK">

<time value="20050329224411+0500" />

<associatedEntity classCode="ASSIGNED">

<id extension="99999999" root="2.16.840.1.113883.4.6" />

<code code="200000000X" codeSystem="2.16.840.1.113883.6.101" displayName="Allopathic & Osteopathic Physicians" />

<addr>

<streetAddressLine>1002 Healthcare Drive </streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>97857</postalCode>

<country>US</country>

</addr>

<telecom use="WP" value="tel:555-555-1002" />

<associatedPerson>

<name>

<given>Henry</given>

<family>Seven</family>

<suffix>DO</suffix>

</name>

</associatedPerson>

</associatedEntity>

</participant>

Transfer Summary (V2)

[ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.1.13:2015-08-01 (open)]

Table 54: Transfer Summary (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
|  | [Assessment Section](#S_Assessment_Section) (optional)  [Review of Systems Section](#S_Review_of_Systems_Section) (optional)  [History of Present Illness Section](#S_History_of_Present_Illness_Section) (optional)  [General Status Section](#S_General_Status_Section) (optional)  [Medications Section (entries required) (V2)](#S_Medications_Section_entries_required_) (required)  [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (optional)  [Medical Equipment Section (V2)](#S_Medical_Equipment_Section_V2) (optional)  [Nutrition Section](#S_Nutrition_Section) (optional)  [Procedures Section (entries required) (V2)](#S_Procedures_Section_entries_required_V) (optional)  [Functional Status Section (V2)](#S_Functional_Status_Section_V2) (optional)  [Reason for Referral Section (V2)](#Reason_for_Referral_Section_V2) (required)  [Assessment and Plan Section (V2)](#S_Assessment_and_Plan_Section_V2) (optional)  [Course of Care Section](#S_Course_of_Care_Section) (optional)  [Admission Diagnosis Section (V3)](#S_Admission_Diagnosis_Section_V3) (optional)  [Mental Status Section (V2)](#S_Mental_Status_Section_V2) (optional)  [Immunizations Section (entries optional) (V3)](#S_Immunizations_Section_entries_optiona) (optional)  [Discharge Diagnosis Section (V3)](#S_Discharge_Diagnosis_Section_V3) (optional)  [Results Section (entries required) (V3)](#S_Results_Section_entries_required_V3) (required)  [Admission Medications Section (entries optional) (V3)](#S_Admission_Medications_Section_entries) (optional)  [Past Medical History (V3)](#S_Past_Medical_History_V3) (optional)  [Vital Signs Section (entries required) (V3)](#S_Vital_Signs_Section_entries_required_) (required)  [Problem Section (entries required) (V3)](#S_Problem_Section_entries_required_V3) (required)  [Physical Exam Section (V3)](#S_Physical_Exam_Section_V3) (optional)  [Payers Section (V3)](#S_Payers_Section_V3) (optional)  [Social History Section (V3)](#S_Social_History_Section_V3) (optional)  [Advance Directives Section (entries required) (V3)](#S_Advance_Directives_Sect_entries_re) (optional)  [Family History Section (V3)](#S_Family_History_Section_V3) (optional)  [Allergies and Intolerances Section (entries required) (V3)](#S_Allergies_and_Intolerances_Section_er) (required)  [Encounters Section (entries required) (V3)](#S_Encounters_Section_entries_required_V3) (optional) |

This document describes constraints on the Clinical Document Architecture (CDA) header and body elements for a Transfer Summary. The Transfer Summary standardizes critical information for exchange of information between providers of care when a patient moves between health care settings.  
Standardization of information used in this form will promote interoperability; create information suitable for reuse in quality measurement, public health, research, and for reimbursement.

Table 55: Transfer Summary (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| ClinicalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.13:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-28239](#C_1198-28239) |  |
| @root | 1..1 | SHALL |  | [1198-28240](#C_1198-28240) | 2.16.840.1.113883.10.20.22.1.13 |
| @extension | 1..1 | SHALL |  | [1198-32907](#C_1198-32907) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-28243](#C_1198-28243) |  |
| @code | 1..1 | SHALL |  | [1198-32968](#C_1198-32968) | urn:oid:2.16.840.1.113883.1.11.20.2.4 (TransferDocumentType) |
| title | 1..1 | SHALL |  | [1198-29838](#C_1198-29838) |  |
| participant | 0..\* | SHOULD |  | [1198-31599](#C_1198-31599) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31872](#C_1198-31872) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = IND |
| associatedEntity | 1..1 | SHALL |  | [1198-31600](#C_1198-31600) |  |
| @classCode | 1..1 | SHALL |  | [1198-31873](#C_1198-31873) | urn:oid:2.16.840.1.113883.11.20.9.33 (INDRoleclassCodes) |
| associatedPerson | 1..1 | SHALL |  | [1198-31601](#C_1198-31601) |  |
| name | 1..\* | SHALL |  | [1198-31602](#C_1198-31602) |  |
| participant | 0..\* | SHOULD |  | [1198-31626](#C_1198-31626) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31627](#C_1198-31627) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = CALLBCK |
| associatedEntity | 1..1 | SHALL |  | [1198-31628](#C_1198-31628) |  |
| @classCode | 1..1 | SHALL |  | [1198-31641](#C_1198-31641) | urn:oid:2.16.840.1.113883.5.110 (HL7RoleClass) = ASSIGNED |
| id | 1..\* | SHALL |  | [1198-31629](#C_1198-31629) |  |
| addr | 0..\* | SHOULD |  | [1198-31630](#C_1198-31630) |  |
| telecom | 1..\* | SHALL |  | [1198-31631](#C_1198-31631) |  |
| associatedPerson | 1..1 | SHALL |  | [1198-31632](#C_1198-31632) |  |
| name | 1..\* | SHALL |  | [1198-31633](#C_1198-31633) |  |
| scopingOrganization | 0..1 | MAY |  | [1198-31634](#C_1198-31634) |  |
| documentationOf | 1..1 | SHALL |  | [1198-31570](#C_1198-31570) |  |
| serviceEvent | 1..1 | SHALL |  | [1198-31571](#C_1198-31571) |  |
| @classCode | 1..1 | SHALL |  | [1198-31572](#C_1198-31572) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = PCPR |
| code | 0..1 | MAY |  | [1198-32650](#C_1198-32650) |  |
| performer | 1..\* | SHALL |  | [1198-31574](#C_1198-31574) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31575](#C_1198-31575) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = PRF |
| functionCode | 0..1 | MAY |  | [1198-32651](#C_1198-32651) | urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy) |
| component | 1..1 | SHALL |  | [1198-28251](#C_1198-28251) |  |
| structuredBody | 1..1 | SHALL |  | [1198-28252](#C_1198-28252) |  |
| component | 0..1 | SHOULD |  | [1198-28253](#C_1198-28253) |  |
| section | 1..1 | SHALL |  | [1198-28254](#C_1198-28254) | [Advance Directives Section (entries required) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.21.1:2015-08-01](#S_Advance_Directives_Sect_entries_re) |
| component | 1..1 | SHALL |  | [1198-28255](#C_1198-28255) |  |
| section | 1..1 | SHALL |  | [1198-28256](#C_1198-28256) | [Allergies and Intolerances Section (entries required) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6.1:2015-08-01](#S_Allergies_and_Intolerances_Section_er) |
| component | 0..1 | MAY |  | [1198-28257](#C_1198-28257) |  |
| section | 1..1 | SHALL |  | [1198-28258](#C_1198-28258) | [Physical Exam Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.2.10:2015-08-01](#S_Physical_Exam_Section_V3) |
| component | 0..1 | MAY |  | [1198-28261](#C_1198-28261) |  |
| section | 1..1 | SHALL |  | [1198-28262](#C_1198-28262) | [Encounters Section (entries required) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.22.1:2015-08-01](#S_Encounters_Section_entries_required_V3) |
| component | 0..1 | MAY |  | [1198-28263](#C_1198-28263) |  |
| section | 1..1 | SHALL |  | [1198-28264](#C_1198-28264) | [Family History Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2015-08-01](#S_Family_History_Section_V3) |
| component | 0..1 | SHOULD |  | [1198-28265](#C_1198-28265) |  |
| section | 1..1 | SHALL |  | [1198-28266](#C_1198-28266) | [Functional Status Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.14:2014-06-09](#S_Functional_Status_Section_V2) |
| component | 0..1 | SHOULD |  | [1198-28271](#C_1198-28271) |  |
| section | 1..1 | SHALL |  | [1198-28272](#C_1198-28272) | [Discharge Diagnosis Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.24:2015-08-01](#S_Discharge_Diagnosis_Section_V3) |
| component | 0..1 | MAY |  | [1198-28273](#C_1198-28273) |  |
| section | 1..1 | SHALL |  | [1198-28274](#C_1198-28274) | [Immunizations Section (entries optional) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.2:2015-08-01](#S_Immunizations_Section_entries_optiona) |
| component | 0..1 | MAY |  | [1198-28275](#C_1198-28275) |  |
| section | 1..1 | SHALL |  | [1198-28276](#C_1198-28276) | [Medical Equipment Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.23:2014-06-09](#S_Medical_Equipment_Section_V2) |
| component | 1..1 | SHALL |  | [1198-28277](#C_1198-28277) |  |
| section | 1..1 | SHALL |  | [1198-28278](#C_1198-28278) | [Medications Section (entries required) (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1.1:2014-06-09](#S_Medications_Section_entries_required_) |
| component | 0..1 | MAY |  | [1198-28279](#C_1198-28279) |  |
| section | 1..1 | SHALL |  | [1198-28280](#C_1198-28280) | [Payers Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2015-08-01](#S_Payers_Section_V3) |
| component | 0..1 | MAY |  | [1198-28281](#C_1198-28281) |  |
| section | 1..1 | SHALL |  | [1198-28282](#C_1198-28282) | [Plan of Treatment Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09](#S_Plan_of_Treatment_Section_V2) |
| component | 1..1 | SHALL |  | [1198-28283](#C_1198-28283) |  |
| section | 1..1 | SHALL |  | [1198-28284](#C_1198-28284) | [Problem Section (entries required) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.5.1:2015-08-01](#S_Problem_Section_entries_required_V3) |
| component | 0..1 | SHOULD |  | [1198-28285](#C_1198-28285) |  |
| section | 1..1 | SHALL |  | [1198-28286](#C_1198-28286) | [Procedures Section (entries required) (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.7.1:2014-06-09](#S_Procedures_Section_entries_required_V) |
| component | 1..1 | SHALL |  | [1198-28287](#C_1198-28287) |  |
| section | 1..1 | SHALL |  | [1198-28288](#C_1198-28288) | [Results Section (entries required) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3.1:2015-08-01](#S_Results_Section_entries_required_V3) |
| component | 0..1 | SHOULD |  | [1198-28289](#C_1198-28289) |  |
| section | 1..1 | SHALL |  | [1198-28290](#C_1198-28290) | [Social History Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2015-08-01](#S_Social_History_Section_V3) |
| component | 1..1 | SHALL |  | [1198-28291](#C_1198-28291) |  |
| section | 1..1 | SHALL |  | [1198-28292](#C_1198-28292) | [Vital Signs Section (entries required) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2015-08-01](#S_Vital_Signs_Section_entries_required_) |
| component | 0..1 | SHOULD |  | [1198-28327](#C_1198-28327) |  |
| section | 1..1 | SHALL |  | [1198-28328](#C_1198-28328) | [Mental Status Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.56:2015-08-01](#S_Mental_Status_Section_V2) |
| component | 0..1 | MAY |  | [1198-28838](#C_1198-28838) |  |
| section | 1..1 | SHALL |  | [1198-28839](#C_1198-28839) | [General Status Section (identifier: urn:oid:2.16.840.1.113883.10.20.2.5](#S_General_Status_Section) |
| component | 0..1 | MAY |  | [1198-30239](#C_1198-30239) |  |
| section | 1..1 | SHALL |  | [1198-30240](#C_1198-30240) | [Review of Systems Section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.18](#S_Review_of_Systems_Section) |
| component | 0..1 | SHOULD |  | [1198-30776](#C_1198-30776) |  |
| section | 1..1 | SHALL |  | [1198-30777](#C_1198-30777) | [Nutrition Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.57](#S_Nutrition_Section) |
| component | 1..1 | SHALL |  | [1198-31342](#C_1198-31342) |  |
| section | 1..1 | SHALL |  | [1198-31343](#C_1198-31343) | [Reason for Referral Section (V2) (identifier: urn:hl7ii:1.3.6.1.4.1.19376.1.5.3.1.3.1:2014-06-09](#Reason_for_Referral_Section_V2) |
| component | 0..1 | MAY |  | [1198-31561](#C_1198-31561) |  |
| section | 1..1 | SHALL |  | [1198-31562](#C_1198-31562) | [Past Medical History (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.20:2015-08-01](#S_Past_Medical_History_V3) |
| component | 0..1 | SHOULD |  | [1198-31563](#C_1198-31563) |  |
| section | 1..1 | SHALL |  | [1198-31564](#C_1198-31564) | [History of Present Illness Section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.4](#S_History_of_Present_Illness_Section) |
| component | 0..1 | MAY |  | [1198-31565](#C_1198-31565) |  |
| section | 1..1 | SHALL |  | [1198-31566](#C_1198-31566) | [Assessment and Plan Section (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09](#S_Assessment_and_Plan_Section_V2) |
| component | 0..1 | MAY |  | [1198-31567](#C_1198-31567) |  |
| section | 1..1 | SHALL |  | [1198-31568](#C_1198-31568) | [Assessment Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.8](#S_Assessment_Section) |
| component | 0..1 | MAY |  | [1198-32445](#C_1198-32445) |  |
| section | 1..1 | SHALL |  | [1198-32446](#C_1198-32446) | [Admission Medications Section (entries optional) (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.44:2015-08-01](#S_Admission_Medications_Section_entries) |
| component | 0..1 | MAY |  | [1198-32447](#C_1198-32447) |  |
| section | 1..1 | SHALL |  | [1198-32448](#C_1198-32448) | [Admission Diagnosis Section (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.43:2015-08-01](#S_Admission_Diagnosis_Section_V3) |
| component | 0..1 | MAY |  | [1198-32648](#C_1198-32648) |  |
| section | 1..1 | SHALL |  | [1198-32649](#C_1198-32649) | [Course of Care Section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.64](#S_Course_of_Care_Section) |

1. Conforms to [US Realm Header (V3)](#D_US_Realm_Header_V3) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2015-08-01).
2. SHALL contain exactly one [1..1] templateId (CONF:1198-28239) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.1.13" (CONF:1198-28240).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32907).
   3. When asserting this templateId, all C-CDA 2.1 section and entry templates that had a previous version in C-CDA R1.1 SHALL include both the C-CDA 2.1 templateId and the C-CDA R1.1 templateId root without an extension. See C-CDA R2.1 Volume 1 - Design Considerations for additional detail (CONF:1198-32946).

The Transfer Summary recommends use of the document type code 18761-7 "Provider Unspecified Transfer Summary", with further specification provided by author or performer, setting, or specialty. When pre-coordinated codes are used, any coded values describing the author or performer of the service act or the practice setting must be consistent with the LOINC document type. For example, an Obstetrics and Gynecology Transfer Summary note would not be authored by a Pediatric Cardiologist.

Pre-coordinated codes are those that indicate the specialty or service provided in the LOINC Long Common Name (Print Name in the TransferDocumentType valueSet table).

When using a generic type of code such as 18761-7 (Provider - Unspecified Transfer Summary), the types of services involved in the care are handled in documentationOf/serviceEvent with the use of serviceEvent/code (e.g., use a SNOMED CT procedure code such as 69031006 (Excision of breast tissue) while performers/providers involved in the care can be identified using the functionCode (bound to Healthcare Provider Taxonomy role codes).

1. SHALL contain exactly one [1..1] code (CONF:1198-28243).
   1. This code SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [TransferDocumentType](#TransferDocumentType) urn:oid:2.16.840.1.113883.1.11.20.2.4 DYNAMIC (CONF:1198-32968).
2. SHALL contain exactly one [1..1] title (CONF:1198-29838).
3. SHOULD contain zero or more [0..\*] participant (CONF:1198-31599) such that it
   1. SHALL contain exactly one [1..1] @typeCode="IND" indirect (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90) (CONF:1198-31872).
   2. SHALL contain exactly one [1..1] associatedEntity (CONF:1198-31600).
      1. This associatedEntity SHALL contain exactly one [1..1] @classCode, which SHALL be selected from ValueSet [INDRoleclassCodes](#INDRoleclassCodes) urn:oid:2.16.840.1.113883.11.20.9.33 DYNAMIC (CONF:1198-31873).
      2. This associatedEntity SHALL contain exactly one [1..1] associatedPerson (CONF:1198-31601).
         1. This associatedPerson SHALL contain at least one [1..\*] name (CONF:1198-31602).
4. SHOULD contain zero or more [0..\*] participant (CONF:1198-31626) such that it
   1. SHALL contain exactly one [1..1] @typeCode="CALLBCK" Call back contact (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90) (CONF:1198-31627).
   2. SHALL contain exactly one [1..1] associatedEntity (CONF:1198-31628).
      1. This associatedEntity SHALL contain exactly one [1..1] @classCode="ASSIGNED" assigned entity (CodeSystem: HL7RoleClass urn:oid:2.16.840.1.113883.5.110) (CONF:1198-31641).
      2. This associatedEntity SHALL contain at least one [1..\*] id (CONF:1198-31629).
      3. This associatedEntity SHOULD contain zero or more [0..\*] addr (CONF:1198-31630).
      4. This associatedEntity SHALL contain at least one [1..\*] telecom (CONF:1198-31631).
      5. This associatedEntity SHALL contain exactly one [1..1] associatedPerson (CONF:1198-31632).
         1. This associatedPerson SHALL contain at least one [1..\*] name (CONF:1198-31633).
      6. This associatedEntity MAY contain zero or one [0..1] scopingOrganization (CONF:1198-31634).
5. SHALL contain exactly one [1..1] documentationOf (CONF:1198-31570).

The serviceEvent in a Transfer Note contains the representation of providers who are wholly or partially responsible for the safety and well-being of a subject of care.

* 1. This documentationOf SHALL contain exactly one [1..1] serviceEvent (CONF:1198-31571).
     1. This serviceEvent SHALL contain exactly one [1..1] @classCode="PCPR" Care Provision (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1198-31572).

Use serviceEvent/code when using a generic document type code such as 18761-7 (Provider-Unspecified Transfer Summary) to represent the service.

* + 1. This serviceEvent MAY contain zero or one [0..1] code (CONF:1198-32650).
    2. This serviceEvent SHALL contain at least one [1..\*] performer (CONF:1198-31574) such that it
       1. SHALL contain exactly one [1..1] @typeCode="PRF" Participation of Physical Performer (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 DYNAMIC) (CONF:1198-31575).

Use performer/functionCode when using a generic document type code such as 18761-7 (Provider-Unspecified Transfer Summary) to represent the provider.

* + - 1. MAY contain zero or one [0..1] functionCode, which SHOULD be selected from ValueSet [Healthcare Provider Taxonomy](#Healthcare_Provider_Taxonomy) urn:oid:2.16.840.1.114222.4.11.1066 DYNAMIC (CONF:1198-32651).

1. SHALL contain exactly one [1..1] component (CONF:1198-28251).
   1. This component SHALL contain exactly one [1..1] structuredBody (CONF:1198-28252).
      1. This structuredBody SHOULD contain zero or one [0..1] component (CONF:1198-28253) such that it
         1. SHALL contain exactly one [1..1] [Advance Directives Section (entries required) (V3)](#S_Advance_Directives_Sect_entries_re) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.21.1:2015-08-01) (CONF:1198-28254).
      2. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-28255) such that it
         1. SHALL contain exactly one [1..1] [Allergies and Intolerances Section (entries required) (V3)](#S_Allergies_and_Intolerances_Section_er) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6.1:2015-08-01) (CONF:1198-28256).
      3. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-28257) such that it
         1. SHALL contain exactly one [1..1] [Physical Exam Section (V3)](#S_Physical_Exam_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.2.10:2015-08-01) (CONF:1198-28258).
      4. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-28261) such that it
         1. SHALL contain exactly one [1..1] [Encounters Section (entries required) (V3)](#S_Encounters_Section_entries_required_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.22.1:2015-08-01) (CONF:1198-28262).
      5. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-28263) such that it
         1. SHALL contain exactly one [1..1] [Family History Section (V3)](#S_Family_History_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2015-08-01) (CONF:1198-28264).
      6. This structuredBody SHOULD contain zero or one [0..1] component (CONF:1198-28265) such that it
         1. SHALL contain exactly one [1..1] [Functional Status Section (V2)](#S_Functional_Status_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.14:2014-06-09) (CONF:1198-28266).
      7. This structuredBody SHOULD contain zero or one [0..1] component (CONF:1198-28271) such that it
         1. SHALL contain exactly one [1..1] [Discharge Diagnosis Section (V3)](#S_Discharge_Diagnosis_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.24:2015-08-01) (CONF:1198-28272).
      8. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-28273) such that it
         1. SHALL contain exactly one [1..1] [Immunizations Section (entries optional) (V3)](#S_Immunizations_Section_entries_optiona) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.2:2015-08-01) (CONF:1198-28274).
      9. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-28275) such that it
         1. SHALL contain exactly one [1..1] [Medical Equipment Section (V2)](#S_Medical_Equipment_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.23:2014-06-09) (CONF:1198-28276).
      10. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-28277) such that it
          1. SHALL contain exactly one [1..1] [Medications Section (entries required) (V2)](#S_Medications_Section_entries_required_) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1.1:2014-06-09) (CONF:1198-28278).
      11. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-28279) such that it
          1. SHALL contain exactly one [1..1] [Payers Section (V3)](#S_Payers_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2015-08-01) (CONF:1198-28280).
      12. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-28281) such that it
          1. SHALL contain exactly one [1..1] [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09) (CONF:1198-28282).
      13. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-28283) such that it
          1. SHALL contain exactly one [1..1] [Problem Section (entries required) (V3)](#S_Problem_Section_entries_required_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.5.1:2015-08-01) (CONF:1198-28284).
      14. This structuredBody SHOULD contain zero or one [0..1] component (CONF:1198-28285) such that it
          1. SHALL contain exactly one [1..1] [Procedures Section (entries required) (V2)](#S_Procedures_Section_entries_required_V) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.7.1:2014-06-09) (CONF:1198-28286).
      15. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-28287) such that it
          1. SHALL contain exactly one [1..1] [Results Section (entries required) (V3)](#S_Results_Section_entries_required_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3.1:2015-08-01) (CONF:1198-28288).
      16. This structuredBody SHOULD contain zero or one [0..1] component (CONF:1198-28289) such that it
          1. SHALL contain exactly one [1..1] [Social History Section (V3)](#S_Social_History_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2015-08-01) (CONF:1198-28290).
      17. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-28291) such that it
          1. SHALL contain exactly one [1..1] [Vital Signs Section (entries required) (V3)](#S_Vital_Signs_Section_entries_required_) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2015-08-01) (CONF:1198-28292).
      18. This structuredBody SHOULD contain zero or one [0..1] component (CONF:1198-28327) such that it
          1. SHALL contain exactly one [1..1] [Mental Status Section (V2)](#S_Mental_Status_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.56:2015-08-01) (CONF:1198-28328).
      19. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-28838) such that it
          1. SHALL contain exactly one [1..1] [General Status Section](#S_General_Status_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.2.5) (CONF:1198-28839).
      20. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-30239) such that it
          1. SHALL contain exactly one [1..1] [Review of Systems Section](#S_Review_of_Systems_Section) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.18) (CONF:1198-30240).
      21. This structuredBody SHOULD contain zero or one [0..1] component (CONF:1198-30776) such that it
          1. SHALL contain exactly one [1..1] [Nutrition Section](#S_Nutrition_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.57) (CONF:1198-30777).
      22. This structuredBody SHALL contain exactly one [1..1] component (CONF:1198-31342) such that it
          1. SHALL contain exactly one [1..1] [Reason for Referral Section (V2)](#Reason_for_Referral_Section_V2) (identifier: urn:hl7ii:1.3.6.1.4.1.19376.1.5.3.1.3.1:2014-06-09) (CONF:1198-31343).
      23. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-31561) such that it
          1. SHALL contain exactly one [1..1] [Past Medical History (V3)](#S_Past_Medical_History_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.20:2015-08-01) (CONF:1198-31562).
      24. This structuredBody SHOULD contain zero or one [0..1] component (CONF:1198-31563) such that it
          1. SHALL contain exactly one [1..1] [History of Present Illness Section](#S_History_of_Present_Illness_Section) (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.4) (CONF:1198-31564).
      25. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-31565) such that it
          1. SHALL contain exactly one [1..1] [Assessment and Plan Section (V2)](#S_Assessment_and_Plan_Section_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09) (CONF:1198-31566).
      26. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-31567) such that it
          1. SHALL contain exactly one [1..1] [Assessment Section](#S_Assessment_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.8) (CONF:1198-31568).
      27. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-32445) such that it
          1. SHALL contain exactly one [1..1] [Admission Medications Section (entries optional) (V3)](#S_Admission_Medications_Section_entries) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.44:2015-08-01) (CONF:1198-32446).
      28. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-32447) such that it
          1. SHALL contain exactly one [1..1] [Admission Diagnosis Section (V3)](#S_Admission_Diagnosis_Section_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.43:2015-08-01) (CONF:1198-32448).
      29. This structuredBody MAY contain zero or one [0..1] component (CONF:1198-32648) such that it
          1. SHALL contain exactly one [1..1] [Course of Care Section](#S_Course_of_Care_Section) (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.64) (CONF:1198-32649).
      30. This structuredBody SHALL contain an Assessment and Plan Section (V2) (2.16.840.1.113883.10.20.22.2.9:2014-06-09), or an Assessment Section (2.16.840.1.113883.10.20.22.2.8) and a Plan of Treatment Section (V2) (2.16.840.1.113883.10.20.22.2.10:2014-06-09) (CONF:1198-31582).
      31. This structuredBody SHALL NOT contain an Assessment and Plan Section (V2) (2.16.840.1.113883.10.20.22.2.9:2014-06-09) when either an Assessment Section (2.16.840.1.113883.10.20.22.2.8) or a Plan of Treatment Section (V2) (2.16.840.1.113883.10.20.22.2.10:2014-06-09) is present (CONF:1198-31583).

Table 56: TransferDocumentType

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: TransferDocumentType urn:oid:2.16.840.1.113883.1.11.20.2.4  (Clinical Focus: A LOINC concept that indicates the focus of the Patient Transfer note),(Data Element Scope: C-CDA r2.1 @code in TransferSummary(V2) [ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.1.13:2015- 08-01 (open)] DYNAMIC),(Inclusion Criteria: LOINC document concepts representing a transfer summary where component = 'transfer summary note' and scale = 'DOC),(Exclusion Criteria: )  This value set was imported on 6/29/2019 with a version of 20190516.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.20.2.4/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 18761-7 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Transfer summary note |
| 28616-1 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Physician Transfer note |
| 28651-8 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Nurse Transfer note |
| 34755-9 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Critical care medicine Transfer summary note |
| 34770-8 | LOINC | urn:oid:2.16.840.1.113883.6.1 | General medicine Transfer summary note |
| 68482-9 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Nurse Hospital Transfer summary note |
| 68565-1 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Obstetrics and Gynecology Transfer summary note |
| 68569-3 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Occupational therapy Transfer summary note |
| 68583-4 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Orthopaedic surgery Transfer summary note |
| 68596-6 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Plastic surgery Transfer summary note |
| ... | | | |

Figure 40: Transfer Summary participant (Support) Example

<participant typeCode="IND">

<time xsi:type="IVL\_TS">

<low value="19590101" />

<high value="20111025" />

</time>

<associatedEntity classCode="ECON">

<code code="MTH" codeSystem="2.16.840.1.113883.5.111" />

<addr>

<streetAddressLine>17 Daws Rd.</streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>97857</postalCode>

<country>US</country>

</addr>

<telecom value="tel:(999)555-1212" use="WP" />

<associatedPerson>

<name>

<prefix>Mrs.</prefix>

<given>Martha</given>

<family>Jones</family>

</name>

</associatedPerson>

</associatedEntity>

</participant>

<participant typeCode="IND">

<functionCode code="407543004" displayName="Primary Carer" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT" />

<time xsi:type="IVL\_TS">

<low value="19590101" />

<high value="20111025" />

</time>

<associatedEntity classCode="CAREGIVER">

<code code="MTH" codeSystem="2.16.840.1.113883.5.111" />

<addr>

<streetAddressLine>17 Daws Rd.</streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>97857</postalCode>

<country>US</country>

</addr>

<telecom value="tel:(999)555-1212" use="WP" />

<associatedPerson>

<name>

<prefix>Mrs.</prefix>

<given>Martha</given>

<family>Jones</family>

</name>

</associatedPerson>

</associatedEntity>

</participant>

Figure 41: Transfer Summary Callback Contact Example

<participant typeCode="CALLBCK">

<time value="20050329224411+0500" />

<associatedEntity classCode="ASSIGNED">

<id extension="99999999" root="2.16.840.1.113883.4.6" />

<code code="200000000X" codeSystem="2.16.840.1.113883.6.101" displayName="Allopathic & Osteopathic Physicians" />

<addr>

<streetAddressLine>1002 Healthcare Drive </streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>97857</postalCode>

<country>US</country>

</addr>

<telecom use="WP" value="tel:555-555-1002" />

<associatedPerson>

<name>

<given>Henry</given>

<family>Seven</family>

</name>

</associatedPerson>

</associatedEntity>

</participant>

Unstructured Document (V3)

[ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.1.10:2015-08-01 (open)]

An Unstructured Document (UD) document type can (1) include unstructured content, such as a graphic, directly in a text element with a mediaType attribute, or (2) reference a single document file, such as a word-processing document using a text/reference element.  
For guidance on how to handle multiple files, on the selection of media types for this IG, and on the identification of external files, see the examples that follow the constraints below.  
IHE’s XDS-SD (Cross-Transaction Specifications and Content Specifications, Scanned Documents Module) profile addresses a similar, more restricted use case, specifically for scanned documents or documents electronically created from existing text sources, and limits content to PDF-A or text. This Unstructured Documents template is applicable not only for scanned documents in non-PDF formats, but also for clinical documents produced through word processing applications, etc.  
For conformance with both specifications, implementers need to ensure that their documents at a minimum conform with the SHALL constraints from either specification.

Table 57: Unstructured Document (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| ClinicalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.10:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-7710](#C_1198-7710) |  |
| @root | 1..1 | SHALL |  | [1198-10054](#C_1198-10054) | 2.16.840.1.113883.10.20.22.1.10 |
| @extension | 1..1 | SHALL |  | [1198-32522](#C_1198-32522) | 2015-08-01 |
| recordTarget | 1..\* | SHALL |  | [1198-31089](#C_1198-31089) |  |
| patientRole | 1..1 | SHALL |  | [1198-31090](#C_1198-31090) |  |
| id | 1..\* | SHALL |  | [1198-31091](#C_1198-31091) |  |
| custodian | 1..1 | SHALL |  | [1198-31096](#C_1198-31096) |  |
| assignedCustodian | 1..1 | SHALL |  | [1198-31097](#C_1198-31097) |  |
| representedCustodianOrganization | 1..1 | SHALL |  | [1198-31098](#C_1198-31098) |  |
| component | 1..1 | SHALL |  | [1198-31085](#C_1198-31085) |  |
| nonXMLBody | 1..1 | SHALL |  | [1198-31086](#C_1198-31086) |  |
| text | 1..1 | SHALL |  | [1198-31087](#C_1198-31087) |  |

Properties

1. Conforms to [US Realm Header (V3)](#D_US_Realm_Header_V3) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2015-08-01).
2. SHALL contain exactly one [1..1] templateId (CONF:1198-7710) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.1.10" (CONF:1198-10054).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32522).
   3. When asserting this templateId, all C-CDA 2.1 section and entry templates that had a previous version in C-CDA R1.1 SHALL include both the C-CDA 2.1 templateId and the C-CDA R1.1 templateId root without an extension. See C-CDA R2.1 Volume 1 - Design Considerations for additional detail (CONF:1198-32944).

recordTarget

1. SHALL contain at least one [1..\*] recordTarget (CONF:1198-31089).
   1. Such recordTargets SHALL contain exactly one [1..1] patientRole (CONF:1198-31090).
      1. This patientRole SHALL contain at least one [1..\*] id (CONF:1198-31091).

custodian

1. SHALL contain exactly one [1..1] custodian (CONF:1198-31096).
   1. This custodian SHALL contain exactly one [1..1] assignedCustodian (CONF:1198-31097).
      1. This assignedCustodian SHALL contain exactly one [1..1] representedCustodianOrganization (CONF:1198-31098).
2. SHALL contain exactly one [1..1] component (CONF:1198-31085).

nonXMLBody

An Unstructured Document must include a nonXMLBody component with a single text element. The text element can reference an external file using a reference element, or include unstructured content directly with a mediaType attribute. The nonXMLBody/text element also has a "compression" attribute that can be used to indicate that the unstructured content was compressed before being Base64Encoded. At a minimum, a compression value of "DF" for the deflate compression algorithm (RFC 1951 [URL:http://www.ietf.org/rfc/rfc1951.txt]) must be supported although it is not required that content be compressed.

* 1. This component SHALL contain exactly one [1..1] nonXMLBody (CONF:1198-31086).
     1. This nonXMLBody SHALL contain exactly one [1..1] text (CONF:1198-31087).
        1. If the text element does not contain a reference element with a value attribute, then it SHALL contain exactly one [1..1] @representation="B64" and exactly one [1..1] @mediaType (CONF:1198-7624).
        2. The value of @mediaType, if present, SHALL be drawn from the value set 2.16.840.1.113883.11.20.7.1 SupportedFileFormats STATIC 2010-05-12 (CONF:1198-7623).

Table 58: SupportedFileFormats

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: SupportedFileFormats urn:oid:2.16.840.1.113883.11.20.7.1  (Clinical Focus: Indicates the file format of an unstructured document contained in a CDA Unstructured Document.),(Data Element Scope: File format concepts selected from the mediType code system.),(Inclusion Criteria: Include concepts where the file format is supported by an Unstructured Document.),(Exclusion Criteria: Exclude concepts where the file format is not supported by an Unstructured Document.)  This value set was imported on 10/17/2019 with a version of 20190425.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.7.1/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| application/msword | Media Type | urn:oid:2.16.840.1.113883.5.79 | MSWORD |
| application/pdf | Media Type | urn:oid:2.16.840.1.113883.5.79 | PDF |
| image/gif | Media Type | urn:oid:2.16.840.1.113883.5.79 | GIF Image |
| image/jpeg | Media Type | urn:oid:2.16.840.1.113883.5.79 | JPEG Image |
| image/png | Media Type | urn:oid:2.16.840.1.113883.5.79 | PNG Image |
| image/tiff | Media Type | urn:oid:2.16.840.1.113883.5.79 | TIFF Image |
| text/html | Media Type | urn:oid:2.16.840.1.113883.5.79 | HTML Text |
| text/plain | Media Type | urn:oid:2.16.840.1.113883.5.79 | Plain Text |
| text/rtf | Media Type | urn:oid:2.16.840.1.113883.5.79 | RTF Text |

Figure 42: nonXMLBody Example with Embedded Content

<component>

<nonXMLBody>

<text mediaType="text/rtf" representation="B64">e1xydGY...</text>

</nonXMLBody>

</component>

Figure 43: nonXMLBody Example with Referenced Content

<component>

<nonXMLBody>

<text>

<reference value="UD\_sample.pdf" />

</text>

</nonXMLBody>

</component>

Figure 44: nonXMLBody Example with Compressed Content

<component>

<nonXMLBody>

<text mediaType="text/rtf" representation="B64" compression="DF">dhUhkasd437hbjfQS7…</text>

</nonXMLBody>

</component>

US Realm Header for Patient Generated Document (V2)

[ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.29.1:2015-08-01 (open)]

This template is designed to be used in conjunction with the US Realm Header (V2). It includes additional conformances which further constrain the US Realm Header (V2).  
The Patient Generated Document Header template is not a separate document type. The document body may contain any structured or unstructured content from C-CDA.

Table 59: US Realm Header for Patient Generated Document (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| ClinicalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.29.1:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-28458](#C_1198-28458) |  |
| @root | 1..1 | SHALL |  | [1198-28459](#C_1198-28459) | 2.16.840.1.113883.10.20.29.1 |
| @extension | 1..1 | SHALL |  | [1198-32917](#C_1198-32917) | 2015-08-01 |
| recordTarget | 1..1 | SHALL |  | [1198-28460](#C_1198-28460) |  |
| patientRole | 1..1 | SHALL |  | [1198-28461](#C_1198-28461) |  |
| id | 1..\* | SHALL |  | [1198-28462](#C_1198-28462) |  |
| patient | 1..1 | SHALL |  | [1198-28465](#C_1198-28465) |  |
| guardian | 0..\* | MAY |  | [1198-28469](#C_1198-28469) |  |
| id | 0..\* | SHOULD |  | [1198-28470](#C_1198-28470) |  |
| code | 0..1 | SHOULD |  | [1198-28473](#C_1198-28473) | urn:oid:2.16.840.1.113883.11.20.12.1 (Personal And Legal Relationship Role Type) |
| languageCommunication | 0..\* | SHOULD |  | [1198-28474](#C_1198-28474) |  |
| preferenceInd | 0..1 | MAY |  | [1198-28475](#C_1198-28475) |  |
| providerOrganization | 0..1 | MAY |  | [1198-28476](#C_1198-28476) |  |
| author | 1..\* | SHALL |  | [1198-28477](#C_1198-28477) |  |
| assignedAuthor | 1..1 | SHALL |  | [1198-28478](#C_1198-28478) |  |
| id | 1..\* | SHALL |  | [1198-28479](#C_1198-28479) |  |
| code | 0..1 | SHOULD |  | [1198-28481](#C_1198-28481) |  |
| @code | 1..1 | SHALL |  | [1198-28676](#C_1198-28676) | urn:oid:2.16.840.1.113883.11.20.12.1 (Personal And Legal Relationship Role Type) |
| dataEnterer | 0..1 | MAY |  | [1198-28678](#C_1198-28678) |  |
| assignedEntity | 1..1 | SHALL |  | [1198-28679](#C_1198-28679) |  |
| code | 0..1 | MAY |  | [1198-28680](#C_1198-28680) | urn:oid:2.16.840.1.113883.11.20.12.1 (Personal And Legal Relationship Role Type) |
| informant | 0..\* | MAY |  | [1198-28681](#C_1198-28681) |  |
| relatedEntity | 1..1 | SHALL |  | [1198-28682](#C_1198-28682) |  |
| code | 0..1 | MAY |  | [1198-28683](#C_1198-28683) |  |
| @code | 0..1 | SHOULD |  | [1198-28684](#C_1198-28684) | urn:oid:2.16.840.1.113883.11.20.12.1 (Personal And Legal Relationship Role Type) |
| custodian | 1..1 | SHALL |  | [1198-28685](#C_1198-28685) |  |
| assignedCustodian | 1..1 | SHALL |  | [1198-28686](#C_1198-28686) |  |
| representedCustodianOrganization | 1..1 | SHALL |  | [1198-28687](#C_1198-28687) |  |
| id | 1..\* | SHALL |  | [1198-28688](#C_1198-28688) |  |
| informationRecipient | 0..\* | MAY |  | [1198-28690](#C_1198-28690) |  |
| intendedRecipient | 1..1 | SHALL |  | [1198-28691](#C_1198-28691) |  |
| id | 0..\* | SHOULD |  | [1198-28692](#C_1198-28692) |  |
| @root | 0..1 | SHOULD |  | [1198-28693](#C_1198-28693) |  |
| legalAuthenticator | 0..1 | MAY |  | [1198-28694](#C_1198-28694) |  |
| assignedEntity | 1..1 | SHALL |  | [1198-28695](#C_1198-28695) |  |
| id | 1..\* | SHALL |  | [1198-28696](#C_1198-28696) |  |
| code | 0..1 | MAY |  | [1198-28697](#C_1198-28697) |  |
| @code | 0..1 | MAY |  | [1198-28698](#C_1198-28698) | urn:oid:2.16.840.1.113883.11.20.12.1 (Personal And Legal Relationship Role Type) |
| authenticator | 0..\* | MAY |  | [1198-28699](#C_1198-28699) |  |
| assignedEntity | 1..1 | SHALL |  | [1198-28700](#C_1198-28700) |  |
| id | 1..\* | SHALL |  | [1198-28701](#C_1198-28701) |  |
| code | 0..1 | SHOULD |  | [1198-28702](#C_1198-28702) | urn:oid:2.16.840.1.113883.11.20.12.1 (Personal And Legal Relationship Role Type) |
| participant | 0..\* | MAY |  | [1198-28703](#C_1198-28703) |  |
| @typeCode | 1..1 | SHALL |  | [1198-28704](#C_1198-28704) |  |
| associatedEntity | 1..1 | SHALL |  | [1198-28705](#C_1198-28705) |  |
| code | 0..1 | SHOULD |  | [1198-28706](#C_1198-28706) | urn:oid:2.16.840.1.113883.11.20.12.1 (Personal And Legal Relationship Role Type) |
| inFulfillmentOf | 0..\* | MAY |  | [1198-28707](#C_1198-28707) |  |
| order | 1..1 | SHALL |  | [1198-28708](#C_1198-28708) |  |
| id | 1..\* | SHALL |  | [1198-28709](#C_1198-28709) |  |
| documentationOf | 0..\* | MAY |  | [1198-28710](#C_1198-28710) |  |
| serviceEvent | 1..1 | SHALL |  | [1198-28711](#C_1198-28711) |  |
| code | 0..1 | SHOULD |  | [1198-28712](#C_1198-28712) |  |
| performer | 0..\* | SHOULD |  | [1198-28713](#C_1198-28713) |  |
| functionCode | 0..1 | MAY |  | [1198-28714](#C_1198-28714) | urn:oid:2.16.840.1.113883.1.11.10267 (ParticipationFunction) |
| assignedEntity | 1..1 | SHALL |  | [1198-28715](#C_1198-28715) |  |
| id | 1..\* | SHALL |  | [1198-28716](#C_1198-28716) |  |
| code | 0..1 | MAY |  | [1198-28718](#C_1198-28718) | urn:oid:2.16.840.1.113883.11.20.12.1 (Personal And Legal Relationship Role Type) |

1. Conforms to [US Realm Header (V3)](#D_US_Realm_Header_V3) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2015-08-01).
2. SHALL contain exactly one [1..1] templateId (CONF:1198-28458) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.29.1" (CONF:1198-28459).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32917).
   3. When asserting this templateId, all C-CDA 2.1 section and entry templates that had a previous version in C-CDA R1.1 SHALL include both the C-CDA 2.1 templateId and the C-CDA R1.1 templateId root without an extension. See C-CDA R2.1 Volume 1 - Design Considerations for additional detail (CONF:1198-32945).

The recordTarget records the patient whose health information is described by the clinical document; each recordTarget must contain at least one patientRole element.

If the document receiver is interested in setting up a translator for the encounter with the patient, the receiver of the document will have to infer the need for a translator, based upon the language skills identified for the patient, the patient’s language of preference and the predominant language used by the organization receiving the CDA.

HL7 Vocabulary simply describes guardian as a relationship to a ward. This need not be a formal legal relationship. When a guardian relationship exists for the patient, it can be represented, regardless of who is present at the time the document is generated. This need not be a formal legal relationship. A child’s parent can be represented in the guardian role. In this case, the guardian/code element would encode the personal relationship of "mother" for the child’s mom or "father" for the child’s dad. An elderly person's child can be represented in the guardian role. In this case, the guardian/code element would encode the personal relationship of "daughter" or "son", or if a legal relationship existed, the relationship of "legal guardian" could be encoded.

1. SHALL contain exactly one [1..1] recordTarget (CONF:1198-28460).
   1. This recordTarget SHALL contain exactly one [1..1] patientRole (CONF:1198-28461).
      1. This patientRole SHALL contain at least one [1..\*] id (CONF:1198-28462).
      2. This patientRole SHALL contain exactly one [1..1] patient (CONF:1198-28465).
         1. This patient MAY contain zero or more [0..\*] guardian (CONF:1198-28469).
            1. The guardian, if present, SHOULD contain zero or more [0..\*] id (CONF:1198-28470).
            2. The guardian, if present, SHOULD contain zero or one [0..1] code, which SHALL be selected from ValueSet [Personal And Legal Relationship Role Type](#Personal_And_Legal_Relationship_Role_Ty) urn:oid:2.16.840.1.113883.11.20.12.1 DYNAMIC (CONF:1198-28473).
         2. This patient SHOULD contain zero or more [0..\*] languageCommunication (CONF:1198-28474).
            1. The languageCommunication, if present, MAY contain zero or one [0..1] preferenceInd (CONF:1198-28475).  
               Note: Indicates a preference for information about care delivery and treatments be communicated (or translated if needed) into this language.  
                 
               If more than one languageCommunication is present, only one languageCommunication element SHALL have a preferenceInd with a value of 1.

If present, this organization represents the provider organization where the person is claiming to be a patient.

* + 1. This patientRole MAY contain zero or one [0..1] providerOrganization (CONF:1198-28476).  
       Note: If present, this organization represents the provider organization where the person is claiming to be a patient.

The author element represents the creator of the clinical document. The author may be a device, or a person. The person is the patient or the patient’s advocate.

1. SHALL contain at least one [1..\*] author (CONF:1198-28477).
   1. Such authors SHALL contain exactly one [1..1] assignedAuthor (CONF:1198-28478).
      1. This assignedAuthor SHALL contain at least one [1..\*] id (CONF:1198-28479).

When the author is a person who is not acting in the role of a clinician, this code encodes the personal or legal relationship between author and the patient.

* + 1. This assignedAuthor SHOULD contain zero or one [0..1] code (CONF:1198-28481).
       1. The code, if present, SHALL contain exactly one [1..1] @code, which SHOULD be selected from ValueSet [Personal And Legal Relationship Role Type](#Personal_And_Legal_Relationship_Role_Ty) urn:oid:2.16.840.1.113883.11.20.12.1 DYNAMIC (CONF:1198-28676).

The dataEnterer element represents the person who transferred the content, written or dictated by someone else, into the clinical document. The guiding rule of thumb is that an author provides the content found within the header or body of the document, subject to their own interpretation, and the dataEnterer adds that information to the electronic system. In other words, a dataEnterer transfers information from one source to another (e.g., transcription from paper form to electronic system). If the dataEnterer is missing, this role is assumed to be played by the author.

1. MAY contain zero or one [0..1] dataEnterer (CONF:1198-28678).
   1. The dataEnterer, if present, SHALL contain exactly one [1..1] assignedEntity (CONF:1198-28679).
      1. This assignedEntity MAY contain zero or one [0..1] code, which SHOULD be selected from ValueSet [Personal And Legal Relationship Role Type](#Personal_And_Legal_Relationship_Role_Ty) urn:oid:2.16.840.1.113883.11.20.12.1 DYNAMIC (CONF:1198-28680).

The informant element describes the source of the information in a medical document.

Assigned health care providers may be a source of information when a document is created. (e.g., a nurse's aide who provides information about a recent significant health care event that occurred within an acute care facility.) In these cases, the assignedEntity element is used.

When the informant is a personal relation, that informant is represented in the relatedEntity element, even if the personal relation is a medical professional. The code element of the relatedEntity describes the relationship between the informant and the patient. The relationship between the informant and the patient needs to be described to help the receiver of the clinical document understand the information in the document.

Each informant can be either an assignedEntity (a clinician serving the patient) OR a relatedEntity (a person with a personal or legal relationship with the patient). The constraints here apply to relatedEntity.

1. MAY contain zero or more [0..\*] informant (CONF:1198-28681) such that it
   1. SHALL contain exactly one [1..1] relatedEntity (CONF:1198-28682).
      1. This relatedEntity MAY contain zero or one [0..1] code (CONF:1198-28683).
         1. The code, if present, SHOULD contain zero or one [0..1] @code, which SHOULD be selected from ValueSet [Personal And Legal Relationship Role Type](#Personal_And_Legal_Relationship_Role_Ty) urn:oid:2.16.840.1.113883.11.20.12.1 DYNAMIC (CONF:1198-28684).

The custodian element represents the organization or person that is in charge of maintaining the document. The custodian is the steward that is entrusted with the care of the document. Every CDA document has exactly one custodian. The custodian participation satisfies the CDA definition of Stewardship. Because CDA is an exchange standard and may not represent the original form of the authenticated document (e.g., CDA could include scanned copy of original), 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. Also, the custodian may be the patient or an organization acting on behalf of the patient, such as a PHR organization.

1. SHALL contain exactly one [1..1] custodian (CONF:1198-28685).
   1. This custodian SHALL contain exactly one [1..1] assignedCustodian (CONF:1198-28686).

The representedCustodianOrganization may be the person when the document is not maintained by an organization.

* + 1. This assignedCustodian SHALL contain exactly one [1..1] representedCustodianOrganization (CONF:1198-28687).

The combined @root and @extension attributes record the custodian organization’s identity in a secure, trusted, and unique way.

* + - 1. This representedCustodianOrganization SHALL contain at least one [1..\*] id (CONF:1198-28688).

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

1. MAY contain zero or more [0..\*] informationRecipient (CONF:1198-28690).
   1. The informationRecipient, if present, SHALL contain exactly one [1..1] intendedRecipient (CONF:1198-28691).

The combined @root and @extension attributes to record the information recipient’s identity in a secure, trusted, and unique way.

* + 1. This intendedRecipient SHOULD contain zero or more [0..\*] id (CONF:1198-28692).

For a provider, the id/@root ="2.16.840.1.113883.4.6" indicates the National Provider Identifier where id/@extension is the NPI number for the provider.

The ids MAY reference the id of a person or organization entity specified elsewhere in the document.

* + - 1. The id, if present, SHOULD contain zero or one [0..1] @root (CONF:1198-28693).

In a patient authored document, the legalAuthenticator identifies the single person legally responsible for the document and must be present if the document has been legally authenticated. (Note that per the following section, there may also be one or more document authenticators.)  
Based on local practice, patient authored documents may be provided without legal authentication. This implies that a patient authored 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. All patient documents have the potential for legal authentication, given the appropriate legal authority.  
Local policies MAY choose to delegate the function of legal authentication to a device or system that generates the document. In these cases, the legal authenticator is the person accepting responsibility for the document, not the generating device or system.  
Note that the legal authenticator, if present, must be a person.

1. MAY contain zero or one [0..1] legalAuthenticator (CONF:1198-28694).
   1. The legalAuthenticator, if present, SHALL contain exactly one [1..1] assignedEntity (CONF:1198-28695).

The combined @root and @extension attributes to record the information recipient’s identity in a secure, trusted, and unique way.

* + 1. This assignedEntity SHALL contain at least one [1..\*] id (CONF:1198-28696).
    2. This assignedEntity MAY contain zero or one [0..1] code (CONF:1198-28697).
       1. The code, if present, MAY contain zero or one [0..1] @code, which SHOULD be selected from ValueSet [Personal And Legal Relationship Role Type](#Personal_And_Legal_Relationship_Role_Ty) urn:oid:2.16.840.1.113883.11.20.12.1 DYNAMIC (CONF:1198-28698).

1. MAY contain zero or more [0..\*] authenticator (CONF:1198-28699).
   1. The authenticator, if present, SHALL contain exactly one [1..1] assignedEntity (CONF:1198-28700).

The combined @root and @extension attributes to record the authenticator’s identity in a secure, trusted, and unique way.

* + 1. This assignedEntity SHALL contain at least one [1..\*] id (CONF:1198-28701).
    2. This assignedEntity SHOULD contain zero or one [0..1] code, which SHOULD be selected from ValueSet [Personal And Legal Relationship Role Type](#Personal_And_Legal_Relationship_Role_Ty) urn:oid:2.16.840.1.113883.11.20.12.1 DYNAMIC (CONF:1198-28702).

The participant element identifies other supporting participants, including parents, relatives, caregivers, insurance policyholders, guarantors, and other participants 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)

1. MAY contain zero or more [0..\*] participant (CONF:1198-28703).

Unless otherwise specified by the document specific header constraints, when participant/@typeCode is IND, associatedEntity/@classCode SHALL be selected from ValueSet 2.16.840.1.113883.11.20.9.33 INDRoleclassCodes DYNAMIC

* 1. The participant, if present, SHALL contain exactly one [1..1] @typeCode (CONF:1198-28704).
  2. The participant, if present, SHALL contain exactly one [1..1] associatedEntity (CONF:1198-28705).
     1. This associatedEntity SHOULD contain zero or one [0..1] code, which SHOULD be selected from ValueSet [Personal And Legal Relationship Role Type](#Personal_And_Legal_Relationship_Role_Ty) urn:oid:2.16.840.1.113883.11.20.12.1 DYNAMIC (CONF:1198-28706).

1. MAY contain zero or more [0..\*] inFulfillmentOf (CONF:1198-28707).
   1. The inFulfillmentOf, if present, SHALL contain exactly one [1..1] order (CONF:1198-28708).

A scheduled appointment or service event in a practice management system may be represented using this id element.

* + 1. This order SHALL contain at least one [1..\*] id (CONF:1198-28709).

1. MAY contain zero or more [0..\*] documentationOf (CONF:1198-28710).
   1. The documentationOf, if present, SHALL contain exactly one [1..1] serviceEvent (CONF:1198-28711).

The code should be selected from a value set established by the document-level template for a specific type of Patient Generated Document.

* + 1. This serviceEvent SHOULD contain zero or one [0..1] code (CONF:1198-28712).
    2. This serviceEvent SHOULD contain zero or more [0..\*] performer (CONF:1198-28713).

When indicating the performer was the primary care physician, implementers should indicate "PCP" as the functionCode

* + - 1. The performer, if present, MAY contain zero or one [0..1] functionCode, which SHALL be selected from ValueSet [ParticipationFunction](#ParticipationFunction) urn:oid:2.16.840.1.113883.1.11.10267 DYNAMIC (CONF:1198-28714).
      2. The performer, if present, SHALL contain exactly one [1..1] assignedEntity (CONF:1198-28715).

The combined @root and @extension attributes record the performer’s identity in a secure, trusted, and unique way.

* + - * 1. This assignedEntity SHALL contain at least one [1..\*] id (CONF:1198-28716).

If the assignedEntity is an individual, the code SHOULD be selected from value set PersonalandLegalRelationshipRoleType value set

* + - * 1. This assignedEntity MAY contain zero or one [0..1] code, which SHOULD be selected from ValueSet [Personal And Legal Relationship Role Type](#Personal_And_Legal_Relationship_Role_Ty) urn:oid:2.16.840.1.113883.11.20.12.1 DYNAMIC (CONF:1198-28718).

Table 60: ParticipationFunction

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: ParticipationFunction urn:oid:2.16.840.1.113883.1.11.10267  (Clinical Focus: This code is used to specify the exact function an actor had in a service in all necessary detail. This domain may include local extensions (CWE).),(Data Element Scope: ),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 5/27/2022 with a version of Latest.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.10267/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| ADMPHYS | HL7ParticipationFunction | urn:oid:2.16.840.1.113883.5.88 | admitting physician |
| ANEST | HL7ParticipationFunction | urn:oid:2.16.840.1.113883.5.88 | anesthesist |
| ANRS | HL7ParticipationFunction | urn:oid:2.16.840.1.113883.5.88 | anesthesia nurse |
| ATTPHYS | HL7ParticipationFunction | urn:oid:2.16.840.1.113883.5.88 | attending physician |
| AUCG | HL7ParticipationFunction | urn:oid:2.16.840.1.113883.5.88 | caregiver information receiver |
| AUCOV | HL7ParticipationFunction | urn:oid:2.16.840.1.113883.5.88 | consent overrider |
| AUEMROV | HL7ParticipationFunction | urn:oid:2.16.840.1.113883.5.88 | emergency overrider |
| AULR | HL7ParticipationFunction | urn:oid:2.16.840.1.113883.5.88 | legitimate relationship information receiver |
| AUTM | HL7ParticipationFunction | urn:oid:2.16.840.1.113883.5.88 | care team information receiver |
| AUWA | HL7ParticipationFunction | urn:oid:2.16.840.1.113883.5.88 | work area information receiver |
| ... | | | |

Figure 45: Patient Generated Document 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>

<id root="2.16.840.1.113883.4.1" extension="111-22-3333" />

<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="1.1.1.1.1.1.1.1.2" />

<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>

Figure 46: Patient Generated Document author Example

<author>

<time value="20121126145000-0500" />

<assignedAuthor>

<!-- Identifier based on the person's Direct Address which is a secure and trusted mechanism for identifying

a person discretely. The root of the id is the OID of the HISP Assigning Authority for the Direct Address-->

<id extension="adameveryman@direct.sampleHISP.com" root="2.16.123.123.12345.1234" />

<!--

The PGD Header Template includes further conformance constraints on the code element to encode the personal or legal

relationship of the author when they are person who is not acting in the role of a clinician..

-->

<code code="ONESELF" displayName="Self" codeSystem="2.16.840.1.113883.5.111" codeSystemName="HL7 Role code" />

<addr use="HP">

<!-- HP is "primary home" from codeSystem 2.16.840.1.113883.5.1119 -->

<streetAddressLine>2222 Home Street</streetAddressLine>

<city>Boston</city>

<state>MA</state>

<postalCode>02368</postalCode>

<!-- US is "United States" from ISO 3166-1 Country Codes: 1.0.3166.1 -->

<country>US</country>

</addr>

<!-- HP is "primary home" from HL7 AddressUse 2.16.840.1.113883.5.1119 -->

<telecom value="tel:(555)555-2004" use="HP" />

<assignedPerson>

<name>

<given>Adam</given>

<family>Everyman</family>

</name>

</assignedPerson>

</assignedAuthor>

</author>

Figure 47: Patient Generated Document author device Example

<!-- The Author below documents the system used to create the Patient Generated Document.

In this scenario the Patient is using a fictitious PHR Service called MyPersonalHealthRecord.com.

It is a service which consumers purchase to receive and create their electronic health records.

It is not a Patient Portal that is tethered to some other EMR or medical insurance records system.

The service is developed by a company call ACME PHR Solutions, Inc. -->

<author>

<time value="20121126145000-0500" />

<assignedAuthor>

<id extension="777.11" root="2.16.840.1.113883.19" />

<addr nullFlavor="NA" />

<telecom nullFlavor="NA" />

<assignedAuthoringDevice>

<manufacturerModelName>ACME PHR</manufacturerModelName>

<softwareName>MyPHR v1.0</softwareName>

</assignedAuthoringDevice>

<representedOrganization>

<id extension="999" root="1.2.3.4.5.6.7.8.9.12345" />

<name>ACME PHR Solutions, Inc.</name>

<telecom use="WP" value="tel:123-123-12345" />

<addr>

<streetAddressLine>4 Future Way</streetAddressLine>

<city>Provenance</city>

<state>RI</state>

<postalCode>02919</postalCode>

</addr>

</representedOrganization>

</assignedAuthor>

</author>

Figure 48: Patient Generated Document dataEnterer Example

<dataEnterer>

<assignedEntity>

<!-- Identifier based on the person's Direct Address which is a secure and trusted mechanism for identifying

a person discretely. The root of the id is the OID of the HISP Assigning Authority for the Direct Address-->

<id extension="adameveryman@direct.sampleHISP.com" root="2.16.123.123.12345.1234" />

<code code="ONESELF" displayName="Self" codeSystem="2.16.840.1.113883.5.111" codeSystemName="HL7 Role code" />

<addr use="HP">

<!-- HP is "primary home" from codeSystem 2.16.840.1.113883.5.1119 -->

<streetAddressLine>2222 Home Street</streetAddressLine>

<city>Boston</city>

<state>MA</state>

<postalCode>02368</postalCode>

<!-- US is "United States" from ISO 3166-1 Country Codes: 1.0.3166.1 -->

<country>US</country>

</addr>

<!-- HP is "primary home" from HL7 AddressUse 2.16.840.1.113883.5.1119 -->

<telecom value="tel:(555)555-2004" use="HP" />

<assignedPerson>

<name>

<given>Adam</given>

<family>Everyman</family>

</name>

</assignedPerson>

</assignedEntity>

</dataEnterer>

Figure 49: Patient Generated Document informant Example <informant>

<informant>

<assignedEntity>

<!-- id using HL7 example OID. -->

<id extension="999.1" root="2.16.840.1.113883.19" />

<code code="ONESELF" displayName="Self" codeSystem="2.16.840.1.113883.5.111" codeSystemName="HL7 Role code" />

<addr use="HP">

<!-- HP is "primary home" from codeSystem 2.16.840.1.113883.5.1119 -->

<streetAddressLine>2222 Home Street</streetAddressLine>

<city>Boston</city>

<state>MA</state>

<postalCode>02368</postalCode>

<!-- US is "United States" from ISO 3166-1 Country Codes: 1.0.3166.1 -->

<country>US</country>

</addr>

<!-- HP is "primary home" from HL7 AddressUse 2.16.840.1.113883.5.1119 -->

<telecom value="tel:(555)555-2004" use="HP" />

<assignedPerson>

<name>

<given>Adam</given>

<family>Everyman</family>

</name>

</assignedPerson>

</assignedEntity>

</informant>

Figure 50: Patient Generated Document informant RelEnt Example

<informant>

<!-- An Errata has been accepted to allow relatedEntity under Informant. #XXXX -->

<relatedEntity classCode="IND">

<!-- id using HL7 example OID. -->

<id extension="999.17" root="2.16.840.1.113883.19" />

<code code="SIS" displayName="Sister" codeSystem="2.16.840.1.113883.11.20.12.1" codeSystemName="Personal And Legal Relationship Role Type" />

<addr use="HP">

<!-- HP is "primary home" from codeSystem 2.16.840.1.113883.5.1119 -->

<streetAddressLine>2222 Home Street</streetAddressLine>

<city>Boston</city>

<state>MA</state>

<postalCode>02368</postalCode>

<!-- US is "United States" from ISO 3166-1 Country Codes: 1.0.3166.1 -->

<country>US</country>

</addr>

<!-- HP is "primary home" from HL7 AddressUse 2.16.840.1.113883.5.1119 -->

<telecom value="tel:(555)555-2004" use="HP" />

<assignedPerson>

<name>

<given>Alice</given>

<family>Everyman</family>

</name>

</assignedPerson>

</relatedEntity>

</informant>

Figure 51: Patient Generated Document custodian Example

<custodian>

<assignedCustodian>

<representedCustodianOrganization>

<!-- id using HL7 example OID. -->

<id extension="999.3" root="2.16.840.1.113883.19" />

<name>MyPersonalHealthRecord.Com</name>

<telecom value="tel:(555)555-1212" use="WP" />

<addr use="WP">

<streetAddressLine>123 Boylston Street</streetAddressLine>

<city>Blue Hill</city>

<state>MA</state>

<postalCode>02368</postalCode>

<country>USA</country>

</addr>

</representedCustodianOrganization>

</assignedCustodian>

</custodian>

Figure 52: Patient Generated Document informationRecipient

<!-- The document is intended for multiple recipients, Adam himself and his PCP physician. -->

<informationRecipient>

<intendedRecipient>

<!-- Identifier based on the person's Direct Address which is a secure and trusted mechanism for identifying

a person discretely. The root of the id is the OID of the HISP Assigning Authority for the Direct Address-->

<id extension="adameveryman@direct.sampleHISP.com" root="2.16.123.123.12345.1234" />

<informationRecipient>

<name>

<given>Adam</given>

<family>Everyman</family>

</name>

</informationRecipient>

<receivedOrganization>

<!-- id using HL7 example OID. -->

<id extension="999.3" root="2.16.840.1.113883.19" />

<name>MyPersonalHealthRecord.Com</name>

</receivedOrganization>

</intendedRecipient>

</informationRecipient>

<informationRecipient>

<intendedRecipient>

<!-- Unique/Trusted id using HL7 example OID. -->

<id extension="999.4" root="2.16.840.1.113883.19" />

<!-- The physician's NPI number -->

<id extension="1122334455" root="2.16.840.1.113883.4.6" />

<!-- The physician's Direct Address -->

<!-- Identifier based on the person's Direct Address which is a secure and trusted mechanism for identifying

a person discretely. The root of the id is the OID of the HISP Assigning Authority for the Direct Address-->

<id extension="DrP@direct.sampleHISP2.com" root="2.16.123.123.12345.4321" />

<telecom use="WP" value="tel:(781)555-1212" />

<telecom use="WP" value="mailto:DrP@direct.sampleHISP2.com" />

<informationRecipient>

<name>

<prefix>Dr.</prefix>

<given>Patricia</given>

<family>Primary</family>

</name>

</informationRecipient>

<receivedOrganization>

<!-- Unique/Trusted id using HL7 example OID. -->

<id extension="999.2" root="2.16.840.1.113883.19" />

<!-- NPI for the organization -->

<id extension="1234567890" root="2.16.840.1.113883.4.6" />

<name>Good Health Internal Medicine</name>

<telecom use="WP" value="tel:(781)555-1212" />

<addr>

<streetAddressLine>100 Health Drive</streetAddressLine>

<city>Boston</city>

<state>MA</state>

<postalCode>02368</postalCode>

<country>USA</country>

</addr>

</receivedOrganization>

</intendedRecipient>

</informationRecipient>

Figure 53: Patient Generated Document legalAuthenticator Example

<legalAuthenticator>

<time value="20121126145000-0500" />

<signatureCode code="S" />

<assignedEntity>

<!-- Identifier based on the person's Direct Address which is a secure and trusted mechanism for identifying

a person discretely. The root of the id is the OID of the HISP Assigning Authority for the Direct Address-->

<id extension="adameveryman@direct.sampleHISP.com" root="2.16.123.123.12345.1234" />

<addr use="HP">

<!-- HP is "primary home" from codeSystem 2.16.840.1.113883.5.1119 -->

<streetAddressLine>2222 Home Street</streetAddressLine>

<city>Boston</city>

<state>MA</state>

<postalCode>02368</postalCode>

<!-- US is "United States" from ISO 3166-1 Country Codes: 1.0.3166.1 -->

<country>US</country>

</addr>

<!-- HP is "primary home" from HL7 AddressUse 2.16.840.1.113883.5.1119 -->

<telecom value="tel:(555)555-2004" use="HP" />

<assignedPerson>

<name>

<given>Adam</given>

<family>Everyman</family>

</name>

</assignedPerson>

</assignedEntity>

</legalAuthenticator>

Figure 54: Patient Generated Document authenticator Example

<authenticator>

<time value="20121126145000-0500" />

<signatureCode code="S" />

<assignedEntity>

<!-- Identifier based on the person's Direct Address which is a secure and trusted mechanism for identifying

a person discretely. The root of the id is the OID of the HISP Assigning Authority for the Direct Address-->

<id extension="adameveryman@direct.sampleHISP.com" root="2.16.123.123.12345.1234" />

<addr use="HP">

<!-- HP is "primary home" from codeSystem 2.16.840.1.113883.5.1119 -->

<streetAddressLine>2222 Home Street</streetAddressLine>

<city>Boston</city>

<state>MA</state>

<postalCode>02368</postalCode>

<!-- US is "United States" from ISO 3166-1 Country Codes: 1.0.3166.1 -->

<country>US</country>

</addr>

<!-- HP is "primary home" from HL7 AddressUse 2.16.840.1.113883.5.1119 -->

<telecom value="tel:(555)555-2004" use="HP" />

<assignedPerson>

<name>

<given>Adam</given>

<family>Everyman</family>

</name>

</assignedPerson>

</assignedEntity>

</authenticator>

Figure 55: Patient Generated Document participant Example

<participant typeCode="IND">

<time xsi:type="IVL\_TS">

<low value="19551125" />

<high value="20121126" />

</time>

<associatedEntity classCode="NOK">

<code code="MTH" codeSystem="2.16.840.1.113883.5.111" />

<addr>

<streetAddressLine>17 Daws Rd.</streetAddressLine>

<city>Blue Bell</city>

<state>MA</state>

<postalCode>02368</postalCode>

<country>US</country>

</addr>

<telecom value="tel:(555)555-2006" use="WP" />

<associatedPerson>

<name>

<prefix>Mrs.</prefix>

<given>Martha</given>

<family>Mum</family>

</name>

</associatedPerson>

</associatedEntity>

</participant>

Figure 56: Patient Generated Document inFulfillmentOf Example

<inFulfillmentOf>

<order>

<!-- The root identifies the EMR system at the Good Health Internal Medicine Practice -->

<id extension="Ord12345" root="2.16.840.1.113883.4.6.1234567890.4" />

</order>

</inFulfillmentOf>

# Section-Level Templates

This chapter contains the section-level templates referenced by one or more of the document types of this consolidated 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 handcrafted 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.

Admission Diagnosis Section (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.43:2015-08-01 (open)]

Table 61: Admission Diagnosis Section (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Discharge Summary (V3)](#D_Discharge_Summary_V3) (optional)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (optional) | [Hospital Admission Diagnosis (V3)](#E_Hospital_Admission_Diagnosis_V3) (optional) |

This section contains a narrative description of the problems or diagnoses identified by the clinician at the time of the patient’s admission. This section may contain a coded entry which represents the admitting diagnoses.

Table 62: Admission Diagnosis Section (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.43:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-9930](#C_1198-9930) |  |
| @root | 1..1 | SHALL |  | [1198-10391](#C_1198-10391) | 2.16.840.1.113883.10.20.22.2.43 |
| @extension | 1..1 | SHALL |  | [1198-32563](#C_1198-32563) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15479](#C_1198-15479) |  |
| @code | 1..1 | SHALL |  | [1198-15480](#C_1198-15480) | 46241-6 |
| @codeSystem | 1..1 | SHALL |  | [1198-30865](#C_1198-30865) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| translation | 1..1 | SHALL |  | [1198-32749](#C_1198-32749) |  |
| @code | 1..1 | SHALL |  | [1198-32750](#C_1198-32750) | 42347-5 |
| @codeSystem | 1..1 | SHALL |  | [1198-32751](#C_1198-32751) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-9932](#C_1198-9932) |  |
| text | 1..1 | SHALL |  | [1198-9933](#C_1198-9933) |  |
| entry | 0..1 | SHOULD |  | [1198-9934](#C_1198-9934) |  |
| act | 1..1 | SHALL |  | [1198-15481](#C_1198-15481) | [Hospital Admission Diagnosis (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.34:2015-08-01](#E_Hospital_Admission_Diagnosis_V3) |

1. SHALL contain exactly one [1..1] templateId (CONF:1198-9930) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.43" (CONF:1198-10391).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32563).
2. SHALL contain exactly one [1..1] code (CONF:1198-15479).
   1. This code SHALL contain exactly one [1..1] @code="46241-6" Hospital Admission diagnosis (CONF:1198-15480).
   2. 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:1198-30865).
   3. This code SHALL contain exactly one [1..1] translation (CONF:1198-32749) such that it
      1. SHALL contain exactly one [1..1] @code="42347-5" Admission Diagnosis (CONF:1198-32750).
      2. 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:1198-32751).
3. SHALL contain exactly one [1..1] title (CONF:1198-9932).
4. SHALL contain exactly one [1..1] text (CONF:1198-9933).
5. SHOULD contain zero or one [0..1] entry (CONF:1198-9934).
   1. The entry, if present, SHALL contain exactly one [1..1] [Hospital Admission Diagnosis (V3)](#E_Hospital_Admission_Diagnosis_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.34:2015-08-01) (CONF:1198-15481).

Figure 57: Admission Diagnosis Section (V3) Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.43" extension="2015-08-01"/>

<code code="46241-6" codeSystem="2.16.840.1.113883.6.1" displayName="Hospital Admission Diagnosis">

<translation code="42347-5" codeSystem="2.16.840.1.113883.6.1" displayName="Admission Diagnosis"></translation>

</code>

<title>HOSPITAL ADMISSION DIAGNOSIS</title>

<text>Appendicitis</text>

<entry>

<act classCode="ACT" moodCode="EVN">

<!--Admission Diagnosis template -->

...

</act>

</entry>

</section>

Admission Medications Section (entries optional) (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.44:2015-08-01 (open)]

Table 63: Admission Medications Section (entries optional) (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Discharge Summary (V3)](#D_Discharge_Summary_V3) (optional)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (optional) | [Admission Medication (V2)](#Admission_Medication_V2) (optional) |

The section contains the medications taken by the patient prior to and at the time of admission to the facility.

Table 64: Admission Medications Section (entries optional) (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.44:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-10098](#C_1198-10098) |  |
| @root | 1..1 | SHALL |  | [1198-10392](#C_1198-10392) | 2.16.840.1.113883.10.20.22.2.44 |
| @extension | 1..1 | SHALL |  | [1198-32560](#C_1198-32560) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15482](#C_1198-15482) |  |
| @code | 1..1 | SHALL |  | [1198-15483](#C_1198-15483) | 42346-7 |
| @codeSystem | 1..1 | SHALL |  | [1198-32142](#C_1198-32142) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-10100](#C_1198-10100) |  |
| text | 1..1 | SHALL |  | [1198-10101](#C_1198-10101) |  |
| entry | 0..\* | SHOULD |  | [1198-10102](#C_1198-10102) |  |
| act | 1..1 | SHALL |  | [1198-15484](#C_1198-15484) | [Admission Medication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.36:2014-06-09](#Admission_Medication_V2) |

1. SHALL contain exactly one [1..1] templateId (CONF:1198-10098) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.44" (CONF:1198-10392).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32560).
2. SHALL contain exactly one [1..1] code (CONF:1198-15482).
   1. This code SHALL contain exactly one [1..1] @code="42346-7" Medications on Admission (CONF:1198-15483).
   2. 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:1198-32142).
3. SHALL contain exactly one [1..1] title (CONF:1198-10100).
4. SHALL contain exactly one [1..1] text (CONF:1198-10101).
5. SHOULD contain zero or more [0..\*] entry (CONF:1198-10102) such that it
   1. SHALL contain exactly one [1..1] [Admission Medication (V2)](#Admission_Medication_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.36:2014-06-09) (CONF:1198-15484).

Advance Directives Section (entries optional) (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.21:2015-08-01 (open)]

Table 65: Advance Directives Section (entries optional) (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (optional)  [Continuity of Care Document (CCD) (V3)](#D_Continuity_of_Care_Document_CCD_V3) (optional)  [Referral Note (V2)](#D_Referral_Note_V2) (optional) | [Advance Directive Observation (V3)](#E_Advance_Directive_Observation_V3) (optional)  [Advance Directive Organizer (V2)](#E_Advance_Directive_Organizer_V2) (optional) |

This section contains data defining the patient’s advance directives and any reference to supporting documentation, including living wills, healthcare proxies, and CPR and resuscitation status. If the referenced documents are available, they can be included in the exchange package.

The most recent directives are required, if known, and should be listed in as much detail as possible.

This section differentiates between "advance directives" and "advance directive documents". The former is the directions to be followed whereas the latter refers to a legal document containing those directions.

Table 66: Advance Directives Section (entries optional) (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.21:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-7928](#C_1198-7928) |  |
| @root | 1..1 | SHALL |  | [1198-10376](#C_1198-10376) | 2.16.840.1.113883.10.20.22.2.21 |
| @extension | 1..1 | SHALL |  | [1198-32497](#C_1198-32497) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15340](#C_1198-15340) |  |
| @code | 1..1 | SHALL |  | [1198-15342](#C_1198-15342) | 42348-3 |
| @codeSystem | 1..1 | SHALL |  | [1198-30812](#C_1198-30812) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-7930](#C_1198-7930) |  |
| text | 1..1 | SHALL |  | [1198-7931](#C_1198-7931) |  |
| entry | 0..\* | MAY |  | [1198-7957](#C_1198-7957) |  |
| observation | 1..1 | SHALL |  | [1198-15443](#C_1198-15443) | [Advance Directive Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.48:2015-08-01](#E_Advance_Directive_Observation_V3) |
| entry | 0..\* | MAY |  | [1198-32891](#C_1198-32891) |  |
| organizer | 1..1 | SHALL |  | [1198-32892](#C_1198-32892) | [Advance Directive Organizer (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.108:2015-08-01](#E_Advance_Directive_Organizer_V2) |

1. SHALL contain exactly one [1..1] templateId (CONF:1198-7928) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.21" (CONF:1198-10376).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32497).
2. SHALL contain exactly one [1..1] code (CONF:1198-15340).
   1. This code SHALL contain exactly one [1..1] @code="42348-3" Advance Directives (CONF:1198-15342).
   2. 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:1198-30812).
3. SHALL contain exactly one [1..1] title (CONF:1198-7930).
4. SHALL contain exactly one [1..1] text (CONF:1198-7931).
5. MAY contain zero or more [0..\*] entry (CONF:1198-7957) such that it
   1. SHALL contain exactly one [1..1] [Advance Directive Observation (V3)](#E_Advance_Directive_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.48:2015-08-01) (CONF:1198-15443).
6. MAY contain zero or more [0..\*] entry (CONF:1198-32891) such that it
   1. SHALL contain exactly one [1..1] [Advance Directive Organizer (V2)](#E_Advance_Directive_Organizer_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.108:2015-08-01) (CONF:1198-32892).

Advance Directives Section (entries required) (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.21.1:2015-08-01 (open)]

Table 67: Advance Directives Section (entries required) (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Transfer Summary (V2)](#D_Transfer_Summary_V2) (optional) | [Advance Directive Observation (V3)](#E_Advance_Directive_Observation_V3) (optional)  [Advance Directive Organizer (V2)](#E_Advance_Directive_Organizer_V2) (optional) |

This section contains data defining the patient’s advance directives and any reference to supporting documentation, including living wills, healthcare proxies, and CPR and resuscitation status. If the referenced documents are available, they can be included in the exchange package.

The most recent directives are required, if known, and should be listed in as much detail as possible.

This section differentiates between "advance directives" and "advance directive documents". The former is the directions to be followed whereas the latter refers to a legal document containing those directions.

Table 68: Advance Directives Section (entries required) (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.21.1:2015-08-01) | | | | | |
| @nullFlavor | 0..1 | MAY |  | [1198-32800](#C_1198-32800) | urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = NI |
| templateId | 1..1 | SHALL |  | [1198-30227](#C_1198-30227) |  |
| @root | 1..1 | SHALL |  | [1198-30228](#C_1198-30228) | 2.16.840.1.113883.10.20.22.2.21.1 |
| @extension | 1..1 | SHALL |  | [1198-32512](#C_1198-32512) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-32929](#C_1198-32929) |  |
| @code | 1..1 | SHALL |  | [1198-32930](#C_1198-32930) | 42348-3 |
| @codeSystem | 1..1 | SHALL |  | [1198-32931](#C_1198-32931) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-32932](#C_1198-32932) |  |
| text | 1..1 | SHALL |  | [1198-32933](#C_1198-32933) |  |
| entry | 1..\* | SHALL |  | [1198-30235](#C_1198-30235) |  |
| observation | 0..1 | MAY |  | [1198-30236](#C_1198-30236) | [Advance Directive Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.48:2015-08-01](#E_Advance_Directive_Observation_V3) |
| organizer | 0..1 | MAY |  | [1198-32420](#C_1198-32420) | [Advance Directive Organizer (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.108:2015-08-01](#E_Advance_Directive_Organizer_V2) |

1. Conforms to [Advance Directives Section (entries optional) (V3)](#S_Advance_Directives_Section_entries_op) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.21:2015-08-01).
2. MAY contain zero or one [0..1] @nullFlavor="NI" No information (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:1198-32800).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-30227) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.21.1" (CONF:1198-30228).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32512).
4. SHALL contain exactly one [1..1] code (CONF:1198-32929).
   1. This code SHALL contain exactly one [1..1] @code="42348-3" Advance Directives (CONF:1198-32930).
   2. 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:1198-32931).
5. SHALL contain exactly one [1..1] title (CONF:1198-32932).
6. SHALL contain exactly one [1..1] text (CONF:1198-32933).

If section/@nullFlavor is not present *SHALL* contain an Advance Directive Observation *OR* an Advance Directive Organizer:

1. SHALL contain at least one [1..\*] entry (CONF:1198-30235) such that it
   1. MAY contain zero or one [0..1] [Advance Directive Observation (V3)](#E_Advance_Directive_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.48:2015-08-01) (CONF:1198-30236).
   2. MAY contain zero or one [0..1] [Advance Directive Organizer (V2)](#E_Advance_Directive_Organizer_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.108:2015-08-01) (CONF:1198-32420).
   3. If section/@nullFlavor is not present, this entry SHALL contain one or more entries, each with  
      *EITHER* an Advance Directive Observation (V3) *OR* an Advance Directive Organizer (V2). There may be a combination of Advance Directive Observations and Advance Directive Organizers in different entries (CONF:1198-32881).

Figure 58: Advance Directives Section (V3) Example

<section>

<!-- C-CDA Advance Directives Section (required entries)template id -->

<templateId root="2.16.840.1.113883.10.20.22.2.21.1" extension="2015-08-01" />

<code code="42348-3" codeSystem="2.16.840.1.113883.6.1" />

<title>ADVANCE DIRECTIVES</title>

<text>

Narrative Text

</text>

<entry typeCode="DRIV">

<organizer classCode="CLUSTER" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.108" />

<!-- \*\*\*Advance Directive Organizer template -->

<id root="af6ebdf2-d996-11e2-a5b8-f23c91aec05e" />

</organizer>

</entry>

<entry typeCode="DRIV">

<organizer classCode="CLUSTER" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.108" />

<!-- \*\*\*Advance Directive Organizer template -->

<id root="af6ebdf2-d996-11e2-a5b8-f23c91aec05e" />

</organizer>

</entry>

</section>

Allergies and Intolerances Section (entries optional) (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.6:2015-08-01 (open)]

Table 69: Allergies and Intolerances Section (entries optional) (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Discharge Summary (V3)](#D_Discharge_Summary_V3) (required)  [History and Physical (V3)](#D_History_and_Physical_V3) (required)  [Progress Note (V3)](#D_Progress_Note_V3) (optional)  [Procedure Note (V3)](#D_Procedure_Note_V3) (optional) | [Allergy Concern Act (V3)](#E_Allergy_Concern_Act_V3) (optional) |

This section lists and describes any medication allergies, adverse reactions, idiosyncratic reactions, anaphylaxis/anaphylactoid reactions to food items, and metabolic variations or adverse reactions/allergies to other substances (such as latex, iodine, tape adhesives). At a minimum, it should list currently active and any relevant historical allergies and adverse reactions.

Table 70: Allergies and Intolerances Section (entries optional) (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-7800](#C_1198-7800) |  |
| @root | 1..1 | SHALL |  | [1198-10378](#C_1198-10378) | 2.16.840.1.113883.10.20.22.2.6 |
| @extension | 1..1 | SHALL |  | [1198-32544](#C_1198-32544) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15345](#C_1198-15345) |  |
| @code | 1..1 | SHALL |  | [1198-15346](#C_1198-15346) | 48765-2 |
| @codeSystem | 1..1 | SHALL |  | [1198-32139](#C_1198-32139) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-7802](#C_1198-7802) |  |
| text | 1..1 | SHALL |  | [1198-7803](#C_1198-7803) |  |
| entry | 0..\* | SHOULD |  | [1198-7804](#C_1198-7804) |  |
| act | 1..1 | SHALL |  | [1198-15444](#C_1198-15444) | [Allergy Concern Act (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.30:2015-08-01](#E_Allergy_Concern_Act_V3) |

1. SHALL contain exactly one [1..1] templateId (CONF:1198-7800) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.6" (CONF:1198-10378).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32544).
2. SHALL contain exactly one [1..1] code (CONF:1198-15345).
   1. This code SHALL contain exactly one [1..1] @code="48765-2" Allergies, adverse reactions, alerts (CONF:1198-15346).
   2. 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:1198-32139).
3. SHALL contain exactly one [1..1] title (CONF:1198-7802).
4. SHALL contain exactly one [1..1] text (CONF:1198-7803).
5. SHOULD contain zero or more [0..\*] entry (CONF:1198-7804) such that it
   1. SHALL contain exactly one [1..1] [Allergy Concern Act (V3)](#E_Allergy_Concern_Act_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.30:2015-08-01) (CONF:1198-15444).

Allergies and Intolerances Section (entries required) (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.6.1:2015-08-01 (open)]

Table 71: Allergies and Intolerances Section (entries required) (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (required)  [Continuity of Care Document (CCD) (V3)](#D_Continuity_of_Care_Document_CCD_V3) (required)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (required)  [Referral Note (V2)](#D_Referral_Note_V2) (required) | [Allergy Concern Act (V3)](#E_Allergy_Concern_Act_V3) (required) |

This section lists and describes any medication allergies, adverse reactions, idiosyncratic reactions, anaphylaxis/anaphylactoid reactions to food items, and metabolic variations or adverse reactions/allergies to other substances (such as latex, iodine, tape adhesives). At a minimum, it should list currently active and any relevant historical allergies and adverse reactions.

Table 72: Allergies and Intolerances Section (entries required) (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6.1:2015-08-01) | | | | | |
| @nullFlavor | 0..1 | MAY |  | [1198-32824](#C_1198-32824) | urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = NI |
| templateId | 1..1 | SHALL |  | [1198-7527](#C_1198-7527) |  |
| @root | 1..1 | SHALL |  | [1198-10379](#C_1198-10379) | 2.16.840.1.113883.10.20.22.2.6.1 |
| @extension | 1..1 | SHALL |  | [1198-32545](#C_1198-32545) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15349](#C_1198-15349) |  |
| @code | 1..1 | SHALL |  | [1198-15350](#C_1198-15350) | 48765-2 |
| @codeSystem | 1..1 | SHALL |  | [1198-32140](#C_1198-32140) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-7534](#C_1198-7534) |  |
| text | 1..1 | SHALL |  | [1198-7530](#C_1198-7530) |  |
| entry | 1..\* | SHALL |  | [1198-7531](#C_1198-7531) |  |
| act | 1..1 | SHALL |  | [1198-15446](#C_1198-15446) | [Allergy Concern Act (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.30:2015-08-01](#E_Allergy_Concern_Act_V3) |

1. Conforms to [Allergies and Intolerances Section (entries optional) (V3)](#S_Allergies_and_Intolerances_Section_eo) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.6:2015-08-01).
2. MAY contain zero or one [0..1] @nullFlavor="NI" No information (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:1198-32824).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-7527) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.6.1" (CONF:1198-10379).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32545).
4. SHALL contain exactly one [1..1] code (CONF:1198-15349).
   1. This code SHALL contain exactly one [1..1] @code="48765-2" Allergies, adverse reactions, alerts (CONF:1198-15350).
   2. 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:1198-32140).
5. SHALL contain exactly one [1..1] title (CONF:1198-7534).
6. SHALL contain exactly one [1..1] text (CONF:1198-7530).

If section/@nullFlavor is not present:

1. SHALL contain at least one [1..\*] entry (CONF:1198-7531) such that it
   1. SHALL contain exactly one [1..1] [Allergy Concern Act (V3)](#E_Allergy_Concern_Act_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.30:2015-08-01) (CONF:1198-15446).

Figure 59: Allergies and Intolerances Section (entries required) (V3) Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.6.1" extension="2015-08-01" />

<code code="48765-2" displayName="Allergies, adverse reactions, alerts" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />

<title>Allergies</title>

<text>

...

</text>

<entry typeCode="DRIV">

<act classCode="ACT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.30" extension="2014-06-09" />

<!-- Allergy Concern Act template -->

...

</act>

</entry>

</section>

Anesthesia Section (V2)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.25:2014-06-09 (open)]

Table 73: Anesthesia Section (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Procedure Note (V3)](#D_Procedure_Note_V3) (optional)  [Operative Note (V3)](#D_Operative_Note_V3) (required) | [Medication Activity (V2)](#Medication_Activity_V2) (optional)  [Procedure Activity Procedure (V2)](#E_Procedure_Activity_Procedure_V2) (optional) |

The Anesthesia Section records the type of anesthesia (e.g., general or local) and may state the actual agent used. This may be a subsection of the Procedure Description Section. The full details of anesthesia are usually found in a separate Anesthesia Note.

Table 74: Anesthesia Section (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.25:2014-06-09) | | | | | |
| templateId | 1..1 | SHALL |  | [1098-8066](#C_1098-8066) |  |
| @root | 1..1 | SHALL |  | [1098-10380](#C_1098-10380) | 2.16.840.1.113883.10.20.22.2.25 |
| @extension | 1..1 | SHALL |  | [1098-32531](#C_1098-32531) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-15351](#C_1098-15351) |  |
| @code | 1..1 | SHALL |  | [1098-15352](#C_1098-15352) | 59774-0 |
| @codeSystem | 1..1 | SHALL |  | [1098-30830](#C_1098-30830) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-8068](#C_1098-8068) |  |
| text | 1..1 | SHALL |  | [1098-8069](#C_1098-8069) |  |
| entry | 0..\* | MAY |  | [1098-8092](#C_1098-8092) |  |
| procedure | 1..1 | SHALL |  | [1098-15447](#C_1098-15447) | [Procedure Activity Procedure (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09](#E_Procedure_Activity_Procedure_V2) |
| entry | 0..\* | MAY |  | [1098-8094](#C_1098-8094) |  |
| substanceAdministration | 1..1 | SHALL |  | [1098-31127](#C_1098-31127) | [Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09](#Medication_Activity_V2) |

1. SHALL contain exactly one [1..1] templateId (CONF:1098-8066) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.25" (CONF:1098-10380).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32531).
2. SHALL contain exactly one [1..1] code (CONF:1098-15351).
   1. This code SHALL contain exactly one [1..1] @code="59774-0" Anesthesia (CONF:1098-15352).
   2. 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:1098-30830).
3. SHALL contain exactly one [1..1] title (CONF:1098-8068).
4. SHALL contain exactly one [1..1] text (CONF:1098-8069).
5. MAY contain zero or more [0..\*] entry (CONF:1098-8092) such that it
   1. SHALL contain exactly one [1..1] [Procedure Activity Procedure (V2)](#E_Procedure_Activity_Procedure_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09) (CONF:1098-15447).
6. MAY contain zero or more [0..\*] entry (CONF:1098-8094) such that it
   1. SHALL contain exactly one [1..1] [Medication Activity (V2)](#Medication_Activity_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09) (CONF:1098-31127).

Figure 60: Anesthesia Section (V2) Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.25" extension="2014-06-09" />

<code code="59774-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName=" Anesthesia" />

<title>Procedure Anesthesia</title>

<text> Conscious sedation with propofol 200 mg IV </text>

<entry>

<procedure classCode="PROC" moodCode="EVN">

<!-- Procedure activity procedure template -->

<templateId root="2.16.840.1.113883.10.20.22.4.14" extension="2014-06-09" />

...

</procedure>

</entry>

<entry>

<substanceAdministration classCode="SBADM" moodCode="EVN">

<!-- Medication activity template -->

<templateId root="2.16.840.1.113883.10.20.22.4.16" extension="2014-06-09" />

...

</substanceAdministration>

</entry>

</section>

Assessment and Plan Section (V2)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09 (open)]

Table 75: Assessment and Plan Section (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (optional)  [History and Physical (V3)](#D_History_and_Physical_V3) (optional)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (optional)  [Referral Note (V2)](#D_Referral_Note_V2) (optional)  [Progress Note (V3)](#D_Progress_Note_V3) (optional)  [Procedure Note (V3)](#D_Procedure_Note_V3) (optional) | [Planned Act (V2)](#E_Planned_Act_V2) (optional) |

This section represents the clinician’s conclusions and working assumptions that will guide treatment of the patient. The Assessment and Plan Section may be combined or separated to meet local policy requirements.  
See also the Assessment Section: templateId 2.16.840.1.113883.10.20.22.2.8 and Plan of Treatment Section (V2): templateId 2.16.840.1.113883.10.20.22.2.10:2014-06-09

Table 76: Assessment and Plan Section (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.9:2014-06-09) | | | | | |
| templateId | 1..1 | SHALL |  | [1098-7705](#C_1098-7705) |  |
| @root | 1..1 | SHALL |  | [1098-10381](#C_1098-10381) | 2.16.840.1.113883.10.20.22.2.9 |
| @extension | 1..1 | SHALL |  | [1098-32583](#C_1098-32583) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-15353](#C_1098-15353) |  |
| @code | 1..1 | SHALL |  | [1098-15354](#C_1098-15354) | 51847-2 |
| @codeSystem | 1..1 | SHALL |  | [1098-32141](#C_1098-32141) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| text | 1..1 | SHALL |  | [1098-7707](#C_1098-7707) |  |
| entry | 0..\* | MAY |  | [1098-7708](#C_1098-7708) |  |
| act | 1..1 | SHALL |  | [1098-15448](#C_1098-15448) | [Planned Act (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.39:2014-06-09](#E_Planned_Act_V2) |

1. SHALL contain exactly one [1..1] templateId (CONF:1098-7705) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.9" (CONF:1098-10381).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32583).
2. SHALL contain exactly one [1..1] code (CONF:1098-15353).
   1. This code SHALL contain exactly one [1..1] @code="51847-2" Assessment and Plan (CONF:1098-15354).
   2. 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:1098-32141).
3. SHALL contain exactly one [1..1] text (CONF:1098-7707).
4. MAY contain zero or more [0..\*] entry (CONF:1098-7708) such that it
   1. SHALL contain exactly one [1..1] [Planned Act (V2)](#E_Planned_Act_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.39:2014-06-09) (CONF:1098-15448).

Figure 61: Assessment and Plan Section (V2) Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.9" extension="2014-06-09" />

<code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" code="51847-2" displayName="ASSESSMENT AND PLAN" />

<title>ASSESSMENT AND PLAN</title>

<text>

...

</text>

<entry>

<act moodCode="RQO" classCode="ACT">

<templateId root="2.16.840.1.113883.10.20.22.4.39" />

<!-- Planned Act -->

...

</act>

</entry>

</section>

Assessment Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.22.2.8 (open)]

Table 77: Assessment Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (optional)  [History and Physical (V3)](#D_History_and_Physical_V3) (optional)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (optional)  [Referral Note (V2)](#D_Referral_Note_V2) (optional)  [Progress Note (V3)](#D_Progress_Note_V3) (optional)  [Procedure Note (V3)](#D_Procedure_Note_V3) (optional) |  |

The Assessment Section (also referred to as “impression” or “diagnoses” outside of the context of CDA) represents the clinician's conclusions and working assumptions that will guide treatment of the patient. The assessment may be a list of specific disease entities or a narrative block.

Table 78: Assessment Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.8) | | | | | |
| templateId | 1..1 | SHALL |  | [81-7711](#C_81-7711) |  |
| @root | 1..1 | SHALL |  | [81-10382](#C_81-10382) | 2.16.840.1.113883.10.20.22.2.8 |
| code | 1..1 | SHALL |  | [81-14757](#C_81-14757) |  |
| @code | 1..1 | SHALL |  | [81-14758](#C_81-14758) | 51848-0 |
| @codeSystem | 1..1 | SHALL |  | [81-26472](#C_81-26472) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-16774](#C_81-16774) |  |
| text | 1..1 | SHALL |  | [81-7713](#C_81-7713) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-7711) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.8" (CONF:81-10382).
2. SHALL contain exactly one [1..1] code (CONF:81-14757).
   1. This code SHALL contain exactly one [1..1] @code="51848-0" Assessments (CONF:81-14758).
   2. 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:81-26472).
3. SHALL contain exactly one [1..1] title (CONF:81-16774).
4. SHALL contain exactly one [1..1] text (CONF:81-7713).

Figure 62: Assessment Section Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.8"/>

<code codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" code="51848-0"

displayName="ASSESSMENTS"/>

<title>ASSESSMENTS</title>

<text>

...

</text>

</section>

Chief Complaint and Reason for Visit Section

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

Table 79: Chief Complaint and Reason for Visit Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (optional)  [Discharge Summary (V3)](#D_Discharge_Summary_V3) (optional)  [History and Physical (V3)](#D_History_and_Physical_V3) (optional)  [Procedure Note (V3)](#D_Procedure_Note_V3) (optional) |  |

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 80: 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 |  | [81-7840](#C_81-7840) |  |
| @root | 1..1 | SHALL |  | [81-10383](#C_81-10383) | 2.16.840.1.113883.10.20.22.2.13 |
| code | 1..1 | SHALL |  | [81-15449](#C_81-15449) |  |
| @code | 1..1 | SHALL |  | [81-15450](#C_81-15450) | 46239-0 |
| @codeSystem | 1..1 | SHALL |  | [81-26473](#C_81-26473) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-7842](#C_81-7842) |  |
| text | 1..1 | SHALL |  | [81-7843](#C_81-7843) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-7840) such that it
   1. 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).
   1. This code SHALL contain exactly one [1..1] @code="46239-0" Chief Complaint and Reason for Visit (CONF:81-15450).
   2. 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 63: Chief Complaint and Reason for Visit Section 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>

Chief Complaint Section

[section: identifier urn:oid:1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1 (open)]

Table 81: Chief Complaint Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (optional)  [Discharge Summary (V3)](#D_Discharge_Summary_V3) (optional)  [History and Physical (V3)](#D_History_and_Physical_V3) (optional)  [Progress Note (V3)](#D_Progress_Note_V3) (optional)  [Procedure Note (V3)](#D_Procedure_Note_V3) (optional) |  |

This section records the patient's chief complaint (the patient’s own description).

Table 82: Chief Complaint Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1) | | | | | |
| templateId | 1..1 | SHALL |  | [81-7832](#C_81-7832) |  |
| @root | 1..1 | SHALL | UID | [81-10453](#C_81-10453) | 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1 |
| code | 1..1 | SHALL |  | [81-15451](#C_81-15451) |  |
| @code | 1..1 | SHALL |  | [81-15452](#C_81-15452) | 10154-3 |
| @codeSystem | 1..1 | SHALL |  | [81-26474](#C_81-26474) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-7834](#C_81-7834) |  |
| text | 1..1 | SHALL |  | [81-7835](#C_81-7835) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-7832) such that it
   1. SHALL contain exactly one [1..1] @root="1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1" (CONF:81-10453).
2. SHALL contain exactly one [1..1] code (CONF:81-15451).
   1. This code SHALL contain exactly one [1..1] @code="10154-3" Chief Complaint (CONF:81-15452).
   2. 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:81-26474).
3. SHALL contain exactly one [1..1] title (CONF:81-7834).
4. SHALL contain exactly one [1..1] text (CONF:81-7835).

Figure 64: Chief Complaint Section Example

<section>

<templateId root="1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1"/>

<code code="10154-3"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="CHIEF COMPLAINT"/>

<title> CHIEF COMPLAINT</title>

<text>Back Pain</text>

</section>

Complications Section (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.37:2015-08-01 (open)]

Table 83: Complications Section (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Procedure Note (V3)](#D_Procedure_Note_V3) (required)  [Operative Note (V3)](#D_Operative_Note_V3) (required) | [Problem Observation (V3)](#E_Problem_Observation_V3) (optional) |

This section contains problems that occurred during or around the time of a procedure. The complications may be known risks or unanticipated problems.

Table 84: Complications Section (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.37:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-8174](#C_1198-8174) |  |
| @root | 1..1 | SHALL |  | [1198-10384](#C_1198-10384) | 2.16.840.1.113883.10.20.22.2.37 |
| @extension | 1..1 | SHALL |  | [1198-32538](#C_1198-32538) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15453](#C_1198-15453) |  |
| @code | 1..1 | SHALL |  | [1198-15454](#C_1198-15454) | 55109-3 |
| @codeSystem | 1..1 | SHALL |  | [1198-30860](#C_1198-30860) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-8176](#C_1198-8176) |  |
| text | 1..1 | SHALL |  | [1198-8177](#C_1198-8177) |  |
| entry | 0..\* | MAY |  | [1198-8795](#C_1198-8795) |  |
| observation | 1..1 | SHALL |  | [1198-15455](#C_1198-15455) | [Problem Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01](#E_Problem_Observation_V3) |

1. SHALL contain exactly one [1..1] templateId (CONF:1198-8174) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.37" (CONF:1198-10384).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32538).
2. SHALL contain exactly one [1..1] code (CONF:1198-15453).
   1. This code SHALL contain exactly one [1..1] @code="55109-3" Complications (CONF:1198-15454).
   2. 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:1198-30860).
3. SHALL contain exactly one [1..1] title (CONF:1198-8176).
4. SHALL contain exactly one [1..1] text (CONF:1198-8177).
5. MAY contain zero or more [0..\*] entry (CONF:1198-8795) such that it
   1. SHALL contain exactly one [1..1] [Problem Observation (V3)](#E_Problem_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01) (CONF:1198-15455).  
      Note: When no coded entries or negation of entries are present, narrative section/text will be provided containing details of the complication(s) or that there were no complications.

Figure 65: Complications Section (V3) Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.37" extension="2015-08-01" />

<code code="55109-3" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Complications" />

<title>Complications</title>

<text>Asthmatic symptoms while under general anesthesia.</text>

<entry>

<observation classCode="OBS" moodCode="EVN">

<!-- Problem Observation -->

...

</observation>

</entry>

</section>

Course of Care Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.22.2.64 (open)]

Table 85: Course of Care Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Transfer Summary (V2)](#D_Transfer_Summary_V2) (optional) |  |

The Course of Care section describes what happened during the course of an encounter.

Table 86: Course of Care Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.64) | | | | | |
| templateId | 1..1 | SHALL |  | [1098-32640](#C_1098-32640) |  |
| @root | 1..1 | SHALL |  | [1098-32642](#C_1098-32642) | 2.16.840.1.113883.10.20.22.2.64 |
| code | 1..1 | SHALL |  | [1098-32641](#C_1098-32641) |  |
| @code | 1..1 | SHALL |  | [1098-32645](#C_1098-32645) | 8648-8 |
| @codeSystem | 1..1 | SHALL |  | [1098-32646](#C_1098-32646) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-32643](#C_1098-32643) |  |
| text | 1..1 | SHALL |  | [1098-32644](#C_1098-32644) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:1098-32640) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.64" (CONF:1098-32642).
2. SHALL contain exactly one [1..1] code (CONF:1098-32641).
   1. This code SHALL contain exactly one [1..1] @code="8648-8" Hospital Course Narrative (CONF:1098-32645).
   2. 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:1098-32646).
3. SHALL contain exactly one [1..1] title (CONF:1098-32643).
4. SHALL contain exactly one [1..1] text (CONF:1098-32644).

Figure 66: Course of Care Section Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.64"

extension="2014-06-09" />

<code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"

code="8648-8" displayName="Hospital Course Narrative" />

<title>Hospital Course of Care</title>

<text>

<paragraph>This patient was only recently transferred after a recurrent

GI bleed as described below.</paragraph>

<paragraph>He presented to the ER today c/o a dark stool yesterday

but a normal brown stool today. On exam he was hypotensive in the

80s resolved after .... .... .... </paragraph>

<paragraph>Lab at discharge: Glucose 112, BUN 16, creatinine 1.1,

electrolytes normal. H. pylori antibody pending. Admission

hematocrit 16%, discharge hematocrit 29%. WBC 7300, platelet

count 256,000. Urinalysis normal. Urine culture: No growth. INR

1.1, PTT 40.</paragraph>

<paragraph>He was transfused with 6 units of packed red blood cells

with .... .... ....</paragraph>

<paragraph>GI evaluation 12 September: Colonoscopy showed single red

clot in .... .... ....</paragraph>

</text>

</section>

DICOM Object Catalog Section - DCM 121181

[section: identifier urn:oid:2.16.840.1.113883.10.20.6.1.1 (open)]

Table 87: DICOM Object Catalog Section - DCM 121181 Contexts

| Contained By: | Contains: |
| --- | --- |
| [Diagnostic Imaging Report (V3)](#D_Diagnostic_Imaging_Report_V3) (optional) | [Study Act](#E_Study_Act) (required) |

DICOM Object Catalog lists all referenced objects and their parent Series and Studies, plus other DICOM attributes required for retrieving the objects.

DICOM Object Catalog sections are not intended for viewing and contain empty section text.

Table 88: DICOM Object Catalog Section - DCM 121181 Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:2.16.840.1.113883.10.20.6.1.1) | | | | | |
| templateId | 1..1 | SHALL |  | [81-8525](#C_81-8525) |  |
| @root | 1..1 | SHALL | UID | [81-10454](#C_81-10454) | 2.16.840.1.113883.10.20.6.1.1 |
| code | 1..1 | SHALL |  | [81-15456](#C_81-15456) |  |
| @code | 1..1 | SHALL |  | [81-15457](#C_81-15457) | 121181 |
| @codeSystem | 1..1 | SHALL |  | [81-26475](#C_81-26475) | urn:oid:1.2.840.10008.2.16.4 (DCM) = 1.2.840.10008.2.16.4 |
| entry | 1..\* | SHALL |  | [81-8530](#C_81-8530) |  |
| act | 1..1 | SHALL |  | [81-15458](#C_81-15458) | [Study Act (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.6](#E_Study_Act) |

1. SHALL contain exactly one [1..1] templateId (CONF:81-8525) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.6.1.1" (CONF:81-10454).
2. SHALL contain exactly one [1..1] code (CONF:81-15456).
   1. This code SHALL contain exactly one [1..1] @code="121181" Dicom Object Catalog (CONF:81-15457).
   2. This code SHALL contain exactly one [1..1] @codeSystem="1.2.840.10008.2.16.4" (CodeSystem: DCM urn:oid:1.2.840.10008.2.16.4) (CONF:81-26475).
3. SHALL contain at least one [1..\*] entry (CONF:81-8530).
   1. Such entries SHALL contain exactly one [1..1] [Study Act](#E_Study_Act) (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.6) (CONF:81-15458).
4. A DICOM Object Catalog SHALL be present if the document contains references to DICOM Images. If present, it SHALL be the first section in the document (CONF:81-8527).

Figure 67: DICOM Object Catalog Section - DCM 121181 Example

<section classCode="DOCSECT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.6.1.1"/>

<code code="121181"

codeSystem="1.2.840.10008.2.16.4"

codeSystemName="DCM"

displayName="DICOM Object Catalog"/>

<entry>

<!-- \*\*\*\* Study Act \*\*\*\* -->

<act classCode="ACT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.6.2.6"/>

<id root="1.2.840.113619.2.62.994044785528.114289542805"/>

<code code="113014"

codeSystem="1.2.840.10008.2.16.4"

codeSystemName="DCM"

displayName="Study"/>

<!-- \*\*\*\* Series Act\*\*\*\*-->

<entryRelationship typeCode="COMP">

<act classCode="ACT" moodCode="EVN">

<id root="1.2.840.113619.2.62.994044785528.20060823223142485051"/>

<code code="113015"

codeSystem="1.2.840.10008.2.16.4"

codeSystemName="DCM"

displayName="Series">

...

</code>

<!-- \*\*\*\* SOP Instance UID \*\*\* -->

<!-- 2 References -->

<entryRelationship typeCode="COMP">

<observation classCode="DGIMG" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.6.2.8"/>

...

</observation>

</entryRelationship>

<entryRelationship typeCode="COMP">

<observation classCode="DGIMG" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.6.2.8"/>

...

</observation>

</entryRelationship>

</act>

</entryRelationship>

</act>

</entry>

</section>

Discharge Diagnosis Section (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.24:2015-08-01 (open)]

Table 89: Discharge Diagnosis Section (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Discharge Summary (V3)](#D_Discharge_Summary_V3) (required)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (optional) | [Hospital Discharge Diagnosis (V3)](#E_Hospital_Discharge_Diagnosis_V3) (optional) |

This template represents problems or diagnoses present at the time of discharge which occurred during the hospitalization. This section includes an optional entry to record patient diagnoses specific to this visit. Problems that need ongoing tracking should also be included in the Problem Section.

Table 90: Discharge Diagnosis Section (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.24:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-7979](#C_1198-7979) |  |
| @root | 1..1 | SHALL |  | [1198-10394](#C_1198-10394) | 2.16.840.1.113883.10.20.22.2.24 |
| @extension | 1..1 | SHALL |  | [1198-32549](#C_1198-32549) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15355](#C_1198-15355) |  |
| @code | 1..1 | SHALL |  | [1198-15356](#C_1198-15356) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 11535-2 |
| @codeSystem | 1..1 | SHALL |  | [1198-30861](#C_1198-30861) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| translation | 1..1 | SHALL |  | [1198-32834](#C_1198-32834) |  |
| @code | 1..1 | SHALL |  | [1198-32835](#C_1198-32835) | 78375-3 |
| @codeSystem | 1..1 | SHALL |  | [1198-32836](#C_1198-32836) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-7981](#C_1198-7981) |  |
| text | 1..1 | SHALL |  | [1198-7982](#C_1198-7982) |  |
| entry | 0..1 | SHOULD |  | [1198-7983](#C_1198-7983) |  |
| act | 1..1 | SHALL |  | [1198-15489](#C_1198-15489) | [Hospital Discharge Diagnosis (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.33:2015-08-01](#E_Hospital_Discharge_Diagnosis_V3) |

1. SHALL contain exactly one [1..1] templateId (CONF:1198-7979) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.24" (CONF:1198-10394).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32549).
2. SHALL contain exactly one [1..1] code (CONF:1198-15355).
   1. This code SHALL contain exactly one [1..1] @code="11535-2" Hospital Discharge Diagnosis (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1 STATIC) (CONF:1198-15356).
   2. 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:1198-30861).
   3. This code SHALL contain exactly one [1..1] translation (CONF:1198-32834) such that it
      1. SHALL contain exactly one [1..1] @code="78375-3" Discharge Diagnosis (CONF:1198-32835).
      2. 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:1198-32836).
3. SHALL contain exactly one [1..1] title (CONF:1198-7981).
4. SHALL contain exactly one [1..1] text (CONF:1198-7982).
5. SHOULD contain zero or one [0..1] entry (CONF:1198-7983).
   1. The entry, if present, SHALL contain exactly one [1..1] [Hospital Discharge Diagnosis (V3)](#E_Hospital_Discharge_Diagnosis_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.33:2015-08-01) (CONF:1198-15489).

Figure 68: Discharge Diagnosis Section (V3) Example

<section>

<!-- Discharge Diagnosis Section Template Id -->

<templateId root="2.16.840.1.113883.10.20.22.2.24" extension="2015-08-01" />

<code code="11535-2" displayName="Hospital Discharge Diagnosis"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC">

<translation code="78375-3" displayName="Discharge Diagnosis"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"></translation>

</code>

<title>Discharge Diagnosis</title>

<text>Diverticula of intestine</text>

<entry>

<act classCode="ACT" moodCode="EVN">

<!-- Hospital discharge Diagnosis act -->

...

</act>

</entry>

</section>

Discharge Diet Section (DEPRECATED)

[section: identifier urn:hl7ii:1.3.6.1.4.1.19376.1.5.3.1.3.33:2014-06-09 (open)]

This section records a narrative description of the expectations for diet and nutrition, including nutrition prescription, proposals, goals, and order requests for monitoring, tracking, or improving the nutritional status of the patient, used in a discharge from a facility such as an emergency department, hospital, or nursing home.

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*: This template has been replaced by the Nutrition Section (2.16.840.1.113883.10.20.22.2.57).

Table 91: Discharge Diet Section (DEPRECATED) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:1.3.6.1.4.1.19376.1.5.3.1.3.33:2014-06-09) | | | | | |
| templateId | 1..1 | SHALL |  | [1098-7975](#C_1098-7975) |  |
| @root | 1..1 | SHALL | UID | [1098-10455](#C_1098-10455) | 1.3.6.1.4.1.19376.1.5.3.1.3.33 |
| @extension | 1..1 | SHALL |  | [1098-32593](#C_1098-32593) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-15459](#C_1098-15459) |  |
| @code | 1..1 | SHALL |  | [1098-15460](#C_1098-15460) | 42344-2 |
| @codeSystem | 1..1 | SHALL |  | [1098-31140](#C_1098-31140) |  |
| title | 1..1 | SHALL |  | [1098-7977](#C_1098-7977) |  |
| text | 1..1 | SHALL |  | [1098-7978](#C_1098-7978) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:1098-7975) such that it
   1. SHALL contain exactly one [1..1] @root="1.3.6.1.4.1.19376.1.5.3.1.3.33" (CONF:1098-10455).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32593).
2. SHALL contain exactly one [1..1] code (CONF:1098-15459).
   1. This code SHALL contain exactly one [1..1] @code="42344-2" Discharge Diet (CONF:1098-15460).
   2. This code SHALL contain exactly one [1..1] @codeSystem (CONF:1098-31140).
3. SHALL contain exactly one [1..1] title (CONF:1098-7977).
4. SHALL contain exactly one [1..1] text (CONF:1098-7978).

Discharge Medications Section (entries optional) (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.11:2015-08-01 (open)]

Table 92: Discharge Medications Section (entries optional) (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Discharge Summary (V3)](#D_Discharge_Summary_V3) (optional) | [Discharge Medication (V3)](#E_Discharge_Med_V3) (optional) |

This section contains the medications the patient is intended to take or stop after discharge. Current, active medications must be listed. The section may also include a patient’s prescription history and indicate the source of the medication list.

Table 93: Discharge Medications Section (entries optional) (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.11:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-7816](#C_1198-7816) |  |
| @root | 1..1 | SHALL |  | [1198-10396](#C_1198-10396) | 2.16.840.1.113883.10.20.22.2.11 |
| @extension | 1..1 | SHALL |  | [1198-32561](#C_1198-32561) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15359](#C_1198-15359) |  |
| @code | 1..1 | SHALL |  | [1198-15360](#C_1198-15360) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 10183-2 |
| @codeSystem | 1..1 | SHALL |  | [1198-32480](#C_1198-32480) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| translation | 1..1 | SHALL |  | [1198-32854](#C_1198-32854) |  |
| @code | 1..1 | SHALL |  | [1198-32855](#C_1198-32855) | 75311-1 |
| @codeSystem | 1..1 | SHALL |  | [1198-32856](#C_1198-32856) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-7818](#C_1198-7818) |  |
| text | 1..1 | SHALL |  | [1198-7819](#C_1198-7819) |  |
| entry | 0..\* | SHOULD |  | [1198-7820](#C_1198-7820) |  |
| act | 1..1 | SHALL |  | [1198-15490](#C_1198-15490) | [Discharge Medication (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.35:2016-03-01](#E_Discharge_Med_V3) |

1. SHALL contain exactly one [1..1] templateId (CONF:1198-7816) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.11" (CONF:1198-10396).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32561).
2. SHALL contain exactly one [1..1] code (CONF:1198-15359).
   1. This code SHALL contain exactly one [1..1] @code="10183-2" Hospital Discharge medications (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1 STATIC) (CONF:1198-15360).
   2. 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:1198-32480).
   3. This code SHALL contain exactly one [1..1] translation (CONF:1198-32854) such that it
      1. SHALL contain exactly one [1..1] @code="75311-1" Discharge medications (CONF:1198-32855).
      2. 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:1198-32856).
3. SHALL contain exactly one [1..1] title (CONF:1198-7818).
4. SHALL contain exactly one [1..1] text (CONF:1198-7819).
5. SHOULD contain zero or more [0..\*] entry (CONF:1198-7820) such that it
   1. SHALL contain exactly one [1..1] [Discharge Medication (V3)](#E_Discharge_Med_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.35:2016-03-01) (CONF:1198-15490).

Discharge Medications Section (entries required) (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.11.1:2015-08-01 (open)]

Table 94: Discharge Medications Section (entries required) (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Discharge Summary (V3)](#D_Discharge_Summary_V3) (optional) | [Discharge Medication (V3)](#E_Discharge_Med_V3) (required) |

This section contains the medications the patient is intended to take or stop after discharge. Current, active medications must be listed. The section may also include a patient’s prescription history and indicate the source of the medication list.

Table 95: Discharge Medications Section (entries required) (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.11.1:2015-08-01) | | | | | |
| @nullFlavor | 0..1 | MAY |  | [1198-32812](#C_1198-32812) | urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = NI |
| templateId | 1..1 | SHALL |  | [1198-7822](#C_1198-7822) |  |
| @root | 1..1 | SHALL |  | [1198-10397](#C_1198-10397) | 2.16.840.1.113883.10.20.22.2.11.1 |
| @extension | 1..1 | SHALL |  | [1198-32562](#C_1198-32562) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15361](#C_1198-15361) |  |
| @code | 1..1 | SHALL |  | [1198-15362](#C_1198-15362) | 10183-2 |
| @codeSystem | 1..1 | SHALL |  | [1198-32145](#C_1198-32145) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| translation | 1..1 | SHALL |  | [1198-32857](#C_1198-32857) |  |
| @code | 1..1 | SHALL |  | [1198-32858](#C_1198-32858) | 75311-1 |
| @codeSystem | 1..1 | SHALL |  | [1198-32859](#C_1198-32859) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-7824](#C_1198-7824) |  |
| text | 1..1 | SHALL |  | [1198-7825](#C_1198-7825) |  |
| entry | 1..\* | SHALL |  | [1198-7826](#C_1198-7826) |  |
| act | 1..1 | SHALL |  | [1198-15491](#C_1198-15491) | [Discharge Medication (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.35:2016-03-01](#E_Discharge_Med_V3) |

1. Conforms to [Discharge Medications Section (entries optional) (V3)](#S_Discharge_Meds_Sec_entries_Opt) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.11:2015-08-01).
2. MAY contain zero or one [0..1] @nullFlavor="NI" No information (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:1198-32812).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-7822) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.11.1" (CONF:1198-10397).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32562).
4. SHALL contain exactly one [1..1] code (CONF:1198-15361).
   1. This code SHALL contain exactly one [1..1] @code="10183-2" Hospital Discharge Medications (CONF:1198-15362).
   2. 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:1198-32145).
   3. This code SHALL contain exactly one [1..1] translation (CONF:1198-32857) such that it
      1. SHALL contain exactly one [1..1] @code="75311-1" Discharge Medications (CONF:1198-32858).
      2. 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:1198-32859).
5. SHALL contain exactly one [1..1] title (CONF:1198-7824).
6. SHALL contain exactly one [1..1] text (CONF:1198-7825).

If section/@nullFlavor is not present:

1. SHALL contain at least one [1..\*] entry (CONF:1198-7826) such that it
   1. SHALL contain exactly one [1..1] [Discharge Medication (V3)](#E_Discharge_Med_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.35:2016-03-01) (CONF:1198-15491).

Figure 69: Discharge Medication Section (V3) (entries required) Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.11.1" extension="2015-08-01" />

<code code="10183-2" displayName="Hospital Discharge Medications"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC">

<translation code="75311-1" displayName="Discharge Medications"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"></translation>

</code>

<title>Discharge Medications</title>

<text>

...

</text>

<entry typeCode="DRIV">

<act classCode="ACT" moodCode="EVN">

<!-- Discharge Medication Entry -->

...

</act>

</entry>

...

</section>

Encounters Section (entries optional) (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.22:2015-08-01 (open)]

Table 96: Encounters Section (entries optional) (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Continuity of Care Document (CCD) (V3)](#D_Continuity_of_Care_Document_CCD_V3) (optional) | [Encounter Activity (V3)](#E_Encounter_Activity_V3) (optional) |

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 97: Encounters Section (entries optional) (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.22:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-7940](#C_1198-7940) |  |
| @root | 1..1 | SHALL |  | [1198-10386](#C_1198-10386) | 2.16.840.1.113883.10.20.22.2.22 |
| @extension | 1..1 | SHALL |  | [1198-32547](#C_1198-32547) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15461](#C_1198-15461) |  |
| @code | 1..1 | SHALL |  | [1198-15462](#C_1198-15462) | 46240-8 |
| @codeSystem | 1..1 | SHALL |  | [1198-31136](#C_1198-31136) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-7942](#C_1198-7942) |  |
| text | 1..1 | SHALL |  | [1198-7943](#C_1198-7943) |  |
| entry | 0..\* | SHOULD |  | [1198-7951](#C_1198-7951) |  |
| encounter | 1..1 | SHALL |  | [1198-15465](#C_1198-15465) | [Encounter Activity (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2015-08-01](#E_Encounter_Activity_V3) |

1. SHALL contain exactly one [1..1] templateId (CONF:1198-7940) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.22" (CONF:1198-10386).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32547).
2. SHALL contain exactly one [1..1] code (CONF:1198-15461).
   1. This code SHALL contain exactly one [1..1] @code="46240-8" Encounters (CONF:1198-15462).
   2. 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:1198-31136).
3. SHALL contain exactly one [1..1] title (CONF:1198-7942).
4. SHALL contain exactly one [1..1] text (CONF:1198-7943).
5. SHOULD contain zero or more [0..\*] entry (CONF:1198-7951) such that it
   1. SHALL contain exactly one [1..1] [Encounter Activity (V3)](#E_Encounter_Activity_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2015-08-01) (CONF:1198-15465).

Encounters Section (entries required) (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.22.1:2015-08-01 (open)]

Table 98: Encounters Section (entries required) (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Transfer Summary (V2)](#D_Transfer_Summary_V2) (optional) | [Encounter Activity (V3)](#E_Encounter_Activity_V3) (required) |

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, as well as 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 99: Encounters Section (entries required) (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.22.1:2015-08-01) | | | | | |
| @nullFlavor | 0..1 | MAY |  | [1198-32815](#C_1198-32815) | urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = NI |
| templateId | 1..1 | SHALL |  | [1198-8705](#C_1198-8705) |  |
| @root | 1..1 | SHALL |  | [1198-10387](#C_1198-10387) | 2.16.840.1.113883.10.20.22.2.22.1 |
| @extension | 1..1 | SHALL |  | [1198-32548](#C_1198-32548) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15466](#C_1198-15466) |  |
| @code | 1..1 | SHALL |  | [1198-15467](#C_1198-15467) | 46240-8 |
| @codeSystem | 1..1 | SHALL |  | [1198-31137](#C_1198-31137) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-8707](#C_1198-8707) |  |
| text | 1..1 | SHALL |  | [1198-8708](#C_1198-8708) |  |
| entry | 1..\* | SHALL |  | [1198-8709](#C_1198-8709) |  |
| encounter | 1..1 | SHALL |  | [1198-15468](#C_1198-15468) | [Encounter Activity (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2015-08-01](#E_Encounter_Activity_V3) |

1. Conforms to [Encounters Section (entries optional) (V3)](#S_Encounters_Section_entries_optional_V3) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.22:2015-08-01).
2. MAY contain zero or one [0..1] @nullFlavor="NI" No information (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:1198-32815).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-8705) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.22.1" (CONF:1198-10387).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32548).
4. SHALL contain exactly one [1..1] code (CONF:1198-15466).
   1. This code SHALL contain exactly one [1..1] @code="46240-8" Encounters (CONF:1198-15467).
   2. 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:1198-31137).
5. SHALL contain exactly one [1..1] title (CONF:1198-8707).
6. SHALL contain exactly one [1..1] text (CONF:1198-8708).

If section/@nullFlavor is not present:

1. SHALL contain at least one [1..\*] entry (CONF:1198-8709) such that it
   1. SHALL contain exactly one [1..1] [Encounter Activity (V3)](#E_Encounter_Activity_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2015-08-01) (CONF:1198-15468).

Figure 70: Encounters Section (entries required) (V3) Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.22.1" extension="2015-08-01" />

<!-- Encounters Section - Entries required -->

<code code="46240-8" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="History of encounters" />

<title>Encounters</title>

<text>

...

</text>

<entry typeCode="DRIV">

<encounter classCode="ENC" moodCode="EVN">

<!-- Encounter Activities -->

...

</encounter>

</entry>

</section>

Family History Section (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2015-08-01 (open)]

Table 100: Family History Section (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (optional)  [Continuity of Care Document (CCD) (V3)](#D_Continuity_of_Care_Document_CCD_V3) (optional)  [Discharge Summary (V3)](#D_Discharge_Summary_V3) (optional)  [History and Physical (V3)](#D_History_and_Physical_V3) (required)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (optional)  [Referral Note (V2)](#D_Referral_Note_V2) (optional)  [Procedure Note (V3)](#D_Procedure_Note_V3) (optional) | [Family History Organizer (V3)](#E_Family_History_Organizer_V3) (optional) |

This section contains data defining the patient’s genetic relatives in terms of possible or relevant health risk factors that have a potential impact on the patient’s healthcare risk profile.

Table 101: Family History Section (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-7932](#C_1198-7932) |  |
| @root | 1..1 | SHALL |  | [1198-10388](#C_1198-10388) | 2.16.840.1.113883.10.20.22.2.15 |
| @extension | 1..1 | SHALL |  | [1198-32607](#C_1198-32607) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15469](#C_1198-15469) |  |
| @code | 1..1 | SHALL |  | [1198-15470](#C_1198-15470) | 10157-6 |
| @codeSystem | 1..1 | SHALL |  | [1198-32481](#C_1198-32481) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-7934](#C_1198-7934) |  |
| text | 1..1 | SHALL |  | [1198-7935](#C_1198-7935) |  |
| entry | 0..\* | MAY |  | [1198-32430](#C_1198-32430) |  |
| organizer | 1..1 | SHALL |  | [1198-32431](#C_1198-32431) | [Family History Organizer (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.45:2015-08-01](#E_Family_History_Organizer_V3) |

1. SHALL contain exactly one [1..1] templateId (CONF:1198-7932) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.15" (CONF:1198-10388).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32607).
2. SHALL contain exactly one [1..1] code (CONF:1198-15469).
   1. This code SHALL contain exactly one [1..1] @code="10157-6" Family History (CONF:1198-15470).
   2. 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:1198-32481).
3. SHALL contain exactly one [1..1] title (CONF:1198-7934).
4. SHALL contain exactly one [1..1] text (CONF:1198-7935).
5. MAY contain zero or more [0..\*] entry (CONF:1198-32430) such that it
   1. SHALL contain exactly one [1..1] [Family History Organizer (V3)](#E_Family_History_Organizer_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.45:2015-08-01) (CONF:1198-32431).

Figure 71: Family History Section (V3) Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.15" extension="2015-08-01" />

<!-- Family history section template -->

<code code="10157-6" codeSystem="2.16.840.1.113883.6.1" />

<title>Family history</title>

<text>

...

</text>

<entry typeCode="DRIV">

<organizer moodCode="EVN" classCode="CLUSTER">

<templateId root="2.16.840.1.113883.10.20.22.4.45" />

<!-- Family history organizer template -->

...

</organizer>

</entry>

</section>

Fetus Subject Context

[relatedSubject: identifier urn:oid:2.16.840.1.113883.10.20.6.2.3 (open)]

Table 102: Fetus Subject Context Contexts

| Contained By: | Contains: |
| --- | --- |
| [Diagnostic Imaging Report (V3)](#D_Diagnostic_Imaging_Report_V3) (optional) |  |

For reports on mothers and their fetus(es), information on a mother is mapped to recordTarget, PatientRole, and Patient. Information on the fetus is mapped to subject, relatedSubject, and SubjectPerson at the CDA section level. Both context information on the mother and fetus must be included in the document if observations on fetus(es) are contained in the document.

Table 103: Fetus Subject Context Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| relatedSubject (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.3) | | | | | |
| templateId | 1..1 | SHALL |  | [81-9189](#C_81-9189) |  |
| @root | 1..1 | SHALL |  | [81-10535](#C_81-10535) | 2.16.840.1.113883.10.20.6.2.3 |
| code | 1..1 | SHALL |  | [81-9190](#C_81-9190) |  |
| @code | 1..1 | SHALL |  | [81-26455](#C_81-26455) | 121026 |
| @codeSystem | 1..1 | SHALL |  | [81-26476](#C_81-26476) | urn:oid:1.2.840.10008.2.16.4 (DCM) = 1.2.840.10008.2.16.4 |
| subject | 1..1 | SHALL |  | [81-9191](#C_81-9191) |  |
| name | 1..1 | SHALL |  | [81-15347](#C_81-15347) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-9189) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.6.2.3" (CONF:81-10535).
2. SHALL contain exactly one [1..1] code (CONF:81-9190).
   1. This code SHALL contain exactly one [1..1] @code="121026" (CONF:81-26455).
   2. This code SHALL contain exactly one [1..1] @codeSystem="1.2.840.10008.2.16.4" (CodeSystem: DCM urn:oid:1.2.840.10008.2.16.4) (CONF:81-26476).
3. SHALL contain exactly one [1..1] subject (CONF:81-9191).

The name element is used to store the DICOM fetus ID, typically a pseudonym such as fetus\_1.

* 1. This subject SHALL contain exactly one [1..1] name (CONF:81-15347).

Figure 72: Fetus Subject Context Example

<relatedSubject>

<templateId root="2.16.840.1.113883.10.20.6.2.3"/>

<code code="121026"

codeSystem="1.2.840.10008.2.16.4"

displayName="Fetus"/>

<subject>

<name>fetus\_1</name>

</subject>

</relatedSubject>

Findings Section (DIR)

[section: identifier urn:oid:2.16.840.1.113883.10.20.6.1.2 (open)]

Table 104: Findings Section (DIR) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Diagnostic Imaging Report (V3)](#D_Diagnostic_Imaging_Report_V3) (required) |  |

The Findings section contains the main narrative body of the report. While not an absolute requirement for transformed DICOM SR reports, it is suggested that Diagnostic Imaging Reports authored in CDA follow Term Info guidelines for the codes in the various observations and procedures recorded in this section.

Table 105: Findings Section (DIR) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:2.16.840.1.113883.10.20.6.1.2) | | | | | |
| templateId | 1..1 | SHALL |  | [81-8531](#C_81-8531) |  |
| @root | 1..1 | SHALL | UID | [81-10456](#C_81-10456) | 2.16.840.1.113883.10.20.6.1.2 |

1. SHALL contain exactly one [1..1] templateId (CONF:81-8531) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.6.1.2" (CONF:81-10456).
2. This section SHOULD contain only the direct observations in the report, with topics such as Reason for Study, History, and Impression placed in separate sections. However, in cases where the source of report content provides a single block of text not separated into these sections, that text SHALL be placed in the Findings section (CONF:81-8532).

Figure 73: Findings Section (DIR) Example

<section>

<templateId root="2.16.840.1.113883.10.20.6.1.2"/>

<code code="121070"

codeSystem="1.2.840.10008.2.16.4"

codeSystemName="DCM"

displayName="Findings"/>

<title>Findings</title>

<text>

<paragraph>

<caption>Finding</caption>

<content ID="Fndng2">The cardiomediastinum is . </content>

</paragraph>

<paragraph>

<caption>Diameter</caption>

<content ID="Diam2">45mm</content>

</paragraph>

...

</text>

<entry>

<templateId root="2.16.840.1.113883.10.20.6.2.12"/>

...

</entry>

</section>

Functional Status Section (V2)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.14:2014-06-09 (open)]

Table 106: Functional Status Section (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (optional)  [Continuity of Care Document (CCD) (V3)](#D_Continuity_of_Care_Document_CCD_V3) (optional)  [Discharge Summary (V3)](#D_Discharge_Summary_V3) (optional)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (optional)  [Referral Note (V2)](#D_Referral_Note_V2) (optional) | [Caregiver Characteristics](#E_Caregiver_Characteristics) (optional)  [Assessment Scale Observation](#E_Assessment_Scale_Observation) (optional)  [Sensory Status](#E_Sensory_Status) (optional)  [Self-Care Activities (ADL and IADL)](#E_SelfCare_Activities_ADL_and_IADL) (optional)  [Non-Medicinal Supply Activity (V2)](#NonMedicinal_Supply_Activity_V2) (optional)  [Functional Status Observation (V2)](#E_Functional_Status_Observation_V2) (optional)  [Functional Status Organizer (V2)](#E_Functional_Status_Organizer_V2) (optional)  [Pressure Ulcer Observation (DEPRECATED)](#E_Pressure_Ulcer_Observation_DEPRECATED) (optional)  [Cognitive Status Problem Observation (DEPRECATED)](#E_Cognitive_Status_Problem_ObsDEP) (optional)  [Functional Status Problem Observation (DEPRECATED)](#E_Functional_Status_Problem_ObsDEP) (optional) |

The Functional Status Section contains observations and assessments of a patient's physical abilities. A patient’s functional status may include information regarding the patient’s ability to perform Activities of Daily Living (ADLs) in areas such as Mobility (e.g., ambulation), Self-Care (e.g., bathing, dressing, feeding, grooming) or Instrumental Activities of Daily Living (IADLs) (e.g., shopping, using a telephone, balancing a check book). Problems that impact function (e.g., dyspnea, dysphagia) can be contained in the section.

Table 107: Functional Status Section (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.14:2014-06-09) | | | | | |
| templateId | 1..1 | SHALL |  | [1098-7920](#C_1098-7920) |  |
| @root | 1..1 | SHALL |  | [1098-10389](#C_1098-10389) | 2.16.840.1.113883.10.20.22.2.14 |
| @extension | 1..1 | SHALL |  | [1098-32567](#C_1098-32567) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-14578](#C_1098-14578) |  |
| @code | 1..1 | SHALL |  | [1098-14579](#C_1098-14579) | 47420-5 |
| @codeSystem | 1..1 | SHALL |  | [1098-30866](#C_1098-30866) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-7922](#C_1098-7922) |  |
| text | 1..1 | SHALL |  | [1098-7923](#C_1098-7923) |  |
| entry | 0..\* | MAY |  | [1098-14414](#C_1098-14414) |  |
| organizer | 1..1 | SHALL |  | [1098-14415](#C_1098-14415) | [Functional Status Organizer (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.66:2014-06-09](#E_Functional_Status_Organizer_V2) |
| entry | 0..\* | MAY |  | [1098-14418](#C_1098-14418) |  |
| observation | 1..1 | SHALL |  | [1098-14419](#C_1098-14419) | [Functional Status Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.67:2014-06-09](#E_Functional_Status_Observation_V2) |
| entry | 0..\* | MAY |  | [1098-14426](#C_1098-14426) |  |
| observation | 1..1 | SHALL |  | [1098-14427](#C_1098-14427) | [Caregiver Characteristics (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.72](#E_Caregiver_Characteristics) |
| entry | 0..\* | MAY |  | [1098-14580](#C_1098-14580) |  |
| observation | 1..1 | SHALL |  | [1098-14581](#C_1098-14581) | [Assessment Scale Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69](#E_Assessment_Scale_Observation) |
| entry | 0..\* | MAY |  | [1098-14582](#C_1098-14582) |  |
| supply | 1..1 | SHALL |  | [1098-30783](#C_1098-30783) | [Non-Medicinal Supply Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.50:2014-06-09](#NonMedicinal_Supply_Activity_V2) |
| entry | 0..\* | MAY |  | [1098-32792](#C_1098-32792) |  |
| observation | 1..1 | SHALL |  | [1098-31009](#C_1098-31009) | [Self-Care Activities (ADL and IADL) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.128](#E_SelfCare_Activities_ADL_and_IADL) |
| entry | 0..\* | MAY |  | [1098-16779](#C_1098-16779) |  |
| observation | 1..1 | SHALL |  | [1098-31011](#C_1098-31011) | [Sensory Status (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.127](#E_Sensory_Status) |
| entry | 0..\* | MAY |  | [1098-14424](#C_1098-14424) |  |
| observation | 1..1 | SHALL |  | [1098-14425](#C_1098-14425) | [Cognitive Status Problem Observation (DEPRECATED) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.73:2014-06-09](#E_Cognitive_Status_Problem_ObsDEP) |
| entry | 0..\* | MAY |  | [1098-14422](#C_1098-14422) |  |
| observation | 1..1 | SHALL |  | [1098-14423](#C_1098-14423) | [Functional Status Problem Observation (DEPRECATED) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.68:2014-06-09](#E_Functional_Status_Problem_ObsDEP) |
| entry | 0..\* | MAY |  | [1098-16777](#C_1098-16777) |  |
| observation | 1..1 | SHALL |  | [1098-16778](#C_1098-16778) | [Pressure Ulcer Observation (DEPRECATED) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.70:2014-06-09](#E_Pressure_Ulcer_Observation_DEPRECATED) |

1. SHALL contain exactly one [1..1] templateId (CONF:1098-7920) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.14" (CONF:1098-10389).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32567).
2. SHALL contain exactly one [1..1] code (CONF:1098-14578).
   1. This code SHALL contain exactly one [1..1] @code="47420-5" Functional Status (CONF:1098-14579).
   2. 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:1098-30866).
3. SHALL contain exactly one [1..1] title (CONF:1098-7922).
4. SHALL contain exactly one [1..1] text (CONF:1098-7923).
5. MAY contain zero or more [0..\*] entry (CONF:1098-14414) such that it
   1. SHALL contain exactly one [1..1] [Functional Status Organizer (V2)](#E_Functional_Status_Organizer_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.66:2014-06-09) (CONF:1098-14415).
6. MAY contain zero or more [0..\*] entry (CONF:1098-14418) such that it
   1. SHALL contain exactly one [1..1] [Functional Status Observation (V2)](#E_Functional_Status_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.67:2014-06-09) (CONF:1098-14419).
7. MAY contain zero or more [0..\*] entry (CONF:1098-14426) such that it
   1. SHALL contain exactly one [1..1] [Caregiver Characteristics](#E_Caregiver_Characteristics) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.72) (CONF:1098-14427).
8. MAY contain zero or more [0..\*] entry (CONF:1098-14580) such that it
   1. SHALL contain exactly one [1..1] [Assessment Scale Observation](#E_Assessment_Scale_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69) (CONF:1098-14581).
9. MAY contain zero or more [0..\*] entry (CONF:1098-14582) such that it
   1. SHALL contain exactly one [1..1] [Non-Medicinal Supply Activity (V2)](#NonMedicinal_Supply_Activity_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.50:2014-06-09) (CONF:1098-30783).
10. MAY contain zero or more [0..\*] entry (CONF:1098-32792) such that it
    1. SHALL contain exactly one [1..1] [Self-Care Activities (ADL and IADL)](#E_SelfCare_Activities_ADL_and_IADL) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.128) (CONF:1098-31009).
11. MAY contain zero or more [0..\*] entry (CONF:1098-16779) such that it
    1. SHALL contain exactly one [1..1] [Sensory Status](#E_Sensory_Status) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.127) (CONF:1098-31011).
12. MAY contain zero or more [0..\*] entry (CONF:1098-14424) such that it
    1. SHALL contain exactly one [1..1] [Cognitive Status Problem Observation (DEPRECATED)](#E_Cognitive_Status_Problem_ObsDEP) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.73:2014-06-09) (CONF:1098-14425).
13. MAY contain zero or more [0..\*] entry (CONF:1098-14422) such that it
    1. SHALL contain exactly one [1..1] [Functional Status Problem Observation (DEPRECATED)](#E_Functional_Status_Problem_ObsDEP) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.68:2014-06-09) (CONF:1098-14423).
14. MAY contain zero or more [0..\*] entry (CONF:1098-16777) such that it
    1. SHALL contain exactly one [1..1] [Pressure Ulcer Observation (DEPRECATED)](#E_Pressure_Ulcer_Observation_DEPRECATED) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.70:2014-06-09) (CONF:1098-16778).

Figure 74: Functional Status Section (V2) Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.14" extension="2014-06-09" />

<!-- Functional Status Section template V2-->

<code code="47420-5" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Functional Status" />

<title>FUNCTIONAL STATUS</title>

<text>

...

</text>

<entry>

<observation classCode="OBS" moodCode="EVN">

<!-- Self Care Activities (NEW)-->

<templateId root="2.16.840.1.113883.10.20.22.4.128" />

...

</observation>

</entry>

<entry>

<observation classCode="OBS" moodCode="EVN">

<!-- Sensory and Speech Status(NEW)-->

<templateId root="2.16.840.1.113883.10.20.22.4.127" />

...

</observation>

</entry>

<entry>

<organizer classCode="CLUSTER" moodCode="EVN">

<!-- Functional Status Organizer V2-->

<templateId root="2.16.840.1.113883.10.20.22.4.66" extension="2014-06-09" />

....

</organizer>

</entry>

<entry>

<observation classCode="OBS" moodCode="EVN">

<!-- Functional Status Observation V2-->

<templateId root="2.16.840.1.113883.10.20.22.4.67" 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>

</section>

General Status Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.2.5 (open)]

Table 108: General Status Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (optional)  [History and Physical (V3)](#D_History_and_Physical_V3) (required)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (optional)  [Referral Note (V2)](#D_Referral_Note_V2) (optional) |  |

The General Status section describes general observations and readily observable attributes of the patient, including affect and demeanor, apparent age compared to actual age, gender, ethnicity, nutritional status based on appearance, body build and habitus (e.g., muscular, cachectic, obese), developmental or other deformities, gait and mobility, personal hygiene, evidence of distress, and voice quality and speech.

Table 109: General Status Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:2.16.840.1.113883.10.20.2.5) | | | | | |
| templateId | 1..1 | SHALL |  | [81-7985](#C_81-7985) |  |
| @root | 1..1 | SHALL | UID | [81-10457](#C_81-10457) | 2.16.840.1.113883.10.20.2.5 |
| code | 1..1 | SHALL |  | [81-15472](#C_81-15472) |  |
| @code | 1..1 | SHALL |  | [81-15473](#C_81-15473) | 10210-3 |
| @codeSystem | 1..1 | SHALL |  | [81-26477](#C_81-26477) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-7987](#C_81-7987) |  |
| text | 1..1 | SHALL |  | [81-7988](#C_81-7988) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-7985) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.2.5" (CONF:81-10457).
2. SHALL contain exactly one [1..1] code (CONF:81-15472).
   1. This code SHALL contain exactly one [1..1] @code="10210-3" General Status (CONF:81-15473).
   2. 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:81-26477).
3. SHALL contain exactly one [1..1] title (CONF:81-7987).
4. SHALL contain exactly one [1..1] text (CONF:81-7988).

Figure 75: General Status Section Example

<section>

<templateId root="2.16.840.1.113883.10.20.2.5" />

<code code="10210-3"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="GENERAL STATUS" />

<title>GENERAL STATUS</title>

<text>

<paragraph>Alert and in good spirits, no acute distress.

</paragraph>

</text>

</section>

Goals Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.22.2.60 (open)]

Table 110: Goals Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Care Plan (V2)](#D_Care_Plan_V2) (required) | [Goal Observation](#E_Goal_Observation_U) (required) |

This template represents patient Goals. A goal is a defined outcome or condition to be achieved in the process of patient care. Goals include patient-defined over-arching goals (e.g., alleviation of health concerns, desired/intended positive outcomes from interventions, longevity, function, symptom management, comfort) and health concern-specific or intervention-specific goals to achieve desired outcomes.

Table 111: Goals Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.60) | | | | | |
| @nullFlavor | 0..1 | MAY |  | [1098-32819](#C_1098-32819) | urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = NI |
| templateId | 1..1 | SHALL |  | [1098-29584](#C_1098-29584) |  |
| @root | 1..1 | SHALL |  | [1098-29585](#C_1098-29585) | 2.16.840.1.113883.10.20.22.2.60 |
| code | 1..1 | SHALL |  | [1098-29586](#C_1098-29586) |  |
| @code | 1..1 | SHALL |  | [1098-29587](#C_1098-29587) | 61146-7 |
| @codeSystem | 1..1 | SHALL |  | [1098-29588](#C_1098-29588) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-30721](#C_1098-30721) |  |
| text | 1..1 | SHALL |  | [1098-30722](#C_1098-30722) |  |
| entry | 1..\* | SHALL |  | [1098-30719](#C_1098-30719) |  |
| observation | 1..1 | SHALL |  | [1098-30720](#C_1098-30720) | [Goal Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.121](#E_Goal_Observation_U) |

1. MAY contain zero or one [0..1] @nullFlavor="NI" No information (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:1098-32819).
2. SHALL contain exactly one [1..1] templateId (CONF:1098-29584) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.60" (CONF:1098-29585).
3. SHALL contain exactly one [1..1] code (CONF:1098-29586).
   1. This code SHALL contain exactly one [1..1] @code="61146-7" Goals (CONF:1098-29587).
   2. 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:1098-29588).
4. SHALL contain exactly one [1..1] title (CONF:1098-30721).
5. SHALL contain exactly one [1..1] text (CONF:1098-30722).

If section/@nullFlavor is not present:

1. SHALL contain at least one [1..\*] entry (CONF:1098-30719) such that it
   1. SHALL contain exactly one [1..1] [Goal Observation](#E_Goal_Observation_U) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.121) (CONF:1098-30720).

Figure 76: Goals Section Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.60" />

<code code="61146-7" displayName="Goals" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />

<title>Goals Section</title>

<text />

<entry>

<observation />

</entry>

</section>

Health Concerns Section (V2)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.58:2015-08-01 (open)]

Table 112: Health Concerns Section (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Care Plan (V2)](#D_Care_Plan_V2) (required) | [Health Status Observation (V2)](#Health_Status_Observation_V2) (optional)  [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (required)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional) |

This section contains data describing an interest or worry about a health state or process that could possibly require attention, intervention, or management. A Health Concern is a health related matter that is of interest, importance or worry to someone, who may be the patient, patient's family or patient's health care provider. Health concerns are derived from a variety of sources within an EHR (such as Problem List, Family History, Social History, Social Worker Note, etc.). Health concerns can be medical, surgical, nursing, allied health or patient-reported concerns.

Problem Concerns are a subset of Health Concerns that have risen to the level of importance that they typically would belong on a classic “Problem List”, such as “Diabetes Mellitus” or “Family History of Melanoma” or “Tobacco abuse”. These are of broad interest to multiple members of the care team. Examples of other Health Concerns that might not typically be considered a Problem Concern include “Risk of Hyperkalemia” for a patient taking an ACE-inhibitor medication, or “Transportation difficulties” for someone who doesn't drive and has trouble getting to appointments, or “Under-insured” for someone who doesn't have sufficient insurance to properly cover their medical needs such as medications. These are typically most important to just a limited number of care team members.

Table 113: Health Concerns Section (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.58:2015-08-01) | | | | | |
| @nullFlavor | 0..1 | MAY |  | [1198-32802](#C_1198-32802) | urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = NI |
| templateId | 1..1 | SHALL |  | [1198-28804](#C_1198-28804) |  |
| @root | 1..1 | SHALL |  | [1198-28805](#C_1198-28805) | 2.16.840.1.113883.10.20.22.2.58 |
| @extension | 1..1 | SHALL |  | [1198-32862](#C_1198-32862) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-28806](#C_1198-28806) |  |
| @code | 1..1 | SHALL |  | [1198-28807](#C_1198-28807) | 75310-3 |
| @codeSystem | 1..1 | SHALL |  | [1198-28808](#C_1198-28808) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-28809](#C_1198-28809) |  |
| text | 1..1 | SHALL |  | [1198-28810](#C_1198-28810) |  |
| entry | 0..\* | SHOULD |  | [1198-30483](#C_1198-30483) |  |
| observation | 1..1 | SHALL |  | [1198-30484](#C_1198-30484) | [Health Status Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.5:2014-06-09](#Health_Status_Observation_V2) |
| entry | 1..\* | SHALL |  | [1198-30768](#C_1198-30768) |  |
| act | 1..1 | SHALL |  | [1198-30769](#C_1198-30769) | [Health Concern Act (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.132:2015-08-01](#E_Health_Concern_Act_V2) |
| entry | 0..\* | MAY |  | [1198-32308](#C_1198-32308) |  |
| act | 1..1 | SHALL |  | [1198-32309](#C_1198-32309) | [Risk Concern Act (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.136:2015-08-01](#E_Risk_Concern_Act_V2) |

1. MAY contain zero or one [0..1] @nullFlavor="NI" No information (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:1198-32802).
2. SHALL contain exactly one [1..1] templateId (CONF:1198-28804) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.58" (CONF:1198-28805).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32862).
3. SHALL contain exactly one [1..1] code (CONF:1198-28806).
   1. This code SHALL contain exactly one [1..1] @code="75310-3" Health concerns document (CONF:1198-28807).
   2. 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:1198-28808).
4. SHALL contain exactly one [1..1] title (CONF:1198-28809).
5. SHALL contain exactly one [1..1] text (CONF:1198-28810).
6. SHOULD contain zero or more [0..\*] entry (CONF:1198-30483) such that it
   1. SHALL contain exactly one [1..1] [Health Status Observation (V2)](#Health_Status_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.5:2014-06-09) (CONF:1198-30484).

If section/@nullFlavor is not present:

1. SHALL contain at least one [1..\*] entry (CONF:1198-30768) such that it
   1. SHALL contain exactly one [1..1] [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.132:2015-08-01) (CONF:1198-30769).
2. MAY contain zero or more [0..\*] entry (CONF:1198-32308) such that it
   1. SHALL contain exactly one [1..1] [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.136:2015-08-01) (CONF:1198-32309).

Figure 77: Health Concerns Section Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.58" />

<code code="75310-3" displayName="Health Concerns Document" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />

<title>Health Concerns Section</title>

<text>

...

</text>

<entry>

<!-- Health Status Observation -->

</entry>

<entry>

<!-- Health Concern Act -->

</entry>

</section>

Health Status Evaluations and Outcomes Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.22.2.61 (open)]

Table 114: Health Status Evaluations and Outcomes Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Care Plan (V2)](#D_Care_Plan_V2) (optional) | [Outcome Observation](#E_OutcomeObservation) (required) |

This section has a combined purpose (similar to how the Assessment and Plan section has a dual purpose). This template represents outcomes of the patient's health status. These assessed outcomes are represented as statuses, at points in time. It also includes outcomes of care from the interventions used to treat the patient, related to established care plan goals and/or interventions. The care planning process is cyclical in nature. Thus, information in this section represents evaluations throughout the care process. For example, it may include the initial evaluated outcomes used to create the care plan, or it may include the final outcome achieved over the course of delivering the planned care.

When using this section in a Care Plan document, do not include an Assessment or an Assessment and Plan Section.

Table 115: Health Status Evaluations and Outcomes Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.61) | | | | | |
| @nullFlavor | 0..1 | MAY |  | [1098-32821](#C_1098-32821) | urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = NI |
| templateId | 1..1 | SHALL |  | [1098-29578](#C_1098-29578) |  |
| @root | 1..1 | SHALL |  | [1098-29579](#C_1098-29579) | 2.16.840.1.113883.10.20.22.2.61 |
| code | 1..1 | SHALL |  | [1098-29580](#C_1098-29580) |  |
| @code | 1..1 | SHALL |  | [1098-29581](#C_1098-29581) | 11383-7 |
| @codeSystem | 1..1 | SHALL |  | [1098-29582](#C_1098-29582) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-29589](#C_1098-29589) |  |
| text | 1..1 | SHALL |  | [1098-29590](#C_1098-29590) |  |
| entry | 1..\* | SHALL |  | [1098-31227](#C_1098-31227) |  |
| observation | 1..1 | SHALL |  | [1098-31228](#C_1098-31228) | [Outcome Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.144](#E_OutcomeObservation) |

1. MAY contain zero or one [0..1] @nullFlavor="NI" No information (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:1098-32821).
2. SHALL contain exactly one [1..1] templateId (CONF:1098-29578) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.61" (CONF:1098-29579).
3. SHALL contain exactly one [1..1] code (CONF:1098-29580).
   1. This code SHALL contain exactly one [1..1] @code="11383-7" Patient Problem Outcome (CONF:1098-29581).
   2. 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:1098-29582).
4. SHALL contain exactly one [1..1] title (CONF:1098-29589).
5. SHALL contain exactly one [1..1] text (CONF:1098-29590).

If section/@nullFlavor is not present:

1. SHALL contain at least one [1..\*] entry (CONF:1098-31227) such that it
   1. SHALL contain exactly one [1..1] [Outcome Observation](#E_OutcomeObservation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.144) (CONF:1098-31228).

Figure 78: Health Status Evaluations and Outcomes Section Example

<section>

<!-- Health Status Evaluations/Outcomes Section -->

<templateId root="2.16.840.1.113883.10.20.22.2.61" />

<code code="11383-7" displayName="Patient Problem Outcome" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />

<title>Health Status Evaluations/Outcomes Section</title>

<text>

<list>

<item>

<content styleCode="Bold">Pulse oximetry greater than 92% on room air</content>: MET <list>

<item>Evaluates Expected Outcome/Goal:

<content styleCode="Bold">

Pulse oximetry greater than 92% on room air

</content>

</item>

<item>Supported by: Pulse oximetry 95% on room air (March 21, 2013 at 15:20)</item>

</list>

</item>

</list>

</text>

<entry>

<!-- Outcome Observation -->

<observation classCode="OBS" moodCode="EVN">

...

</observation>

</entry>

<entry>

<!-- Outcome Observation -->

<observation classCode="OBS" moodCode="EVN">

...

</observation>

</entry>

...

</section>

History of Present Illness Section

[section: identifier urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.4 (open)]

Table 116: History of Present Illness Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (required)  [Discharge Summary (V3)](#D_Discharge_Summary_V3) (optional)  [History and Physical (V3)](#D_History_and_Physical_V3) (optional)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (optional)  [Referral Note (V2)](#D_Referral_Note_V2) (optional)  [Procedure Note (V3)](#D_Procedure_Note_V3) (optional) |  |

The History of Present Illness section describes the history related to the reason for the encounter. It contains the historical details leading up to and pertaining to the patient’s current complaint or reason for seeking medical care.

Table 117: History of Present Illness Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.4) | | | | | |
| templateId | 1..1 | SHALL |  | [81-7848](#C_81-7848) |  |
| @root | 1..1 | SHALL | UID | [81-10458](#C_81-10458) | 1.3.6.1.4.1.19376.1.5.3.1.3.4 |
| code | 1..1 | SHALL |  | [81-15477](#C_81-15477) |  |
| @code | 1..1 | SHALL |  | [81-15478](#C_81-15478) | 10164-2 |
| @codeSystem | 1..1 | SHALL |  | [81-26478](#C_81-26478) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-7850](#C_81-7850) |  |
| text | 1..1 | SHALL |  | [81-7851](#C_81-7851) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-7848) such that it
   1. SHALL contain exactly one [1..1] @root="1.3.6.1.4.1.19376.1.5.3.1.3.4" (CONF:81-10458).
2. SHALL contain exactly one [1..1] code (CONF:81-15477).
   1. This code SHALL contain exactly one [1..1] @code="10164-2" (CONF:81-15478).
   2. 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:81-26478).
3. SHALL contain exactly one [1..1] title (CONF:81-7850).
4. SHALL contain exactly one [1..1] text (CONF:81-7851).

Figure 79: History of Present Illness Section Example

<section>

<templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.4"/>

<code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"

code="10164-2"

displayName="HISTORY OF PRESENT ILLNESS"/>

<title>HISTORY OF PRESENT ILLNESS</title>

<text>

<paragraph>This patient was only recently discharged for a recurrent

GI bleed as described below.</paragraph>

<paragraph>He presented to the ER today c/o a dark stool yesterday

but a normal brown stool today. On exam he was hypotensive in the

80s resolved after .... .... .... </paragraph>

<paragraph>Lab at discharge: Glucose 112, BUN 16, creatinine 1.1,

electrolytes normal. H. pylori antibody pending. Admission

hematocrit 16%, discharge hematocrit 29%. WBC 7300, platelet

count 256,000. Urinalysis normal. Urine culture: No growth. INR

1.1, PTT 40.</paragraph>

<paragraph>He was transfused with 6 units of packed red blood cells

with .... .... ....</paragraph>

<paragraph>GI evaluation 12 September: Colonoscopy showed single red

clot in .... .... ....</paragraph>

</text>

</section>

Hospital Consultations Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.22.2.42 (open)]

Table 118: Hospital Consultations Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Discharge Summary (V3)](#D_Discharge_Summary_V3) (optional) |  |

The Hospital Consultations Section records consultations that occurred during the admission.

Table 119: Hospital Consultations Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.42) | | | | | |
| templateId | 1..1 | SHALL |  | [81-9915](#C_81-9915) |  |
| @root | 1..1 | SHALL |  | [81-10393](#C_81-10393) | 2.16.840.1.113883.10.20.22.2.42 |
| code | 1..1 | SHALL |  | [81-15485](#C_81-15485) |  |
| @code | 1..1 | SHALL |  | [81-15486](#C_81-15486) | 18841-7 |
| @codeSystem | 1..1 | SHALL |  | [81-26479](#C_81-26479) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-9917](#C_81-9917) |  |
| text | 1..1 | SHALL |  | [81-9918](#C_81-9918) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-9915) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.42" (CONF:81-10393).
2. SHALL contain exactly one [1..1] code (CONF:81-15485).
   1. This code SHALL contain exactly one [1..1] @code="18841-7" Hospital Consultations Section (CONF:81-15486).
   2. 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:81-26479).
3. SHALL contain exactly one [1..1] title (CONF:81-9917).
4. SHALL contain exactly one [1..1] text (CONF:81-9918).

Figure 80: Hospital Consultations Section Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.42"/>

<code code="18841-7" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="Hospital Consultations Section"/>

<title>HOSPITAL CONSULTATIONS</title>

<text>

<list listType="ordered">

<item>Gastroenterology</item>

<item>Cardiology</item>

<item>Dietitian</item>

</list>

</text>

</section>

Hospital Course Section

[section: identifier urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.5 (open)]

Table 120: Hospital Course Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Discharge Summary (V3)](#D_Discharge_Summary_V3) (required) |  |

The Hospital Course Section describes the sequence of events from admission to discharge in a hospital facility.

Table 121: Hospital Course Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.5) | | | | | |
| templateId | 1..1 | SHALL |  | [81-7852](#C_81-7852) |  |
| @root | 1..1 | SHALL | UID | [81-10459](#C_81-10459) | 1.3.6.1.4.1.19376.1.5.3.1.3.5 |
| code | 1..1 | SHALL |  | [81-15487](#C_81-15487) |  |
| @code | 1..1 | SHALL |  | [81-15488](#C_81-15488) | 8648-8 |
| @codeSystem | 1..1 | SHALL |  | [81-26480](#C_81-26480) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-7854](#C_81-7854) |  |
| text | 1..1 | SHALL |  | [81-7855](#C_81-7855) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-7852) such that it
   1. SHALL contain exactly one [1..1] @root="1.3.6.1.4.1.19376.1.5.3.1.3.5" (CONF:81-10459).
2. SHALL contain exactly one [1..1] code (CONF:81-15487).
   1. This code SHALL contain exactly one [1..1] @code="8648-8" Hospital Course (CONF:81-15488).
   2. 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:81-26480).
3. SHALL contain exactly one [1..1] title (CONF:81-7854).
4. SHALL contain exactly one [1..1] text (CONF:81-7855).

Figure 81: Hospital Course Section Example

<section>

<templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.5"/>

<code code="8648-8"

displayName="HOSPITAL COURSE"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"/>

<title>Hospital Course</title>

<text> The patient was admitted and started on Lovenox and

nitroglycerin paste. The patient had ... </text>

</section>

Hospital Discharge Instructions Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.22.2.41 (open)]

Table 122: Hospital Discharge Instructions Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Discharge Summary (V3)](#D_Discharge_Summary_V3) (optional) |  |

The Hospital Discharge Instructions Section records instructions at discharge.

Table 123: Hospital Discharge Instructions Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.41) | | | | | |
| templateId | 1..1 | SHALL |  | [81-9919](#C_81-9919) |  |
| @root | 1..1 | SHALL |  | [81-10395](#C_81-10395) | 2.16.840.1.113883.10.20.22.2.41 |
| code | 1..1 | SHALL |  | [81-15357](#C_81-15357) |  |
| @code | 1..1 | SHALL |  | [81-15358](#C_81-15358) | 8653-8 |
| @codeSystem | 1..1 | SHALL |  | [81-26481](#C_81-26481) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-9921](#C_81-9921) |  |
| text | 1..1 | SHALL |  | [81-9922](#C_81-9922) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-9919) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.41" (CONF:81-10395).
2. SHALL contain exactly one [1..1] code (CONF:81-15357).
   1. This code SHALL contain exactly one [1..1] @code="8653-8" Hospital Discharge Instructions (CONF:81-15358).
   2. 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:81-26481).
3. SHALL contain exactly one [1..1] title (CONF:81-9921).
4. SHALL contain exactly one [1..1] text (CONF:81-9922).

Figure 82: Hospital Discharge Instructions Section Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.41"/>

<code code="8653-8" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="HOSPITAL DISCHARGE INSTRUCTIONS"/>

<title>HOSPITAL DISCHARGE INSTRUCTIONS</title>

<text>

<list listType="ordered">

<item>Take all of your prescription medication as directed.</item>

<item>Make an appointment with your doctor to be seen two weeks from the

date of your procedure.</item>

<item>You may feel slightly bloated after the procedure because of air

that was introduced during the examination.</item>

<item>Call your physician if you notice:

<br/>

Bleeding or black stools.

<br/>

Abdominal pain.

<br/>

Fever or chills.

<br/>

Nausea or vomiting.

<br/>

Any unusual pain or problem.

<br/>

Pain or redness at the site where the intravenous needle was

placed.

<br/>

</item>

<item>Do not drink alcohol for 24 hours. Alcohol amplifies the effect of

the sedatives given.</item>

<item>Do not drive or operate machinery for 24 hours.</item>

</list>

</text>

</section>

Hospital Discharge Physical Section

[section: identifier urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.26 (open)]

Table 124: Hospital Discharge Physical Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Discharge Summary (V3)](#D_Discharge_Summary_V3) (optional) |  |

The Hospital Discharge Physical Section records a narrative description of the patient’s physical findings.

Table 125: Hospital Discharge Physical Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.26) | | | | | |
| templateId | 1..1 | SHALL |  | [81-7971](#C_81-7971) |  |
| @root | 1..1 | SHALL | UID | [81-10460](#C_81-10460) | 1.3.6.1.4.1.19376.1.5.3.1.3.26 |
| code | 1..1 | SHALL |  | [81-15363](#C_81-15363) |  |
| @code | 1..1 | SHALL |  | [81-15364](#C_81-15364) | 10184-0 |
| @codeSystem | 1..1 | SHALL |  | [81-26482](#C_81-26482) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-7973](#C_81-7973) |  |
| text | 1..1 | SHALL |  | [81-7974](#C_81-7974) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-7971) such that it
   1. SHALL contain exactly one [1..1] @root="1.3.6.1.4.1.19376.1.5.3.1.3.26" (CONF:81-10460).
2. SHALL contain exactly one [1..1] code (CONF:81-15363).
   1. This code SHALL contain exactly one [1..1] @code="10184-0" Hospital Discharge Physical (CONF:81-15364).
   2. 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:81-26482).
3. SHALL contain exactly one [1..1] title (CONF:81-7973).
4. SHALL contain exactly one [1..1] text (CONF:81-7974).

Figure 83: Hospital Discharge Physical Section Example

<section>

<templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.26"/>

<code code="10184-0"

displayName="HOSPITAL DISCHARGE PHYSICAL"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"/>

<title>Hospital Discharge Physical</title>

<text>GENERAL: Well-developed, slightly obese man.

<br/>

NECK: Supple, with no jugular venous distension.

<br/>

HEART: Intermittent tachycardia without murmurs or gallops.

<br/>

PULMONARY: Decreased breath sounds, but no clear-cut rales or

wheezes.

<br/>

EXTREMITIES: Free of edema.

</text>

</section>

Hospital Discharge Studies Summary Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.22.2.16 (open)]

Table 126: Hospital Discharge Studies Summary Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Discharge Summary (V3)](#D_Discharge_Summary_V3) (optional) |  |

This section records the results of observations generated by laboratories, imaging procedures, and other procedures. The scope includes 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, and could record 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 when a cardiologist reports the left ventricular ejection fraction based on the review of an echocardiogram.

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

Note that there are discrepancies between CCD and the lab domain model, such as the effectiveTime in specimen collection.

Table 127: Hospital Discharge Studies Summary Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.16) | | | | | |
| templateId | 1..1 | SHALL |  | [81-7910](#C_81-7910) |  |
| @root | 1..1 | SHALL |  | [81-10398](#C_81-10398) | 2.16.840.1.113883.10.20.22.2.16 |
| code | 1..1 | SHALL |  | [81-15365](#C_81-15365) |  |
| @code | 1..1 | SHALL |  | [81-15366](#C_81-15366) | 11493-4 |
| @codeSystem | 1..1 | SHALL |  | [81-26483](#C_81-26483) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-7912](#C_81-7912) |  |
| text | 1..1 | SHALL |  | [81-7913](#C_81-7913) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-7910) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.16" (CONF:81-10398).
2. SHALL contain exactly one [1..1] code (CONF:81-15365).
   1. This code SHALL contain exactly one [1..1] @code="11493-4" Hospital Discharge Studies Summary (CONF:81-15366).
   2. 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:81-26483).
3. SHALL contain exactly one [1..1] title (CONF:81-7912).
4. SHALL contain exactly one [1..1] text (CONF:81-7913).

Figure 84: Hospital Discharge Studies Summary Section Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.16"/>

<code code="11493-4"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="HOSPITAL DISCHARGE STUDIES SUMMARY"/>

<title>Hospital Discharge Studies Summary</title>

<text>

...

</text>

</section>

Immunizations Section (entries optional) (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.2:2015-08-01 (open)]

Table 128: Immunizations Section (entries optional) (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (optional)  [Discharge Summary (V3)](#D_Discharge_Summary_V3) (optional)  [History and Physical (V3)](#D_History_and_Physical_V3) (optional)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (optional) | [Immunization Activity (V3)](#E_Immunization_Activity_V3) (optional) |

The Immunizations Section defines a patient's current immunization status and pertinent immunization history. The primary use case for the Immunization Section is to enable communication of a patient's immunization status. The section should include current immunization status, and may contain the entire immunization history that is relevant to the period of time being summarized.

Table 129: Immunizations Section (entries optional) (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.2:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-7965](#C_1198-7965) |  |
| @root | 1..1 | SHALL |  | [1198-10399](#C_1198-10399) | 2.16.840.1.113883.10.20.22.2.2 |
| @extension | 1..1 | SHALL |  | [1198-32529](#C_1198-32529) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15367](#C_1198-15367) |  |
| @code | 1..1 | SHALL |  | [1198-15368](#C_1198-15368) | 11369-6 |
| @codeSystem | 1..1 | SHALL |  | [1198-32146](#C_1198-32146) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-7967](#C_1198-7967) |  |
| text | 1..1 | SHALL |  | [1198-7968](#C_1198-7968) |  |
| entry | 0..\* | SHOULD |  | [1198-7969](#C_1198-7969) |  |
| substanceAdministration | 1..1 | SHALL |  | [1198-15494](#C_1198-15494) | [Immunization Activity (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.52:2015-08-01](#E_Immunization_Activity_V3) |

1. SHALL contain exactly one [1..1] templateId (CONF:1198-7965) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.2" (CONF:1198-10399).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32529).
2. SHALL contain exactly one [1..1] code (CONF:1198-15367).
   1. This code SHALL contain exactly one [1..1] @code="11369-6" Immunizations (CONF:1198-15368).
   2. 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:1198-32146).
3. SHALL contain exactly one [1..1] title (CONF:1198-7967).
4. SHALL contain exactly one [1..1] text (CONF:1198-7968).
5. SHOULD contain zero or more [0..\*] entry (CONF:1198-7969) such that it
   1. SHALL contain exactly one [1..1] [Immunization Activity (V3)](#E_Immunization_Activity_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.52:2015-08-01) (CONF:1198-15494).

Immunizations Section (entries required) (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.2.1:2015-08-01 (open)]

Table 130: Immunizations Section (entries required) (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Continuity of Care Document (CCD) (V3)](#D_Continuity_of_Care_Document_CCD_V3) (optional)  [Referral Note (V2)](#D_Referral_Note_V2) (optional) | [Immunization Activity (V3)](#E_Immunization_Activity_V3) (required) |

The Immunizations Section defines a patient's current immunization status and pertinent immunization history. The primary use case for the Immunization Section is to enable communication of a patient's immunization status. The section should include current immunization status, and may contain the entire immunization history that is relevant to the period of time being summarized.

Table 131: Immunizations Section (entries required) (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.2.1:2015-08-01) | | | | | |
| @nullFlavor | 0..1 | MAY |  | [1198-32833](#C_1198-32833) | urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = NI |
| templateId | 1..1 | SHALL |  | [1198-9015](#C_1198-9015) |  |
| @root | 1..1 | SHALL |  | [1198-10400](#C_1198-10400) | 2.16.840.1.113883.10.20.22.2.2.1 |
| @extension | 1..1 | SHALL |  | [1198-32530](#C_1198-32530) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15369](#C_1198-15369) |  |
| @code | 1..1 | SHALL |  | [1198-15370](#C_1198-15370) | 11369-6 |
| @codeSystem | 1..1 | SHALL |  | [1198-32147](#C_1198-32147) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-9017](#C_1198-9017) |  |
| text | 1..1 | SHALL |  | [1198-9018](#C_1198-9018) |  |
| entry | 1..\* | SHALL |  | [1198-9019](#C_1198-9019) |  |
| substanceAdministration | 1..1 | SHALL |  | [1198-15495](#C_1198-15495) | [Immunization Activity (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.52:2015-08-01](#E_Immunization_Activity_V3) |

1. Conforms to [Immunizations Section (entries optional) (V3)](#S_Immunizations_Section_entries_optiona) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.2:2015-08-01).
2. MAY contain zero or one [0..1] @nullFlavor="NI" No information (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:1198-32833).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-9015) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.2.1" (CONF:1198-10400).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32530).
4. SHALL contain exactly one [1..1] code (CONF:1198-15369).
   1. This code SHALL contain exactly one [1..1] @code="11369-6" Immunizations (CONF:1198-15370).
   2. 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:1198-32147).
5. SHALL contain exactly one [1..1] title (CONF:1198-9017).
6. SHALL contain exactly one [1..1] text (CONF:1198-9018).

If section/@nullFlavor is not present:

1. SHALL contain at least one [1..\*] entry (CONF:1198-9019) such that it
   1. SHALL contain exactly one [1..1] [Immunization Activity (V3)](#E_Immunization_Activity_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.52:2015-08-01) (CONF:1198-15495).

Figure 85: Immunizations Section (entries required) (V3) Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.2" />

<templateId root="2.16.840.1.113883.10.20.22.2.2" extension="2015-08-01" />

<templateId root="2.16.840.1.113883.10.20.22.2.2.1" />

<templateId root="2.16.840.1.113883.10.20.22.2.2.1" extension="2015-08-01" />

<!-- \*\*\*\*\*\*\*\* Immunizations section template \*\*\*\*\*\*\*\* -->

<code code="11369-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="History of immunizations" />

<title>Immunizations</title>

<text>

<table border="1" width="100%">

<thead>

<tr>

<th>Vaccine</th>

<th>Date</th>

<th>Status</th>

</tr>

</thead>

<tbody>

<tr>

<td>

<content ID="immun1" />Influenza virus vaccine, IM

</td>

<td>Nov 1999</td>

<td>Completed</td>

</tr>

<tr>

<td>

<content ID="immun2" />Influenza virus vaccine, IM

</td>

<td>Dec 1998</td>

<td>Completed</td>

</tr>

<tr>

<td>

<content ID="immun3" />

Pneumococcal polysaccharide vaccine, IM

</td>

<td>Dec 1998</td>

<td>Completed</td>

</tr>

<tr>

<td>

<content ID="immun4" />Tetanus and diphtheria toxoids, IM

</td>

<td>1997</td>

<td>Refused</td>

</tr>

</tbody>

</table>

</text>

<entry typeCode="DRIV">

<substanceAdministration classCode="SBADM" moodCode="EVN" negationInd="false">

<templateId root="2.16.840.1.113883.10.20.22.4.52" />

<!-- \*\*\*\* Immunization activity template \*\*\*\* -->

...

</substanceAdministration>

</entry>

...

</section>

Implants Section (DEPRECATED)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.33:2014-06-09 (open)]

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*: Replaced by the Procedure Implants Section (2.16.840.1.113883.10.20.22.2.40)

Table 132: Implants Section (DEPRECATED) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.33:2014-06-09) | | | | | |
| templateId | 1..1 | SHALL |  | [1098-8042](#C_1098-8042) |  |
| @root | 1..1 | SHALL |  | [1098-32608](#C_1098-32608) | 2.16.840.1.113883.10.20.22.2.33 |
| @extension | 1..1 | SHALL |  | [1098-32609](#C_1098-32609) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-15371](#C_1098-15371) |  |
| @code | 1..1 | SHALL |  | [1098-15372](#C_1098-15372) | 55122-6 |
| @codeSystem | 1..1 | SHALL |  | [1098-26471](#C_1098-26471) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-8044](#C_1098-8044) |  |
| text | 1..1 | SHALL |  | [1098-8045](#C_1098-8045) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:1098-8042) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.33" (CONF:1098-32608).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32609).
2. SHALL contain exactly one [1..1] code (CONF:1098-15371).
   1. This code SHALL contain exactly one [1..1] @code="55122-6" Implants (CONF:1098-15372).
   2. 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:1098-26471).
3. SHALL contain exactly one [1..1] title (CONF:1098-8044).
4. SHALL contain exactly one [1..1] text (CONF:1098-8045).

Instructions Section (V2)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.45:2014-06-09 (open)]

Table 133: Instructions Section (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [History and Physical (V3)](#D_History_and_Physical_V3) (optional)  [Progress Note (V3)](#D_Progress_Note_V3) (optional) | [Instruction (V2)](#Instruction_V2) (required) |

The Instructions Section records instructions given to a patient. List patient decision aids here.

Table 134: Instructions Section (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.45:2014-06-09) | | | | | |
| @nullFlavor | 0..1 | MAY |  | [1098-32835](#C_1098-32835) | urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = NI |
| templateId | 1..1 | SHALL |  | [1098-10112](#C_1098-10112) |  |
| @root | 1..1 | SHALL |  | [1098-31384](#C_1098-31384) | 2.16.840.1.113883.10.20.22.2.45 |
| @extension | 1..1 | SHALL |  | [1098-32599](#C_1098-32599) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-15375](#C_1098-15375) |  |
| @code | 1..1 | SHALL |  | [1098-15376](#C_1098-15376) | 69730-0 |
| @codeSystem | 1..1 | SHALL |  | [1098-32148](#C_1098-32148) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-10114](#C_1098-10114) |  |
| text | 1..1 | SHALL |  | [1098-10115](#C_1098-10115) |  |
| entry | 1..\* | SHALL |  | [1098-10116](#C_1098-10116) |  |
| act | 1..1 | SHALL |  | [1098-31398](#C_1098-31398) | [Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09](#Instruction_V2) |

1. MAY contain zero or one [0..1] @nullFlavor="NI" No information (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:1098-32835).
2. SHALL contain exactly one [1..1] templateId (CONF:1098-10112) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.45" (CONF:1098-31384).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32599).
3. SHALL contain exactly one [1..1] code (CONF:1098-15375).
   1. This code SHALL contain exactly one [1..1] @code="69730-0" Instructions (CONF:1098-15376).
   2. 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:1098-32148).
4. SHALL contain exactly one [1..1] title (CONF:1098-10114).
5. SHALL contain exactly one [1..1] text (CONF:1098-10115).

If section/@nullFlavor is not present:

1. SHALL contain at least one [1..\*] entry (CONF:1098-10116) such that it
   1. SHALL contain exactly one [1..1] [Instruction (V2)](#Instruction_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:1098-31398).

Figure 86: Instructions Section (V2) Example

<section>

<templateId root="2.16.840.1.113883.10.20.21.2.45"

extension="2014-06-09" />

<code code="69730-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="INSTRUCTIONS" />

<title>INSTRUCTIONS</title>

<text>

Patient may have low grade fever, mild joint pain and injection area

tenderness

</text>

<entry typeCode="DRIV">

<act classCode="ACT" moodCode="INT">

<templateId root="2.16.840.1.113883.10.20.22.4.20" />

<!-- \*\*\* Instructions template \*\*\* -->

...

</act>

</entry>

</section>

Interventions Section (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.21.2.3:2015-08-01 (open)]

Table 135: Interventions Section (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Care Plan (V2)](#D_Care_Plan_V2) (optional)  [Progress Note (V3)](#D_Progress_Note_V3) (optional) | [Handoff Communication Participants](#E_Handoff_Communication_Participants) (optional)  [Planned Intervention Act (V2)](#E_Planned_Intervention_Act_V2) (optional)  [Intervention Act (V2)](#E_Intervention_Act_V2) (optional) |

This template represents Interventions. Interventions are actions taken to maximize the prospects of the goals of care for the patient, including the removal of barriers to success. Interventions can be planned, ordered, historical, etc.

Interventions include actions that may be ongoing (e.g., maintenance medications that the patient is taking, or monitoring the patient’s health status or the status of an intervention).

Instructions are nested within interventions and may include self-care instructions. Instructions are information or directions to the patient and other providers including how to care for the individual’s condition, what to do at home, when to call for help, any additional appointments, testing, and changes to the medication list or medication instructions, clinical guidelines and a summary of best practice.

Instructions are information or directions to the patient. Use the Instructions Section when instructions are included as part of a document that is not a Care Plan. Use the Interventions Section, containing the Intervention Act containing the Instruction entry, when instructions are part of a structured care plan.

Table 136: Interventions Section (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.21.2.3:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-8680](#C_1198-8680) |  |
| @root | 1..1 | SHALL | UID | [1198-10461](#C_1198-10461) | 2.16.840.1.113883.10.20.21.2.3 |
| @extension | 1..1 | SHALL |  | [1198-32559](#C_1198-32559) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15377](#C_1198-15377) |  |
| @code | 1..1 | SHALL |  | [1198-15378](#C_1198-15378) | 62387-6 |
| @codeSystem | 1..1 | SHALL |  | [1198-30864](#C_1198-30864) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-8682](#C_1198-8682) |  |
| text | 1..1 | SHALL |  | [1198-8683](#C_1198-8683) |  |
| entry | 0..\* | SHOULD |  | [1198-30996](#C_1198-30996) |  |
| act | 1..1 | SHALL |  | [1198-30997](#C_1198-30997) | [Intervention Act (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.131:2015-08-01](#E_Intervention_Act_V2) |
| entry | 0..\* | SHOULD |  | [1198-32730](#C_1198-32730) |  |
| act | 1..1 | SHALL |  | [1198-32731](#C_1198-32731) | [Planned Intervention Act (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.146:2015-08-01](#E_Planned_Intervention_Act_V2) |
| entry | 0..\* | MAY | Entry | [1198-32402](#C_1198-32402) |  |
| act | 1..1 | SHALL |  | [1198-32403](#C_1198-32403) | [Handoff Communication Participants (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.141](#E_Handoff_Communication_Participants) |

1. SHALL contain exactly one [1..1] templateId (CONF:1198-8680) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.21.2.3" (CONF:1198-10461).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32559).
2. SHALL contain exactly one [1..1] code (CONF:1198-15377).
   1. This code SHALL contain exactly one [1..1] @code="62387-6" Interventions Provided (CONF:1198-15378).
   2. 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:1198-30864).
3. SHALL contain exactly one [1..1] title (CONF:1198-8682).
4. SHALL contain exactly one [1..1] text (CONF:1198-8683).
5. SHOULD contain zero or more [0..\*] entry (CONF:1198-30996) such that it
   1. SHALL contain exactly one [1..1] [Intervention Act (V2)](#E_Intervention_Act_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.131:2015-08-01) (CONF:1198-30997).
6. SHOULD contain zero or more [0..\*] entry (CONF:1198-32730) such that it
   1. SHALL contain exactly one [1..1] [Planned Intervention Act (V2)](#E_Planned_Intervention_Act_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.146:2015-08-01) (CONF:1198-32731).
7. MAY contain zero or more [0..\*] entry (CONF:1198-32402) such that it
   1. SHALL contain exactly one [1..1] [Handoff Communication Participants](#E_Handoff_Communication_Participants) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.141) (CONF:1198-32403).

Figure 87: Interventions Section (V3) Example

<section>

<templateId root="2.16.840.1.113883.10.20.21.2.3" extension="2015-08-01" />

<code code="62387-6" displayName="Interventions Provided" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />

<title>Interventions Section</title>

<text />

<entry>

<act />

</entry>

</section>

Medical (General) History Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.22.2.39 (open)]

Table 137: Medical (General) History Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Procedure Note (V3)](#D_Procedure_Note_V3) (optional) |  |

The Medical History Section describes all aspects of the medical history of the patient even if not pertinent to the current procedure, and may include chief complaint, past medical history, social history, family history, surgical or procedure history, medication history, and other history information. The history may be limited to information pertinent to the current procedure or may be more comprehensive. The history may be reported as a collection of random clinical statements or it may be reported categorically. Categorical report formats may be divided into multiple subsections including Past Medical History, Social History.

Table 138: Medical (General) History Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.39) | | | | | |
| templateId | 1..1 | SHALL |  | [81-8160](#C_81-8160) |  |
| @root | 1..1 | SHALL |  | [81-10403](#C_81-10403) | 2.16.840.1.113883.10.20.22.2.39 |
| code | 1..1 | SHALL |  | [81-15379](#C_81-15379) |  |
| @code | 1..1 | SHALL |  | [81-15380](#C_81-15380) | 11329-0 |
| @codeSystem | 1..1 | SHALL |  | [81-26484](#C_81-26484) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-8162](#C_81-8162) |  |
| text | 1..1 | SHALL |  | [81-8163](#C_81-8163) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-8160) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.39" (CONF:81-10403).
2. SHALL contain exactly one [1..1] code (CONF:81-15379).
   1. This code SHALL contain exactly one [1..1] @code="11329-0" Medical (General) History (CONF:81-15380).
   2. 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:81-26484).
3. SHALL contain exactly one [1..1] title (CONF:81-8162).
4. SHALL contain exactly one [1..1] text (CONF:81-8163).

Medical Equipment Section (V2)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.23:2014-06-09 (open)]

Table 139: Medical Equipment Section (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (optional)  [Continuity of Care Document (CCD) (V3)](#D_Continuity_of_Care_Document_CCD_V3) (optional)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (optional)  [Referral Note (V2)](#D_Referral_Note_V2) (optional) | [Procedure Activity Procedure (V2)](#E_Procedure_Activity_Procedure_V2) (optional)  [Non-Medicinal Supply Activity (V2)](#NonMedicinal_Supply_Activity_V2) (optional)  [Medical Equipment Organizer](#E_Medical_Equipment_Organizer) (optional) |

This section defines a patient's implanted and external health and medical devices and equipment. This section lists any pertinent durable medical equipment (DME) used to help maintain the patient’s health status. All equipment relevant to the diagnosis, care, or treatment of a patient should be included.  
Devices applied to, or placed in, the patient are represented with the Procedure Activity Procedure (V2) template. Equipment supplied to the patient (e.g., pumps, inhalers, wheelchairs) is represented by the Non-Medicinal Supply Activity V2 template.  
These devices may be grouped together within a Medical Equipment Organizer. The organizer would probably not be used with devices applied in or on the patient but rather to organize a group of medical supplies the patient has been supplied with.

Table 140: Medical Equipment Section (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.23:2014-06-09) | | | | | |
| templateId | 1..1 | SHALL |  | [1098-7944](#C_1098-7944) |  |
| @root | 1..1 | SHALL |  | [1098-10404](#C_1098-10404) | 2.16.840.1.113883.10.20.22.2.23 |
| @extension | 1..1 | SHALL |  | [1098-32523](#C_1098-32523) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-15381](#C_1098-15381) |  |
| @code | 1..1 | SHALL |  | [1098-15382](#C_1098-15382) | 46264-8 |
| @codeSystem | 1..1 | SHALL |  | [1098-30828](#C_1098-30828) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-7946](#C_1098-7946) |  |
| text | 1..1 | SHALL |  | [1098-7947](#C_1098-7947) |  |
| entry | 0..\* | MAY |  | [1098-7948](#C_1098-7948) |  |
| organizer | 1..1 | SHALL |  | [1098-30351](#C_1098-30351) | [Medical Equipment Organizer (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.135](#E_Medical_Equipment_Organizer) |
| entry | 0..\* | SHOULD |  | [1098-31125](#C_1098-31125) |  |
| supply | 1..1 | SHALL |  | [1098-31861](#C_1098-31861) | [Non-Medicinal Supply Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.50:2014-06-09](#NonMedicinal_Supply_Activity_V2) |
| entry | 0..\* | SHOULD |  | [1098-31885](#C_1098-31885) |  |
| procedure | 1..1 | SHALL |  | [1098-31886](#C_1098-31886) | [Procedure Activity Procedure (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09](#E_Procedure_Activity_Procedure_V2) |

1. SHALL contain exactly one [1..1] templateId (CONF:1098-7944) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.23" (CONF:1098-10404).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32523).
2. SHALL contain exactly one [1..1] code (CONF:1098-15381).
   1. This code SHALL contain exactly one [1..1] @code="46264-8" Medical Equipment (CONF:1098-15382).
   2. 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:1098-30828).
3. SHALL contain exactly one [1..1] title (CONF:1098-7946).
4. SHALL contain exactly one [1..1] text (CONF:1098-7947).
5. MAY contain zero or more [0..\*] entry (CONF:1098-7948) such that it
   1. SHALL contain exactly one [1..1] [Medical Equipment Organizer](#E_Medical_Equipment_Organizer) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.135) (CONF:1098-30351).
6. SHOULD contain zero or more [0..\*] entry (CONF:1098-31125) such that it
   1. SHALL contain exactly one [1..1] [Non-Medicinal Supply Activity (V2)](#NonMedicinal_Supply_Activity_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.50:2014-06-09) (CONF:1098-31861).
7. SHOULD contain zero or more [0..\*] entry (CONF:1098-31885) such that it
   1. SHALL contain exactly one [1..1] [Procedure Activity Procedure (V2)](#E_Procedure_Activity_Procedure_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09) (CONF:1098-31886).

Figure 88: Medical Equipment Section (V2) Example

<component>

<section>

<!-- Medical equipment section -->

<templateId root="2.16.840.1.113883.10.20.22.2.23" extension="2014-06-09" />

<code code="46264-8" codeSystem="2.16.840.1.113883.6.1" />

<title>MEDICAL EQUIPMENT</title>

<text>

<content styleCode="Bold">Medical Equipment</content>

<list>

<item>Implanted Devices: Cardiac Pacemaker July 3, 2013</item>

<item>Implanted Devices: Upper GI Prosthesis, January 3, 2013</item>

<item>Cane, February 2, 2003</item>

<item>Biliary Stent, May 5, 2013</item>

</list>

</text>

<entry>

<organizer classCode="CLUSTER" moodCode="EVN">

<!-- Medical Equipment Organizer template -->

<templateId root="2.16.840.1.113883.10.20.22.4.135" />

...

</organizer>

</entry>

<entry>

<supply classCode="SPLY" moodCode="EVN">

<!-- Non-medicinal supply activity V2 template \*\*\*\*\*\*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.50" extension="2014-06-09" />

...

</supply>

</entry>

<entry>

<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" />

...

</procedure>

</entry>

</section>

</component>

Medications Administered Section (V2)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.38:2014-06-09 (open)]

Table 141: Medications Administered Section (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Procedure Note (V3)](#D_Procedure_Note_V3) (optional) | [Medication Activity (V2)](#Medication_Activity_V2) (optional) |

The Medications Administered Section usually resides inside a Procedure Note describing a procedure. This section defines medications and fluids administered during the procedure, its related encounter, or other procedure related activity excluding anesthetic medications. Anesthesia medications should be documented as described in the Anesthesia Section  
templateId 2.16.840.1.113883.10.20.22.2.25.

Table 142: Medications Administered Section (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.38:2014-06-09) | | | | | |
| templateId | 1..1 | SHALL |  | [1098-8152](#C_1098-8152) |  |
| @root | 1..1 | SHALL |  | [1098-10405](#C_1098-10405) | 2.16.840.1.113883.10.20.22.2.38 |
| @extension | 1..1 | SHALL |  | [1098-32525](#C_1098-32525) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-15383](#C_1098-15383) |  |
| @code | 1..1 | SHALL |  | [1098-15384](#C_1098-15384) | 29549-3 |
| @codeSystem | 1..1 | SHALL |  | [1098-30829](#C_1098-30829) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-8154](#C_1098-8154) |  |
| text | 1..1 | SHALL |  | [1098-8155](#C_1098-8155) |  |
| entry | 0..\* | MAY |  | [1098-8156](#C_1098-8156) |  |
| substanceAdministration | 1..1 | SHALL |  | [1098-15499](#C_1098-15499) | [Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09](#Medication_Activity_V2) |

1. SHALL contain exactly one [1..1] templateId (CONF:1098-8152) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.38" (CONF:1098-10405).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32525).
2. SHALL contain exactly one [1..1] code (CONF:1098-15383).
   1. This code SHALL contain exactly one [1..1] @code="29549-3" Medications Administered (CONF:1098-15384).
   2. 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:1098-30829).
3. SHALL contain exactly one [1..1] title (CONF:1098-8154).
4. SHALL contain exactly one [1..1] text (CONF:1098-8155).
5. MAY contain zero or more [0..\*] entry (CONF:1098-8156).
   1. The entry, if present, SHALL contain exactly one [1..1] [Medication Activity (V2)](#Medication_Activity_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09) (CONF:1098-15499).

Figure 89: Medications Administered Section (V2) Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.38" extension="2014-06-09" />

<code code="29549-3" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="MEDICATIONS ADMINISTERED" />

<title>MEDICATIONS ADMINISTERED</title>

<text>

<table border="1" width="100%">

<thead>

<tr>

<th>Medication</th>

<th>Directions</th>

<th>Start Date</th>

<th>Status</th>

<th>Indications</th>

<th>Fill Instructions</th>

</tr>

</thead>

<tbody>

<tr>

<td>

<content ID="MedAdministered\_1">

Proventil 0.09 MG/ACTUAT inhalant solution

</content>

</td>

<td>0.09 MG/ACTUAT inhalant solution, 2 puffs QID PRN wheezing</td>

<td>20070103</td>

<td>Active</td>

<td>Pneumonia (233604007 SNOMED CT)</td>

<td>Generic Substitution Allowed</td>

</tr>

</tbody>

</table>

</text>

<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 V2 \*\* -->

...

</substanceAdministration>

</entry>

</section>

Medications Section (entries optional) (V2)

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

Table 143: Medications Section (entries optional) (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [History and Physical (V3)](#D_History_and_Physical_V3) (required)  [Progress Note (V3)](#D_Progress_Note_V3) (optional)  [Procedure Note (V3)](#D_Procedure_Note_V3) (optional) | [Medication Activity (V2)](#Medication_Activity_V2) (optional) |

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 144: 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 |  | [1098-7791](#C_1098-7791) |  |
| @root | 1..1 | SHALL |  | [1098-10432](#C_1098-10432) | 2.16.840.1.113883.10.20.22.2.1 |
| @extension | 1..1 | SHALL |  | [1098-32500](#C_1098-32500) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-15385](#C_1098-15385) |  |
| @code | 1..1 | SHALL |  | [1098-15386](#C_1098-15386) | 10160-0 |
| @codeSystem | 1..1 | SHALL |  | [1098-30824](#C_1098-30824) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-7793](#C_1098-7793) |  |
| text | 1..1 | SHALL |  | [1098-7794](#C_1098-7794) |  |
| entry | 0..\* | SHOULD |  | [1098-7795](#C_1098-7795) |  |
| substanceAdministration | 1..1 | SHALL |  | [1098-10076](#C_1098-10076) | [Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09](#Medication_Activity_V2) |

1. SHALL contain exactly one [1..1] templateId (CONF:1098-7791) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.1" (CONF:1098-10432).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32500).
2. SHALL contain exactly one [1..1] code (CONF:1098-15385).
   1. This code SHALL contain exactly one [1..1] @code="10160-0" History of medication use (CONF:1098-15386).
   2. 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
   1. SHALL contain exactly one [1..1] [Medication Activity (V2)](#Medication_Activity_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09) (CONF:1098-10076).

Medications Section (entries required) (V2)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.1.1:2014-06-09 (open)]

Table 145: Medications Section (entries required) (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (optional)  [Continuity of Care Document (CCD) (V3)](#D_Continuity_of_Care_Document_CCD_V3) (required)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (required)  [Referral Note (V2)](#D_Referral_Note_V2) (required) | [Medication Activity (V2)](#Medication_Activity_V2) (required) |

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.

This section requires either an entry indicating the subject is not known to be on any medications or entries summarizing the subject's medications.

Table 146: Medications Section (entries required) (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1.1:2014-06-09) | | | | | |
| @nullFlavor | 0..1 | MAY |  | [1098-32845](#C_1098-32845) | urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = NI |
| templateId | 1..1 | SHALL |  | [1098-7568](#C_1098-7568) |  |
| @root | 1..1 | SHALL |  | [1098-10433](#C_1098-10433) | 2.16.840.1.113883.10.20.22.2.1.1 |
| @extension | 1..1 | SHALL |  | [1098-32499](#C_1098-32499) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-15387](#C_1098-15387) |  |
| @code | 1..1 | SHALL |  | [1098-15388](#C_1098-15388) | 10160-0 |
| @codeSystem | 1..1 | SHALL |  | [1098-30825](#C_1098-30825) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-7570](#C_1098-7570) |  |
| text | 1..1 | SHALL |  | [1098-7571](#C_1098-7571) |  |
| entry | 1..\* | SHALL |  | [1098-7572](#C_1098-7572) |  |
| substanceAdministration | 1..1 | SHALL |  | [1098-10077](#C_1098-10077) | [Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09](#Medication_Activity_V2) |

1. Conforms to [Medications Section (entries optional) (V2)](#S_Medications_Section_entries_optional_) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1:2014-06-09).
2. MAY contain zero or one [0..1] @nullFlavor="NI" No information (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:1098-32845).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-7568) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.1.1" (CONF:1098-10433).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32499).
4. SHALL contain exactly one [1..1] code (CONF:1098-15387).
   1. This code SHALL contain exactly one [1..1] @code="10160-0" History of medication use (CONF:1098-15388).
   2. 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:1098-30825).
5. SHALL contain exactly one [1..1] title (CONF:1098-7570).
6. SHALL contain exactly one [1..1] text (CONF:1098-7571).

If section/@nullFlavor is not present:

1. SHALL contain at least one [1..\*] entry (CONF:1098-7572) such that it
   1. SHALL contain exactly one [1..1] [Medication Activity (V2)](#Medication_Activity_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09) (CONF:1098-10077).

Figure 90: Medications Section (entries required) (V2) Example

<section>

<!--\*\*MEDICATION SECTION (coded entries required) \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.2.1.1" extension="2014-06-09" />

<!-- Medications Section (entries optional) -->

<templateId root="2.16.840.1.113883.10.20.22.2.1" extension="2014-06-09" />

<code code="10160-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="HISTORY OF MEDICATION USE" />

<title>MEDICATIONS</title>

<text>

Narrative Text

</text>

<entry>

<substanceAdministration classCode="SBADM" moodCode="EVN">

<!--\*\*MEDICATION ACTIVITY V2 \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.16" extension="2014-06-09" />

....

</substanceAdministration>

</entry>

</section>

Mental Status Section (V2)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.56:2015-08-01 (open)]

Table 147: Mental Status Section (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (optional)  [Continuity of Care Document (CCD) (V3)](#D_Continuity_of_Care_Document_CCD_V3) (optional)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (optional)  [Referral Note (V2)](#D_Referral_Note_V2) (optional) | [Assessment Scale Observation](#E_Assessment_Scale_Observation) (optional)  [Mental Status Organizer (V3)](#E_Mental_Status_Organizer_V3) (optional)  [Mental Status Observation (V3)](#E_Mental_Status_Observation_V3) (optional) |

The Mental Status Section contains observations and evaluations related to a patient’s psychological and mental competency and deficits including, but not limited to any of the following types of information:  
• Appearance (e.g., unusual grooming, clothing or body modifications)  
• Attitude (e.g., cooperative, guarded, hostile)  
• Behavior/psychomotor (e.g., abnormal movements, eye contact, tics)  
• Mood and affect (e.g., anxious, angry, euphoric)  
• Speech and Language (e.g., pressured speech, perseveration)  
• Thought process (e.g., logic, coherence)  
• Thought content (e.g., delusions, phobias)  
• Perception (e.g., voices, hallucinations)  
• Cognition (e.g., memory, alertness/consciousness, attention, orientation) – which were included in Cognitive Status Observation in earlier publications of C-CDA.  
• Insight and judgment (e.g., understanding of condition, decision making)

Table 148: Mental Status Section (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.56:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-28293](#C_1198-28293) |  |
| @root | 1..1 | SHALL |  | [1198-28294](#C_1198-28294) | 2.16.840.1.113883.10.20.22.2.56 |
| @extension | 1..1 | SHALL |  | [1198-32793](#C_1198-32793) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-28295](#C_1198-28295) |  |
| @code | 1..1 | SHALL |  | [1198-28296](#C_1198-28296) | 10190-7 |
| @codeSystem | 1..1 | SHALL |  | [1198-30826](#C_1198-30826) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-28297](#C_1198-28297) |  |
| text | 1..1 | SHALL |  | [1198-28298](#C_1198-28298) |  |
| entry | 0..\* | MAY |  | [1198-28301](#C_1198-28301) |  |
| organizer | 1..1 | SHALL |  | [1198-28302](#C_1198-28302) | [Mental Status Organizer (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.75:2015-08-01](#E_Mental_Status_Organizer_V3) |
| entry | 0..\* | MAY |  | [1198-28305](#C_1198-28305) |  |
| observation | 1..1 | SHALL |  | [1198-28306](#C_1198-28306) | [Mental Status Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.74:2015-08-01](#E_Mental_Status_Observation_V3) |
| entry | 0..\* | MAY |  | [1198-28313](#C_1198-28313) |  |
| observation | 1..1 | SHALL |  | [1198-28314](#C_1198-28314) | [Assessment Scale Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69](#E_Assessment_Scale_Observation) |

1. SHALL contain exactly one [1..1] templateId (CONF:1198-28293) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.56" (CONF:1198-28294).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32793).
2. SHALL contain exactly one [1..1] code (CONF:1198-28295).
   1. This code SHALL contain exactly one [1..1] @code="10190-7" Mental Status (CONF:1198-28296).
   2. 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:1198-30826).
3. SHALL contain exactly one [1..1] title (CONF:1198-28297).
4. SHALL contain exactly one [1..1] text (CONF:1198-28298).
5. MAY contain zero or more [0..\*] entry (CONF:1198-28301) such that it
   1. SHALL contain exactly one [1..1] [Mental Status Organizer (V3)](#E_Mental_Status_Organizer_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.75:2015-08-01) (CONF:1198-28302).
6. MAY contain zero or more [0..\*] entry (CONF:1198-28305) such that it
   1. SHALL contain exactly one [1..1] [Mental Status Observation (V3)](#E_Mental_Status_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.74:2015-08-01) (CONF:1198-28306).
7. MAY contain zero or more [0..\*] entry (CONF:1198-28313) such that it
   1. SHALL contain exactly one [1..1] [Assessment Scale Observation](#E_Assessment_Scale_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69) (CONF:1198-28314).

Figure 91: Mental Status Section Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.14" extension="2015-08-01" />

<!-- Mental Status Section -->

<code code="10190-7" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="MENTAL STATUS" />

<title>MENTAL STATUS</title>

<text>

...

</text>

<entry>

<observation classCode="OBS" moodCode="EVN">

<!-- Mental Status Observation template -->

<templateId root="2.16.840.1.113883.10.20.22.4.125" extension="2015-08-01" />

...

</observation>

</entry>

<entry>

<observation classCode="OBS" moodCode="EVN">

<!-- Mental Status Observation V2 -->

<templateId root="2.16.840.1.113883.10.20.22.4.74" extension="2015-08-01" />

...

</observation>

</entry>

<entry>

<organizer classCode="CLUSTER" moodCode="EVN">

<!-- Mental Status Organizer V2-->

<templateId root="2.16.840.1.113883.10.20.22.4.75" extension="2015-08-01" />

<id root="a7bc1062-8649-42a0-833d-ekd65bd013c9" />

...

</organizer>

</entry>

</section>

Nutrition Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.22.2.57 (open)]

Table 149: Nutrition Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (optional)  [Continuity of Care Document (CCD) (V3)](#D_Continuity_of_Care_Document_CCD_V3) (optional)  [Discharge Summary (V3)](#D_Discharge_Summary_V3) (optional)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (optional)  [Referral Note (V2)](#D_Referral_Note_V2) (optional)  [Progress Note (V3)](#D_Progress_Note_V3) (optional) | [Nutritional Status Observation](#E_Nutritional_Status_Observation) (optional) |

The Nutrition Section represents diet and nutrition information including special diet requirements and restrictions (e.g., texture modified diet, liquids only, enteral feeding). It also represents the overall nutritional status of the patient and nutrition assessment findings.

Table 150: Nutrition Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.57) | | | | | |
| templateId | 1..1 | SHALL |  | [1098-30477](#C_1098-30477) |  |
| @root | 1..1 | SHALL | UID | [1098-30478](#C_1098-30478) | 2.16.840.1.113883.10.20.22.2.57 |
| code | 1..1 | SHALL |  | [1098-30318](#C_1098-30318) |  |
| @code | 1..1 | SHALL |  | [1098-30319](#C_1098-30319) | 61144-2 |
| @codeSystem | 1..1 | SHALL |  | [1098-30320](#C_1098-30320) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-31042](#C_1098-31042) |  |
| text | 1..1 | SHALL |  | [1098-31043](#C_1098-31043) |  |
| entry | 0..\* | SHOULD |  | [1098-30321](#C_1098-30321) |  |
| observation | 1..1 | SHALL |  | [1098-30322](#C_1098-30322) | [Nutritional Status Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.124](#E_Nutritional_Status_Observation) |

1. SHALL contain exactly one [1..1] templateId (CONF:1098-30477) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.57" (CONF:1098-30478).
2. SHALL contain exactly one [1..1] code (CONF:1098-30318).
   1. This code SHALL contain exactly one [1..1] @code="61144-2" Diet and nutrition  (CONF:1098-30319).
   2. 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:1098-30320).
3. SHALL contain exactly one [1..1] title (CONF:1098-31042).
4. SHALL contain exactly one [1..1] text (CONF:1098-31043).
5. SHOULD contain zero or more [0..\*] entry (CONF:1098-30321) such that it
   1. SHALL contain exactly one [1..1] [Nutritional Status Observation](#E_Nutritional_Status_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.124) (CONF:1098-30322).

Figure 92: Nutrition Section Example

<section>

<!-- Nutrition Section -->

<templateId root="2.16.840.1.113883.10.20.22.2.57" />

<code code="61144-2" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Diet and Nutrition" />

<title>NUTRITION SECTION</title>

<text>

<paragraph>Nutritional Status: well nourished</paragraph>

<paragraph>Nutrition Assessment: Dietary Requirements; low sodium diet, Dietary Intake, high carbohydrate diet; BMI 25-29 overweight </paragraph>

<paragraph>Nutritional Recommendations: BMI 22; Nutrition Education "Lean Meats"</paragraph>

</text>

<entry>

<!-- SHOULD HAVE Nutritional Status Observation -->

<observation classCode="OBS" moodCode="EVN">

<!-- contains NUTRITIONAL STATUS Observation -->

<templateId root="2.16.840.1.113883.10.20.22.4.124" />

...

<entryRelationship typeCode="SUBJ">

<observation classCode="OBS" moodCode="EVN">

<!-- \*\* Nutritional Assessment observation\*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.138" />

<id root="ab1791b0-5c71-11db-b0de-0800200c9a66" />

...

</observation>

</entryRelationship>

</observation>

</entry>

</section>

Objective Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.21.2.1 (open)]

Table 151: Objective Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Progress Note (V3)](#D_Progress_Note_V3) (optional) |  |

The Objective Section contains data about the patient gathered through tests, measures, or observations that produce a quantified or categorized result. It includes important and relevant positive and negative test results, physical findings, review of systems, and other measurements and observations.

Table 152: Objective Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:2.16.840.1.113883.10.20.21.2.1) | | | | | |
| templateId | 1..1 | SHALL |  | [81-7869](#C_81-7869) |  |
| @root | 1..1 | SHALL | UID | [81-10462](#C_81-10462) | 2.16.840.1.113883.10.20.21.2.1 |
| code | 1..1 | SHALL |  | [81-15389](#C_81-15389) |  |
| @code | 1..1 | SHALL |  | [81-15390](#C_81-15390) | 61149-1 |
| @codeSystem | 1..1 | SHALL |  | [81-26485](#C_81-26485) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-7871](#C_81-7871) |  |
| text | 1..1 | SHALL |  | [81-7872](#C_81-7872) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-7869) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.21.2.1" (CONF:81-10462).
2. SHALL contain exactly one [1..1] code (CONF:81-15389).
   1. This code SHALL contain exactly one [1..1] @code="61149-1" Objective (CONF:81-15390).
   2. 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:81-26485).
3. SHALL contain exactly one [1..1] title (CONF:81-7871).
4. SHALL contain exactly one [1..1] text (CONF:81-7872).

Figure 93: Objective Section Example

<section>

<templateId root="2.16.840.1.113883.10.20.21.2.1"/>

<code code="61149-1 " codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="OBJECTIVE DATA "/>

<title>OBJECTIVE DATA</title>

<text>

<list listType="ordered">

<item>Chest: clear to ausc. No rales, normal breath sounds</item>

<item>Heart: RR, PMI in normal location and no heave or evidence of

cardiomegaly,normal heart sounds, no murm or gallop</item>

</list>

</text>

</section>

Observer Context

[assignedAuthor: identifier urn:oid:2.16.840.1.113883.10.20.6.2.4 (open)]

Table 153: Observer Context Contexts

| Contained By: | Contains: |
| --- | --- |
| [Diagnostic Imaging Report (V3)](#D_Diagnostic_Imaging_Report_V3) (optional) |  |

The Observer Context is used to override the author specified in the CDA Header. It is valid as a direct child element of a section.

Table 154: Observer Context Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| assignedAuthor (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.4) | | | | | |
| templateId | 1..1 | SHALL |  | [81-9194](#C_81-9194) |  |
| @root | 1..1 | SHALL |  | [81-10536](#C_81-10536) | 2.16.840.1.113883.10.20.6.2.4 |
| id | 1..\* | SHALL |  | [81-9196](#C_81-9196) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-9194) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.6.2.4" (CONF:81-10536).

The id element contains the author's id or the DICOM device observer UID

1. SHALL contain at least one [1..\*] id (CONF:81-9196).
2. Either assignedPerson or assignedAuthoringDevice SHALL be present (CONF:81-9198).

Figure 94: Observer Context Example

<assignedAuthor>

<templateId root="2.16.840.1.113883.10.20.6.2.4"/>

<id extension="121008" root="2.16.840.1.113883.19.5"/>

<assignedPerson>

<name>

<given>Richard</given>

<family>Blitz</family>

<suffix>MD</suffix>

</name>

</assignedPerson>

</assignedAuthor>

Operative Note Fluids Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.7.12 (open)]

Table 155: Operative Note Fluids Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Operative Note (V3)](#D_Operative_Note_V3) (optional) |  |

The Operative Note Fluids Section may be used to record fluids administered during the surgical procedure.

Table 156: Operative Note Fluids Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:2.16.840.1.113883.10.20.7.12) | | | | | |
| templateId | 1..1 | SHALL |  | [81-8030](#C_81-8030) |  |
| @root | 1..1 | SHALL | UID | [81-10463](#C_81-10463) | 2.16.840.1.113883.10.20.7.12 |
| code | 1..1 | SHALL |  | [81-15391](#C_81-15391) |  |
| @code | 1..1 | SHALL |  | [81-15392](#C_81-15392) | 10216-0 |
| @codeSystem | 1..1 | SHALL |  | [81-26486](#C_81-26486) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-8032](#C_81-8032) |  |
| text | 1..1 | SHALL |  | [81-8033](#C_81-8033) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-8030) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.7.12" (CONF:81-10463).
2. SHALL contain exactly one [1..1] code (CONF:81-15391).
   1. This code SHALL contain exactly one [1..1] @code="10216-0" Operative Note Fluids (CONF:81-15392).
   2. 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:81-26486).
3. SHALL contain exactly one [1..1] title (CONF:81-8032).
4. SHALL contain exactly one [1..1] text (CONF:81-8033).
5. If the Operative Note Fluids section is present, there SHALL be a statement providing details of the fluids administered or SHALL explicitly state there were no fluids administered (CONF:81-8052).

Figure 95: Operative Note Fluids Section Example

<section>

<templateId root="2.16.840.1.113883.10.20.7.12"/>

<code code="10216-0"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="OPERATIVE NOTE FLUIDS"/>

<title>Operative Note Fluids</title>

<text>250 ML Ringers Lactate</text>

</section>

Operative Note Surgical Procedure Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.7.14 (open)]

Table 157: Operative Note Surgical Procedure Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Operative Note (V3)](#D_Operative_Note_V3) (optional) |  |

The Operative Note Surgical Procedure Section can be used to restate the procedures performed if appropriate for an enterprise workflow. The procedure(s) performed associated with the Operative Note are formally modeled in the header using serviceEvent.

Table 158: Operative Note Surgical Procedure Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:2.16.840.1.113883.10.20.7.14) | | | | | |
| templateId | 1..1 | SHALL |  | [81-8034](#C_81-8034) |  |
| @root | 1..1 | SHALL | UID | [81-10464](#C_81-10464) | 2.16.840.1.113883.10.20.7.14 |
| code | 1..1 | SHALL |  | [81-15393](#C_81-15393) |  |
| @code | 1..1 | SHALL |  | [81-15394](#C_81-15394) | 10223-6 |
| @codeSystem | 1..1 | SHALL |  | [81-26487](#C_81-26487) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-8036](#C_81-8036) |  |
| text | 1..1 | SHALL |  | [81-8037](#C_81-8037) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-8034) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.7.14" (CONF:81-10464).
2. SHALL contain exactly one [1..1] code (CONF:81-15393).
   1. This code SHALL contain exactly one [1..1] @code="10223-6" Operative Note Surgical Procedure (CONF:81-15394).
   2. 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:81-26487).
3. SHALL contain exactly one [1..1] title (CONF:81-8036).
4. SHALL contain exactly one [1..1] text (CONF:81-8037).
5. If the surgical procedure section is present there SHALL be text indicating the procedure performed (CONF:81-8054).

Figure 96: Operative Note Surgical Procedure Section Example

<section>

<templateId root="2.16.840.1.113883.10.20.7.14"/>

<code code="10223-6"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="OPERATIVE NOTE SURGICAL PROCEDURE"/>

<title>Surgical Procedure</title>

<text>Laparoscopic Appendectomy</text>

</section>

Past Medical History (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.20:2015-08-01 (open)]

Table 159: Past Medical History (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (optional)  [Discharge Summary (V3)](#D_Discharge_Summary_V3) (optional)  [History and Physical (V3)](#D_History_and_Physical_V3) (required)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (optional)  [Referral Note (V2)](#D_Referral_Note_V2) (optional)  [Procedure Note (V3)](#D_Procedure_Note_V3) (optional) | [Problem Observation (V3)](#E_Problem_Observation_V3) (optional) |

This section contains a record of the patient’s past complaints, problems, and diagnoses. It contains data from the patient’s past up to the patient’s current complaint or reason for seeking medical care.

Table 160: Past Medical History (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.20:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-7828](#C_1198-7828) |  |
| @root | 1..1 | SHALL |  | [1198-10390](#C_1198-10390) | 2.16.840.1.113883.10.20.22.2.20 |
| @extension | 1..1 | SHALL |  | [1198-32536](#C_1198-32536) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15474](#C_1198-15474) |  |
| @code | 1..1 | SHALL |  | [1198-15475](#C_1198-15475) | 11348-0 |
| @codeSystem | 1..1 | SHALL |  | [1198-30831](#C_1198-30831) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-7830](#C_1198-7830) |  |
| text | 1..1 | SHALL |  | [1198-7831](#C_1198-7831) |  |
| entry | 0..\* | MAY |  | [1198-8791](#C_1198-8791) |  |
| observation | 1..1 | SHALL |  | [1198-15476](#C_1198-15476) | [Problem Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01](#E_Problem_Observation_V3) |

1. SHALL contain exactly one [1..1] templateId (CONF:1198-7828) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.20" (CONF:1198-10390).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32536).
2. SHALL contain exactly one [1..1] code (CONF:1198-15474).
   1. This code SHALL contain exactly one [1..1] @code="11348-0" History of Past Illness (CONF:1198-15475).
   2. 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:1198-30831).
3. SHALL contain exactly one [1..1] title (CONF:1198-7830).
4. SHALL contain exactly one [1..1] text (CONF:1198-7831).
5. MAY contain zero or more [0..\*] entry (CONF:1198-8791) such that it
   1. SHALL contain exactly one [1..1] [Problem Observation (V3)](#E_Problem_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01) (CONF:1198-15476).

Figure 97: Past Medical History (V3) Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.20" extension="2015-08-01" />

<!-- \*\* History of Past Illness Section \*\* -->

<code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" code="11348-0" displayName="HISTORY OF PAST ILLNESS" />

<title>PAST MEDICAL HISTORY</title>

<text>

<paragraph>Patient has had ..... </paragraph>

</text>

<entry>

<!-- Sample With Problem Observation. -->

<observation classCode="OBS" moodCode="EVN">

<!-- Problem Observation -->

...

</observation>

</entry>

</section>

Payers Section (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2015-08-01 (open)]

Table 161: Payers Section (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Continuity of Care Document (CCD) (V3)](#D_Continuity_of_Care_Document_CCD_V3) (optional)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (optional) | [Coverage Activity (V3)](#E_Coverage_Activity_V3) (optional) |

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 162: Payers Section (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-7924](#C_1198-7924) |  |
| @root | 1..1 | SHALL |  | [1198-10434](#C_1198-10434) | 2.16.840.1.113883.10.20.22.2.18 |
| @extension | 1..1 | SHALL |  | [1198-32597](#C_1198-32597) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15395](#C_1198-15395) |  |
| @code | 1..1 | SHALL |  | [1198-15396](#C_1198-15396) | 48768-6 |
| @codeSystem | 1..1 | SHALL |  | [1198-32149](#C_1198-32149) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-7926](#C_1198-7926) |  |
| text | 1..1 | SHALL |  | [1198-7927](#C_1198-7927) |  |
| entry | 0..\* | SHOULD |  | [1198-7959](#C_1198-7959) |  |
| act | 1..1 | SHALL |  | [1198-15501](#C_1198-15501) | [Coverage Activity (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.60:2015-08-01](#E_Coverage_Activity_V3) |

1. SHALL contain exactly one [1..1] templateId (CONF:1198-7924) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.18" (CONF:1198-10434).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32597).
2. SHALL contain exactly one [1..1] code (CONF:1198-15395).
   1. This code SHALL contain exactly one [1..1] @code="48768-6" Payers (CONF:1198-15396).
   2. 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:1198-32149).
3. SHALL contain exactly one [1..1] title (CONF:1198-7926).
4. SHALL contain exactly one [1..1] text (CONF:1198-7927).
5. SHOULD contain zero or more [0..\*] entry (CONF:1198-7959) such that it
   1. SHALL contain exactly one [1..1] [Coverage Activity (V3)](#E_Coverage_Activity_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.60:2015-08-01) (CONF:1198-15501).

Figure 98: Payers Section (V3) Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.18" extension="2015-08-01" />

<!-- \*\*\*\*\*\*\*\* 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="2015-08-01" />

<!-- \*\*\*\* Coverage entry template \*\*\*\* -->

...

</act>

</entry>

</section>

Physical Exam Section (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.2.10:2015-08-01 (open)]

Table 163: Physical Exam Section (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (optional)  [History and Physical (V3)](#D_History_and_Physical_V3) (required)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (optional)  [Referral Note (V2)](#D_Referral_Note_V2) (optional)  [Progress Note (V3)](#D_Progress_Note_V3) (optional)  [Procedure Note (V3)](#D_Procedure_Note_V3) (optional) | [Longitudinal Care Wound Observation (V2)](#E_Longitudinal_Care_Wound_Observation_V2) (optional) |

The section includes direct observations made by a clinician. The examination may include the use of simple instruments and may also describe simple maneuvers performed directly on the patient’s body.  
It also includes observations made by the examining clinician using only inspection, palpation, auscultation, and percussion. It does not include laboratory or imaging findings.  
The exam may be limited to pertinent body systems based on the patient’s chief complaint or it may include a comprehensive examination. The examination may be reported as a collection of random clinical statements or it may be reported categorically.  
The Physical Exam Section may contain multiple nested subsections.

Table 164: Physical Exam Section (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.2.10:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-7806](#C_1198-7806) |  |
| @root | 1..1 | SHALL | UID | [1198-10465](#C_1198-10465) | 2.16.840.1.113883.10.20.2.10 |
| @extension | 1..1 | SHALL |  | [1198-32587](#C_1198-32587) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15397](#C_1198-15397) |  |
| @code | 1..1 | SHALL |  | [1198-15398](#C_1198-15398) | 29545-1 |
| @codeSystem | 1..1 | SHALL |  | [1198-30931](#C_1198-30931) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-7808](#C_1198-7808) |  |
| text | 1..1 | SHALL |  | [1198-7809](#C_1198-7809) |  |
| entry | 0..\* | MAY |  | [1198-31926](#C_1198-31926) |  |
| observation | 1..1 | SHALL |  | [1198-31927](#C_1198-31927) | [Longitudinal Care Wound Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.114:2015-08-01](#E_Longitudinal_Care_Wound_Observation_V2) |
| component | 0..\* | MAY |  | [1198-32434](#C_1198-32434) |  |
| section | 1..1 | SHALL |  | [1198-32435](#C_1198-32435) |  |
| code | 1..1 | SHALL |  | [1198-32436](#C_1198-32436) | urn:oid:2.16.840.1.113883.11.20.9.65 (Physical Exam Type) |
| title | 1..1 | SHALL |  | [1198-32437](#C_1198-32437) |  |
| text | 1..1 | SHALL |  | [1198-32438](#C_1198-32438) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:1198-7806) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.2.10" (CONF:1198-10465).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32587).
2. SHALL contain exactly one [1..1] code (CONF:1198-15397).
   1. This code SHALL contain exactly one [1..1] @code="29545-1" Physical Findings (CONF:1198-15398).
   2. 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:1198-30931).
3. SHALL contain exactly one [1..1] title (CONF:1198-7808).
4. SHALL contain exactly one [1..1] text (CONF:1198-7809).
5. MAY contain zero or more [0..\*] entry (CONF:1198-31926) such that it
   1. SHALL contain exactly one [1..1] [Longitudinal Care Wound Observation (V2)](#E_Longitudinal_Care_Wound_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.114:2015-08-01) (CONF:1198-31927).
6. MAY contain zero or more [0..\*] component (CONF:1198-32434) such that it
   1. SHALL contain exactly one [1..1] section (CONF:1198-32435).
      1. This section SHALL contain exactly one [1..1] code, which SHOULD be selected from ValueSet [Physical Exam Type](#Physical_Exam_Type) urn:oid:2.16.840.1.113883.11.20.9.65 DYNAMIC (CONF:1198-32436).
      2. This section SHALL contain exactly one [1..1] title (CONF:1198-32437).
      3. This section SHALL contain exactly one [1..1] text (CONF:1198-32438).

Table 165: Physical Exam Type

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Physical Exam Type urn:oid:2.16.840.1.113883.11.20.9.65  (Clinical Focus: Document section types that may be used under the Physical Examination section of C-CDA.),(Data Element Scope: C-CDA r2.1 Component in Physical Exam Section (V3)[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.2.10:2015-08-01 (open)] STATIC),(Inclusion Criteria: Specified LOINC concepts with Scale:Nar and Class:H&P.PX and selected concepts with Scale:Nom or DOC),(Exclusion Criteria: Only as in inclusion)  This value set was imported on 6/26/2019 with a version of 20190114.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.65/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 10190-7 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Mental status Narrative |
| 10191-5 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Physical findings of Abdomen Narrative |
| 10192-3 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Physical findings of Back Narrative |
| 10193-1 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Physical findings of Breasts Narrative |
| 10194-9 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Physical findings of Neurologic deep tendon reflexes Narrative |
| 10195-6 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Physical findings of Ear Narrative |
| 10196-4 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Physical findings of Extremities Narrative |
| 10197-2 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Physical findings of Eye Narrative |
| 10198-0 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Physical findings of Genitourinary tract Narrative |
| 10199-8 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Physical findings of Head Narrative |
| ... | | | |

Figure 99: Physical Exam Section (V3) Example

<component>

<section>

<templateId root="2.16.840.1.113883.10.20.2.10" extension="2015-08-01" />

<code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" code="29545-1" displayName="Physical Findings" />

<title>Physical Examination</title>

<!--\*\*10.4.1 Physical Exam at Transfer -->

<text>

<list listType="ordered">

<item>Recurrent GI bleed of unknown etiology; hypotension perhaps

secondary to this but as likely secondary to polypharmacy.</item>

<item>Acute on chronic anemia secondary to #1.</item>

<item>Azotemia, acute renal failure with volume loss secondary to

#1.</item>

<item>Hyperkalemia secondary to #3 and on ACE and K+ supplement.</item>

<item>Other chronic diagnoses as noted above, currently stable.</item>

</list>

</text>

...

</section>

</component>

Plan of Treatment Section (V2)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09 (open)]

Table 166: Plan of Treatment Section (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (optional)  [Continuity of Care Document (CCD) (V3)](#D_Continuity_of_Care_Document_CCD_V3) (optional)  [Discharge Summary (V3)](#D_Discharge_Summary_V3) (required)  [History and Physical (V3)](#D_History_and_Physical_V3) (optional)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (optional)  [Referral Note (V2)](#D_Referral_Note_V2) (optional)  [Progress Note (V3)](#D_Progress_Note_V3) (optional)  [Procedure Note (V3)](#D_Procedure_Note_V3) (optional)  [Operative Note (V3)](#D_Operative_Note_V3) (optional) | [Goal Observation](#E_Goal_Observation_U) (optional)  [Nutrition Recommendation](#E_Nutrition_Recommendation) (optional)  [Planned Act (V2)](#E_Planned_Act_V2) (optional)  [Planned Encounter (V2)](#E_Planned_Encounter_V2) (optional)  [Planned Procedure (V2)](#E_Planned_Procedure_V2) (optional)  [Planned Observation (V2)](#E_Planned_Observation_V2) (optional)  [Planned Supply (V2)](#E_Planned_Supply_V2) (optional)  [Planned Medication Activity (V2)](#E_Planned_Medication_Activity_V2) (optional)  [Handoff Communication Participants](#E_Handoff_Communication_Participants) (optional)  [Instruction (V2)](#Instruction_V2) (optional)  [Planned Immunization Activity](#E_Planned_Immunization_Activity) (optional) |

This section, formerly known as "Plan of Care", contains data that define pending orders, interventions, encounters, services, and procedures for the patient. It is limited to prospective, unfulfilled, or incomplete orders and requests only. These are indicated by the @moodCode of the entries within this section. All active, incomplete, or pending orders, appointments, referrals, procedures, services, or any other pending event of clinical significance to the current care of the patient should be listed.  
Clinical reminders are placed here to provide prompts for disease prevention and management, patient safety, and healthcare quality improvements, including widely accepted performance measures.  
The plan may also indicate that patient education will be provided.  
When used in a document that includes a Goals Section, all the goals (whether narrative only, or structured Goal Observation entries) should be recorded in the Goals Section, rather than in the Plan of Treatment Section, to avoid confusion as to “which/whose goals should be in which section?”  
When used in a document that does not include a Goals Section, the Plan of Treatment section may also contain information about care team members’ goals, including the patient’s values, beliefs, preferences, care expectations, and overarching care goals. Values may include the importance of quality of life over longevity. These values are taken into account when prioritizing all problems and their treatments. Beliefs may include comfort with dying or the refusal of blood transfusions because of the patient’s religious convictions. Preferences may include liquid medicines over tablets, or treatment via secure email instead of in person. Care expectations may range from being treated only by female clinicians, to expecting all calls to be returned within 24 hours. Overarching goals described in this section are not tied to a specific condition, problem, health concern, or intervention. Examples of overarching goals could be to minimize pain or dependence on others, or to walk a daughter down the aisle for her marriage.

Table 167: Plan of Treatment Section (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09) | | | | | |
| templateId | 1..1 | SHALL |  | [1098-7723](#C_1098-7723) |  |
| @root | 1..1 | SHALL |  | [1098-10435](#C_1098-10435) | 2.16.840.1.113883.10.20.22.2.10 |
| @extension | 1..1 | SHALL |  | [1098-32501](#C_1098-32501) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-14749](#C_1098-14749) |  |
| @code | 1..1 | SHALL |  | [1098-14750](#C_1098-14750) | 18776-5 |
| @codeSystem | 1..1 | SHALL |  | [1098-30813](#C_1098-30813) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-16986](#C_1098-16986) |  |
| text | 1..1 | SHALL |  | [1098-7725](#C_1098-7725) |  |
| entry | 0..\* | MAY |  | [1098-7726](#C_1098-7726) |  |
| observation | 1..1 | SHALL |  | [1098-14751](#C_1098-14751) | [Planned Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.44:2014-06-09](#E_Planned_Observation_V2) |
| entry | 0..\* | MAY |  | [1098-8805](#C_1098-8805) |  |
| encounter | 1..1 | SHALL |  | [1098-30472](#C_1098-30472) | [Planned Encounter (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.40:2014-06-09](#E_Planned_Encounter_V2) |
| entry | 0..\* | MAY |  | [1098-8807](#C_1098-8807) |  |
| act | 1..1 | SHALL |  | [1098-30473](#C_1098-30473) | [Planned Act (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.39:2014-06-09](#E_Planned_Act_V2) |
| entry | 0..\* | MAY |  | [1098-8809](#C_1098-8809) |  |
| procedure | 1..1 | SHALL |  | [1098-30474](#C_1098-30474) | [Planned Procedure (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2014-06-09](#E_Planned_Procedure_V2) |
| entry | 0..\* | MAY |  | [1098-8811](#C_1098-8811) |  |
| substanceAdministration | 1..1 | SHALL |  | [1098-30475](#C_1098-30475) | [Planned Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09](#E_Planned_Medication_Activity_V2) |
| entry | 0..\* | MAY |  | [1098-8813](#C_1098-8813) |  |
| supply | 1..1 | SHALL |  | [1098-30476](#C_1098-30476) | [Planned Supply (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.43:2014-06-09](#E_Planned_Supply_V2) |
| entry | 0..\* | MAY |  | [1098-14695](#C_1098-14695) |  |
| act | 1..1 | SHALL |  | [1098-31397](#C_1098-31397) | [Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09](#Instruction_V2) |
| entry | 0..\* | MAY |  | [1098-29621](#C_1098-29621) |  |
| act | 1..1 | SHALL |  | [1098-30868](#C_1098-30868) | [Handoff Communication Participants (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.141](#E_Handoff_Communication_Participants) |
| entry | 0..\* | MAY |  | [1098-31841](#C_1098-31841) |  |
| act | 1..1 | SHALL |  | [1098-31864](#C_1098-31864) | [Nutrition Recommendation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.130](#E_Nutrition_Recommendation) |
| entry | 0..\* | MAY |  | [1098-32353](#C_1098-32353) |  |
| substanceAdministration | 1..1 | SHALL |  | [1098-32354](#C_1098-32354) | [Planned Immunization Activity (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.120](#E_Planned_Immunization_Activity) |
| entry | 0..\* | MAY |  | [1098-32887](#C_1098-32887) |  |
| observation | 1..1 | SHALL |  | [1098-32888](#C_1098-32888) | [Goal Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.121](#E_Goal_Observation_U) |

1. SHALL contain exactly one [1..1] templateId (CONF:1098-7723) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.10" (CONF:1098-10435).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32501).
2. SHALL contain exactly one [1..1] code (CONF:1098-14749).
   1. This code SHALL contain exactly one [1..1] @code="18776-5" Plan of Treatment (CONF:1098-14750).
   2. 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:1098-30813).
3. SHALL contain exactly one [1..1] title (CONF:1098-16986).
4. SHALL contain exactly one [1..1] text (CONF:1098-7725).
5. MAY contain zero or more [0..\*] entry (CONF:1098-7726) such that it
   1. SHALL contain exactly one [1..1] [Planned Observation (V2)](#E_Planned_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.44:2014-06-09) (CONF:1098-14751).
6. MAY contain zero or more [0..\*] entry (CONF:1098-8805) such that it
   1. SHALL contain exactly one [1..1] [Planned Encounter (V2)](#E_Planned_Encounter_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.40:2014-06-09) (CONF:1098-30472).
7. MAY contain zero or more [0..\*] entry (CONF:1098-8807) such that it
   1. SHALL contain exactly one [1..1] [Planned Act (V2)](#E_Planned_Act_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.39:2014-06-09) (CONF:1098-30473).
8. MAY contain zero or more [0..\*] entry (CONF:1098-8809) such that it
   1. SHALL contain exactly one [1..1] [Planned Procedure (V2)](#E_Planned_Procedure_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2014-06-09) (CONF:1098-30474).
9. MAY contain zero or more [0..\*] entry (CONF:1098-8811) such that it
   1. SHALL contain exactly one [1..1] [Planned Medication Activity (V2)](#E_Planned_Medication_Activity_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09) (CONF:1098-30475).
10. MAY contain zero or more [0..\*] entry (CONF:1098-8813) such that it
    1. SHALL contain exactly one [1..1] [Planned Supply (V2)](#E_Planned_Supply_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.43:2014-06-09) (CONF:1098-30476).
11. MAY contain zero or more [0..\*] entry (CONF:1098-14695) such that it
    1. SHALL contain exactly one [1..1] [Instruction (V2)](#Instruction_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:1098-31397).
12. MAY contain zero or more [0..\*] entry (CONF:1098-29621) such that it
    1. SHALL contain exactly one [1..1] [Handoff Communication Participants](#E_Handoff_Communication_Participants) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.141) (CONF:1098-30868).
13. MAY contain zero or more [0..\*] entry (CONF:1098-31841) such that it
    1. SHALL contain exactly one [1..1] [Nutrition Recommendation](#E_Nutrition_Recommendation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.130) (CONF:1098-31864).
14. MAY contain zero or more [0..\*] entry (CONF:1098-32353) such that it
    1. SHALL contain exactly one [1..1] [Planned Immunization Activity](#E_Planned_Immunization_Activity) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.120) (CONF:1098-32354).
15. MAY contain zero or more [0..\*] entry (CONF:1098-32887) such that it
    1. SHALL contain exactly one [1..1] [Goal Observation](#E_Goal_Observation_U) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.121) (CONF:1098-32888).

Figure 100: Plan of Treatment Section (V2) Example

<component>

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.10" extension="2014-06-09" />

<!-- \*\*\*\* Plan of Treatment Section V2 template \*\*\*\* -->

<code code="18776-5" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Treatment plan" />

<title>TREATMENT PLAN</title>

<text>

...

</text>

<entry>

<act classCode="ACT" moodCode="EVN">

<!-- Handoff Communication template -->

<templateId root="2.16.840.1.113883.10.20.22.4.141" />

...

</act>

</entry>

<entry>

<encounter moodCode="INT" classCode="ENC">

<templateId root="2.16.840.1.113883.10.20.22.4.40" extension="2014-06-09" />

<!-- Plan Activity Encounter V2 template -->

...

</encounter>

</entry>

</section>

</component>

Planned Procedure Section (V2)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.30:2014-06-09 (open)]

Table 168: Planned Procedure Section (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Procedure Note (V3)](#D_Procedure_Note_V3) (optional)  [Operative Note (V3)](#D_Operative_Note_V3) (optional) | [Planned Procedure (V2)](#E_Planned_Procedure_V2) (optional) |

This section contains the procedure(s) that a clinician planned based on the preoperative assessment.

Table 169: Planned Procedure Section (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.30:2014-06-09) | | | | | |
| templateId | 1..1 | SHALL |  | [1098-8082](#C_1098-8082) |  |
| @root | 1..1 | SHALL |  | [1098-10436](#C_1098-10436) | 2.16.840.1.113883.10.20.22.2.30 |
| @extension | 1..1 | SHALL |  | [1098-32590](#C_1098-32590) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-15399](#C_1098-15399) |  |
| @code | 1..1 | SHALL |  | [1098-15400](#C_1098-15400) | 59772-4 |
| @codeSystem | 1..1 | SHALL |  | [1098-32151](#C_1098-32151) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-8084](#C_1098-8084) |  |
| text | 1..1 | SHALL |  | [1098-8085](#C_1098-8085) |  |
| entry | 0..\* | MAY |  | [1098-8744](#C_1098-8744) |  |
| procedure | 1..1 | SHALL |  | [1098-15502](#C_1098-15502) | [Planned Procedure (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2014-06-09](#E_Planned_Procedure_V2) |

1. SHALL contain exactly one [1..1] templateId (CONF:1098-8082) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.30" (CONF:1098-10436).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32590).
2. SHALL contain exactly one [1..1] code (CONF:1098-15399).
   1. This code SHALL contain exactly one [1..1] @code="59772-4" Planned Procedure (CONF:1098-15400).
   2. 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:1098-32151).
3. SHALL contain exactly one [1..1] title (CONF:1098-8084).
4. SHALL contain exactly one [1..1] text (CONF:1098-8085).
5. MAY contain zero or more [0..\*] entry (CONF:1098-8744) such that it
   1. SHALL contain exactly one [1..1] [Planned Procedure (V2)](#E_Planned_Procedure_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2014-06-09) (CONF:1098-15502).

Figure 101: Planned Procedure Section (V2) Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.30" extension="2014-06-09" />

<code code="59772-4" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Planned Procedure" />

<title>Planned Procedure</title>

<text>

...

</text>

<entry>

<procedure moodCode="RQO" classCode="PROC">

<templateId root="2.16.840.1.113883.10.20.22.4.41" extension="2014-06-09" />

<!-- \*\* Planned Procedure \*\* -->

...

</procedure>

</entry>

</section>

Postoperative Diagnosis Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.22.2.35 (open)]

Table 170: Postoperative Diagnosis Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Operative Note (V3)](#D_Operative_Note_V3) (required) |  |

The Postoperative Diagnosis Section records the diagnosis or diagnoses discovered or confirmed during the surgery. Often it is the same as the preoperative diagnosis.

Table 171: Postoperative Diagnosis Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.35) | | | | | |
| templateId | 1..1 | SHALL |  | [81-8101](#C_81-8101) |  |
| @root | 1..1 | SHALL |  | [81-10437](#C_81-10437) | 2.16.840.1.113883.10.20.22.2.35 |
| code | 1..1 | SHALL |  | [81-15401](#C_81-15401) |  |
| @code | 1..1 | SHALL |  | [81-15402](#C_81-15402) | 10218-6 |
| @codeSystem | 1..1 | SHALL |  | [81-26488](#C_81-26488) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-8103](#C_81-8103) |  |
| text | 1..1 | SHALL |  | [81-8104](#C_81-8104) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-8101) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.35" (CONF:81-10437).
2. SHALL contain exactly one [1..1] code (CONF:81-15401).
   1. This code SHALL contain exactly one [1..1] @code="10218-6" Postoperative Diagnosis (CONF:81-15402).
   2. 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:81-26488).
3. SHALL contain exactly one [1..1] title (CONF:81-8103).
4. SHALL contain exactly one [1..1] text (CONF:81-8104).

Figure 102: Postoperative Diagnosis Section Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.35"/>

<code code="10218-6"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="POSTOPERATIVE DIAGNOSIS"/>

<title>Postoperative Diagnosis</title>

<text>Appendicitis with periappendiceal abscess</text>

</section>

Postprocedure Diagnosis Section (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.36:2015-08-01 (open)]

Table 172: Postprocedure Diagnosis Section (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Procedure Note (V3)](#D_Procedure_Note_V3) (required) | [Postprocedure Diagnosis (V3)](#E_Postprocedure_Diagnosis_V3) (optional) |

The Postprocedure Diagnosis Section records the diagnosis or diagnoses discovered or confirmed during the procedure. Often it is the same as the preprocedure diagnosis or indication.

Table 173: Postprocedure Diagnosis Section (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.36:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-8167](#C_1198-8167) |  |
| @root | 1..1 | SHALL |  | [1198-10438](#C_1198-10438) | 2.16.840.1.113883.10.20.22.2.36 |
| @extension | 1..1 | SHALL |  | [1198-32550](#C_1198-32550) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15403](#C_1198-15403) |  |
| @code | 1..1 | SHALL |  | [1198-15404](#C_1198-15404) | 59769-0 |
| @codeSystem | 1..1 | SHALL |  | [1198-30862](#C_1198-30862) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-8170](#C_1198-8170) |  |
| text | 1..1 | SHALL |  | [1198-8171](#C_1198-8171) |  |
| entry | 0..1 | SHOULD |  | [1198-8762](#C_1198-8762) |  |
| act | 1..1 | SHALL |  | [1198-15503](#C_1198-15503) | [Postprocedure Diagnosis (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.51:2015-08-01](#E_Postprocedure_Diagnosis_V3) |

1. SHALL contain exactly one [1..1] templateId (CONF:1198-8167) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.36" (CONF:1198-10438).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32550).
2. SHALL contain exactly one [1..1] code (CONF:1198-15403).
   1. This code SHALL contain exactly one [1..1] @code="59769-0" Postprocedure Diagnosis (CONF:1198-15404).
   2. 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:1198-30862).
3. SHALL contain exactly one [1..1] title (CONF:1198-8170).
4. SHALL contain exactly one [1..1] text (CONF:1198-8171).
5. SHOULD contain zero or one [0..1] entry (CONF:1198-8762) such that it
   1. SHALL contain exactly one [1..1] [Postprocedure Diagnosis (V3)](#E_Postprocedure_Diagnosis_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.51:2015-08-01) (CONF:1198-15503).

Figure 103: Postprocedure Diagnosis Section (V3) Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.36" extension="2015-08-01" />

<code code="59769-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="POSTPROCEDURE DIAGNOSIS" />

<title>Postprocedure Diagnosis</title>

<text>

...

</text>

<entry>

<act moodCode="EVN" classCode="ACT">

<templateId root="2.16.840.1.113883.10.20.22.4.51" extension="2014-06-09" />

<!-- \*\* Postprocedure Diagnosis \*\* -->

...

</act>

</entry>

</section>

Preoperative Diagnosis Section (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.34:2015-08-01 (open)]

Table 174: Preoperative Diagnosis Section (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Operative Note (V3)](#D_Operative_Note_V3) (required) | [Preoperative Diagnosis (V3)](#E_Preoperative_Diagnosis_V3) (optional) |

The Preoperative Diagnosis Section records the surgical diagnoses assigned to the patient before the surgical procedure which are the reason for the surgery. The preoperative diagnosis is, in the surgeon's opinion, the diagnosis that will be confirmed during surgery.

Table 175: Preoperative Diagnosis Section (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.34:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-8097](#C_1198-8097) |  |
| @root | 1..1 | SHALL |  | [1198-10439](#C_1198-10439) | 2.16.840.1.113883.10.20.22.2.34 |
| @extension | 1..1 | SHALL |  | [1198-32551](#C_1198-32551) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15405](#C_1198-15405) |  |
| @code | 1..1 | SHALL |  | [1198-15406](#C_1198-15406) | 10219-4 |
| @codeSystem | 1..1 | SHALL |  | [1198-30863](#C_1198-30863) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-8099](#C_1198-8099) |  |
| text | 1..1 | SHALL |  | [1198-8100](#C_1198-8100) |  |
| entry | 0..1 | SHOULD |  | [1198-10096](#C_1198-10096) |  |
| act | 1..1 | SHALL |  | [1198-15504](#C_1198-15504) | [Preoperative Diagnosis (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.65:2015-08-01](#E_Preoperative_Diagnosis_V3) |

1. SHALL contain exactly one [1..1] templateId (CONF:1198-8097) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.34" (CONF:1198-10439).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32551).
2. SHALL contain exactly one [1..1] code (CONF:1198-15405).
   1. This code SHALL contain exactly one [1..1] @code="10219-4" Preoperative Diagnosis (CONF:1198-15406).
   2. 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:1198-30863).
3. SHALL contain exactly one [1..1] title (CONF:1198-8099).
4. SHALL contain exactly one [1..1] text (CONF:1198-8100).
5. SHOULD contain zero or one [0..1] entry (CONF:1198-10096) such that it
   1. SHALL contain exactly one [1..1] [Preoperative Diagnosis (V3)](#E_Preoperative_Diagnosis_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.65:2015-08-01) (CONF:1198-15504).

Figure 104: Preoperative Diagnosis Section (V3) Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.34" extension="2015-08-01" />

<code code="10219-4" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName=" PREOPERATIVE DIAGNOSIS" />

<title>Preoperative Diagnosis</title>

<text>Appendicitis</text>

<entry>

<act moodCode="EVN" classCode="ACT">

<templateId root="2.16.840.1.113883.10.20.22.4.65" extension="2015-08-01" />

<!-- \*\* Preoperative Diagnosis \*\* -->

...

</act>

</entry>

</section>

Problem Section (entries optional) (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.5:2015-08-01 (open)]

Table 176: Problem Section (entries optional) (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Discharge Summary (V3)](#D_Discharge_Summary_V3) (optional)  [History and Physical (V3)](#D_History_and_Physical_V3) (optional)  [Progress Note (V3)](#D_Progress_Note_V3) (optional) | [Health Status Observation (V2)](#Health_Status_Observation_V2) (optional)  [Problem Concern Act (V3)](#E_Problem_Concern_Act_V3) (optional) |

This section lists and describes all relevant clinical problems at the time the document is generated. At a minimum, all pertinent current and historical problems should be listed. Overall health status may be represented in this section.

Table 177: Problem Section (entries optional) (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.5:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-7877](#C_1198-7877) |  |
| @root | 1..1 | SHALL |  | [1198-10440](#C_1198-10440) | 2.16.840.1.113883.10.20.22.2.5 |
| @extension | 1..1 | SHALL |  | [1198-32511](#C_1198-32511) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15407](#C_1198-15407) |  |
| @code | 1..1 | SHALL |  | [1198-15408](#C_1198-15408) | 11450-4 |
| @codeSystem | 1..1 | SHALL |  | [1198-31141](#C_1198-31141) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-7879](#C_1198-7879) |  |
| text | 1..1 | SHALL |  | [1198-7880](#C_1198-7880) |  |
| entry | 0..\* | SHOULD |  | [1198-7881](#C_1198-7881) |  |
| act | 1..1 | SHALL |  | [1198-15505](#C_1198-15505) | [Problem Concern Act (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.3:2015-08-01](#E_Problem_Concern_Act_V3) |
| entry | 0..1 | MAY |  | [1198-30481](#C_1198-30481) |  |
| observation | 1..1 | SHALL |  | [1198-30482](#C_1198-30482) | [Health Status Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.5:2014-06-09](#Health_Status_Observation_V2) |

1. SHALL contain exactly one [1..1] templateId (CONF:1198-7877) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.5" (CONF:1198-10440).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32511).
2. SHALL contain exactly one [1..1] code (CONF:1198-15407).
   1. This code SHALL contain exactly one [1..1] @code="11450-4" Problem List (CONF:1198-15408).
   2. 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:1198-31141).
3. SHALL contain exactly one [1..1] title (CONF:1198-7879).
4. SHALL contain exactly one [1..1] text (CONF:1198-7880).
5. SHOULD contain zero or more [0..\*] entry (CONF:1198-7881) such that it
   1. SHALL contain exactly one [1..1] [Problem Concern Act (V3)](#E_Problem_Concern_Act_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.3:2015-08-01) (CONF:1198-15505).
6. MAY contain zero or one [0..1] entry (CONF:1198-30481) such that it
   1. SHALL contain exactly one [1..1] [Health Status Observation (V2)](#Health_Status_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.5:2014-06-09) (CONF:1198-30482).

Problem Section (entries required) (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.5.1:2015-08-01 (open)]

Table 178: Problem Section (entries required) (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (required)  [Continuity of Care Document (CCD) (V3)](#D_Continuity_of_Care_Document_CCD_V3) (required)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (required)  [Referral Note (V2)](#D_Referral_Note_V2) (required) | [Health Status Observation (V2)](#Health_Status_Observation_V2) (optional)  [Problem Concern Act (V3)](#E_Problem_Concern_Act_V3) (required) |

This section lists and describes all relevant clinical problems at the time the document is generated. At a minimum, all pertinent current and historical problems should be listed. Overall health status may be represented in this section.

Table 179: Problem Section (entries required) (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.5.1:2015-08-01) | | | | | |
| @nullFlavor | 0..1 | MAY |  | [1198-32864](#C_1198-32864) | urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = NI |
| templateId | 1..1 | SHALL |  | [1198-9179](#C_1198-9179) |  |
| @root | 1..1 | SHALL |  | [1198-10441](#C_1198-10441) | 2.16.840.1.113883.10.20.22.2.5.1 |
| @extension | 1..1 | SHALL |  | [1198-32510](#C_1198-32510) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15409](#C_1198-15409) |  |
| @code | 1..1 | SHALL |  | [1198-15410](#C_1198-15410) | 11450-4 |
| @codeSystem | 1..1 | SHALL |  | [1198-31142](#C_1198-31142) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-9181](#C_1198-9181) |  |
| text | 1..1 | SHALL |  | [1198-9182](#C_1198-9182) |  |
| entry | 1..\* | SHALL |  | [1198-9183](#C_1198-9183) |  |
| act | 1..1 | SHALL |  | [1198-15506](#C_1198-15506) | [Problem Concern Act (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.3:2015-08-01](#E_Problem_Concern_Act_V3) |
| entry | 0..1 | MAY |  | [1198-30479](#C_1198-30479) |  |
| observation | 1..1 | SHALL |  | [1198-30480](#C_1198-30480) | [Health Status Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.5:2014-06-09](#Health_Status_Observation_V2) |

1. Conforms to [Problem Section (entries optional) (V3)](#S_Problem_Section_entries_optional_V3) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.5:2015-08-01).
2. MAY contain zero or one [0..1] @nullFlavor="NI" No information (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:1198-32864).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-9179) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.5.1" (CONF:1198-10441).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32510).
4. SHALL contain exactly one [1..1] code (CONF:1198-15409).
   1. This code SHALL contain exactly one [1..1] @code="11450-4" Problem List (CONF:1198-15410).
   2. 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:1198-31142).
5. SHALL contain exactly one [1..1] title (CONF:1198-9181).
6. SHALL contain exactly one [1..1] text (CONF:1198-9182).

If section/@nullFlavor is not present:

1. SHALL contain at least one [1..\*] entry (CONF:1198-9183) such that it
   1. SHALL contain exactly one [1..1] [Problem Concern Act (V3)](#E_Problem_Concern_Act_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.3:2015-08-01) (CONF:1198-15506).
2. MAY contain zero or one [0..1] entry (CONF:1198-30479) such that it
   1. SHALL contain exactly one [1..1] [Health Status Observation (V2)](#Health_Status_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.5:2014-06-09) (CONF:1198-30480).

Figure 105: Problem Section (entries required) (V3) Example

<section>

<!-- [C-CDA R2.1] Problem Section (entries optional) -->

<templateId root="2.16.840.1.113883.10.20.22.2.5" extension="2015-08-01" />

<!-- [C-CDA R2.1] Problem Section (entries required) -->

<templateId root="2.16.840.1.113883.10.20.22.2.5.1" extension="2015-08-01" />

<code code="11450-4"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="PROBLEM LIST" />

<title>PROBLEMS</title>

<text>

<list listType="ordered">

<item>Pneumonia: Resolved in March 1998</item>

<item>...</item>

</list>

</text>

<entry typeCode="DRIV">

<act classCode="ACT" moodCode="EVN">

<!-- [C-CDA R2.1] Problem Concern Act (V3) -->

<templateId root="2.16.840.1.113883.10.20.22.4.3" extension="2015-08-01" />

...

</act>

</entry>

</section>

Figure 106: No Known Problems Section Example

<section>

<!-- [C-CDA R2.1] Problem Section (entries optional) -->

<templateId root="2.16.840.1.113883.10.20.22.2.5" extension="2015-08-01" />

<!-- [C-CDA R2.1] Problem Section (entries required) -->

<templateId root="2.16.840.1.113883.10.20.22.2.5.1" extension="2015-08-01" />

<code code="11450-4" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Problem List" />

<title>PROBLEMS</title>

<text ID="Concern\_1">

Problem Concern:

<br />

Concern Tracker Start Date: 06/07/2013 16:05:06

<br />

Concern Tracker End Date:

<br />

Concern Status: Active

<br />

<content ID="problems1">No known

<content ID="problemType1">problems.</content>

</content>

</text>

<entry typeCode="DRIV">

<act classCode="ACT" moodCode="EVN">

<!-- [C-CDA R2.1] Problem Concern Act (V3) -->

<templateId root="2.16.840.1.113883.10.20.22.4.3" extension="2015-08-01" />

<id root="36e3e930-7b14-11db-9fe1-0800200c9a66" />

<!-- SDWG supports 48765-2 or CONC in the code element -->

<code code="CONC" codeSystem="2.16.840.1.113883.5.6" />

<text>

<reference value="#Concern\_1" />

</text>

<statusCode code="active" />

<!-- The concern is not active, in terms of there being an active condition

to be managed.-->

<effectiveTime>

<low value="20130607160506" />

<!-- Time at which THIS “concern” began being tracked.-->

</effectiveTime>

<!-- status is active so high is not applicable. If high is present it

should have nullFlavor of NA-->

<!-- Optional Author Element-->

<author>

<!--\_ [C-CDA R2] Author Participation -->

<templateId root="2.16.840.1.113883.10.20.22.4.119" />

<time value="20130607160506" />

<assignedAuthor>

...

</assignedAuthor>

</author>

<entryRelationship typeCode="SUBJ">

<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. -->

<!-- [C-CDA R2.1] Problem Observation (V3) -->

<templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2015-08-01" />

<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 ie 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>

</entryRelationship>

</act>

</entry>

</section>

Procedure Description Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.22.2.27 (open)]

Table 180: Procedure Description Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Procedure Note (V3)](#D_Procedure_Note_V3) (required)  [Operative Note (V3)](#D_Operative_Note_V3) (required) |  |

The Procedure Description section records the particulars of the procedure and may include procedure site preparation, surgical site preparation, pertinent details related to sedation/anesthesia, pertinent details related to measurements and markings, procedure times, medications administered, estimated blood loss, specimens removed, implants, instrumentation, sponge counts, tissue manipulation, wound closure, sutures used, vital signs and other monitoring data. Local practice often identifies the level and type of detail required based on the procedure or specialty.

Table 181: Procedure Description Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.27) | | | | | |
| templateId | 1..1 | SHALL |  | [81-8062](#C_81-8062) |  |
| @root | 1..1 | SHALL |  | [81-10442](#C_81-10442) | 2.16.840.1.113883.10.20.22.2.27 |
| code | 1..1 | SHALL |  | [81-15411](#C_81-15411) |  |
| @code | 1..1 | SHALL |  | [81-15412](#C_81-15412) | 29554-3 |
| @codeSystem | 1..1 | SHALL |  | [81-26489](#C_81-26489) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-8064](#C_81-8064) |  |
| text | 1..1 | SHALL |  | [81-8065](#C_81-8065) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-8062) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.27" (CONF:81-10442).
2. SHALL contain exactly one [1..1] code (CONF:81-15411).
   1. This code SHALL contain exactly one [1..1] @code="29554-3" Procedure Description (CONF:81-15412).
   2. 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:81-26489).
3. SHALL contain exactly one [1..1] title (CONF:81-8064).
4. SHALL contain exactly one [1..1] text (CONF:81-8065).

Figure 107: Procedure Description Section Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.27"/>

<code code="29554-3"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="PROCEDURE DESCRIPTION"/>

<title>Procedure Description</title>

<text>The patient was taken to the endoscopy suite where ... </text>

</section>

Procedure Disposition Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.18.2.12 (open)]

Table 182: Procedure Disposition Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Procedure Note (V3)](#D_Procedure_Note_V3) (optional)  [Operative Note (V3)](#D_Operative_Note_V3) (optional) |  |

The Procedure Disposition Section records the status and condition of the patient at the completion of the procedure or surgery. It often also states where the patient was transferred to for the next level of care.

Table 183: Procedure Disposition Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:2.16.840.1.113883.10.20.18.2.12) | | | | | |
| templateId | 1..1 | SHALL |  | [81-8070](#C_81-8070) |  |
| @root | 1..1 | SHALL | UID | [81-10466](#C_81-10466) | 2.16.840.1.113883.10.20.18.2.12 |
| code | 1..1 | SHALL |  | [81-15413](#C_81-15413) |  |
| @code | 1..1 | SHALL |  | [81-15414](#C_81-15414) | 59775-7 |
| @codeSystem | 1..1 | SHALL |  | [81-26490](#C_81-26490) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-8072](#C_81-8072) |  |
| text | 1..1 | SHALL |  | [81-8073](#C_81-8073) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-8070) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.18.2.12" (CONF:81-10466).
2. SHALL contain exactly one [1..1] code (CONF:81-15413).
   1. This code SHALL contain exactly one [1..1] @code="59775-7" Procedure Disposition (CONF:81-15414).
   2. 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:81-26490).
3. SHALL contain exactly one [1..1] title (CONF:81-8072).
4. SHALL contain exactly one [1..1] text (CONF:81-8073).

Figure 108: Procedure Disposition Section Example

<section>

<templateId root="2.16.840.1.113883.10.20.18.2.12"/>

<code code="59775-7" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="PROCEDURE DISPOSITION"/>

<title>PROCEDURE DISPOSITION</title>

<text>The patient was taken to the Endoscopy Recovery Unit in stable

condition.</text>

</section>

Procedure Estimated Blood Loss Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.18.2.9 (open)]

Table 184: Procedure Estimated Blood Loss Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Procedure Note (V3)](#D_Procedure_Note_V3) (optional)  [Operative Note (V3)](#D_Operative_Note_V3) (required) |  |

The Procedure Estimated Blood Loss Section may be a subsection of another section such as the Procedure Description Section. The Procedure Estimated Blood Loss Section records the approximate amount of blood that the patient lost during the procedure or surgery. It may be an accurate quantitative amount, e.g., 250 milliliters, or it may be descriptive, e.g., “minimal” or “none”.

Table 185: Procedure Estimated Blood Loss Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:2.16.840.1.113883.10.20.18.2.9) | | | | | |
| templateId | 1..1 | SHALL |  | [81-8074](#C_81-8074) |  |
| @root | 1..1 | SHALL | UID | [81-10467](#C_81-10467) | 2.16.840.1.113883.10.20.18.2.9 |
| code | 1..1 | SHALL |  | [81-15415](#C_81-15415) |  |
| @code | 1..1 | SHALL |  | [81-15416](#C_81-15416) | 59770-8 |
| @codeSystem | 1..1 | SHALL |  | [81-26491](#C_81-26491) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-8076](#C_81-8076) |  |
| text | 1..1 | SHALL |  | [81-8077](#C_81-8077) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-8074) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.18.2.9" (CONF:81-10467).
2. SHALL contain exactly one [1..1] code (CONF:81-15415).
   1. This code SHALL contain exactly one [1..1] @code="59770-8" Procedure Estimated Blood Loss (CONF:81-15416).
   2. 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:81-26491).
3. SHALL contain exactly one [1..1] title (CONF:81-8076).
4. SHALL contain exactly one [1..1] text (CONF:81-8077).
5. The Estimated Blood Loss section SHALL include a statement providing an estimate of the amount of blood lost during the procedure, even if the estimate is text, such as "minimal" or "none" (CONF:81-8741).

Figure 109: Procedure Estimated Blood Loss Section Example

<section>

<templateId root="2.16.840.1.113883.10.20.18.2.9"/>

<code code="59770-8" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="PROCEDURE ESTIMATED BLOOD LOSS"/>

<title>Procedure Estimated Blood Loss</title>

<text>Minimal</text>

</section>

Procedure Findings Section (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.28:2015-08-01 (open)]

Table 186: Procedure Findings Section (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Procedure Note (V3)](#D_Procedure_Note_V3) (optional)  [Operative Note (V3)](#D_Operative_Note_V3) (required) | [Problem Observation (V3)](#E_Problem_Observation_V3) (optional) |

The Procedure Findings Section records clinically significant observations confirmed or discovered during a procedure or surgery.

Table 187: Procedure Findings Section (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.28:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-8078](#C_1198-8078) |  |
| @root | 1..1 | SHALL |  | [1198-10443](#C_1198-10443) | 2.16.840.1.113883.10.20.22.2.28 |
| @extension | 1..1 | SHALL |  | [1198-32537](#C_1198-32537) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15417](#C_1198-15417) |  |
| @code | 1..1 | SHALL |  | [1198-15418](#C_1198-15418) | 59776-5 |
| @codeSystem | 1..1 | SHALL |  | [1198-30859](#C_1198-30859) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-8080](#C_1198-8080) |  |
| text | 1..1 | SHALL |  | [1198-8081](#C_1198-8081) |  |
| entry | 0..\* | MAY |  | [1198-8090](#C_1198-8090) |  |
| observation | 1..1 | SHALL |  | [1198-15507](#C_1198-15507) | [Problem Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01](#E_Problem_Observation_V3) |

1. SHALL contain exactly one [1..1] templateId (CONF:1198-8078) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.28" (CONF:1198-10443).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32537).
2. SHALL contain exactly one [1..1] code (CONF:1198-15417).
   1. This code SHALL contain exactly one [1..1] @code="59776-5" Procedure Findings (CONF:1198-15418).
   2. 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:1198-30859).
3. SHALL contain exactly one [1..1] title (CONF:1198-8080).
4. SHALL contain exactly one [1..1] text (CONF:1198-8081).
5. MAY contain zero or more [0..\*] entry (CONF:1198-8090) such that it
   1. SHALL contain exactly one [1..1] [Problem Observation (V3)](#E_Problem_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01) (CONF:1198-15507).

Figure 110: Procedure Findings Section (V3) Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.28" extension="2015-08-01" />

<code code="59776-5" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="PROCEDURE FINDINGS" />

<title>Procedure Findings</title>

<text>A 6 mm sessile polyp was found in the ascending colon and removed by snare, no cautery. Bleeding was controlled. Moderate diverticulosis and hemorrhoids were incidentally noted.</text>

<entry>

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2014-06-09" />

<!-- Problem Observation -->

...

</observation>

</entry>

</section>

Procedure Implants Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.22.2.40 (open)]

Table 188: Procedure Implants Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Procedure Note (V3)](#D_Procedure_Note_V3) (optional)  [Operative Note (V3)](#D_Operative_Note_V3) (optional) |  |

The Procedure Implants Section records any materials placed during the procedure including stents, tubes, and drains.

Table 189: Procedure Implants Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.40) | | | | | |
| templateId | 1..1 | SHALL |  | [81-8178](#C_81-8178) |  |
| @root | 1..1 | SHALL |  | [81-10444](#C_81-10444) | 2.16.840.1.113883.10.20.22.2.40 |
| code | 1..1 | SHALL |  | [81-15373](#C_81-15373) |  |
| @code | 1..1 | SHALL |  | [81-15374](#C_81-15374) | 59771-6 |
| @codeSystem | 1..1 | SHALL |  | [81-26492](#C_81-26492) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-8180](#C_81-8180) |  |
| text | 1..1 | SHALL |  | [81-8181](#C_81-8181) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-8178) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.40" (CONF:81-10444).
2. SHALL contain exactly one [1..1] code (CONF:81-15373).
   1. This code SHALL contain exactly one [1..1] @code="59771-6" Procedure Implants (CONF:81-15374).
   2. 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:81-26492).
3. SHALL contain exactly one [1..1] title (CONF:81-8180).
4. SHALL contain exactly one [1..1] text (CONF:81-8181).
5. The Procedure Implants section SHALL include a statement providing details of the implants placed, or assert no implants were placed (CONF:81-8769).

Figure 111: Procedure Implants Section Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.40"/>

<code code="59771-6" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="PROCEDURE IMPLANTS"/>

<title>Procedure Implants</title>

<text>No implants were placed.</text>

</section>

Procedure Indications Section (V2)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.29:2014-06-09 (open)]

Table 190: Procedure Indications Section (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Procedure Note (V3)](#D_Procedure_Note_V3) (required)  [Operative Note (V3)](#D_Operative_Note_V3) (optional) | [Indication (V2)](#Indication_V2) (optional) |

This section contains the reason(s) for the procedure or surgery. This section may include the preprocedure diagnoses as well as symptoms contributing to the reason for the procedure.

Table 191: Procedure Indications Section (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.29:2014-06-09) | | | | | |
| templateId | 1..1 | SHALL |  | [1098-8058](#C_1098-8058) |  |
| @root | 1..1 | SHALL |  | [1098-10445](#C_1098-10445) | 2.16.840.1.113883.10.20.22.2.29 |
| @extension | 1..1 | SHALL |  | [1098-32572](#C_1098-32572) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-15419](#C_1098-15419) |  |
| @code | 1..1 | SHALL |  | [1098-15420](#C_1098-15420) | 59768-2 |
| @codeSystem | 1..1 | SHALL |  | [1098-30827](#C_1098-30827) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-8060](#C_1098-8060) |  |
| text | 1..1 | SHALL |  | [1098-8061](#C_1098-8061) |  |
| entry | 0..\* | MAY |  | [1098-8743](#C_1098-8743) |  |
| observation | 1..1 | SHALL |  | [1098-15508](#C_1098-15508) | [Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09](#Indication_V2) |

1. SHALL contain exactly one [1..1] templateId (CONF:1098-8058) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.29" (CONF:1098-10445).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32572).
2. SHALL contain exactly one [1..1] code (CONF:1098-15419).
   1. This code SHALL contain exactly one [1..1] @code="59768-2" Procedure Indications  (CONF:1098-15420).
   2. 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:1098-30827).
3. SHALL contain exactly one [1..1] title (CONF:1098-8060).
4. SHALL contain exactly one [1..1] text (CONF:1098-8061).
5. MAY contain zero or more [0..\*] entry (CONF:1098-8743) such that it
   1. SHALL contain exactly one [1..1] [Indication (V2)](#Indication_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09) (CONF:1098-15508).

Figure 112: Procedure Indications Section (V2) Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.29" extension="2014-06-09" />

<code code="59768-2" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="PROCEDURE INDICATIONS" />

<title>Procedure Indications</title>

<text>The procedure is performed for screening in a low risk individual.

</text>

<entry>

<observation classCode="OBS" moodCode="EVN">

<!-- Indication Entry -->

<templateId root="2.16.840.1.113883.10.20.22.4.19" extension="2014-06-09" />

...

</observation>

</entry>

</section>

Procedure Specimens Taken Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.22.2.31 (open)]

Table 192: Procedure Specimens Taken Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Procedure Note (V3)](#D_Procedure_Note_V3) (optional)  [Operative Note (V3)](#D_Operative_Note_V3) (required) |  |

The Procedure Specimens Taken Section records the tissues, objects, or samples taken from the patient during the procedure including biopsies, aspiration fluid, or other samples sent for pathological analysis. The narrative may include a description of the specimens.

Table 193: Procedure Specimens Taken Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.31) | | | | | |
| templateId | 1..1 | SHALL |  | [81-8086](#C_81-8086) |  |
| @root | 1..1 | SHALL |  | [81-10446](#C_81-10446) | 2.16.840.1.113883.10.20.22.2.31 |
| code | 1..1 | SHALL |  | [81-15421](#C_81-15421) |  |
| @code | 1..1 | SHALL |  | [81-15422](#C_81-15422) | 59773-2 |
| @codeSystem | 1..1 | SHALL |  | [81-26493](#C_81-26493) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-8088](#C_81-8088) |  |
| text | 1..1 | SHALL |  | [81-8089](#C_81-8089) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-8086) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.31" (CONF:81-10446).
2. SHALL contain exactly one [1..1] code (CONF:81-15421).
   1. This code SHALL contain exactly one [1..1] @code="59773-2" Procedure Specimens Taken (CONF:81-15422).
   2. 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:81-26493).
3. SHALL contain exactly one [1..1] title (CONF:81-8088).
4. SHALL contain exactly one [1..1] text (CONF:81-8089).
5. The Procedure Specimens Taken section SHALL list all specimens removed or SHALL explicitly state that no specimens were taken (CONF:81-8742).

Figure 113: Procedure Specimens Taken Section Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.31"/>

<code code="59773-2"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="PROCEDURE SPECIMENS TAKEN"/>

<title>Procedure Specimens Taken</title>

<text>Ascending colon polyp</text>

</section>

Procedures Section (entries optional) (V2)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.7:2014-06-09 (open)]

Table 194: Procedures Section (entries optional) (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (optional)  [Discharge Summary (V3)](#D_Discharge_Summary_V3) (optional)  [History and Physical (V3)](#D_History_and_Physical_V3) (optional)  [Referral Note (V2)](#D_Referral_Note_V2) (optional)  [Procedure Note (V3)](#D_Procedure_Note_V3) (optional) | [Procedure Activity Act (V2)](#E_Procedure_Activity_Act_V2) (optional)  [Procedure Activity Procedure (V2)](#E_Procedure_Activity_Procedure_V2) (optional)  [Procedure Activity Observation (V2)](#E_Procedure_Activity_Observation_V2) (optional) |

This section describes all interventional, surgical, diagnostic, or therapeutic procedures or treatments pertinent to the patient historically at the time the document is generated. The section should include notable procedures, but can contain all procedures for the period of time being summarized. The common notion of "procedure" is broader than that specified by the HL7 Version 3 Reference Information Model (RIM), therefore this section contains procedure templates represented with three RIM classes: Act, Observation, and Procedure. Procedure Activity Procedure (V2) is for procedures that alter the physical condition of a patient (e.g., splenectomy). Procedure Activity Observation (V2) is for procedures that result in new information about a patient but do not cause physical alteration (e.g., EEG). Procedure Activity Act (V2) is for all other types of procedures (e.g., dressing change).

Table 195: Procedures Section (entries optional) (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.7:2014-06-09) | | | | | |
| templateId | 1..1 | SHALL |  | [1098-6270](#C_1098-6270) |  |
| @root | 1..1 | SHALL |  | [1098-6271](#C_1098-6271) | 2.16.840.1.113883.10.20.22.2.7 |
| @extension | 1..1 | SHALL |  | [1098-32532](#C_1098-32532) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-15423](#C_1098-15423) |  |
| @code | 1..1 | SHALL |  | [1098-15424](#C_1098-15424) | 47519-4 |
| @codeSystem | 1..1 | SHALL |  | [1098-31139](#C_1098-31139) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| title | 1..1 | SHALL |  | [1098-17184](#C_1098-17184) |  |
| text | 1..1 | SHALL |  | [1098-6273](#C_1098-6273) |  |
| entry | 0..\* | MAY |  | [1098-6274](#C_1098-6274) |  |
| procedure | 1..1 | SHALL |  | [1098-15509](#C_1098-15509) | [Procedure Activity Procedure (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09](#E_Procedure_Activity_Procedure_V2) |
| entry | 0..\* | MAY |  | [1098-6278](#C_1098-6278) |  |
| observation | 1..1 | SHALL |  | [1098-15510](#C_1098-15510) | [Procedure Activity Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.13:2014-06-09](#E_Procedure_Activity_Observation_V2) |
| entry | 0..\* | MAY |  | [1098-8533](#C_1098-8533) |  |
| act | 1..1 | SHALL |  | [1098-15511](#C_1098-15511) | [Procedure Activity Act (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.12:2014-06-09](#E_Procedure_Activity_Act_V2) |

1. SHALL contain exactly one [1..1] templateId (CONF:1098-6270) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.7" (CONF:1098-6271).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32532).
2. SHALL contain exactly one [1..1] code (CONF:1098-15423).
   1. This code SHALL contain exactly one [1..1] @code="47519-4" History of Procedures (CONF:1098-15424).
   2. This code SHALL contain exactly one [1..1] @codeSystem (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1098-31139).
3. SHALL contain exactly one [1..1] title (CONF:1098-17184).
4. SHALL contain exactly one [1..1] text (CONF:1098-6273).
5. MAY contain zero or more [0..\*] entry (CONF:1098-6274) such that it
   1. SHALL contain exactly one [1..1] [Procedure Activity Procedure (V2)](#E_Procedure_Activity_Procedure_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09) (CONF:1098-15509).
6. MAY contain zero or more [0..\*] entry (CONF:1098-6278) such that it
   1. SHALL contain exactly one [1..1] [Procedure Activity Observation (V2)](#E_Procedure_Activity_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.13:2014-06-09) (CONF:1098-15510).
7. MAY contain zero or more [0..\*] entry (CONF:1098-8533) such that it
   1. SHALL contain exactly one [1..1] [Procedure Activity Act (V2)](#E_Procedure_Activity_Act_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.12:2014-06-09) (CONF:1098-15511).

Procedures Section (entries required) (V2)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.7.1:2014-06-09 (open)]

Table 196: Procedures Section (entries required) (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Continuity of Care Document (CCD) (V3)](#D_Continuity_of_Care_Document_CCD_V3) (optional)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (optional) | [Procedure Activity Act (V2)](#E_Procedure_Activity_Act_V2) (optional)  [Procedure Activity Procedure (V2)](#E_Procedure_Activity_Procedure_V2) (optional)  [Procedure Activity Observation (V2)](#E_Procedure_Activity_Observation_V2) (optional) |

This section describes all interventional, surgical, diagnostic, or therapeutic procedures or treatments pertinent to the patient historically at the time the document is generated. The section should include notable procedures, but can contain all procedures for the period of time being summarized. The common notion of "procedure" is broader than that specified by the HL7 Version 3 Reference Information Model (RIM), therefore this section contains procedure templates represented with three RIM classes: Act, Observation, and Procedure. Procedure Activity Procedure (V2) is for procedures that alter the physical condition of a patient (e.g., splenectomy). Procedure Activity Observation (V2) is for procedures that result in new information about a patient but do not cause physical alteration (e.g., EEG). Procedure Activity Act (V2) is for all other types of procedures (e.g., dressing change).

Table 197: Procedures Section (entries required) (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.7.1:2014-06-09) | | | | | |
| @nullFlavor | 0..1 | MAY |  | [1098-32876](#C_1098-32876) | urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = NI |
| templateId | 1..1 | SHALL |  | [1098-7891](#C_1098-7891) |  |
| @root | 1..1 | SHALL |  | [1098-10447](#C_1098-10447) | 2.16.840.1.113883.10.20.22.2.7.1 |
| @extension | 1..1 | SHALL |  | [1098-32533](#C_1098-32533) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-15425](#C_1098-15425) |  |
| @code | 1..1 | SHALL |  | [1098-15426](#C_1098-15426) | 47519-4 |
| @codeSystem | 1..1 | SHALL |  | [1098-31138](#C_1098-31138) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-7893](#C_1098-7893) |  |
| text | 1..1 | SHALL |  | [1098-7894](#C_1098-7894) |  |
| entry | 1..\* | SHALL |  | [1098-7895](#C_1098-7895) |  |
| act | 0..1 | MAY |  | [1098-32877](#C_1098-32877) | [Procedure Activity Act (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.12:2014-06-09](#E_Procedure_Activity_Act_V2) |
| observation | 0..1 | MAY |  | [1098-32878](#C_1098-32878) | [Procedure Activity Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.13:2014-06-09](#E_Procedure_Activity_Observation_V2) |
| procedure | 0..1 | MAY |  | [1098-15512](#C_1098-15512) | [Procedure Activity Procedure (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09](#E_Procedure_Activity_Procedure_V2) |

1. Conforms to [Procedures Section (entries optional) (V2)](#Procedures_Section_entries_optional_V2) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.7:2014-06-09).
2. MAY contain zero or one [0..1] @nullFlavor="NI" No information (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:1098-32876).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-7891) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.7.1" (CONF:1098-10447).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32533).
4. SHALL contain exactly one [1..1] code (CONF:1098-15425).
   1. This code SHALL contain exactly one [1..1] @code="47519-4" History of Procedures (CONF:1098-15426).
   2. 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:1098-31138).
5. SHALL contain exactly one [1..1] title (CONF:1098-7893).
6. SHALL contain exactly one [1..1] text (CONF:1098-7894).

If section/@nullFlavor is not present there *SHALL* be at least one entry conformant to Procedure Activity Act (V2) (templateId 2.16.840.1.113883.10.20.22.4.12:2014-06-09) *OR* Procedure Activity Observation (V2) (templateId: 2.16.840.1.113883.10.20.22.4.13:2014-06-09) *OR* Procedure Activity Procedure (V2) (templateId: 2.16.840.1.113883.10.20.22.4.14:2014-06-09)

1. SHALL contain at least one [1..\*] entry (CONF:1098-7895) such that it
   1. MAY contain zero or one [0..1] [Procedure Activity Act (V2)](#E_Procedure_Activity_Act_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.12:2014-06-09) (CONF:1098-32877).
   2. MAY contain zero or one [0..1] [Procedure Activity Observation (V2)](#E_Procedure_Activity_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.13:2014-06-09) (CONF:1098-32878).
   3. MAY contain zero or one [0..1] [Procedure Activity Procedure (V2)](#E_Procedure_Activity_Procedure_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09) (CONF:1098-15512).

Figure 114: Procedures Section (entries required) (V2) Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.7" extension="2014-06-09" />

<!-- Procedures section template -->

<code code="47519-4" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="PROCEDURES" />

<title>Procedures</title>

<text>

...

</text>

<entry typeCode="DRIV">

<procedure classCode="PROC" moodCode="EVN">

<!-- Procedure Activity Procedure template -->

<templateId root="2.16.840.1.113883.10.20.22.4.14" extension="2014-06-09" />

...

</procedure>

</entry>

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.13" extension="2014-06-09" />

<!-- Procedure Activity Observation template -->

...

</observation>

<entry>

<act classCode="ACT" moodCode="INT">

<templateId root="2.16.840.1.113883.10.20.22.4.12" extension="2014-06-09" />

<!-- Procedure Activity Act template -->

...

</act>

</entry>

</section>

Reason for Referral Section (V2)

[section: identifier urn:hl7ii:1.3.6.1.4.1.19376.1.5.3.1.3.1:2014-06-09 (open)]

Table 198: Reason for Referral Section (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Transfer Summary (V2)](#D_Transfer_Summary_V2) (required)  [Referral Note (V2)](#D_Referral_Note_V2) (required) | [Patient Referral Act](#E_Patient_Referral_Act) (optional) |

This section describes the clinical reason why a provider is sending a patient to another provider for care. The reason for referral may become the reason for visit documented by the receiving provider.

Table 199: Reason for Referral Section (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:1.3.6.1.4.1.19376.1.5.3.1.3.1:2014-06-09) | | | | | |
| templateId | 1..1 | SHALL |  | [1098-7844](#C_1098-7844) |  |
| @root | 1..1 | SHALL | UID | [1098-10468](#C_1098-10468) | 1.3.6.1.4.1.19376.1.5.3.1.3.1 |
| @extension | 1..1 | SHALL |  | [1098-32571](#C_1098-32571) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-15427](#C_1098-15427) |  |
| @code | 1..1 | SHALL |  | [1098-15428](#C_1098-15428) | 42349-1 |
| @codeSystem | 1..1 | SHALL |  | [1098-30867](#C_1098-30867) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-7846](#C_1098-7846) |  |
| text | 1..1 | SHALL |  | [1098-7847](#C_1098-7847) |  |
| entry | 0..\* | MAY |  | [1098-30808](#C_1098-30808) |  |
| act | 1..1 | SHALL |  | [1098-30897](#C_1098-30897) | [Patient Referral Act (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.140](#E_Patient_Referral_Act) |

1. SHALL contain exactly one [1..1] templateId (CONF:1098-7844) such that it
   1. SHALL contain exactly one [1..1] @root="1.3.6.1.4.1.19376.1.5.3.1.3.1" (CONF:1098-10468).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32571).
2. SHALL contain exactly one [1..1] code (CONF:1098-15427).
   1. This code SHALL contain exactly one [1..1] @code="42349-1" Reason for Referral (CONF:1098-15428).
   2. 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:1098-30867).
3. SHALL contain exactly one [1..1] title (CONF:1098-7846).
4. SHALL contain exactly one [1..1] text (CONF:1098-7847).
5. MAY contain zero or more [0..\*] entry (CONF:1098-30808) such that it
   1. SHALL contain exactly one [1..1] [Patient Referral Act](#E_Patient_Referral_Act) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.140) (CONF:1098-30897).

Figure 115: Reason for Referral Section (V2) Example

<component>

<section>

<templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.1" extension="2014-06-09" />

<code code="42349-1" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Reason for Referral " />

<title>REASON FOR REFERRAL</title>

<text>Request for Patient referral for consultation.</text>

<entry>

<observation classCode="OBS" moodCode="INT">

<!-- Patient Referral Activity Observation -->

<templateId root="2.16.840.1.113883.10.20.22.4.140" />

...

</observation>

</entry>

</section>

</component>

Reason for Visit Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.22.2.12 (open)]

Table 200: Reason for Visit Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (optional)  [Discharge Summary (V3)](#D_Discharge_Summary_V3) (optional)  [History and Physical (V3)](#D_History_and_Physical_V3) (optional)  [Procedure Note (V3)](#D_Procedure_Note_V3) (optional) |  |

This section records the patient’s reason for the patient's visit (as documented by the provider). Local policy determines whether Reason for Visit and Chief Complaint are in separate or combined sections.

Table 201: Reason for Visit Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:2.16.840.1.113883.10.20.22.2.12) | | | | | |
| templateId | 1..1 | SHALL |  | [81-7836](#C_81-7836) |  |
| @root | 1..1 | SHALL |  | [81-10448](#C_81-10448) | 2.16.840.1.113883.10.20.22.2.12 |
| code | 1..1 | SHALL |  | [81-15429](#C_81-15429) |  |
| @code | 1..1 | SHALL |  | [81-15430](#C_81-15430) | 29299-5 |
| @codeSystem | 1..1 | SHALL |  | [81-26494](#C_81-26494) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-7838](#C_81-7838) |  |
| text | 1..1 | SHALL |  | [81-7839](#C_81-7839) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-7836) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.12" (CONF:81-10448).
2. SHALL contain exactly one [1..1] code (CONF:81-15429).
   1. This code SHALL contain exactly one [1..1] @code="29299-5" Reason for Visit (CONF:81-15430).
   2. 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:81-26494).
3. SHALL contain exactly one [1..1] title (CONF:81-7838).
4. SHALL contain exactly one [1..1] text (CONF:81-7839).

Figure 116: Reason for Visit Section Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.12"/>

<code code="29299-5"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="REASON FOR VISIT"/>

<title>REASON FOR VISIT</title>

<text>

<paragraph>Dark stools.</paragraph>

</text>

</section>

Results Section (entries optional) (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.3:2015-08-01 (open)]

Table 202: Results Section (entries optional) (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [History and Physical (V3)](#D_History_and_Physical_V3) (required)  [Progress Note (V3)](#D_Progress_Note_V3) (optional) | [Result Organizer (V3)](#E_Result_Organizer_V3) (optional) |

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 203: Results Section (entries optional) (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-7116](#C_1198-7116) |  |
| @root | 1..1 | SHALL |  | [1198-9136](#C_1198-9136) | 2.16.840.1.113883.10.20.22.2.3 |
| @extension | 1..1 | SHALL |  | [1198-32591](#C_1198-32591) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15431](#C_1198-15431) |  |
| @code | 1..1 | SHALL |  | [1198-15432](#C_1198-15432) | 30954-2 |
| @codeSystem | 1..1 | SHALL |  | [1198-31041](#C_1198-31041) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-8891](#C_1198-8891) |  |
| text | 1..1 | SHALL |  | [1198-7118](#C_1198-7118) |  |
| entry | 0..\* | SHOULD |  | [1198-7119](#C_1198-7119) |  |
| organizer | 1..1 | SHALL |  | [1198-15515](#C_1198-15515) | [Result Organizer (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.1:2015-08-01](#E_Result_Organizer_V3) |

1. SHALL contain exactly one [1..1] templateId (CONF:1198-7116) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.3" (CONF:1198-9136).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32591).
2. SHALL contain exactly one [1..1] code (CONF:1198-15431).
   1. This code SHALL contain exactly one [1..1] @code="30954-2" Relevant diagnostic tests and/or laboratory data (CONF:1198-15432).
   2. 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:1198-31041).
3. SHALL contain exactly one [1..1] title (CONF:1198-8891).
4. SHALL contain exactly one [1..1] text (CONF:1198-7118).
5. SHOULD contain zero or more [0..\*] entry (CONF:1198-7119) such that it
   1. SHALL contain exactly one [1..1] [Result Organizer (V3)](#E_Result_Organizer_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.1:2015-08-01) (CONF:1198-15515).

Results Section (entries required) (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.3.1:2015-08-01 (open)]

Table 204: Results Section (entries required) (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (optional)  [Continuity of Care Document (CCD) (V3)](#D_Continuity_of_Care_Document_CCD_V3) (required)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (required)  [Referral Note (V2)](#D_Referral_Note_V2) (optional) | [Result Organizer (V3)](#E_Result_Organizer_V3) (required) |

The Results Section contains observations of results generated by laboratories, imaging procedures, and other procedures. These coded result observations are contained within a Results Organizer in the Results Section. The scope includes observations such as hematology, chemistry, serology, virology, toxicology, microbiology, plain x-ray, ultrasound, CT, MRI, angiography, echocardiography, nuclear medicine, pathology, and procedure observations. The section often includes notable results such as abnormal values or relevant trends, and could 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 205: Results Section (entries required) (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3.1:2015-08-01) | | | | | |
| @nullFlavor | 0..1 | MAY |  | [1198-32875](#C_1198-32875) | urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = NI |
| templateId | 1..1 | SHALL |  | [1198-7108](#C_1198-7108) |  |
| @root | 1..1 | SHALL |  | [1198-9137](#C_1198-9137) | 2.16.840.1.113883.10.20.22.2.3.1 |
| @extension | 1..1 | SHALL |  | [1198-32592](#C_1198-32592) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15433](#C_1198-15433) |  |
| @code | 1..1 | SHALL |  | [1198-15434](#C_1198-15434) | 30954-2 |
| @codeSystem | 1..1 | SHALL |  | [1198-31040](#C_1198-31040) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-8892](#C_1198-8892) |  |
| text | 1..1 | SHALL |  | [1198-7111](#C_1198-7111) |  |
| entry | 1..\* | SHALL |  | [1198-7112](#C_1198-7112) |  |
| organizer | 1..1 | SHALL |  | [1198-15516](#C_1198-15516) | [Result Organizer (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.1:2015-08-01](#E_Result_Organizer_V3) |

1. Conforms to [Results Section (entries optional) (V3)](#S_Results_Section_entries_optional_V3) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3:2015-08-01).
2. MAY contain zero or one [0..1] @nullFlavor="NI" No information (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:1198-32875).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-7108) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.3.1" (CONF:1198-9137).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32592).
4. SHALL contain exactly one [1..1] code (CONF:1198-15433).
   1. This code SHALL contain exactly one [1..1] @code="30954-2" Relevant diagnostic tests and/or laboratory data (CONF:1198-15434).
   2. 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:1198-31040).
5. SHALL contain exactly one [1..1] title (CONF:1198-8892).
6. SHALL contain exactly one [1..1] text (CONF:1198-7111).

If section/@nullFlavor is not present:

1. SHALL contain at least one [1..\*] entry (CONF:1198-7112) such that it
   1. SHALL contain exactly one [1..1] [Result Organizer (V3)](#E_Result_Organizer_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.1:2015-08-01) (CONF:1198-15516).

Figure 117: Results Section (entries required) (V3) Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.3.1" extension="2015-08-01" />

<code code="30954-2" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="RELEVANT DIAGNOSTIC TESTS AND/OR LABORATORY DATA" />

<title>Results</title>

<text />

<entry typeCode="DRIV">

<organizer classCode="BATTERY" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.1" extension="2014-06-09" />

...

<organizer>

<component>

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.2" extension="2014-06-09" />

. . .

</observation>

</component>

</organizer>

</organizer>

</entry>

</section>

Review of Systems Section

[section: identifier urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.18 (open)]

Table 206: Review of Systems Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (optional)  [Discharge Summary (V3)](#D_Discharge_Summary_V3) (optional)  [History and Physical (V3)](#D_History_and_Physical_V3) (required)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (optional)  [Referral Note (V2)](#D_Referral_Note_V2) (optional)  [Progress Note (V3)](#D_Progress_Note_V3) (optional)  [Procedure Note (V3)](#D_Procedure_Note_V3) (optional) |  |

The Review of Systems Section contains a relevant collection of symptoms and functions systematically gathered by a clinician. It includes symptoms the patient is currently experiencing, some of which were not elicited during the history of present illness, as well as a potentially large number of pertinent negatives, for example, symptoms that the patient denied experiencing.

Table 207: Review of Systems Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:1.3.6.1.4.1.19376.1.5.3.1.3.18) | | | | | |
| templateId | 1..1 | SHALL |  | [81-7812](#C_81-7812) |  |
| @root | 1..1 | SHALL | UID | [81-10469](#C_81-10469) | 1.3.6.1.4.1.19376.1.5.3.1.3.18 |
| code | 1..1 | SHALL |  | [81-15435](#C_81-15435) |  |
| @code | 1..1 | SHALL |  | [81-15436](#C_81-15436) | 10187-3 |
| @codeSystem | 1..1 | SHALL |  | [81-26495](#C_81-26495) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-7814](#C_81-7814) |  |
| text | 1..1 | SHALL |  | [81-7815](#C_81-7815) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-7812) such that it
   1. SHALL contain exactly one [1..1] @root="1.3.6.1.4.1.19376.1.5.3.1.3.18" (CONF:81-10469).
2. SHALL contain exactly one [1..1] code (CONF:81-15435).
   1. This code SHALL contain exactly one [1..1] @code="10187-3" Review of Systems (CONF:81-15436).
   2. 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:81-26495).
3. SHALL contain exactly one [1..1] title (CONF:81-7814).
4. SHALL contain exactly one [1..1] text (CONF:81-7815).

Figure 118: Review of Systems Section Example

<section>

<templateId root="1.3.6.1.4.1.19376.1.5.3.1.3.18"/>

<code code="10187-3" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="REVIEW OF SYSTEMS"/>

<title>REVIEW OF SYSTEMS</title>

<text>

<paragraph>

Patient denies recent history of fever or malaise. Positive

For weakness and shortness of breath. One episode of melena. No recent

headaches. Positive for osteoarthritis in hips, knees and hands.

</paragraph>

</text>

</section>

Social History Section (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2015-08-01 (open)]

Table 208: Social History Section (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (optional)  [Continuity of Care Document (CCD) (V3)](#D_Continuity_of_Care_Document_CCD_V3) (required)  [Discharge Summary (V3)](#D_Discharge_Summary_V3) (optional)  [History and Physical (V3)](#D_History_and_Physical_V3) (required)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (optional)  [Referral Note (V2)](#D_Referral_Note_V2) (optional)  [Procedure Note (V3)](#D_Procedure_Note_V3) (optional) | [Pregnancy Observation](#E_Pregnancy_Observation) (optional)  [Caregiver Characteristics](#E_Caregiver_Characteristics) (optional)  [Characteristics of Home Environment](#E_Characteristics_of_Home_Environment) (optional)  [Cultural and Religious Observation](#E_Cultural_and_Religious_Observation) (optional)  [Smoking Status - Meaningful Use (V2)](#E_Smoking_Status__Meaningful_Use_V2) (optional)  [Tobacco Use (V2)](#Tobacco_Use_V2) (optional)  [Social History Observation (V3)](#E_Social_History_Observation_V3) (optional) |

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 209: Social History Section (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-7936](#C_1198-7936) |  |
| @root | 1..1 | SHALL |  | [1198-10449](#C_1198-10449) | 2.16.840.1.113883.10.20.22.2.17 |
| @extension | 1..1 | SHALL |  | [1198-32494](#C_1198-32494) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-14819](#C_1198-14819) |  |
| @code | 1..1 | SHALL |  | [1198-14820](#C_1198-14820) | 29762-2 |
| @codeSystem | 1..1 | SHALL |  | [1198-30814](#C_1198-30814) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-7938](#C_1198-7938) |  |
| text | 1..1 | SHALL |  | [1198-7939](#C_1198-7939) |  |
| entry | 0..\* | MAY |  | [1198-7953](#C_1198-7953) |  |
| observation | 1..1 | SHALL |  | [1198-14821](#C_1198-14821) | [Social History Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2015-08-01](#E_Social_History_Observation_V3) |
| entry | 0..\* | MAY |  | [1198-9132](#C_1198-9132) |  |
| observation | 1..1 | SHALL |  | [1198-14822](#C_1198-14822) | [Pregnancy Observation (identifier: urn:oid:2.16.840.1.113883.10.20.15.3.8](#E_Pregnancy_Observation) |
| entry | 0..\* | SHOULD |  | [1198-14823](#C_1198-14823) |  |
| observation | 1..1 | SHALL |  | [1198-14824](#C_1198-14824) | [Smoking Status - Meaningful Use (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09](#E_Smoking_Status__Meaningful_Use_V2) |
| entry | 0..\* | MAY |  | [1198-16816](#C_1198-16816) |  |
| observation | 1..1 | SHALL |  | [1198-16817](#C_1198-16817) | [Tobacco Use (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09](#Tobacco_Use_V2) |
| entry | 0..\* | MAY |  | [1198-28361](#C_1198-28361) |  |
| observation | 1..1 | SHALL |  | [1198-28362](#C_1198-28362) | [Caregiver Characteristics (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.72](#E_Caregiver_Characteristics) |
| entry | 0..\* | MAY |  | [1198-28366](#C_1198-28366) |  |
| observation | 1..1 | SHALL |  | [1198-28367](#C_1198-28367) | [Cultural and Religious Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.111](#E_Cultural_and_Religious_Observation) |
| entry | 0..\* | MAY |  | [1198-28825](#C_1198-28825) |  |
| observation | 1..1 | SHALL |  | [1198-28826](#C_1198-28826) | [Characteristics of Home Environment (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.109](#E_Characteristics_of_Home_Environment) |

1. SHALL contain exactly one [1..1] templateId (CONF:1198-7936) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.17" (CONF:1198-10449).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32494).
2. SHALL contain exactly one [1..1] code (CONF:1198-14819).
   1. This code SHALL contain exactly one [1..1] @code="29762-2" Social History (CONF:1198-14820).
   2. 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:1198-30814).
3. SHALL contain exactly one [1..1] title (CONF:1198-7938).
4. SHALL contain exactly one [1..1] text (CONF:1198-7939).
5. MAY contain zero or more [0..\*] entry (CONF:1198-7953) such that it
   1. SHALL contain exactly one [1..1] [Social History Observation (V3)](#E_Social_History_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2015-08-01) (CONF:1198-14821).
6. MAY contain zero or more [0..\*] entry (CONF:1198-9132) such that it
   1. SHALL contain exactly one [1..1] [Pregnancy Observation](#E_Pregnancy_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.15.3.8) (CONF:1198-14822).
7. SHOULD contain zero or more [0..\*] entry (CONF:1198-14823) such that it
   1. SHALL contain exactly one [1..1] [Smoking Status - Meaningful Use (V2)](#E_Smoking_Status__Meaningful_Use_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09) (CONF:1198-14824).
8. MAY contain zero or more [0..\*] entry (CONF:1198-16816) such that it
   1. SHALL contain exactly one [1..1] [Tobacco Use (V2)](#Tobacco_Use_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09) (CONF:1198-16817).
9. MAY contain zero or more [0..\*] entry (CONF:1198-28361) such that it
   1. SHALL contain exactly one [1..1] [Caregiver Characteristics](#E_Caregiver_Characteristics) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.72) (CONF:1198-28362).
10. MAY contain zero or more [0..\*] entry (CONF:1198-28366) such that it
    1. SHALL contain exactly one [1..1] [Cultural and Religious Observation](#E_Cultural_and_Religious_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.111) (CONF:1198-28367).
11. MAY contain zero or more [0..\*] entry (CONF:1198-28825) such that it
    1. SHALL contain exactly one [1..1] [Characteristics of Home Environment](#E_Characteristics_of_Home_Environment) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.109) (CONF:1198-28826).

Figure 119: Social History Section (V3) Example

<component>

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.17" extension="2015-08-01" />

<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="2015-08-01" />

...

</observation>

</entry>

<entry>

<observation classCode="OBS" moodCode="EVN">

<!-- \*\* Current smoking status observation \*\* -->

<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 Observations(NEW)\*\*-->

<templateId root="2.16.840.1.113883.10.20.22.4.111" />

...

</observation>

</entry>

<entry>

<observation classCode="OBS" moodCode="EVN">

<!-- \*\* Characteristics of Care Environment\*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.109" />

...

</observation>

</entry>

</section>

</component>

Subjective Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.21.2.2 (open)]

Table 210: Subjective Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Progress Note (V3)](#D_Progress_Note_V3) (optional) |  |

The Subjective Section describes in a narrative format the patient’s current condition and/or interval changes as reported by the patient or by the patient’s guardian or another informant.

Table 211: Subjective Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:2.16.840.1.113883.10.20.21.2.2) | | | | | |
| templateId | 1..1 | SHALL |  | [81-7873](#C_81-7873) |  |
| @root | 1..1 | SHALL | UID | [81-10470](#C_81-10470) | 2.16.840.1.113883.10.20.21.2.2 |
| code | 1..1 | SHALL |  | [81-15437](#C_81-15437) |  |
| @code | 1..1 | SHALL |  | [81-15438](#C_81-15438) | 61150-9 |
| @codeSystem | 1..1 | SHALL |  | [81-26496](#C_81-26496) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-7875](#C_81-7875) |  |
| text | 1..1 | SHALL |  | [81-7876](#C_81-7876) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-7873) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.21.2.2" (CONF:81-10470).
2. SHALL contain exactly one [1..1] code (CONF:81-15437).
   1. This code SHALL contain exactly one [1..1] @code="61150-9" Subjective (CONF:81-15438).
   2. 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:81-26496).
3. SHALL contain exactly one [1..1] title (CONF:81-7875).
4. SHALL contain exactly one [1..1] text (CONF:81-7876).

Figure 120: Subjective Section Example

<section>

<templateId root="2.16.840.1.113883.10.20.21.2.2"/>

<code code="61150-9" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="SUBJECTIVE"/>

<title>SUBJECTIVE DATA</title>

<text>

<paragraph>

I have used the peripheral nerve stimulator in my back for five days.

While using it I found that I was able to do physical activity

without pain. However, afterwards for one day, I would feel pain but

then it would go away. I also noticed that I didn’t have to take the

Vicodin as much. I took 2 less Vicodin per day and 2 less tramadol

everyday. I have not lain in my bed in a year and a half. I sleep in

a recliner.

</paragraph>

</text>

</section>

Surgery Description Section (DEPRECATED)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.26:2014-06-09 (open)]

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*: This template has been replaced by the Procedure Description Section (2.16.840.1.113883.10.20.22.2.27).

Table 212: Surgery Description Section (DEPRECATED) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.26:2014-06-09) | | | | | |
| templateId | 1..1 | SHALL |  | [1098-8022](#C_1098-8022) |  |
| @root | 1..1 | SHALL |  | [1098-10450](#C_1098-10450) | 2.16.840.1.113883.10.20.22.2.26 |
| @extension | 1..1 | SHALL |  | [1098-32893](#C_1098-32893) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-15439](#C_1098-15439) |  |
| @code | 1..1 | SHALL |  | [1098-15440](#C_1098-15440) | 29554-3 |
| @codeSystem | 1..1 | SHALL |  | [1098-26497](#C_1098-26497) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-8024](#C_1098-8024) |  |
| text | 1..1 | SHALL |  | [1098-8025](#C_1098-8025) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:1098-8022) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.26" (CONF:1098-10450).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32893).
2. SHALL contain exactly one [1..1] code (CONF:1098-15439).
   1. This code SHALL contain exactly one [1..1] @code="29554-3" Surgery Description (CONF:1098-15440).
   2. 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:1098-26497).
3. SHALL contain exactly one [1..1] title (CONF:1098-8024).
4. SHALL contain exactly one [1..1] text (CONF:1098-8025).

Surgical Drains Section

[section: identifier urn:oid:2.16.840.1.113883.10.20.7.13 (open)]

Table 213: Surgical Drains Section Contexts

| Contained By: | Contains: |
| --- | --- |
| [Operative Note (V3)](#D_Operative_Note_V3) (optional) |  |

The Surgical Drains Section may be used to record drains placed during the surgical procedure. Optionally, surgical drain placement may be represented with a text element in the Procedure Description Section.

Table 214: Surgical Drains Section Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:oid:2.16.840.1.113883.10.20.7.13) | | | | | |
| templateId | 1..1 | SHALL |  | [81-8038](#C_81-8038) |  |
| @root | 1..1 | SHALL | UID | [81-10473](#C_81-10473) | 2.16.840.1.113883.10.20.7.13 |
| code | 1..1 | SHALL |  | [81-15441](#C_81-15441) |  |
| @code | 1..1 | SHALL |  | [81-15442](#C_81-15442) | 11537-8 |
| @codeSystem | 1..1 | SHALL |  | [81-26498](#C_81-26498) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-8040](#C_81-8040) |  |
| text | 1..1 | SHALL |  | [81-8041](#C_81-8041) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:81-8038) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.7.13" (CONF:81-10473).
2. SHALL contain exactly one [1..1] code (CONF:81-15441).
   1. This code SHALL contain exactly one [1..1] @code="11537-8" Surgical Drains (CONF:81-15442).
   2. 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:81-26498).
3. SHALL contain exactly one [1..1] title (CONF:81-8040).
4. SHALL contain exactly one [1..1] text (CONF:81-8041).
5. If the Surgical Drains section is present, there SHALL be a statement providing details of the drains placed or SHALL explicitly state there were no drains placed (CONF:81-8056).

Figure 121: Surgical Drains Section Example

<section>

<templateId root="2.16.840.1.113883.10.20.7.13"/>

<code code="11537-8"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="SURGICAL DRAINS"/>

<title>Surgical Drains</title>

<text>Penrose drain placed</text>

</section>

Vital Signs Section (entries optional) (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.4:2015-08-01 (open)]

Table 215: Vital Signs Section (entries optional) (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Discharge Summary (V3)](#D_Discharge_Summary_V3) (optional)  [History and Physical (V3)](#D_History_and_Physical_V3) (required)  [Progress Note (V3)](#D_Progress_Note_V3) (optional) | [Vital Signs Organizer (V3)](#E_Vital_Signs_Organizer_V3) (optional) |

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 216: Vital Signs Section (entries optional) (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4:2015-08-01) | | | | | |
| templateId | 1..1 | SHALL |  | [1198-7268](#C_1198-7268) |  |
| @root | 1..1 | SHALL |  | [1198-10451](#C_1198-10451) | 2.16.840.1.113883.10.20.22.2.4 |
| @extension | 1..1 | SHALL |  | [1198-32584](#C_1198-32584) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15242](#C_1198-15242) |  |
| @code | 1..1 | SHALL |  | [1198-15243](#C_1198-15243) | 8716-3 |
| @codeSystem | 1..1 | SHALL |  | [1198-30902](#C_1198-30902) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-9966](#C_1198-9966) |  |
| text | 1..1 | SHALL |  | [1198-7270](#C_1198-7270) |  |
| entry | 0..\* | SHOULD |  | [1198-7271](#C_1198-7271) |  |
| organizer | 1..1 | SHALL |  | [1198-15517](#C_1198-15517) | [Vital Signs Organizer (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.26:2015-08-01](#E_Vital_Signs_Organizer_V3) |

1. SHALL contain exactly one [1..1] templateId (CONF:1198-7268) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.4" (CONF:1198-10451).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32584).
2. SHALL contain exactly one [1..1] code (CONF:1198-15242).
   1. This code SHALL contain exactly one [1..1] @code="8716-3" Vital Signs (CONF:1198-15243).
   2. 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:1198-30902).
3. SHALL contain exactly one [1..1] title (CONF:1198-9966).
4. SHALL contain exactly one [1..1] text (CONF:1198-7270).
5. SHOULD contain zero or more [0..\*] entry (CONF:1198-7271) such that it
   1. SHALL contain exactly one [1..1] [Vital Signs Organizer (V3)](#E_Vital_Signs_Organizer_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.26:2015-08-01) (CONF:1198-15517).

Vital Signs Section (entries required) (V3)

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2015-08-01 (open)]

Table 217: Vital Signs Section (entries required) (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Consultation Note (V3)](#D_Consultation_Note_V3) (optional)  [Continuity of Care Document (CCD) (V3)](#D_Continuity_of_Care_Document_CCD_V3) (required)  [Transfer Summary (V2)](#D_Transfer_Summary_V2) (required)  [Referral Note (V2)](#D_Referral_Note_V2) (optional) | [Vital Signs Organizer (V3)](#E_Vital_Signs_Organizer_V3) (required) |

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 218: Vital Signs Section (entries required) (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2015-08-01) | | | | | |
| @nullFlavor | 0..1 | MAY |  | [1198-32874](#C_1198-32874) | urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = NI |
| templateId | 1..1 | SHALL |  | [1198-7273](#C_1198-7273) |  |
| @root | 1..1 | SHALL |  | [1198-10452](#C_1198-10452) | 2.16.840.1.113883.10.20.22.2.4.1 |
| @extension | 1..1 | SHALL |  | [1198-32585](#C_1198-32585) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-15962](#C_1198-15962) |  |
| @code | 1..1 | SHALL |  | [1198-15963](#C_1198-15963) | 8716-3 |
| @codeSystem | 1..1 | SHALL |  | [1198-30903](#C_1198-30903) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1198-9967](#C_1198-9967) |  |
| text | 1..1 | SHALL |  | [1198-7275](#C_1198-7275) |  |
| entry | 1..\* | SHALL |  | [1198-7276](#C_1198-7276) |  |
| organizer | 1..1 | SHALL |  | [1198-15964](#C_1198-15964) | [Vital Signs Organizer (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.26:2015-08-01](#E_Vital_Signs_Organizer_V3) |

1. Conforms to [Vital Signs Section (entries optional) (V3)](#S_Vital_Signs_Section_entries_optional_) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4:2015-08-01).
2. MAY contain zero or one [0..1] @nullFlavor="NI" No information (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:1198-32874).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-7273) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.2.4.1" (CONF:1198-10452).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32585).
4. SHALL contain exactly one [1..1] code (CONF:1198-15962).
   1. This code SHALL contain exactly one [1..1] @code="8716-3" Vital Signs (CONF:1198-15963).
   2. 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:1198-30903).
5. SHALL contain exactly one [1..1] title (CONF:1198-9967).
6. SHALL contain exactly one [1..1] text (CONF:1198-7275).

If section/@nullFlavor is not present:

1. SHALL contain at least one [1..\*] entry (CONF:1198-7276) such that it
   1. SHALL contain exactly one [1..1] [Vital Signs Organizer (V3)](#E_Vital_Signs_Organizer_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.26:2015-08-01) (CONF:1198-15964).

Figure 122: Vital Signs Section (entries required) (V3) Example

<component>

<section>

<!-- \*\* Vital Signs section with entries required \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.2.4.1" extension="2015-08-01" />

<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="2015-08-01" />

. . .

</organizer>

</entry>

</section>

</component>

# Entry-Level Templates

This chapter describes the clinical statement entry templates used within the sections of the document types of this consolidated guide. 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., template identifier, 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), this guide constrains 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.  
Provenance in entry templates:  
In this version of Consolidated CDA (C-CDA), we have added a “SHOULD” Author constraint on several entry-level templates. Authorship and Author timestamps must be explicitly asserted in these cases, unless the values propagated from the document header hold true.  
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.

Admission Medication (V2)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.36:2014-06-09 (open)]

Table 219: Admission Medication (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Admission Medications Section (entries optional) (V3)](#S_Admission_Medications_Section_entries) (optional) | [Medication Activity (V2)](#Medication_Activity_V2) (required) |

This template represents the medications taken by the patient prior to and at the time of admission.

Table 220: Admission Medication (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.36:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-7698](#C_1098-7698) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1098-7699](#C_1098-7699) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-16758](#C_1098-16758) |  |
| @root | 1..1 | SHALL |  | [1098-16759](#C_1098-16759) | 2.16.840.1.113883.10.20.22.4.36 |
| @extension | 1..1 | SHALL |  | [1098-32524](#C_1098-32524) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-15518](#C_1098-15518) |  |
| @code | 1..1 | SHALL |  | [1098-15519](#C_1098-15519) | 42346-7 |
| @codeSystem | 1..1 | SHALL |  | [1098-32152](#C_1098-32152) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| entryRelationship | 1..\* | SHALL |  | [1098-7701](#C_1098-7701) |  |
| @typeCode | 1..1 | SHALL |  | [1098-7702](#C_1098-7702) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| substanceAdministration | 1..1 | SHALL |  | [1098-15520](#C_1098-15520) | [Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09](#Medication_Activity_V2) |

1. SHALL contain exactly one [1..1] @classCode="ACT" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1098-7698).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1098-7699).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-16758) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.36" (CONF:1098-16759).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32524).
4. SHALL contain exactly one [1..1] code (CONF:1098-15518).
   1. This code SHALL contain exactly one [1..1] @code="42346-7" Medications on Admission (CONF:1098-15519).
   2. 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:1098-32152).
5. SHALL contain at least one [1..\*] entryRelationship (CONF:1098-7701) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1098-7702).
   2. SHALL contain exactly one [1..1] [Medication Activity (V2)](#Medication_Activity_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09) (CONF:1098-15520).

Figure 123: Admission Medication (V2) Example

<act classCode="ACT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.36" extension="2014-06-09" />

<code code="42346-7" />

<entryRelationship typeCode="SUBJ">

<substanceAdministration classCode="SBADM" moodCode="EVN">

<!-- \*\* MEDICATION ACTIVITY V2 \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.16" extension="2014-06-09" />

...

</substanceAdministration>

</entryRelationship>

</act>

Advance Directive Observation (V3)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.48:2015-08-01 (open)]

Table 221: Advance Directive Observation (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Advance Directive Organizer (V2)](#E_Advance_Directive_Organizer_V2) (required)  [Planned Intervention Act (V2)](#E_Planned_Intervention_Act_V2) (optional)  [Intervention Act (V2)](#E_Intervention_Act_V2) (optional)  [Advance Directives Section (entries optional) (V3)](#S_Advance_Directives_Section_entries_op) (optional)  [Advance Directives Section (entries required) (V3)](#S_Advance_Directives_Sect_entries_re) (optional) | [US Realm Address (AD.US.FIELDED)](#U_US_Realm_Address_ADUSFIELDED) (optional)  [US Realm Person Name (PN.US.FIELDED)](#U_US_Realm_Person_Name_PNUSFIELDED) (optional)  [Author Participation](#U_Author_Participation) (optional) |

This clinical statement represents Advance Directive Observation findings (e.g., “resuscitation status is Full Code”) rather than orders. It should not be considered a legal document or a substitute for the actual Advance Directive document. The related legal documents are referenced using the reference/externalReference element.  
The Advance Directive Observation describes the patient’s directives, including but not limited to:  
• Medications  
• Transfer of Care to Hospital  
• Treatment  
• Procedures  
• Intubation and Ventilation  
• Diagnostic Tests  
• Tests

The observation/value element contains the detailed patient directive which may be coded or text. For example, a category directive may be antibiotics, and the details would be intravenous antibiotics only.

Table 222: Advance Directive Observation (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.48:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-8648](#C_1198-8648) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1198-8649](#C_1198-8649) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-8655](#C_1198-8655) |  |
| @root | 1..1 | SHALL |  | [1198-10485](#C_1198-10485) | 2.16.840.1.113883.10.20.22.4.48 |
| @extension | 1..1 | SHALL |  | [1198-32496](#C_1198-32496) | 2015-08-01 |
| id | 1..\* | SHALL |  | [1198-8654](#C_1198-8654) |  |
| code | 1..1 | SHALL |  | [1198-8651](#C_1198-8651) | urn:oid:2.16.840.1.113883.1.11.20.2 (Advance Directive Type Code) |
| translation | 1..1 | SHALL |  | [1198-32842](#C_1198-32842) |  |
| @code | 1..1 | SHALL |  | [1198-32843](#C_1198-32843) | 75320-2 |
| @codeSystem | 1..1 | SHALL |  | [1198-32844](#C_1198-32844) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1198-8652](#C_1198-8652) |  |
| @code | 1..1 | SHALL |  | [1198-19082](#C_1198-19082) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1198-8656](#C_1198-8656) |  |
| low | 1..1 | SHALL |  | [1198-28719](#C_1198-28719) |  |
| high | 1..1 | SHALL |  | [1198-15521](#C_1198-15521) |  |
| value | 1..1 | SHALL |  | [1198-30804](#C_1198-30804) |  |
| author | 0..\* | SHOULD |  | [1198-32406](#C_1198-32406) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| participant | 0..\* | SHOULD |  | [1198-8662](#C_1198-8662) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8663](#C_1198-8663) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = VRF |
| templateId | 1..1 | SHALL |  | [1198-8664](#C_1198-8664) |  |
| @root | 1..1 | SHALL |  | [1198-10486](#C_1198-10486) | 2.16.840.1.113883.10.20.1.58 |
| time | 0..1 | SHOULD |  | [1198-8665](#C_1198-8665) |  |
| participantRole | 1..1 | SHALL |  | [1198-8825](#C_1198-8825) |  |
| code | 0..1 | SHOULD |  | [1198-28446](#C_1198-28446) | urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy) |
| addr | 0..\* | MAY |  | [1198-28451](#C_1198-28451) | [US Realm Address (AD.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2](#U_US_Realm_Address_ADUSFIELDED) |
| playingEntity | 0..1 | MAY |  | [1198-28428](#C_1198-28428) |  |
| name | 0..\* | MAY |  | [1198-28454](#C_1198-28454) | [US Realm Person Name (PN.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1](#U_US_Realm_Person_Name_PNUSFIELDED) |
| participant | 0..\* | SHOULD |  | [1198-8667](#C_1198-8667) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8668](#C_1198-8668) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = CST |
| participantRole | 1..1 | SHALL |  | [1198-8669](#C_1198-8669) |  |
| @classCode | 1..1 | SHALL |  | [1198-8670](#C_1198-8670) | urn:oid:2.16.840.1.113883.5.110 (HL7RoleClass) = AGNT |
| code | 0..1 | SHOULD |  | [1198-28440](#C_1198-28440) | urn:oid:2.16.840.1.113883.11.20.12.1 (Personal And Legal Relationship Role Type) |
| addr | 0..1 | SHOULD |  | [1198-8671](#C_1198-8671) | [US Realm Address (AD.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2](#U_US_Realm_Address_ADUSFIELDED) |
| telecom | 0..\* | SHOULD |  | [1198-8672](#C_1198-8672) |  |
| playingEntity | 1..1 | SHALL |  | [1198-8824](#C_1198-8824) |  |
| code | 0..1 | SHOULD |  | [1198-28444](#C_1198-28444) | urn:oid:2.16.840.1.113883.11.20.9.51 (Healthcare Agent Qualifier) |
| name | 1..1 | SHALL |  | [1198-8673](#C_1198-8673) |  |
| reference | 1..\* | SHOULD |  | [1198-8692](#C_1198-8692) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8694](#C_1198-8694) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| externalDocument | 1..1 | SHALL |  | [1198-8693](#C_1198-8693) |  |
| id | 1..\* | SHALL |  | [1198-8695](#C_1198-8695) |  |
| text | 0..1 | MAY |  | [1198-8696](#C_1198-8696) |  |
| reference | 0..1 | MAY |  | [1198-8697](#C_1198-8697) |  |

1. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-8648).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-8649).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-8655) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.48" (CONF:1198-10485).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32496).
4. SHALL contain at least one [1..\*] id (CONF:1198-8654).
5. SHALL contain exactly one [1..1] code, which SHOULD be selected from ValueSet [Advance Directive Type Code](#Advance_Directive_Type_Code) urn:oid:2.16.840.1.113883.1.11.20.2 DYNAMIC (CONF:1198-8651).
   1. This code SHALL contain exactly one [1..1] translation (CONF:1198-32842) such that it
      1. SHALL contain exactly one [1..1] @code="75320-2" Advance directive (CONF:1198-32843).
      2. 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:1198-32844).
6. SHALL contain exactly one [1..1] statusCode (CONF:1198-8652).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1198-19082).
7. SHALL contain exactly one [1..1] effectiveTime (CONF:1198-8656).
   1. This effectiveTime SHALL contain exactly one [1..1] low (CONF:1198-28719).
   2. This effectiveTime SHALL contain exactly one [1..1] high (CONF:1198-15521).
      1. If the Advance Directive does not have a specified ending time, the <high> element \*\*SHALL\*\* have the nullFlavor attribute set to \*NA\* (CONF:1198-32449).
8. SHALL contain exactly one [1..1] value (CONF:1198-30804) such that it
   1. If type CD, then value will be SNOMED-CT 2.16.840.1.113883.6.96 (CONF:1198-32493).
9. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1198-32406).

The participant "VRF" represents the clinician(s) who verified the patient advance directive observation.

1. SHOULD contain zero or more [0..\*] participant (CONF:1198-8662) such that it
   1. SHALL contain exactly one [1..1] @typeCode="VRF" Verifier (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 STATIC) (CONF:1198-8663).
   2. SHALL contain exactly one [1..1] templateId (CONF:1198-8664) such that it
      1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.1.58" (CONF:1198-10486).
   3. SHOULD contain zero or one [0..1] time (CONF:1198-8665).
      1. The data type of Observation/participant/time in a verification SHALL be *TS* (time stamp) (CONF:1198-8666).
   4. SHALL contain exactly one [1..1] participantRole (CONF:1198-8825).
      1. This participantRole SHOULD contain zero or one [0..1] code, which SHOULD be selected from ValueSet [Healthcare Provider Taxonomy](#Healthcare_Provider_Taxonomy) urn:oid:2.16.840.1.114222.4.11.1066 DYNAMIC (CONF:1198-28446).
      2. This participantRole MAY contain zero or more [0..\*] [US Realm Address (AD.US.FIELDED)](#U_US_Realm_Address_ADUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1198-28451).
      3. This participantRole MAY contain zero or one [0..1] playingEntity (CONF:1198-28428).
         1. The playingEntity, if present, MAY contain zero or more [0..\*] [US Realm Person Name (PN.US.FIELDED)](#U_US_Realm_Person_Name_PNUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1198-28454).

This custodian (CST) participant identifies a legal representative for the patient's advance directive. Examples of such individuals are called health care agents, substitute decision makers and/or health care proxies. If there is more than one legal representative, a qualifier may be used to designate the legal representative as primary or secondary.

1. SHOULD contain zero or more [0..\*] participant (CONF:1198-8667) such that it
   1. SHALL contain exactly one [1..1] @typeCode="CST" Custodian (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 STATIC) (CONF:1198-8668).
   2. SHALL contain exactly one [1..1] participantRole (CONF:1198-8669).
      1. This participantRole SHALL contain exactly one [1..1] @classCode="AGNT" Agent (CodeSystem: HL7RoleClass urn:oid:2.16.840.1.113883.5.110 STATIC) (CONF:1198-8670).
      2. This participantRole SHOULD contain zero or one [0..1] code, which SHOULD be selected from ValueSet [Personal And Legal Relationship Role Type](#Personal_And_Legal_Relationship_Role_Ty) urn:oid:2.16.840.1.113883.11.20.12.1 DYNAMIC (CONF:1198-28440).
      3. This participantRole SHOULD contain zero or one [0..1] [US Realm Address (AD.US.FIELDED)](#U_US_Realm_Address_ADUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1198-8671).
      4. This participantRole SHOULD contain zero or more [0..\*] telecom (CONF:1198-8672).
      5. This participantRole SHALL contain exactly one [1..1] playingEntity (CONF:1198-8824).
         1. This playingEntity SHOULD contain zero or one [0..1] code, which SHOULD be selected from ValueSet [Healthcare Agent Qualifier](#Healthcare_Agent_Qualifier) urn:oid:2.16.840.1.113883.11.20.9.51 DYNAMIC (CONF:1198-28444).

Record the name of the agent who can provide a copy of the Advance Directive in the name element.

* + - 1. This playingEntity SHALL contain exactly one [1..1] name (CONF:1198-8673).

1. SHOULD contain at least one [1..\*] reference (CONF:1198-8692) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1198-8694).
   2. SHALL contain exactly one [1..1] externalDocument (CONF:1198-8693).
      1. This externalDocument SHALL contain at least one [1..\*] id (CONF:1198-8695).
      2. This externalDocument MAY contain zero or one [0..1] text (CONF:1198-8696).
         1. The text, if present, MAY contain zero or one [0..1] reference (CONF:1198-8697).
            1. The URL of a referenced advance directive document MAY be present, and SHALL be represented in Observation/reference/ExternalDocument/text/reference (CONF:1198-8698).
            2. If a URL is referenced, then it SHOULD have a corresponding linkHTML element in narrative block (CONF:1198-8699).

Table 223: Advance Directive Type Code

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Advance Directive Type Code urn:oid:2.16.840.1.113883.1.11.20.2  (Clinical Focus: Kinds of intervention addressed by an advance directive),(Data Element Scope: ),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 6/24/2019 with a version of 20190319.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.20.2/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 14152002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Intravenous infusion (procedure) |
| 281789004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Antibiotic therapy (procedure) |
| 304251008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Resuscitation status (observable entity) |
| 52765003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Intubation (procedure) |
| 61420007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Tube feeding of patient (regime/therapy) |
| 71388002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Procedure (procedure) |
| 78823007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Life support procedure (procedure) |
| 89666000 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Cardiopulmonary resuscitation (procedure) |

Table 224: Healthcare Agent Qualifier

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Healthcare Agent Qualifier urn:oid:2.16.840.1.113883.11.20.9.51  (Clinical Focus: A value set SNOMED-CT qualifier codes for representing principal and secondary.),(Data Element Scope: Health care agent attribute),(Inclusion Criteria: Qualifier concepts Primary and Secondary only),(Exclusion Criteria: only concepts in inclusion criteria)  This value set was imported on 6/24/2019 with a version of 20190319.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.51/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 2603003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Secondary (qualifier value) |
| 63161005 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Principal (qualifier value) |

Figure 124: Advance Directive Observation (V3) Example

<entry>

<observation classCode="OBS" moodCode="EVN">

<!-- \*\* Advance Directive Observation\*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.48"

extension="2015-08-01" />

<id root="9b54c3c9-1673-49c7-aef9-b037ed72ed27" />

<code code="304251008" displayName="Resuscitation"

codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT">

<translation code="75320-2"

displayName="Advance Directive"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"></translation>

</code>

<statusCode code="completed" />

<effectiveTime>

<low value="20110213" />

<high nullFlavor="NA" />

</effectiveTime>

<value xsi:type="CD"

code="304253006"

codeSystem="2.16.840.1.113883.6.96"

codeSystemName="SNOMED-CT"

displayName="Not for resuscitation">

<originalText>Do not resuscitate</originalText>

</value>

<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"

displayName="Registered nurse"

codeSystem="2.16.840.1.113883.6.101"

codeSystemName="Health Care Provider Taxonomy (HIPAA)" />

<assignedPerson>

<name>

<given>Nurse</given>

<family>Nightingale</family>

<suffix>RN</suffix>

</name>

</assignedPerson>

<representedOrganization classCode="ORG">

<id root="2.16.840.1.113883.19.5" />

<name>Good Health Hospital</name>

</representedOrganization>

</assignedAuthor>

</author>

<participant typeCode="VRF">

<templateId root="2.16.840.1.113883.10.20.1.58" />

<time value="201302013" />

<participantRole>

<id root="20cf14fb-b65c-4c8c-a54d-b0cca834c18c" />

<code code="163W00000X"

codeSystem="2.16.840.1.113883.6.101"

codeSystemName="Health Care Provider Taxonomy (HIPAA)"

displayName="Registered nurse" />

<addr>

...

</addr>

<telecom value="tel:(995)555-1006" use="WP" />

<playingEntity>

<code code="63161005" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT" displayName="Principal" />

<name>

<given>Nurse</given>

<family>Florence</family>

<suffix>RN</suffix>

</name>

</playingEntity>

</participantRole>

</participant>

<participant typeCode="CST">

<participantRole classCode="AGNT">

<code code="MTH" codeSystem="2.16.840.1.113883.5.111" displayName="Mother" />

<addr>

...

</addr>

<telecom value="tel:(999)555-1212" use="WP" />

<playingEntity>

<code code="63161005" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT" displayName="Principal" />

<name>

<prefix>Mrs.</prefix>

<given>Martha</given>

<family>Jones</family>

</name>

</playingEntity>

</participantRole>

</participant>

<reference typeCode="REFR">

<externalDocument>

<id root="b50b7910-7ffb-4f4c-bbe4-177ed68cbbf3" />

<text mediaType="application/pdf">

<reference value="AdvanceDirective.b50b7910-7ffb-4f4c-bbe4-177ed68cbbf3.pdf" />

</text>

<versionNumber value="1" />

</externalDocument>

</reference>

</observation>

</entry>

Advance Directive Organizer (V2)

[organizer: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.108:2015-08-01 (open)]

Table 225: Advance Directive Organizer (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Advance Directives Section (entries optional) (V3)](#S_Advance_Directives_Section_entries_op) (optional)  [Advance Directives Section (entries required) (V3)](#S_Advance_Directives_Sect_entries_re) (optional) | [Author Participation](#U_Author_Participation) (optional)  [Advance Directive Observation (V3)](#E_Advance_Directive_Observation_V3) (required) |

This clinical statement groups a set of advance directive observations.

Table 226: Advance Directive Organizer (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| organizer (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.108:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-28410](#C_1198-28410) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = CLUSTER |
| @moodCode | 1..1 | SHALL |  | [1198-28411](#C_1198-28411) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-28412](#C_1198-28412) |  |
| @root | 1..1 | SHALL |  | [1198-28413](#C_1198-28413) | 2.16.840.1.113883.10.20.22.4.108 |
| @extension | 1..1 | SHALL |  | [1198-32876](#C_1198-32876) | 2015-08-01 |
| id | 1..\* | SHALL |  | [1198-28414](#C_1198-28414) |  |
| code | 1..1 | SHALL |  | [1198-28415](#C_1198-28415) |  |
| @code | 1..1 | SHALL |  | [1198-31230](#C_1198-31230) | 45473-6 |
| @codeSystem | 1..1 | SHALL |  | [1198-31231](#C_1198-31231) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1198-28418](#C_1198-28418) |  |
| @code | 1..1 | SHALL |  | [1198-31346](#C_1198-31346) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| author | 0..\* | SHOULD |  | [1198-32407](#C_1198-32407) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| component | 1..\* | SHALL |  | [1198-28420](#C_1198-28420) |  |
| observation | 1..1 | SHALL |  | [1198-28421](#C_1198-28421) | [Advance Directive Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.48:2015-08-01](#E_Advance_Directive_Observation_V3) |

1. SHALL contain exactly one [1..1] @classCode="CLUSTER" Cluster (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1198-28410).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-28411).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-28412) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.108" (CONF:1198-28413).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32876).
4. SHALL contain at least one [1..\*] id (CONF:1198-28414).
5. SHALL contain exactly one [1..1] code (CONF:1198-28415).
   1. This code SHALL contain exactly one [1..1] @code="45473-6" Advance directive - living will  (CONF:1198-31230).
   2. 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:1198-31231).
6. SHALL contain exactly one [1..1] statusCode (CONF:1198-28418).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1198-31346).
7. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1198-32407).
8. SHALL contain at least one [1..\*] component (CONF:1198-28420) such that it
   1. SHALL contain exactly one [1..1] [Advance Directive Observation (V3)](#E_Advance_Directive_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.48:2015-08-01) (CONF:1198-28421).

Figure 125: Advance Directive Organizer (V2) Example

<organizer classCode="CLUSTER" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.108" extension="2015-08-01" />

<id root="631F0E95-F055-4FA2-AF10-3AE036CAD2EC" extension="10.1.1" />

<code code="45473-6"

displayName="advance directive - living will"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC">

<originalText>

<reference value="#ADO1" />

</originalText>

</code>

<statusCode code="completed" />

<!-- Author Participation -->

<author>

<templateId root="2.16.840.1.113883.10.20.22.4.119" />

<time value="20130807150000-0500" />

<assignedAuthor>

<id extension="5555555551" root="2.16.840.1.113883.4.6" />

<code code="163W00000X"

displayName="Registered nurse"

codeSystem="2.16.840.1.113883.6.101"

codeSystemName="Healthcare Provider Taxonomy (HIPAA)" />

<assignedPerson>

<name>

<given>Nurse</given>

<family>Nightingale</family>

<suffix>RN</suffix>

</name>

</assignedPerson>

<representedOrganization classCode="ORG">

<id root="2.16.840.1.113883.19.5" />

<name>Good Health Hospital</name>

</representedOrganization>

</assignedAuthor>

</author>

<component>

<!-- Advance Directive Observation (V3) -->

...

</component>

<component>

<!-- Advance Directive Observation (V3) -->

...

</component>

<component>

<!-- Advance Directive Observation (V3) -->

...

</component>

</organizer>

Age Observation

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

Table 227: Age Observation Contexts

| Contained By: | Contains: |
| --- | --- |
| [Family History Observation (V3)](#E_Family_History_Observation_V3) (optional)  [Problem Observation (V3)](#E_Problem_Observation_V3) (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 228: 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 |  | [81-7613](#C_81-7613) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [81-7614](#C_81-7614) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [81-7899](#C_81-7899) |  |
| @root | 1..1 | SHALL |  | [81-10487](#C_81-10487) | 2.16.840.1.113883.10.20.22.4.31 |
| code | 1..1 | SHALL |  | [81-7615](#C_81-7615) |  |
| @code | 1..1 | SHALL |  | [81-16776](#C_81-16776) | 445518008 |
| @codeSystem | 1..1 | SHALL |  | [81-26499](#C_81-26499) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.6.96 |
| statusCode | 1..1 | SHALL |  | [81-15965](#C_81-15965) |  |
| @code | 1..1 | SHALL |  | [81-15966](#C_81-15966) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| value | 1..1 | SHALL | PQ | [81-7617](#C_81-7617) |  |
| @unit | 1..1 | SHALL | CS | [81-7618](#C_81-7618) | 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: HL7ActMood 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
   1. 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).
   1. This code SHALL contain exactly one [1..1] @code="445518008" Age At Onset (CONF:81-16776).
   2. 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).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus 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).
   1. This value SHALL contain exactly one [1..1] @unit, which SHALL be selected from ValueSet [AgePQ\_UCUM](#AgePQ_UCUM) urn:oid:2.16.840.1.113883.11.20.9.21 DYNAMIC (CONF:81-7618).

Table 229: AgePQ\_UCUM

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: AgePQ\_UCUM urn:oid:2.16.840.1.113883.11.20.9.21  (Clinical Focus: Units of time needed for humans and animals),(Data Element Scope: time),(Inclusion Criteria: time units from year to minute),(Exclusion Criteria: only units within inclusion criteria)  This value set was imported on 6/24/2019 with a version of 20180508.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.21/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| a | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | year |
| d | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | day |
| h | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | hour |
| min | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | minute |
| mo | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | month |
| wk | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | week |

Figure 126: 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>

Allergy Concern Act (V3)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.30:2015-08-01 (open)]

Table 230: Allergy Concern Act (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Allergies and Intolerances Section (entries optional) (V3)](#S_Allergies_and_Intolerances_Section_eo) (optional)  [Allergies and Intolerances Section (entries required) (V3)](#S_Allergies_and_Intolerances_Section_er) (required) | [Allergy - Intolerance Observation (V2)](#E_Allergy__Intolerance_Observation_V2) (required)  [Author Participation](#U_Author_Participation) (optional) |

This template reflects an ongoing concern on behalf of the provider that placed the allergy on a patient’s allergy list. As long as the underlying condition is of concern to the provider (i.e., as long as the allergy, whether active or resolved, is of ongoing concern and interest to the provider), the statusCode is “active”. Only when the underlying allergy is no longer of concern is the statusCode set to “completed”. The effectiveTime reflects the time that the underlying allergy was felt to be a concern.

The statusCode of the Allergy Concern Act is the definitive indication of the status of the concern, whereas the effectiveTime of the nested Allergy - Intolerance Observation is the definitive indication of whether or not the underlying allergy is resolved.

The effectiveTime/low of the Allergy Concern Act asserts when the concern became active. This equates to the time the concern was authored in the patient's chart. The effectiveTime/high asserts when the concern was completed (e.g., when the clinician deemed there is no longer any need to track the underlying condition).

Table 231: Allergy Concern Act (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.30:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-7469](#C_1198-7469) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1198-7470](#C_1198-7470) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-7471](#C_1198-7471) |  |
| @root | 1..1 | SHALL |  | [1198-10489](#C_1198-10489) | 2.16.840.1.113883.10.20.22.4.30 |
| @extension | 1..1 | SHALL |  | [1198-32543](#C_1198-32543) | 2015-08-01 |
| id | 1..\* | SHALL |  | [1198-7472](#C_1198-7472) |  |
| code | 1..1 | SHALL |  | [1198-7477](#C_1198-7477) |  |
| @code | 1..1 | SHALL |  | [1198-19158](#C_1198-19158) | CONC |
| @codeSystem | 1..1 | SHALL |  | [1198-32154](#C_1198-32154) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = 2.16.840.1.113883.5.6 |
| statusCode | 1..1 | SHALL |  | [1198-7485](#C_1198-7485) |  |
| @code | 1..1 | SHALL |  | [1198-19086](#C_1198-19086) | urn:oid:2.16.840.1.113883.11.20.9.19 (ProblemAct statusCode) |
| effectiveTime | 1..1 | SHALL |  | [1198-7498](#C_1198-7498) |  |
| author | 0..\* | SHOULD |  | [1198-31145](#C_1198-31145) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| entryRelationship | 1..\* | SHALL |  | [1198-7509](#C_1198-7509) |  |
| @typeCode | 1..1 | SHALL |  | [1198-7915](#C_1198-7915) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| observation | 1..1 | SHALL |  | [1198-14925](#C_1198-14925) | [Allergy - Intolerance Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.7:2014-06-09](#E_Allergy__Intolerance_Observation_V2) |

1. SHALL contain exactly one [1..1] @classCode="ACT" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-7469).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-7470).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-7471) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.30" (CONF:1198-10489).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32543).
4. SHALL contain at least one [1..\*] id (CONF:1198-7472).
5. SHALL contain exactly one [1..1] code (CONF:1198-7477).
   1. This code SHALL contain exactly one [1..1] @code="CONC" Concern (CONF:1198-19158).
   2. This code SHALL contain exactly one [1..1] @codeSystem="2.16.840.1.113883.5.6" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1198-32154).
6. SHALL contain exactly one [1..1] statusCode (CONF:1198-7485).
   1. This statusCode SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [ProblemAct statusCode](#ProblemAct_statusCode) urn:oid:2.16.840.1.113883.11.20.9.19 STATIC (CONF:1198-19086).
7. SHALL contain exactly one [1..1] effectiveTime (CONF:1198-7498).
   1. If statusCode/@code="active" Active, then effectiveTime SHALL contain [1..1] low (CONF:1198-7504).
   2. If statusCode/@code="completed" Completed, then effectiveTime SHALL contain [1..1] high (CONF:1198-10085).
8. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1198-31145).
9. SHALL contain at least one [1..\*] entryRelationship (CONF:1198-7509) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1198-7915).
   2. SHALL contain exactly one [1..1] [Allergy - Intolerance Observation (V2)](#E_Allergy__Intolerance_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.7:2014-06-09) (CONF:1198-14925).

Table 232: ProblemAct statusCode

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: ProblemAct statusCode urn:oid:2.16.840.1.113883.11.20.9.19  A ValueSet of HL7 actStatus codes for use on the concern act  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.19/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| completed | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | Completed |
| aborted | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | Aborted |
| active | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | Active |
| suspended | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | Suspended |

Figure 127: Allergy Concern Act (V3) Example

<act classCode="ACT" moodCode="EVN">

<!-- \*\* Allergy Concern Act \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.30" extension="2015-08-01" />

<id root="36e3e930-7b14-11db-9fe1-0800200c9a66" />

<code code="CONC" codeSystem="2.16.840.1.113883.5.6" />

<!-- The statusCode represents the need to continue tracking the allergy -->

<!-- This is of ongoing concern to the provider -->

<statusCode code="active" />

<effectiveTime>

<!-- The low value represents when the allergy was first recorded in the

patient's chart -->

<!-- Concern started being tracked as an active issue on May 1, 1998 -->

<low value="199805011145-0800" />

</effectiveTime>

<author typeCode="AUT">

<!-- Same as Concern effectiveTime/low -->

<time value="199805011145-0800" />

<assignedAuthor>

<id extension="555555555" root="1.1.1.1.1.1.1.2" />

</assignedAuthor>

</author>

<entryRelationship typeCode="SUBJ">

<observation classCode="OBS" moodCode="EVN">

<!-- \*\* Allergy observation \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.7" extension="2014-06-09" />

<id root="4adc1020-7b14-11db-9fe1-0800200c9a66" />

<code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4" />

<!-- Observation statusCode represents the status of the act of observing -->

<statusCode code="completed" />

<effectiveTime>

<!-- The low value reflects the date of onset of the allergy -->

<!-- Based on patient symptoms, presumed onset is May 1, 1998 -->

<low value="19980501" />

<!-- The high value reflects when the allergy was known to be resolved

(and will generally be absent) -->

</effectiveTime>

<value xsi:type="CD" code="419199007" displayName="Allergy to substance" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" />

<author typeCode="AUT">

<time value="199805011145-0800" />

<assignedAuthor>

<id extension="222223333" root="1.1.1.1.1.1.1.3" />

</assignedAuthor>

</author>

<participant typeCode="CSM">

<participantRole classCode="MANU">

<playingEntity classCode="MMAT">

<code code="70618" displayName="Penicillin" codeSystem="2.16.840.1.113883.6.88" codeSystemName="RxNorm" />

</playingEntity>

</participantRole>

</participant>

<entryRelationship typeCode="MFST" inversionInd="true">

<observation classCode="OBS" moodCode="EVN">

<!-- \*\* Reaction observation \*\* -->

<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" />

<statusCode code="completed" />

<effectiveTime>

<low value="200802260800-0800" />

<high value="2008022801200-0800" />

</effectiveTime>

<value xsi:type="CD" code="422587007" codeSystem="2.16.840.1.113883.6.96" displayName="Nausea" />

</observation>

</entryRelationship>

</observation>

</entryRelationship>

</act>

Allergy Status Observation

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.28:2019-06-20 (open)]

Table 233: Allergy Status Observation Contexts

| Contained By: | Contains: |
| --- | --- |
| [Allergy - Intolerance Observation (V2)](#E_Allergy__Intolerance_Observation_V2) (optional)  [Substance or Device Allergy - Intolerance Observation (V2)](#E_Substance_or_Device_Allergy__V2) (optional) |  |

This template represents the clinical status attributed to the allergy or intolerance. There can be only one allergy status observation per allergy - intolerance observation.

Table 234: Allergy Status Observation Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.28:2019-06-20) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-7318](#C_1198-7318) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1198-7319](#C_1198-7319) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-7317](#C_1198-7317) |  |
| @root | 1..1 | SHALL |  | [1198-10490](#C_1198-10490) | 2.16.840.1.113883.10.20.22.4.28 |
| @extension | 1..1 | SHALL |  | [1198-32962](#C_1198-32962) | 2019-06-20 |
| code | 1..1 | SHALL |  | [1198-7320](#C_1198-7320) |  |
| @code | 1..1 | SHALL |  | [1198-19131](#C_1198-19131) | 33999-4 |
| @codeSystem | 1..1 | SHALL |  | [1198-32155](#C_1198-32155) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1198-7321](#C_1198-7321) |  |
| @code | 1..1 | SHALL |  | [1198-19087](#C_1198-19087) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| value | 1..1 | SHALL | CE | [1198-7322](#C_1198-7322) | urn:oid:2.16.840.1.113762.1.4.1099.29 (Allergy Clinical Status) |

1. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-7318).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-7319).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-7317) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.28" (CONF:1198-10490).
   2. SHALL contain exactly one [1..1] @extension="2019-06-20" (CONF:1198-32962).
4. SHALL contain exactly one [1..1] code (CONF:1198-7320).
   1. This code SHALL contain exactly one [1..1] @code="33999-4" Status (CONF:1198-19131).
   2. 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:1198-32155).
5. SHALL contain exactly one [1..1] statusCode (CONF:1198-7321).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1198-19087).
6. SHALL contain exactly one [1..1] value with @xsi:type="CE", where the code SHALL be selected from ValueSet [Allergy Clinical Status](#Allergy_Clinical_Status) urn:oid:2.16.840.1.113762.1.4.1099.29 DYNAMIC (CONF:1198-7322).

Table 235: Allergy Clinical Status

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Allergy Clinical Status urn:oid:2.16.840.1.113762.1.4.1099.29  (Clinical Focus: The clinical status of an allergic condition),(Data Element Scope: Status value),(Inclusion Criteria: limited high level status of a clinical condition),(Exclusion Criteria: none specific)  This value set was imported on 6/26/2019 with a version of 20190418.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1099.29/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 413322009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Problem resolved (finding) |
| 55561003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Active (qualifier value) |
| 73425007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Inactive (qualifier value) |

Assessment Scale Observation

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

Table 236: Assessment Scale Observation Contexts

| Contained By: | Contains: |
| --- | --- |
| [Sensory Status](#E_Sensory_Status) (optional)  [Functional Status Section (V2)](#S_Functional_Status_Section_V2) (optional)  [Functional Status Observation (V2)](#E_Functional_Status_Observation_V2) (optional)  [Mental Status Observation (V3)](#E_Mental_Status_Observation_V3) (optional)  [Mental Status Section (V2)](#S_Mental_Status_Section_V2) (optional)  [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional) | [Assessment Scale Supporting Observation](#E_Assessment_Scale_Supporting_Observati) (optional) |

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 237: Assessment Scale Observation Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69) | | | | | |
| @classCode | 1..1 | SHALL |  | [81-14434](#C_81-14434) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [81-14435](#C_81-14435) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [81-14436](#C_81-14436) |  |
| @root | 1..1 | SHALL |  | [81-14437](#C_81-14437) | 2.16.840.1.113883.10.20.22.4.69 |
| id | 1..\* | SHALL |  | [81-14438](#C_81-14438) |  |
| code | 1..1 | SHALL |  | [81-14439](#C_81-14439) |  |
| derivationExpr | 0..1 | MAY |  | [81-14637](#C_81-14637) |  |
| statusCode | 1..1 | SHALL |  | [81-14444](#C_81-14444) |  |
| @code | 1..1 | SHALL |  | [81-19088](#C_81-19088) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [81-14445](#C_81-14445) |  |
| value | 1..1 | SHALL |  | [81-14450](#C_81-14450) |  |
| interpretationCode | 0..\* | MAY |  | [81-14459](#C_81-14459) |  |
| translation | 0..\* | MAY |  | [81-14888](#C_81-14888) |  |
| author | 0..\* | MAY |  | [81-14460](#C_81-14460) |  |
| entryRelationship | 0..\* | SHOULD |  | [81-14451](#C_81-14451) |  |
| @typeCode | 1..1 | SHALL |  | [81-16741](#C_81-16741) | COMP |
| observation | 1..1 | SHALL |  | [81-16742](#C_81-16742) | [Assessment Scale Supporting Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.86](#E_Assessment_Scale_Supporting_Observati) |
| referenceRange | 0..\* | MAY |  | [81-16799](#C_81-16799) |  |
| observationRange | 1..1 | SHALL |  | [81-16800](#C_81-16800) |  |
| text | 0..1 | SHOULD |  | [81-16801](#C_81-16801) |  |
| reference | 0..1 | SHOULD |  | [81-16802](#C_81-16802) |  |
| @value | 0..1 | MAY |  | [81-16803](#C_81-16803) |  |

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: HL7ActMood 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
   1. 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).
   1. 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

1. MAY contain zero or one [0..1] derivationExpr (CONF:81-14637).
2. SHALL contain exactly one [1..1] statusCode (CONF:81-14444).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus 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)

1. SHALL contain exactly one [1..1] effectiveTime (CONF:81-14445).
2. SHALL contain exactly one [1..1] value (CONF:81-14450).
3. MAY contain zero or more [0..\*] interpretationCode (CONF:81-14459).
   1. The interpretationCode, if present, MAY contain zero or more [0..\*] translation (CONF:81-14888).
4. MAY contain zero or more [0..\*] author (CONF:81-14460).
5. SHOULD contain zero or more [0..\*] entryRelationship (CONF:81-14451) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" has component (CONF:81-16741).
   2. SHALL contain exactly one [1..1] [Assessment Scale Supporting Observation](#E_Assessment_Scale_Supporting_Observati) (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)

1. MAY contain zero or more [0..\*] referenceRange (CONF:81-16799).
   1. 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)

* + 1. 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).
          1. The reference, if present, MAY contain zero or one [0..1] @value (CONF:81-16803).

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 128: 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>

Assessment Scale Supporting Observation

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

Table 238: Assessment Scale Supporting Observation Contexts

| Contained By: | Contains: |
| --- | --- |
| [Assessment Scale Observation](#E_Assessment_Scale_Observation) (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 239: 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 |  | [81-16715](#C_81-16715) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [81-16716](#C_81-16716) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [81-16722](#C_81-16722) |  |
| @root | 1..1 | SHALL |  | [81-16723](#C_81-16723) | 2.16.840.1.113883.10.20.22.4.86 |
| id | 1..\* | SHALL |  | [81-16724](#C_81-16724) |  |
| code | 1..1 | SHALL |  | [81-19178](#C_81-19178) |  |
| @code | 1..1 | SHALL |  | [81-19179](#C_81-19179) |  |
| statusCode | 1..1 | SHALL |  | [81-16720](#C_81-16720) |  |
| @code | 1..1 | SHALL |  | [81-19089](#C_81-19089) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| value | 1..\* | SHALL |  | [81-16754](#C_81-16754) |  |

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: HL7ActMood 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
   1. 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).
   1. This code SHALL contain exactly one [1..1] @code (CONF:81-19179).
      1. 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).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:81-19089).
7. SHALL contain at least one [1..\*] value (CONF:81-16754).
   1. 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 129: 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>

Authorization Activity

[act: identifier urn:oid:2.16.840.1.113883.10.20.1.19 (open)]

An Authorization Activity represents authorizations or pre-authorizations currently active for the patient for the particular payer.

Authorizations are represented using an act subordinate to the policy or program that provided it. The authorization refers to the policy or program. Authorized treatments can be grouped into an organizer class, where common properties, such as the reason for the authorization, can be expressed. Subordinate acts represent what was authorized.

Table 240: Authorization Activity Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:oid:2.16.840.1.113883.10.20.1.19) | | | | | |
| @classCode | 1..1 | SHALL |  | [81-8944](#C_81-8944) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [81-8945](#C_81-8945) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = EVN |
| templateId | 1..1 | SHALL |  | [81-8946](#C_81-8946) |  |
| @root | 1..1 | SHALL |  | [81-10529](#C_81-10529) | 2.16.840.1.113883.10.20.1.19 |
| id | 1..1 | SHALL |  | [81-8947](#C_81-8947) |  |
| entryRelationship | 1..\* | SHALL |  | [81-8948](#C_81-8948) |  |
| @typeCode | 1..1 | SHALL |  | [81-8949](#C_81-8949) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |

1. SHALL contain exactly one [1..1] @classCode="ACT" Act (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:81-8944).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:81-8945).
3. SHALL contain exactly one [1..1] templateId (CONF:81-8946) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.1.19" (CONF:81-10529).
4. SHALL contain exactly one [1..1] id (CONF:81-8947).
5. SHALL contain at least one [1..\*] entryRelationship (CONF:81-8948) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has Subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:81-8949).
   2. The target of an authorization activity with act/entryRelationship/@typeCode="SUBJ" SHALL be a clinical statement with moodCode="PRMS" Promise (CONF:81-8951).
   3. The target of an authorization activity MAY contain one or more performer, to indicate the providers that have been authorized to provide treatment (CONF:81-8952).

Figure 130: Authorization Activity Example

<act classCode="ACT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.1.19"/>

<id root="f4dce790-8328-11db-9fe1-0800200c9a66"/>

<code nullFlavor="NA" />

<entryRelationship typeCode="SUBJ">

<procedure classCode="PROC" moodCode="PRMS">

<code code="73761001"

codeSystem="2.16.840.1.113883.6.96"

codeSystemName="SNOMED CT"

displayName="Colonoscopy"/>

</procedure>

</entryRelationship>

</act>

Boundary Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.6.2.11 (open)]

Table 241: Boundary Observation Contexts

| Contained By: | Contains: |
| --- | --- |
| [Referenced Frames Observation](#E_Referenced_Frames_Observation) (required) |  |

A Boundary Observation contains a list of integer values for the referenced frames of a DICOM multiframe image SOP instance. It identifies the frame numbers within the referenced SOP instance to which the reference applies. The CDA Boundary Observation numbers frames using the same convention as DICOM, with the first frame in the referenced object being Frame 1. A Boundary Observation must be used if a referenced DICOM SOP instance is a multiframe image and the reference does not apply to all frames.

Table 242: Boundary Observation Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.11) | | | | | |
| @classCode | 1..1 | SHALL |  | [81-9282](#C_81-9282) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [81-9283](#C_81-9283) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = EVN |
| code | 1..1 | SHALL |  | [81-9284](#C_81-9284) |  |
| @code | 1..1 | SHALL |  | [81-19157](#C_81-19157) | urn:oid:1.2.840.10008.2.16.4 (DCM) = 113036 |
| value | 1..\* | SHALL | INT | [81-9285](#C_81-9285) |  |

1. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:81-9282).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:81-9283).
3. SHALL contain exactly one [1..1] code (CONF:81-9284).
   1. This code SHALL contain exactly one [1..1] @code="113036" Frames for Display (CodeSystem: DCM urn:oid:1.2.840.10008.2.16.4 STATIC) (CONF:81-19157).

Each number represents a frame for display.

1. SHALL contain at least one [1..\*] value with @xsi:type="INT" (CONF:81-9285).

Figure 131: Boundary Observation Example

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.6.2.11"/>

<code code="113036" codeSystem="1.2.840.10008.2.16.4"

displayName="Frames for Display"/>

<value xsi:type="INT" value="1"/>

</observation>

Caregiver Characteristics

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

Table 243: Caregiver Characteristics Contexts

| Contained By: | Contains: |
| --- | --- |
| [Functional Status Section (V2)](#S_Functional_Status_Section_V2) (optional)  [Functional Status Observation (V2)](#E_Functional_Status_Observation_V2) (optional)  [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional)  [Social History Section (V3)](#S_Social_History_Section_V3) (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 244: 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 |  | [81-14219](#C_81-14219) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [81-14220](#C_81-14220) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [81-14221](#C_81-14221) |  |
| @root | 1..1 | SHALL |  | [81-14222](#C_81-14222) | 2.16.840.1.113883.10.20.22.4.72 |
| id | 1..\* | SHALL |  | [81-14223](#C_81-14223) |  |
| code | 1..1 | SHALL |  | [81-14230](#C_81-14230) |  |
| statusCode | 1..1 | SHALL |  | [81-14233](#C_81-14233) |  |
| @code | 1..1 | SHALL |  | [81-19090](#C_81-19090) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| value | 1..1 | SHALL | CD | [81-14599](#C_81-14599) |  |
| participant | 1..\* | SHALL |  | [81-14227](#C_81-14227) |  |
| @typeCode | 1..1 | SHALL |  | [81-26451](#C_81-26451) | IND |
| time | 0..1 | MAY |  | [81-14830](#C_81-14830) |  |
| low | 1..1 | SHALL |  | [81-14831](#C_81-14831) |  |
| high | 0..1 | MAY |  | [81-14832](#C_81-14832) |  |
| participantRole | 1..1 | SHALL |  | [81-14228](#C_81-14228) |  |
| @classCode | 1..1 | SHALL |  | [81-14229](#C_81-14229) | 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: HL7ActMood 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
   1. 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).
   1. 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).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus 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).
   1. 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).
   1. Such participants SHALL contain exactly one [1..1] @typeCode="IND" (CONF:81-26451).
   2. Such participants MAY contain zero or one [0..1] time (CONF:81-14830).
      1. The time, if present, SHALL contain exactly one [1..1] low (CONF:81-14831).
      2. The time, if present, MAY contain zero or one [0..1] high (CONF:81-14832).
   3. Such participants SHALL contain exactly one [1..1] participantRole (CONF:81-14228).
      1. This participantRole SHALL contain exactly one [1..1] @classCode="CAREGIVER" (CONF:81-14229).

Figure 132: 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>

Characteristics of Home Environment

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

Table 245: Characteristics of Home Environment Contexts

| Contained By: | Contains: |
| --- | --- |
| [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional)  [Social History Section (V3)](#S_Social_History_Section_V3) (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 246: 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 |  | [1098-27890](#C_1098-27890) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-27891](#C_1098-27891) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-27892](#C_1098-27892) |  |
| @root | 1..1 | SHALL |  | [1098-27893](#C_1098-27893) | 2.16.840.1.113883.10.20.22.4.109 |
| id | 1..\* | SHALL |  | [1098-27894](#C_1098-27894) |  |
| code | 1..1 | SHALL |  | [1098-31352](#C_1098-31352) |  |
| @code | 1..1 | SHALL |  | [1098-31353](#C_1098-31353) | 75274-1 |
| @codeSystem | 1..1 | SHALL |  | [1098-31354](#C_1098-31354) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1098-27901](#C_1098-27901) |  |
| @code | 1..1 | SHALL |  | [1098-27902](#C_1098-27902) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| value | 1..1 | SHALL | CD | [1098-28823](#C_1098-28823) | 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: HL7ActMood 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
   1. 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).
   1. This code SHALL contain exactly one [1..1] @code="75274-1" Characteristics of residence (CONF:1098-31353).
   2. 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).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus 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](#Residence_and_Accommodation_Type) urn:oid:2.16.840.1.113883.11.20.9.49 DYNAMIC (CONF:1098-28823).

Table 247: Residence and Accommodation Type

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Residence and Accommodation Type urn:oid:2.16.840.1.113883.11.20.9.49  (Clinical Focus: 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.),(Data Element Scope: element that is used to describe housing situation),(Inclusion Criteria: All descendants of 365508006),(Exclusion Criteria: )  This value set was imported on 6/29/2019 with a version of 20190319.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.49/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 105526001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Homeless family (finding) |
| 105527005 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Living in residence with poor sanitation (finding) |
| 105530003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Living in residential institution (finding) |
| 105531004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Housing unsatisfactory (finding) |
| 105532006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Overcrowded in house (finding) |
| 105535008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Lack of heat in house (finding) |
| 105536009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Living in housing without electricity (finding) |
| 105537000 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Living in housing with technical defects (finding) |
| 113165003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Duplex home living (finding) |
| 11762561000119103 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Assisted living facility patient (finding) |
| ... | | | |

Figure 133: 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>

Code Observations

[observation: identifier urn:oid:2.16.840.1.113883.10.20.6.2.13 (open)]

Table 248: Code Observations Contexts

| Contained By: | Contains: |
| --- | --- |
| [Diagnostic Imaging Report (V3)](#D_Diagnostic_Imaging_Report_V3) (optional) | [SOP Instance Observation](#E_SOP_Instance_Observation) (optional)  [Quantity Measurement Observation](#E_Quantity_Measurement_Observation) (optional) |

DICOM Template 2000 specifies that Imaging Report Elements of Value Type Code are contained in sections. The Imaging Report Elements are inferred from Basic Diagnostic Imaging Report Observations that consist of image references and measurements (linear, area, volume, and numeric). Coded DICOM Imaging Report Elements in this context are mapped to CDA-coded observations that are section components and are related to the SOP Instance Observations (templateId 2.16.840.1.113883.10.20.6.2.8) or Quantity Measurement Observations (templateId 2.16.840.1.113883.10.20.6.2.14) by the SPRT (Support) act relationship.

Table 249: Code Observations Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.13) | | | | | |
| @classCode | 1..1 | SHALL |  | [81-9304](#C_81-9304) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [81-9305](#C_81-9305) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [81-15523](#C_81-15523) |  |
| @root | 1..1 | SHALL |  | [81-15524](#C_81-15524) | 2.16.840.1.113883.10.20.6.2.13 |
| code | 1..1 | SHALL |  | [81-19181](#C_81-19181) |  |
| effectiveTime | 0..1 | SHOULD |  | [81-9309](#C_81-9309) |  |
| value | 1..1 | SHALL |  | [81-9308](#C_81-9308) |  |
| entryRelationship | 0..\* | MAY |  | [81-9311](#C_81-9311) |  |
| @typeCode | 1..1 | SHALL |  | [81-9312](#C_81-9312) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SPRT |
| observation | 1..1 | SHALL |  | [81-16083](#C_81-16083) | [SOP Instance Observation (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.8](#E_SOP_Instance_Observation) |
| entryRelationship | 0..\* | MAY |  | [81-9314](#C_81-9314) |  |
| @typeCode | 1..1 | SHALL |  | [81-9315](#C_81-9315) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SPRT |
| observation | 1..1 | SHALL |  | [81-16084](#C_81-16084) | [Quantity Measurement Observation (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.14](#E_Quantity_Measurement_Observation) |

1. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:81-9304).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:81-9305).
3. SHALL contain exactly one [1..1] templateId (CONF:81-15523).
   1. This templateId SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.6.2.13" (CONF:81-15524).
4. SHALL contain exactly one [1..1] code (CONF:81-19181).
5. SHOULD contain zero or one [0..1] effectiveTime (CONF:81-9309).
6. SHALL contain exactly one [1..1] value (CONF:81-9308).
7. MAY contain zero or more [0..\*] entryRelationship (CONF:81-9311) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SPRT" Has Support (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:81-9312).
   2. SHALL contain exactly one [1..1] [SOP Instance Observation](#E_SOP_Instance_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.8) (CONF:81-16083).
8. MAY contain zero or more [0..\*] entryRelationship (CONF:81-9314) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SPRT" Has Support (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:81-9315).
   2. SHALL contain exactly one [1..1] [Quantity Measurement Observation](#E_Quantity_Measurement_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.14) (CONF:81-16084).
9. Code Observations SHALL be rendered into section/text in separate paragraphs (CONF:81-9310).

Figure 134: Code Observations Example

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.6.2.13"/>

<code code="18782-3" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="Study observation"/>

<statusCode code="completed"/>

<value xsi:type="CD" code="309530007"

codeSystem="2.16.840.1.113883.6.96"

codeSystemName="SNOMED CT"

displayName="Hilar mass"/>

<!-- entryRelationship elements referring to SOP Instance Observations

or Quantity Measurement Observations may appear here -->

</observation>

Cognitive Status Problem Observation (DEPRECATED)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.73:2014-06-09 (open)]

Table 250: Cognitive Status Problem Observation (DEPRECATED) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Functional Status Section (V2)](#S_Functional_Status_Section_V2) (optional) |  |

A cognitive status problem observation is a clinical statement that describes a patient's cognitive condition, findings, or symptoms. Examples of cognitive problem observations are inability to recall, amnesia, dementia, and aggressive behavior.

A cognitive problem observation is a finding or medical condition. This is different from a cognitive result observation, which is a response to a question that provides insight into the patient's cognitive status, judgement, comprehension ability, or response speed.

THIS TEMPLATE HAS BEEN DEPRECATED AND MAY BE DELETED FROM A FUTURE RELEASE OF THIS IMPLEMENTATION GUIDE. USE OF THIS TEMPLATE IS NOT RECOMMENDED.

*Reason for deprecation*: Cognitive Status Problem Observation has been merged, without loss of expressivity, into Mental Status Observation (2.16.840.1.113883.10.20.22.4.74).

Table 251: Cognitive Status Problem Observation (DEPRECATED) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.73:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-14319](#C_1098-14319) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-14320](#C_1098-14320) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| @negationInd | 0..1 | MAY |  | [1098-14344](#C_1098-14344) |  |
| templateId | 1..1 | SHALL |  | [1098-14346](#C_1098-14346) |  |
| @root | 1..1 | SHALL |  | [1098-14347](#C_1098-14347) | 2.16.840.1.113883.10.20.22.4.73 |
| @extension | 1..1 | SHALL |  | [1098-32600](#C_1098-32600) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-14321](#C_1098-14321) |  |
| code | 1..1 | SHALL |  | [1098-14804](#C_1098-14804) |  |
| @code | 0..1 | SHOULD |  | [1098-14805](#C_1098-14805) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 373930000 |
| text | 0..1 | SHOULD |  | [1098-14341](#C_1098-14341) |  |
| reference | 0..1 | SHOULD |  | [1098-15532](#C_1098-15532) |  |
| @value | 0..1 | SHOULD |  | [1098-15533](#C_1098-15533) |  |
| statusCode | 1..1 | SHALL |  | [1098-14323](#C_1098-14323) |  |
| @code | 1..1 | SHALL |  | [1098-19091](#C_1098-19091) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 0..1 | SHOULD |  | [1098-14324](#C_1098-14324) |  |
| low | 1..1 | SHALL |  | [1098-26458](#C_1098-26458) |  |
| high | 0..1 | MAY |  | [1098-26459](#C_1098-26459) |  |
| value | 1..1 | SHALL | CD | [1098-14349](#C_1098-14349) | urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 (Problem) |
| methodCode | 0..\* | MAY |  | [1098-14693](#C_1098-14693) |  |

1. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1098-14319).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1098-14320).

Use negationInd="true" to indicate that the problem was not observed.

1. MAY contain zero or one [0..1] @negationInd (CONF:1098-14344).
2. SHALL contain exactly one [1..1] templateId (CONF:1098-14346) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.73" (CONF:1098-14347).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32600).
3. SHALL contain at least one [1..\*] id (CONF:1098-14321).
4. SHALL contain exactly one [1..1] code (CONF:1098-14804).
   1. This code SHOULD contain zero or one [0..1] @code="373930000" Cognitive function finding (CodeSystem: SNOMED CT urn:oid:2.16.840.1.113883.6.96 STATIC) (CONF:1098-14805).
5. SHOULD contain zero or one [0..1] text (CONF:1098-14341).
   1. The text, if present, SHOULD contain zero or one [0..1] reference (CONF:1098-15532).
      1. The reference, if present, SHOULD contain zero or one [0..1] @value (CONF:1098-15533).
         1. 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:1098-15534).
6. SHALL contain exactly one [1..1] statusCode (CONF:1098-14323).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1098-19091).
7. SHOULD contain zero or one [0..1] effectiveTime (CONF:1098-14324).

The value of effectiveTime/low represents onset date.

* 1. The effectiveTime, if present, SHALL contain exactly one [1..1] low (CONF:1098-26458).

If the problem is resolved, record the resolution date in effectiveTime/high. If the problem is known to be resolved but the resolution date is not known, use @nullFlavor="UNK". If the problem is not resolved, do not include the high element.

* 1. The effectiveTime, if present, MAY contain zero or one [0..1] high (CONF:1098-26459).

1. SHALL contain exactly one [1..1] value with @xsi:type="CD", where the code SHOULD be selected from ValueSet [Problem](#Problem) urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 DYNAMIC (CONF:1098-14349).
2. MAY contain zero or more [0..\*] methodCode (CONF:1098-14693).

Table 252: Problem

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Problem urn:oid:2.16.840.1.113883.3.88.12.3221.7.4  (Clinical Focus: A pathology or disorder identified in a patient),(Data Element Scope: Observations),(Inclusion Criteria: Limited to terms descending from the Clinical Findings (404684003) or Situation with Explicit Context (243796009) hierarchies.),(Exclusion Criteria: any concept not in the hierarchies specified)  This value set was imported on 6/26/2019 with a version of 20190426.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.3221.7.4/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 10000006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Radiating chest pain (finding) |
| 10001005 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Bacterial sepsis (disorder) |
| 10007009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Coffin-Siris syndrome (disorder) |
| 1001000119102 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Pulmonary embolism with pulmonary infarction (disorder) |
| 1001000124104 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Normal left ventricular systolic function (finding) |
| 10017004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Occlusal wear of teeth (disorder) |
| 100191000119105 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Asymmetry of prostate (finding) |
| 100211000119106 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Muscle spasm of thoracic back (disorder) |
| 100231000119101 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Acquired pericardial cyst (disorder) |
| 10028000 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Uncomplicated sedative, hypnotic AND/OR anxiolytic withdrawal (disorder) |
| ... | | | |

Comment Activity

[act: identifier urn:oid:2.16.840.1.113883.10.20.22.4.64 (open)]

Table 253: Comment Activity Contexts

| Contained By: | Contains: |
| --- | --- |
|  | [Author Participation](#U_Author_Participation) (optional) |

Comments are free text data that cannot otherwise be recorded using data elements already defined by this specification. They are not to be used to record information that can be recorded elsewhere. For example, a free text description of the severity of an allergic reaction would not be recorded in a comment.

Table 254: Comment Activity Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.64) | | | | | |
| @classCode | 1..1 | SHALL |  | [81-9425](#C_81-9425) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [81-9426](#C_81-9426) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [81-9427](#C_81-9427) |  |
| @root | 1..1 | SHALL |  | [81-10491](#C_81-10491) | 2.16.840.1.113883.10.20.22.4.64 |
| code | 1..1 | SHALL |  | [81-9428](#C_81-9428) |  |
| @code | 1..1 | SHALL |  | [81-19159](#C_81-19159) | 48767-8 |
| @codeSystem | 1..1 | SHALL |  | [81-26501](#C_81-26501) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| text | 1..1 | SHALL |  | [81-9430](#C_81-9430) |  |
| reference | 1..1 | SHALL |  | [81-15967](#C_81-15967) |  |
| @value | 1..1 | SHALL |  | [81-15968](#C_81-15968) |  |
| author | 0..1 | SHOULD |  | [81-9433](#C_81-9433) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |

1. SHALL contain exactly one [1..1] @classCode="ACT" Act (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:81-9425).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:81-9426).
3. SHALL contain exactly one [1..1] templateId (CONF:81-9427) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.64" (CONF:81-10491).
4. SHALL contain exactly one [1..1] code (CONF:81-9428).
   1. This code SHALL contain exactly one [1..1] @code="48767-8" Annotation Comment (CONF:81-19159).
   2. 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:81-26501).
5. SHALL contain exactly one [1..1] text (CONF:81-9430).
   1. This text SHALL contain exactly one [1..1] reference (CONF:81-15967).
      1. This reference SHALL contain exactly one [1..1] @value (CONF:81-15968).
         1. This reference/@value SHALL begin with a '#' and SHALL point to its corresponding narrative (using the approach defined in CDA Release 2, section 4.3.5.1) (CONF:81-15969).
6. SHOULD contain zero or one [0..1] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:81-9433).
7. Data elements defined elsewhere in the specification SHALL NOT be recorded using the Comment Activity (CONF:81-9429).

Figure 135: Comment Activity Example

<act classCode="ACT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.64"/>

<code code="48767-8" displayName="Annotation Comment"

codeSystemName="LOINC"

codeSystem="2.16.840.1.113883.6.1"/>

<text>The patient stated that he was looking forward to an upcoming

vacation to New York with his family. He was concerned that he may

not have enough medication for the trip. An additional prescription

was provided to cover that period of time.

<reference value="#PntrtoSectionText"/>

</text>

<author>

<time value="20050329224411+0500"/>

<assignedAuthor>

<id extension="KP00017" root="2.16.840.1.113883.19.5"/>

<addr>

<streetAddressLine>21 North Ave.</streetAddressLine>

<city>Burlington</city>

<state>MA</state>

<postalCode>02368</postalCode>

<country>US</country>

</addr>

<telecom use="WP" value="tel:(555)555-1003"/>

<assignedPerson>

<name>

<given>Henry</given>

<family>Seven</family>

</name>

</assignedPerson>

</assignedAuthor>

</author>

</act>

Coverage Activity (V3)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.60:2015-08-01 (open)]

Table 255: Coverage Activity (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Payers Section (V3)](#S_Payers_Section_V3) (optional) | [Policy Activity (V3)](#E_Policy_Activity_V3) (required) |

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 256: Coverage Activity (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.60:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-8872](#C_1198-8872) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1198-8873](#C_1198-8873) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-8897](#C_1198-8897) |  |
| @root | 1..1 | SHALL |  | [1198-10492](#C_1198-10492) | 2.16.840.1.113883.10.20.22.4.60 |
| @extension | 1..1 | SHALL |  | [1198-32596](#C_1198-32596) | 2015-08-01 |
| id | 1..\* | SHALL |  | [1198-8874](#C_1198-8874) |  |
| code | 1..1 | SHALL |  | [1198-8876](#C_1198-8876) |  |
| @code | 1..1 | SHALL |  | [1198-19160](#C_1198-19160) | 48768-6 |
| @codeSystem | 1..1 | SHALL |  | [1198-32156](#C_1198-32156) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1198-8875](#C_1198-8875) |  |
| @code | 1..1 | SHALL |  | [1198-19094](#C_1198-19094) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| entryRelationship | 1..\* | SHALL |  | [1198-8878](#C_1198-8878) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8879](#C_1198-8879) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| sequenceNumber | 0..1 | MAY |  | [1198-17174](#C_1198-17174) |  |
| @value | 1..1 | SHALL |  | [1198-17175](#C_1198-17175) |  |
| act | 1..1 | SHALL |  | [1198-15528](#C_1198-15528) | [Policy Activity (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.61:2015-08-01](#E_Policy_Activity_V3) |

1. SHALL contain exactly one [1..1] @classCode="ACT" Act (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-8872).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-8873).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-8897) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.60" (CONF:1198-10492).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32596).
4. SHALL contain at least one [1..\*] id (CONF:1198-8874).
5. SHALL contain exactly one [1..1] code (CONF:1198-8876).
   1. This code SHALL contain exactly one [1..1] @code="48768-6" Payment sources (CONF:1198-19160).
   2. 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:1198-32156).
6. SHALL contain exactly one [1..1] statusCode (CONF:1198-8875).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1198-19094).
7. SHALL contain at least one [1..\*] entryRelationship (CONF:1198-8878) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" has component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1198-8879).
   2. MAY contain zero or one [0..1] sequenceNumber (CONF:1198-17174).
      1. The sequenceNumber, if present, SHALL contain exactly one [1..1] @value (CONF:1198-17175).
   3. SHALL contain exactly one [1..1] [Policy Activity (V3)](#E_Policy_Activity_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.61:2015-08-01) (CONF:1198-15528).

Figure 136: Coverage Activity (V3) Example

<act classCode="ACT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.60" extension="2015-08-01" />

<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="2015-08-01" />

. . .

</act>

</entryRelationship>

</act>

Criticality Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.145 (open)]

Table 257: Criticality Observation Contexts

| Contained By: | Contains: |
| --- | --- |
| [Allergy - Intolerance Observation (V2)](#E_Allergy__Intolerance_Observation_V2) (optional)  [Substance or Device Allergy - Intolerance Observation (V2)](#E_Substance_or_Device_Allergy__V2) (optional) |  |

This observation represents the gravity of the potential risk for future life-threatening adverse reactions when exposed to a substance known to cause an adverse reaction in that individual. When the worst case result is assessed to have a life-threatening or organ system threatening potential, it is considered to be of high criticality.

Table 258: Criticality Observation Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.145) | | | | | |
| @classCode | 1..1 | SHALL |  | [81-32921](#C_81-32921) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [81-32922](#C_81-32922) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [81-32918](#C_81-32918) |  |
| @root | 1..1 | SHALL |  | [81-32923](#C_81-32923) | 2.16.840.1.113883.10.20.22.4.145 |
| code | 1..1 | SHALL |  | [81-32919](#C_81-32919) |  |
| @code | 1..1 | SHALL |  | [81-32925](#C_81-32925) | 82606-5 |
| @codeSystem | 1..1 | SHALL |  | [81-32926](#C_81-32926) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [81-32920](#C_81-32920) |  |
| @code | 1..1 | SHALL |  | [81-32927](#C_81-32927) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| value | 1..1 | SHALL | CD | [81-32928](#C_81-32928) | urn:oid:2.16.840.1.113883.1.11.20549 (Criticality Observation) |

1. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:81-32921).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:81-32922).
3. SHALL contain exactly one [1..1] templateId (CONF:81-32918) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.145" (CONF:81-32923).
4. SHALL contain exactly one [1..1] code (CONF:81-32919).
   1. This code SHALL contain exactly one [1..1] @code="82606-5" Criticality (CONF:81-32925).
   2. 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:81-32926).
5. SHALL contain exactly one [1..1] statusCode (CONF:81-32920).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:81-32927).
6. SHALL contain exactly one [1..1] value with @xsi:type="CD", where the code SHALL be selected from ValueSet [Criticality Observation](#Criticality_Observation) urn:oid:2.16.840.1.113883.1.11.20549 DYNAMIC (CONF:81-32928).

Table 259: Criticality Observation

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Criticality Observation urn:oid:2.16.840.1.113883.1.11.20549  (Clinical Focus: A clinical judgment as to the worst case result of a future exposure (including substance administration).),(Data Element Scope: observation),(Inclusion Criteria: All descendant codes from \_CriticalityObservationValue in code system ObservationValue),(Exclusion Criteria: none)  This value set was imported on 6/24/2019 with a version of 20190425.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.20549/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| CRITH | HL7ObservationValue | urn:oid:2.16.840.1.113883.5.1063 | high criticality |
| CRITL | HL7ObservationValue | urn:oid:2.16.840.1.113883.5.1063 | low criticality |
| CRITU | HL7ObservationValue | urn:oid:2.16.840.1.113883.5.1063 | unable to assess criticality |

Figure 137: Criticality Observation Example

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.145"/>

<code code="82606-5" codeSystem="2.16.840.1.113883.6.1"

displayName="Criticality" />

<text>

<reference value="#criticality"/>

</text>

<statusCode code="completed"/>

<value xsi:type="CD" code="CRITH" displayName="high criticality" codeSystem="2.16.840.1.113883.5.10.63"

codeSystemName="HL7ObservationValue"/>

</observation>

Cultural and Religious Observation

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

Table 260: Cultural and Religious Observation Contexts

| Contained By: | Contains: |
| --- | --- |
| [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional)  [Social History Section (V3)](#S_Social_History_Section_V3) (optional) |  |

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

Table 261: 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 |  | [1098-27924](#C_1098-27924) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-27925](#C_1098-27925) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-27926](#C_1098-27926) |  |
| @root | 1..1 | SHALL |  | [1098-27927](#C_1098-27927) | 2.16.840.1.113883.10.20.22.4.111 |
| id | 1..\* | SHALL |  | [1098-27928](#C_1098-27928) |  |
| code | 1..1 | SHALL |  | [1098-27929](#C_1098-27929) |  |
| @code | 1..1 | SHALL |  | [1098-27930](#C_1098-27930) | 75281-6 |
| @codeSystem | 1..1 | SHALL |  | [1098-27931](#C_1098-27931) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1098-27936](#C_1098-27936) |  |
| @code | 1..1 | SHALL |  | [1098-27937](#C_1098-27937) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| value | 1..1 | SHALL |  | [1098-28442](#C_1098-28442) |  |

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: HL7ActMood 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
   1. 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).
   1. This code SHALL contain exactly one [1..1] @code="75281-6" Personal belief (CONF:1098-27930).
   2. 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).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1098-27937).
7. SHALL contain exactly one [1..1] value (CONF:1098-28442).
   1. 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 138: 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>

Deceased Observation (V3)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.79:2015-08-01 (open)]

Table 262: Deceased Observation (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
|  | [Problem Observation (V3)](#E_Problem_Observation_V3) (optional) |

This template represents the observation that a patient has died. It also represents the cause of death, indicated by an entryRelationship type of ‘CAUS’. This template allows for more specific representation of data than is available with the use of dischargeDispositionCode.

Table 263: Deceased Observation (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.79:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-14851](#C_1198-14851) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1198-14852](#C_1198-14852) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-14871](#C_1198-14871) |  |
| @root | 1..1 | SHALL |  | [1198-14872](#C_1198-14872) | 2.16.840.1.113883.10.20.22.4.79 |
| @extension | 1..1 | SHALL |  | [1198-32541](#C_1198-32541) | 2015-08-01 |
| id | 1..\* | SHALL |  | [1198-14873](#C_1198-14873) |  |
| code | 1..1 | SHALL |  | [1198-14853](#C_1198-14853) |  |
| @code | 1..1 | SHALL |  | [1198-19135](#C_1198-19135) | ASSERTION |
| @codeSystem | 1..1 | SHALL |  | [1198-32158](#C_1198-32158) | urn:oid:2.16.840.1.113883.5.4 (HL7ActCode) = 2.16.840.1.113883.5.4 |
| statusCode | 1..1 | SHALL |  | [1198-14854](#C_1198-14854) |  |
| @code | 1..1 | SHALL |  | [1198-19095](#C_1198-19095) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1198-14855](#C_1198-14855) |  |
| low | 1..1 | SHALL |  | [1198-14874](#C_1198-14874) |  |
| value | 1..1 | SHALL | CD | [1198-14857](#C_1198-14857) |  |
| @code | 1..1 | SHALL |  | [1198-15142](#C_1198-15142) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 419099009 |
| entryRelationship | 0..1 | SHOULD |  | [1198-14868](#C_1198-14868) |  |
| @typeCode | 1..1 | SHALL |  | [1198-14875](#C_1198-14875) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = CAUS |
| @inversionInd | 1..1 | SHALL |  | [1198-32900](#C_1198-32900) | true |
| observation | 1..1 | SHALL |  | [1198-14870](#C_1198-14870) | [Problem Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01](#E_Problem_Observation_V3) |

1. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-14851).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-14852).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-14871) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.79" (CONF:1198-14872).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32541).
4. SHALL contain at least one [1..\*] id (CONF:1198-14873).
5. SHALL contain exactly one [1..1] code (CONF:1198-14853).
   1. This code SHALL contain exactly one [1..1] @code="ASSERTION" Assertion (CONF:1198-19135).
   2. This code SHALL contain exactly one [1..1] @codeSystem="2.16.840.1.113883.5.4" (CodeSystem: HL7ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:1198-32158).
6. SHALL contain exactly one [1..1] statusCode (CONF:1198-14854).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1198-19095).
7. SHALL contain exactly one [1..1] effectiveTime (CONF:1198-14855).
   1. This effectiveTime SHALL contain exactly one [1..1] low (CONF:1198-14874).
8. SHALL contain exactly one [1..1] value with @xsi:type="CD" (CONF:1198-14857).
   1. This value SHALL contain exactly one [1..1] @code="419099009" Dead (CodeSystem: SNOMED CT urn:oid:2.16.840.1.113883.6.96 STATIC) (CONF:1198-15142).
9. SHOULD contain zero or one [0..1] entryRelationship (CONF:1198-14868) such that it
   1. SHALL contain exactly one [1..1] @typeCode="CAUS" Is etiology for (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1198-14875).
   2. SHALL contain exactly one [1..1] @inversionInd="true" True (CONF:1198-32900).
   3. SHALL contain exactly one [1..1] [Problem Observation (V3)](#E_Problem_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01) (CONF:1198-14870).

Figure 139: Deceased Observation (V3) Example

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.79" extension="2015-08-01" />

<id root="6898fae0-5c8a-11db-b0de-0800200c9a77" />

<code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4" />

<statusCode code="completed" />

<effectiveTime>

<low value="20100303" />

</effectiveTime>

<value xsi:type="CD" code="419099009" codeSystem="2.16.840.1.113883.6.96" displayName="Dead" />

<entry typeCode="DRIV">

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2015-08-01" />

...

</observation>

</entry>

</observation>

Discharge Medication (V3)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.35:2016-03-01 (open)]

Table 264: Discharge Medication (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Discharge Medications Section (entries optional) (V3)](#S_Discharge_Meds_Sec_entries_Opt) (optional)  [Discharge Medications Section (entries required) (V3)](#S_Discharge_Meds_Section_entries_R) (required) | [Medication Activity (V2)](#Medication_Activity_V2) (required) |

This template represents medications that the patient is intended to take (or stop) after discharge.

Table 265: Discharge Medication (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.35:2016-03-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-7689](#C_1198-7689) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1198-7690](#C_1198-7690) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-16760](#C_1198-16760) |  |
| @root | 1..1 | SHALL |  | [1198-16761](#C_1198-16761) | 2.16.840.1.113883.10.20.22.4.35 |
| @extension | 1..1 | SHALL |  | [1198-32513](#C_1198-32513) | 2016-03-01 |
| code | 1..1 | SHALL |  | [1198-7691](#C_1198-7691) |  |
| @code | 1..1 | SHALL |  | [1198-19161](#C_1198-19161) | 10183-2 |
| @codeSystem | 1..1 | SHALL |  | [1198-32159](#C_1198-32159) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| translation | 1..1 | SHALL |  | [1198-32952](#C_1198-32952) |  |
| @code | 1..1 | SHALL |  | [1198-32953](#C_1198-32953) | 75311-1 |
| @codeSystem | 1..1 | SHALL |  | [1198-32954](#C_1198-32954) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1198-32779](#C_1198-32779) |  |
| @code | 1..1 | SHALL |  | [1198-32780](#C_1198-32780) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| entryRelationship | 1..\* | SHALL |  | [1198-7692](#C_1198-7692) |  |
| @typeCode | 1..1 | SHALL |  | [1198-7693](#C_1198-7693) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| substanceAdministration | 1..1 | SHALL |  | [1198-15525](#C_1198-15525) | [Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09](#Medication_Activity_V2) |

1. SHALL contain exactly one [1..1] @classCode="ACT" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-7689).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-7690).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-16760) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.35" (CONF:1198-16761).
   2. SHALL contain exactly one [1..1] @extension="2016-03-01" (CONF:1198-32513).
4. SHALL contain exactly one [1..1] code (CONF:1198-7691).
   1. This code SHALL contain exactly one [1..1] @code="10183-2" Hospital discharge medication (CONF:1198-19161).
   2. 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:1198-32159).
   3. This code SHALL contain exactly one [1..1] translation (CONF:1198-32952).
      1. This translation SHALL contain exactly one [1..1] @code="75311-1" Discharge Medication (CONF:1198-32953).
      2. This translation 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:1198-32954).
5. SHALL contain exactly one [1..1] statusCode (CONF:1198-32779).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1198-32780).
6. SHALL contain at least one [1..\*] entryRelationship (CONF:1198-7692) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has Subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1198-7693).
   2. SHALL contain exactly one [1..1] [Medication Activity (V2)](#Medication_Activity_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09) (CONF:1198-15525).

Figure 140: Discharge Medication (V3) Example

<act classCode="ACT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.35" extension="2014-06-09" />

<code code="10183-2"

displayName="Hospital discharge medication"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC">

<translation code="75311-1"

displayName="Discharge medication"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"/>

</code>

<statusCode code="completed" />

<entryRelationship typeCode="SUBJ">

<substanceAdministration classCode="SBADM" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.16" extension="2014-06-09" />

...

</substanceAdministration>

</entryRelationship>

</act>

Drug Monitoring Act

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

Table 266: Drug Monitoring Act Contexts

| Contained By: | Contains: |
| --- | --- |
| [Medication Activity (V2)](#Medication_Activity_V2) (optional) | [US Realm Person Name (PN.US.FIELDED)](#U_US_Realm_Person_Name_PNUSFIELDED) (required) |

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 laboratory results. Here the person designated to monitor the drug is the primary care provider.

Table 267: Drug Monitoring Act Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.123) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-30823](#C_1098-30823) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1098-28656](#C_1098-28656) | INT |
| templateId | 1..1 | SHALL |  | [1098-28657](#C_1098-28657) |  |
| @root | 1..1 | SHALL |  | [1098-28658](#C_1098-28658) | 2.16.840.1.113883.10.20.22.4.123 |
| id | 1..\* | SHALL |  | [1098-31920](#C_1098-31920) |  |
| code | 1..1 | SHALL |  | [1098-28660](#C_1098-28660) |  |
| @code | 1..1 | SHALL |  | [1098-30818](#C_1098-30818) | 395170001 |
| @codeSystem | 1..1 | SHALL |  | [1098-30819](#C_1098-30819) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.6.96 |
| statusCode | 1..1 | SHALL |  | [1098-31921](#C_1098-31921) |  |
| @code | 1..1 | SHALL |  | [1098-32358](#C_1098-32358) | urn:oid:2.16.840.1.113883.1.11.15933 (ActStatus) |
| effectiveTime | 1..1 | SHALL |  | [1098-31922](#C_1098-31922) |  |
| participant | 1..\* | SHALL |  | [1098-28661](#C_1098-28661) |  |
| @typeCode | 1..1 | SHALL |  | [1098-28663](#C_1098-28663) | RESP |
| participantRole | 1..1 | SHALL |  | [1098-28662](#C_1098-28662) |  |
| @classCode | 1..1 | SHALL |  | [1098-28664](#C_1098-28664) | ASSIGNED |
| id | 1..\* | SHALL |  | [1098-28665](#C_1098-28665) |  |
| playingEntity | 1..1 | SHALL |  | [1098-28667](#C_1098-28667) |  |
| @classCode | 1..1 | SHALL |  | [1098-28668](#C_1098-28668) | PSN |
| name | 1..1 | SHALL |  | [1098-28669](#C_1098-28669) | [US Realm Person Name (PN.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1](#U_US_Realm_Person_Name_PNUSFIELDED) |

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
   1. 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).
   1. This code SHALL contain exactly one [1..1] @code="395170001" medication monitoring (regime/therapy) (CONF:1098-30818).
   2. 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).
   1. This statusCode SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [ActStatus](#ActStatus) urn:oid:2.16.840.1.113883.1.11.15933 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
   1. SHALL contain exactly one [1..1] @typeCode="RESP" (CONF:1098-28663).
   2. SHALL contain exactly one [1..1] participantRole (CONF:1098-28662).
      1. This participantRole SHALL contain exactly one [1..1] @classCode="ASSIGNED" (CONF:1098-28664).
      2. This participantRole SHALL contain at least one [1..\*] id (CONF:1098-28665).
      3. 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 Person Name (PN.US.FIELDED)](#U_US_Realm_Person_Name_PNUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1098-28669).

Table 268: ActStatus

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: ActStatus urn:oid:2.16.840.1.113883.1.11.15933  Contains the names (codes) for each of the states in the state-machine of the RIM Act class.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.15933/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| normal | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | normal |
| aborted | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | aborted |
| active | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | active |
| cancelled | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | cancelled |
| completed | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | completed |
| held | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | held |
| new | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | new |
| suspended | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | suspended |
| nullified | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | nullified |
| obsolete | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | obsolete |

Figure 141: 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>

Drug Vehicle

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

Table 269: Drug Vehicle Contexts

| Contained By: | Contains: |
| --- | --- |
| [Medication Activity (V2)](#Medication_Activity_V2) (optional)  [Immunization Activity (V3)](#E_Immunization_Activity_V3) (optional) |  |

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

Table 270: 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 |  | [81-7490](#C_81-7490) | urn:oid:2.16.840.1.113883.5.110 (HL7RoleClass) = MANU |
| templateId | 1..1 | SHALL |  | [81-7495](#C_81-7495) |  |
| @root | 1..1 | SHALL |  | [81-10493](#C_81-10493) | 2.16.840.1.113883.10.20.22.4.24 |
| code | 1..1 | SHALL |  | [81-19137](#C_81-19137) |  |
| @code | 1..1 | SHALL |  | [81-19138](#C_81-19138) | 412307009 |
| @codeSystem | 1..1 | SHALL |  | [81-26502](#C_81-26502) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.6.96 |
| playingEntity | 1..1 | SHALL |  | [81-7492](#C_81-7492) |  |
| code | 1..1 | SHALL |  | [81-7493](#C_81-7493) |  |
| name | 0..1 | MAY |  | [81-7494](#C_81-7494) |  |

1. SHALL contain exactly one [1..1] @classCode="MANU" (CodeSystem: HL7RoleClass 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
   1. 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).
   1. This code SHALL contain exactly one [1..1] @code="412307009" Drug Vehicle (CONF:81-19138).
   2. 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.

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

Figure 142: 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>

Encounter Activity (V3)

[encounter: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2015-08-01 (open)]

Table 271: Encounter Activity (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Planned Intervention Act (V2)](#E_Planned_Intervention_Act_V2) (optional)  [Intervention Act (V2)](#E_Intervention_Act_V2) (optional)  [Encounters Section (entries optional) (V3)](#S_Encounters_Section_entries_optional_V3) (optional)  [Encounters Section (entries required) (V3)](#S_Encounters_Section_entries_required_V3) (required) | [Service Delivery Location](#E_Service_Delivery_Location) (optional)  [Indication (V2)](#Indication_V2) (optional)  [Encounter Diagnosis (V3)](#E_Encounter_Diagnosis_V3) (optional) |

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

Table 272: Encounter Activity (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| encounter (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-8710](#C_1198-8710) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ENC |
| @moodCode | 1..1 | SHALL |  | [1198-8711](#C_1198-8711) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-8712](#C_1198-8712) |  |
| @root | 1..1 | SHALL |  | [1198-26353](#C_1198-26353) | 2.16.840.1.113883.10.20.22.4.49 |
| @extension | 1..1 | SHALL |  | [1198-32546](#C_1198-32546) | 2015-08-01 |
| id | 1..\* | SHALL |  | [1198-8713](#C_1198-8713) |  |
| code | 1..1 | SHALL |  | [1198-8714](#C_1198-8714) | urn:oid:2.16.840.1.113883.3.88.12.80.32 (EncounterTypeCode) |
| originalText | 0..1 | SHOULD |  | [1198-8719](#C_1198-8719) |  |
| reference | 0..1 | SHOULD |  | [1198-15970](#C_1198-15970) |  |
| @value | 0..1 | SHOULD |  | [1198-15971](#C_1198-15971) |  |
| translation | 0..1 | MAY |  | [1198-32323](#C_1198-32323) |  |
| @code | 1..1 | SHALL |  | [1198-32972](#C_1198-32972) | urn:oid:2.16.840.1.113883.11.20.9.52 (Encounter Planned) |
| effectiveTime | 1..1 | SHALL |  | [1198-8715](#C_1198-8715) |  |
| sdtc:dischargeDispositionCode | 0..1 | MAY |  | [1198-32176](#C_1198-32176) |  |
| @code | 0..1 | SHOULD |  | [1198-32981](#C_1198-32981) | urn:oid:2.16.840.1.113883.3.88.12.80.33 (NUBC UB-04 FL17 Patient Status) |
| performer | 0..\* | MAY |  | [1198-8725](#C_1198-8725) |  |
| assignedEntity | 1..1 | SHALL |  | [1198-8726](#C_1198-8726) |  |
| code | 0..1 | MAY |  | [1198-8727](#C_1198-8727) | urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy) |
| participant | 0..\* | SHOULD |  | [1198-8738](#C_1198-8738) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8740](#C_1198-8740) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = LOC |
| participantRole | 1..1 | SHALL |  | [1198-14903](#C_1198-14903) | [Service Delivery Location (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32](#E_Service_Delivery_Location) |
| entryRelationship | 0..\* | MAY |  | [1198-8722](#C_1198-8722) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8723](#C_1198-8723) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [1198-14899](#C_1198-14899) | [Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09](#Indication_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-15492](#C_1198-15492) |  |
| act | 1..1 | SHALL |  | [1198-15973](#C_1198-15973) | [Encounter Diagnosis (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.80:2015-08-01](#E_Encounter_Diagnosis_V3) |

1. SHALL contain exactly one [1..1] @classCode="ENC" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-8710).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-8711).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-8712) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.49" (CONF:1198-26353).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32546).
4. SHALL contain at least one [1..\*] id (CONF:1198-8713).
5. SHALL contain exactly one [1..1] code, which SHOULD be selected from ValueSet [EncounterTypeCode](#EncounterTypeCode) urn:oid:2.16.840.1.113883.3.88.12.80.32 DYNAMIC (CONF:1198-8714).
   1. This code SHOULD contain zero or one [0..1] originalText (CONF:1198-8719).
      1. The originalText, if present, SHOULD contain zero or one [0..1] reference (CONF:1198-15970).
         1. The reference, if present, SHOULD contain zero or one [0..1] @value (CONF:1198-15971).
            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:1198-15972).
   2. This code MAY contain zero or one [0..1] translation (CONF:1198-32323) such that it
      1. SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [Encounter Planned](#Encounter_Planned) urn:oid:2.16.840.1.113883.11.20.9.52 DYNAMIC (CONF:1198-32972).
6. SHALL contain exactly one [1..1] effectiveTime (CONF:1198-8715).
7. MAY contain zero or one [0..1] sdtc:dischargeDispositionCode (CONF:1198-32176).  
   Note: 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 dischargeDispositionCode element
   1. The sdtc:dischargeDispositionCode, if present, SHOULD contain zero or one [0..1] @code, which SHOULD be selected from ValueSet [NUBC UB-04 FL17 Patient Status](#NUBC_UB04_FL17_Patient_Status) urn:oid:2.16.840.1.113883.3.88.12.80.33 (CONF:1198-32981).
8. MAY contain zero or more [0..\*] performer (CONF:1198-8725).
   1. The performer, if present, SHALL contain exactly one [1..1] assignedEntity (CONF:1198-8726).
      1. This assignedEntity MAY contain zero or one [0..1] code, which SHOULD be selected from ValueSet [Healthcare Provider Taxonomy](#Healthcare_Provider_Taxonomy) urn:oid:2.16.840.1.114222.4.11.1066 DYNAMIC (CONF:1198-8727).
9. SHOULD contain zero or more [0..\*] participant (CONF:1198-8738) such that it
   1. SHALL contain exactly one [1..1] @typeCode="LOC" Location (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 STATIC) (CONF:1198-8740).
   2. SHALL contain exactly one [1..1] [Service Delivery Location](#E_Service_Delivery_Location) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32) (CONF:1198-14903).
10. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-8722) such that it
    1. SHALL contain exactly one [1..1] @typeCode="RSON" Has Reason (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1198-8723).
    2. SHALL contain exactly one [1..1] [Indication (V2)](#Indication_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09) (CONF:1198-14899).
11. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-15492) such that it
    1. SHALL contain exactly one [1..1] [Encounter Diagnosis (V3)](#E_Encounter_Diagnosis_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.80:2015-08-01) (CONF:1198-15973).

Table 273: EncounterTypeCode

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: EncounterTypeCode urn:oid:2.16.840.1.113883.3.88.12.80.32  (Clinical Focus: Concepts that represent an interaction between a patient and clinician. Interactions may include in-person encounters, telephone conversations, and email exchanges.),(Data Element Scope: Indicator of an encounter),(Inclusion Criteria: CPT codes found in the following CPT sections: 99201-99499 E/M 99500-99600 home health (mainly nonphysician, such as newborn care in home) 99605-99607 medication management 98966-98968 non physician telephone services),(Exclusion Criteria: Only codes as defined in the inclusion criteria)  This value set was imported on 6/24/2019 with a version of 20190517.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.80.32/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 98966 | CPT | urn:oid:2.16.840.1.113883.6.12 | Telephone assessment and management service provided by a qualified nonphysician health care professional to an established patient, parent, or guardian not originating from a related assessment and management service provided within the previous 7 days nor leading to an assessment and management service or procedure within the next 24 hours or soonest available appointment; 5-10 minutes of medical discussion |
| 98967 | CPT | urn:oid:2.16.840.1.113883.6.12 | Telephone assessment and management service provided by a qualified nonphysician health care professional to an established patient, parent, or guardian not originating from a related assessment and management service provided within the previous 7 days nor leading to an assessment and management service or procedure within the next 24 hours or soonest available appointment; 11-20 minutes of medical discussion |
| 98968 | CPT | urn:oid:2.16.840.1.113883.6.12 | Telephone assessment and management service provided by a qualified nonphysician health care professional to an established patient, parent, or guardian not originating from a related assessment and management service provided within the previous 7 days nor leading to an assessment and management service or procedure within the next 24 hours or soonest available appointment; 21-30 minutes of medical discussion |
| 99091 | CPT | urn:oid:2.16.840.1.113883.6.12 | Collection and interpretation of physiologic data (eg, ECG, blood pressure, glucose monitoring) digitally stored and/or transmitted by the patient and/or caregiver to the physician or other qualified health care professional, qualified by education, training, licensure/regulation (when applicable) requiring a minimum of 30 minutes of time, each 30 days |
| 99201 | CPT | urn:oid:2.16.840.1.113883.6.12 | Office or other outpatient visit for the evaluation and management of a new patient, which requires these 3 key components: A problem focused history; A problem focused examination; Straightforward medical decision making. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are self limited or minor. Typically, 10 minutes are spent face-to-face with the patient and/or family. |
| 99202 | CPT | urn:oid:2.16.840.1.113883.6.12 | Office or other outpatient visit for the evaluation and management of a new patient, which requires these 3 key components: An expanded problem focused history; An expanded problem focused examination; Straightforward medical decision making. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of low to moderate severity. Typically, 20 minutes are spent face-to-face with the patient and/or family. |
| 99203 | CPT | urn:oid:2.16.840.1.113883.6.12 | Office or other outpatient visit for the evaluation and management of a new patient, which requires these 3 key components: A detailed history; A detailed examination; Medical decision making of low complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of moderate severity. Typically, 30 minutes are spent face-to-face with the patient and/or family. |
| 99204 | CPT | urn:oid:2.16.840.1.113883.6.12 | Office or other outpatient visit for the evaluation and management of a new patient, which requires these 3 key components: A comprehensive history; A comprehensive examination; Medical decision making of moderate complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of moderate to high severity. Typically, 45 minutes are spent face-to-face with the patient and/or family. |
| 99205 | CPT | urn:oid:2.16.840.1.113883.6.12 | Office or other outpatient visit for the evaluation and management of a new patient, which requires these 3 key components: A comprehensive history; A comprehensive examination; Medical decision making of high complexity. Counseling and/or coordination of care with other physicians, other qualified health care professionals, or agencies are provided consistent with the nature of the problem(s) and the patient's and/or family's needs. Usually, the presenting problem(s) are of moderate to high severity. Typically, 60 minutes are spent face-to-face with the patient and/or family. |
| 99211 | CPT | urn:oid:2.16.840.1.113883.6.12 | Office or other outpatient visit for the evaluation and management of an established patient, that may not require the presence of a physician or other qualified health care professional. Usually, the presenting problem(s) are minimal. Typically, 5 minutes are spent performing or supervising these services. |
| ... | | | |

Table 274: Encounter Planned

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Encounter Planned urn:oid:2.16.840.1.113883.11.20.9.52  (Clinical Focus: Activities that represent planned patient encounters with clinicians),(Data Element Scope: encounter),(Inclusion Criteria: SNOMED-CT codes descending from "308335008" patient encounter procedure (procedure).),(Exclusion Criteria: unknown)  This value set was imported on 10/25/2017 with a version of 20171016.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.52/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 108219001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Physician visit with evaluation AND/OR management service (procedure) |
| 108220007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Evaluation AND/OR management - new patient (procedure) |
| 108221006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Evaluation AND/OR management - established patient (procedure) |
| 11429006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Consultation (procedure) |
| 11797002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Telephone call by physician to patient or for consultation (procedure) |
| 12566000 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Consultation in computer dosimetry and isodose chart, teletherapy (procedure) |
| 12586001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Physician direction of emergency medical systems (procedure) |
| 12843005 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Subsequent hospital visit by physician (procedure) |
| 14736009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | History and physical examination with evaluation and management of patient (procedure) |
| 15301000 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Consultation in chemotherapy (procedure) |
| ... | | | |

Figure 143: Encounter Activity (V3) Example

<encounter classCode="ENC" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.49" extension="2015-08-01" />

<id root="2a620155-9d11-439e-92b3-5d9815ff4de8" />

<code code="99213" displayName="Office outpatient visit 15 minutes" codeSystemName="CPT" 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>

Encounter Diagnosis (V3)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.80:2015-08-01 (open)]

Table 275: Encounter Diagnosis (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional)  [Encounter Activity (V3)](#E_Encounter_Activity_V3) (optional) | [Problem Observation (V3)](#E_Problem_Observation_V3) (required) |

This template wraps relevant problems or diagnoses at the close of a visit or that need to be followed after the visit.

Table 276: Encounter Diagnosis (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.80:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-14889](#C_1198-14889) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1198-14890](#C_1198-14890) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-14895](#C_1198-14895) |  |
| @root | 1..1 | SHALL |  | [1198-14896](#C_1198-14896) | 2.16.840.1.113883.10.20.22.4.80 |
| @extension | 1..1 | SHALL |  | [1198-32542](#C_1198-32542) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-19182](#C_1198-19182) |  |
| @code | 1..1 | SHALL |  | [1198-19183](#C_1198-19183) | 29308-4 |
| @codeSystem | 1..1 | SHALL |  | [1198-32160](#C_1198-32160) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| entryRelationship | 1..\* | SHALL |  | [1198-14892](#C_1198-14892) |  |
| @typeCode | 1..1 | SHALL |  | [1198-14893](#C_1198-14893) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| observation | 1..1 | SHALL |  | [1198-14898](#C_1198-14898) | [Problem Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01](#E_Problem_Observation_V3) |

1. SHALL contain exactly one [1..1] @classCode="ACT" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-14889).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-14890).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-14895) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.80" (CONF:1198-14896).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32542).
4. SHALL contain exactly one [1..1] code (CONF:1198-19182).
   1. This code SHALL contain exactly one [1..1] @code="29308-4" Diagnosis (CONF:1198-19183).
   2. 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:1198-32160).
5. SHALL contain at least one [1..\*] entryRelationship (CONF:1198-14892) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1198-14893).
   2. SHALL contain exactly one [1..1] [Problem Observation (V3)](#E_Problem_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01) (CONF:1198-14898).

Figure 144: Encounter Diagnosis (V3) Example

<act classCode="ACT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.80" extension="2015-08-01" />

<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="2015-08-01" />

<!-- Problem Observation -->

...

</observation>

</entryRelationship>

</act>

Entry Reference

[act: identifier urn:oid:2.16.840.1.113883.10.20.22.4.122 (open)]

Table 277: Entry Reference Contexts

| Contained By: | Contains: |
| --- | --- |
| [Goal Observation](#E_Goal_Observation_U) (optional)  [Outcome Observation](#E_OutcomeObservation) (optional)  [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional)  [Planned Intervention Act (V2)](#E_Planned_Intervention_Act_V2) (optional)  [Planned Intervention Act (V2)](#E_Planned_Intervention_Act_V2) (required)  [Intervention Act (V2)](#E_Intervention_Act_V2) (optional) |  |

This template represents the act of referencing another entry in the same CDA document instance. Its purpose is to remove the need to repeat the complete XML representation of the referred entry when relating one entry to another. This template can be used to reference many types of Act class derivations, such as encounters, observations, procedures etc., as it is often necessary when authoring CDA documents to repeatedly reference other Acts of these types. For example, in a Care Plan it is necessary to repeatedly relate Health Concerns, Goals, Interventions and Outcomes.

The id is required and must be the same id as the entry/id it is referencing. The id cannot be a null value. Act/Code is set to nullFlavor=“NP” (Not Present). This means the value is not present in the message (in act/Code).

Table 278: Entry Reference Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-31485](#C_1098-31485) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1098-31486](#C_1098-31486) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-31487](#C_1098-31487) |  |
| @root | 1..1 | SHALL |  | [1098-31488](#C_1098-31488) | 2.16.840.1.113883.10.20.22.4.122 |
| id | 1..\* | SHALL |  | [1098-31489](#C_1098-31489) |  |
| code | 1..1 | SHALL |  | [1098-31490](#C_1098-31490) |  |
| @nullFlavor | 1..1 | SHALL |  | [1098-31491](#C_1098-31491) | urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = NP |
| statusCode | 1..1 | SHALL |  | [1098-31498](#C_1098-31498) |  |
| @code | 0..1 | MAY |  | [1098-31499](#C_1098-31499) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |

1. SHALL contain exactly one [1..1] @classCode="ACT" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1098-31485).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1098-31486).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-31487) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.122" (CONF:1098-31488).

The 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. The ID cannot have Null value (e.g., nullFlavor is not allowed).

1. SHALL contain at least one [1..\*] id (CONF:1098-31489).
2. SHALL contain exactly one [1..1] code (CONF:1098-31490).
   1. This code SHALL contain exactly one [1..1] @nullFlavor="NP" Not Present (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:1098-31491).
3. SHALL contain exactly one [1..1] statusCode (CONF:1098-31498).
   1. This statusCode MAY contain zero or one [0..1] @code="completed" (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-31499).

Figure 145: Entry Reference Example

<!--

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Health Concern section

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

-->

<act classCode="ACT" moodCode="EVN">

<!-- Health Concern Act of a pneumonia diagnosis -->

<templateId root="2.16.840.1.113883.10.20.22.4.132" />

<id root="4eab0e52-dd7d-4285-99eb-72d32ddb195c" />

<code code="75310-3" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Health Concern" />

<statusCode code="active" />

<effectiveTime value="20130616" />

<entryRelationship typeCode="REFR">

<!-- Problem Observation (V2) -->

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2014-06-09" />

<id root="8dfacd73-1682-4cc4-9351-e54ccea83612" />

<code code="29308-4"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="Diagnosis"/>

<statusCode code="completed" />

<effectiveTime>

<!-- Date of diagnosis -->

<low value="20130616" />

</effectiveTime>

<value xsi:type="CD" code="233604007"

codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"

displayName="Pneumonia" />

<!-- This Entry Reference refers to a goal, intervention, actual

outcome, or some other entry present in the Care Plan

that the Health Concern is related to-->

<entryRelationship typeCode="REFR">

<act classCode="ACT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.122" />

<!-- This ID equals the ID of the goal of a pulse

ox greater than 92% -->

<id root="3700b3b0-fbed-11e2-b778-0800200c9a66" />

<!-- The code is nulled to "NP" Not Present" -->

<code nullFlavor="NP" />

<statusCode code="completed" />

</act>

</entryRelationship>

</observation>

</entryRelationship>

</act>

...

<!--

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Expected Outcomes/Goals section

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

-->

...

<entry>

<!-- This is an observation about the expected outcome of a pulse ox reading

of 92 or greater. The Id is the same as the ID as the ID of the

pneumonia problem above -->

<observation classCode="OBS" moodCode="GOL">

<id root="3700b3b0-fbed-11e2-b778-0800200c9a66" />

<code code="59408-5"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="Oxygen saturation in Arterial blood by Pulse oximetry"/>

<statusCode code="active" />

<value xsi:type="IVL\_PQ">

<low value="92" unit="%" />

</value>

<!-- There could be another Entry Reference here referring to the

related health concern, actual outcome, or intervention -->

...

</observation>

</entry>

...

Figure 146: Diagnosis Reference Example

<!-- Show how an encounter can include a discharge diagnosis which references an

item on the problem list using the Entry Reference template -->

<!-- Problem Section -->

<observation>

<id root="1234567" />

<code code="123" codeSystem="1.2.3" displayName="asthma" />

</observation>

<!-- Encounter Section -->

<encounter>

<entryRelationship typeCode="COMP">

<act>

<code code="145" codeSystem="4.5.6" displayName="discharge diagnosis" />

<templateId root="2.16.840.1.113883.10.20.22.4.33" extension="2014-06-09" />

<!-- this is for illustrative purposes only. In this particular

case, the template requires a nested Problem

Observation (V2). In the Health Concern template,

we'd need a constraint that says it's allowable to

include the Entry Reference template. -->

<entryRelationship typeCode="SUBJ">

<act classCode="ACT" moodCode="XXX">

<templateId root="2.16.840.1.113883.10.20.22.4.122" />

<id root="1234567" />

<code nullFlavor="NP" />

</act>

</entryRelationship>

</act>

</entryRelationship>

</encounter>

Estimated Date of Delivery

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

Table 279: Estimated Date of Delivery Contexts

| Contained By: | Contains: |
| --- | --- |
| [Pregnancy Observation](#E_Pregnancy_Observation) (optional) |  |

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

Table 280: 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 |  | [81-444](#C_81-444) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [81-445](#C_81-445) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [81-16762](#C_81-16762) |  |
| @root | 1..1 | SHALL |  | [81-16763](#C_81-16763) | 2.16.840.1.113883.10.20.15.3.1 |
| code | 1..1 | SHALL |  | [81-19139](#C_81-19139) |  |
| @code | 1..1 | SHALL |  | [81-19140](#C_81-19140) | 11778-8 |
| @codeSystem | 1..1 | SHALL |  | [81-26503](#C_81-26503) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [81-448](#C_81-448) |  |
| @code | 1..1 | SHALL |  | [81-19096](#C_81-19096) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| value | 1..1 | SHALL | TS | [81-450](#C_81-450) |  |

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: HL7ActMood 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
   1. 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).
   1. This code SHALL contain exactly one [1..1] @code="11778-8" Estimated date of delivery (CONF:81-19140).
   2. 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).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus 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 147: 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>

External Document Reference

[externalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.115:2014-06-09 (open)]

Table 281: External Document Reference Contexts

| Contained By: | Contains: |
| --- | --- |
| [Goal Observation](#E_Goal_Observation_U) (optional)  [Outcome Observation](#E_OutcomeObservation) (optional)  [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional)  [Planned Intervention Act (V2)](#E_Planned_Intervention_Act_V2) (optional)  [Intervention Act (V2)](#E_Intervention_Act_V2) (optional) |  |

Where it is necessary to reference an external clinical document, the External Document Reference template can be used to reference this external document. However, if the containing document is appending to or replacing another document in the same set, that relationship is set in the header, using ClinicalDocument/relatedDocument.

Table 282: External Document Reference Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| externalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.115:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-31931](#C_1098-31931) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = DOCCLIN |
| @moodCode | 1..1 | SHALL |  | [1098-31932](#C_1098-31932) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-32748](#C_1098-32748) |  |
| @root | 1..1 | SHALL |  | [1098-32750](#C_1098-32750) | 2.16.840.1.113883.10.20.22.4.115 |
| @extension | 1..1 | SHALL |  | [1098-32749](#C_1098-32749) | 2014-06-09 |
| id | 1..1 | SHALL |  | [1098-32751](#C_1098-32751) |  |
| code | 1..1 | SHALL |  | [1098-31933](#C_1098-31933) |  |
| setId | 0..1 | SHOULD |  | [1098-32752](#C_1098-32752) |  |
| versionNumber | 0..1 | SHOULD |  | [1098-32753](#C_1098-32753) |  |

1. SHALL contain exactly one [1..1] @classCode="DOCCLIN" Clinical Document (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1098-31931).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1098-31932).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-32748) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.115" (CONF:1098-32750).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32749).
4. SHALL contain exactly one [1..1] id (CONF:1098-32751).
5. SHALL contain exactly one [1..1] code (CONF:1098-31933).
6. SHOULD contain zero or one [0..1] setId (CONF:1098-32752).
7. SHOULD contain zero or one [0..1] versionNumber (CONF:1098-32753).

Figure 148: External Document Reference Example

<externalDocument classCode="DOCCLIN" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.115"

extension="2014-06-09" />

<id root="6f1bd58b-c58f-40b7-b314-caf1294ed98b" />

<code codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

code="57133-1"

displayName="Referral Note" />

<setId extension="sTT988" root="2.16.840.1.113883.19.5.99999.19" />

<versionNumber value="1" />

</externalDocument>

Family History Death Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.47 (open)]

Table 283: Family History Death Observation Contexts

| Contained By: | Contains: |
| --- | --- |
| [Family History Observation (V3)](#E_Family_History_Observation_V3) (optional) |  |

This clinical statement records whether the family member is deceased.

Table 284: Family History Death Observation Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.47) | | | | | |
| @classCode | 1..1 | SHALL |  | [81-8621](#C_81-8621) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [81-8622](#C_81-8622) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [81-8623](#C_81-8623) |  |
| @root | 1..1 | SHALL |  | [81-10495](#C_81-10495) | 2.16.840.1.113883.10.20.22.4.47 |
| code | 1..1 | SHALL |  | [81-19141](#C_81-19141) |  |
| @code | 1..1 | SHALL |  | [81-19142](#C_81-19142) | ASSERTION |
| @codeSystem | 1..1 | SHALL |  | [81-26504](#C_81-26504) | urn:oid:2.16.840.1.113883.5.4 (HL7ActCode) = 2.16.840.1.113883.5.4 |
| statusCode | 1..1 | SHALL |  | [81-8625](#C_81-8625) |  |
| @code | 1..1 | SHALL |  | [81-19097](#C_81-19097) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| value | 1..1 | SHALL | CD | [81-8626](#C_81-8626) |  |
| @code | 1..1 | SHALL |  | [81-26470](#C_81-26470) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 419099009 |

1. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:81-8621).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:81-8622).
3. SHALL contain exactly one [1..1] templateId (CONF:81-8623) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.47" (CONF:81-10495).
4. SHALL contain exactly one [1..1] code (CONF:81-19141).
   1. This code SHALL contain exactly one [1..1] @code="ASSERTION" Assertion (CONF:81-19142).
   2. This code SHALL contain exactly one [1..1] @codeSystem="2.16.840.1.113883.5.4" (CodeSystem: HL7ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:81-26504).
5. SHALL contain exactly one [1..1] statusCode (CONF:81-8625).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:81-19097).
6. SHALL contain exactly one [1..1] value with @xsi:type="CD" (CONF:81-8626).
   1. This value SHALL contain exactly one [1..1] @code="419099009" Dead (CodeSystem: SNOMED CT urn:oid:2.16.840.1.113883.6.96 STATIC) (CONF:81-26470).

Figure 149: Family History Death Observation Example

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.47"/>

<id root="6898fae0-5c8a-11db-b0de-0800200c9a66"/>

<code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4"/>

<statusCode code="completed"/>

<value xsi:type="CD"

code="419099009"

codeSystem="2.16.840.1.113883.6.96"

displayName="Dead"/>

</observation>

Family History Observation (V3)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.46:2015-08-01 (open)]

Table 285: Family History Observation (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Family History Organizer (V3)](#E_Family_History_Organizer_V3) (required) | [Age Observation](#E_Age_Observation) (optional)  [Family History Death Observation](#E_Family_History_Death_Observation) (optional) |

Family History Observations related to a particular family member are contained within a Family History Organizer. The effectiveTime in the Family History Observation is the biologically or clinically relevant time of the observation. The biologically or clinically relevant time is the time at which the observation holds (is effective) for the family member (the subject of the observation).

Table 286: Family History Observation (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.46:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-8586](#C_1198-8586) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1198-8587](#C_1198-8587) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-8599](#C_1198-8599) |  |
| @root | 1..1 | SHALL |  | [1198-10496](#C_1198-10496) | 2.16.840.1.113883.10.20.22.4.46 |
| @extension | 1..1 | SHALL |  | [1198-32605](#C_1198-32605) | 2015-08-01 |
| id | 1..\* | SHALL |  | [1198-8592](#C_1198-8592) |  |
| code | 1..1 | SHALL |  | [1198-32427](#C_1198-32427) | urn:oid:2.16.840.1.113883.3.88.12.3221.7.2 (Problem Type (SNOMEDCT)) |
| translation | 1..\* | SHALL |  | [1198-32847](#C_1198-32847) | urn:oid:2.16.840.1.113762.1.4.1099.28 (Problem Type (LOINC)) |
| statusCode | 1..1 | SHALL |  | [1198-8590](#C_1198-8590) |  |
| @code | 1..1 | SHALL |  | [1198-19098](#C_1198-19098) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 0..1 | SHOULD |  | [1198-8593](#C_1198-8593) |  |
| value | 1..1 | SHALL | CD | [1198-8591](#C_1198-8591) | urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 (Problem) |
| entryRelationship | 0..1 | MAY |  | [1198-8675](#C_1198-8675) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8676](#C_1198-8676) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = SUBJ |
| @inversionInd | 1..1 | SHALL |  | [1198-8677](#C_1198-8677) | true |
| observation | 1..1 | SHALL |  | [1198-15526](#C_1198-15526) | [Age Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.31](#E_Age_Observation) |
| entryRelationship | 0..1 | MAY |  | [1198-8678](#C_1198-8678) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8679](#C_1198-8679) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = CAUS |
| observation | 1..1 | SHALL |  | [1198-15527](#C_1198-15527) | [Family History Death Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.47](#E_Family_History_Death_Observation) |

1. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-8586).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-8587).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-8599) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.46" (CONF:1198-10496).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32605).
4. SHALL contain at least one [1..\*] id (CONF:1198-8592).
5. SHALL contain exactly one [1..1] code, which SHOULD be selected from ValueSet [Problem Type (SNOMEDCT)](#Problem_Type_SNOMEDCT) urn:oid:2.16.840.1.113883.3.88.12.3221.7.2 DYNAMIC (CONF:1198-32427).
   1. This code SHALL contain at least one [1..\*] translation, which SHOULD be selected from ValueSet [Problem Type (LOINC)](#Problem_Type_LOINC) urn:oid:2.16.840.1.113762.1.4.1099.28 DYNAMIC (CONF:1198-32847).
6. SHALL contain exactly one [1..1] statusCode (CONF:1198-8590).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1198-19098).
7. SHOULD contain zero or one [0..1] effectiveTime (CONF:1198-8593).
8. SHALL contain exactly one [1..1] value with @xsi:type="CD", where the code SHALL be selected from ValueSet [Problem](#Problem) urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 DYNAMIC (CONF:1198-8591).
9. MAY contain zero or one [0..1] entryRelationship (CONF:1198-8675) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Subject (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 STATIC) (CONF:1198-8676).
   2. SHALL contain exactly one [1..1] @inversionInd="true" True (CONF:1198-8677).
   3. SHALL contain exactly one [1..1] [Age Observation](#E_Age_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.31) (CONF:1198-15526).
10. MAY contain zero or one [0..1] entryRelationship (CONF:1198-8678) such that it
    1. SHALL contain exactly one [1..1] @typeCode="CAUS" Causal or Contributory (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 STATIC) (CONF:1198-8679).
    2. SHALL contain exactly one [1..1] [Family History Death Observation](#E_Family_History_Death_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.47) (CONF:1198-15527).

Table 287: Problem Type (SNOMEDCT)

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Problem Type (SNOMEDCT) urn:oid:2.16.840.1.113883.3.88.12.3221.7.2  (Clinical Focus: A problem observation categorization of the condition as represented in the SNOMED CT code system.),(Data Element Scope: Problem Observation),(Inclusion Criteria: High level condition types as selected for use.),(Exclusion Criteria: Only the codes selected.)  This value set was imported on 6/20/2019 with a version of 20190319.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.3221.7.2/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 248536006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Finding of functional performance and activity (finding) |
| 282291009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Diagnosis interpretation (observable entity) |
| 373930000 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Cognitive function finding (finding) |
| 404684003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Clinical finding (finding) |
| 409586006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Complaint (finding) |
| 418799008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Finding reported by subject or history provider (finding) |
| 55607006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Problem (finding) |
| 64572001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Disease (disorder) |

Table 288: Problem Type (LOINC)

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Problem Type (LOINC) urn:oid:2.16.840.1.113762.1.4.1099.28  (Clinical Focus: A problem observation categorization of the condition as represented in the LOINC code system.),(Data Element Scope: Problem observation),(Inclusion Criteria: High level condition types as selected for use.),(Exclusion Criteria: Only those selected)  This value set was imported on 6/20/2019 with a version of 20190416.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1099.28/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 29308-4 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Diagnosis |
| 75275-8 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Cognitive function [Interpretation] |
| 75312-9 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Clinical finding Family member |
| 75313-7 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Complaint Family member |
| 75314-5 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Diagnosis Family member |
| 75315-2 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Condition Family member |
| 75316-0 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Functional performance Family member |
| 75317-8 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Symptom Family member |
| 75318-6 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Problem Family member |
| 75319-4 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Mental function Family member |
| ... | | | |

Figure 150: Family History Observation (V3) Example

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.46" extension="2015-08-01" />

<!-- Family History Observation template -->

<id root="d42ebf70-5c89-11db-b0de-0800200c9a66" />

<code code="75323-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Condition">

<translation code="64572001" displayName="Condition"

codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"></translation>

</code>

<statusCode code="completed" />

<effectiveTime value="1967" />

<value xsi:type="CD" code="22298006" codeSystem="2.16.840.1.113883.6.96" displayName="Myocardial infarction" />

<entryRelationship typeCode="CAUS">

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.47" />

...

</observation>

</entryRelationship>

<entryRelationship typeCode="SUBJ" inversionInd="true">

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.31" />

....

</observation>

</entryRelationship>

</observation>

Family History Organizer (V3)

[organizer: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.45:2015-08-01 (open)]

Table 289: Family History Organizer (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional)  [Family History Section (V3)](#S_Family_History_Section_V3) (optional) | [Family History Observation (V3)](#E_Family_History_Observation_V3) (required) |

The Family History Organizer associates a set of observations with a family member. For example, the Family History Organizer can group a set of observations about the patient’s father.

Table 290: Family History Organizer (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| organizer (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.45:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-8600](#C_1198-8600) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = CLUSTER |
| @moodCode | 1..1 | SHALL |  | [1198-8601](#C_1198-8601) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-8604](#C_1198-8604) |  |
| @root | 1..1 | SHALL |  | [1198-10497](#C_1198-10497) | 2.16.840.1.113883.10.20.22.4.45 |
| @extension | 1..1 | SHALL |  | [1198-32606](#C_1198-32606) | 2015-08-01 |
| id | 1..\* | SHALL |  | [1198-32485](#C_1198-32485) |  |
| statusCode | 1..1 | SHALL |  | [1198-8602](#C_1198-8602) |  |
| @code | 1..1 | SHALL |  | [1198-19099](#C_1198-19099) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| subject | 1..1 | SHALL |  | [1198-8609](#C_1198-8609) |  |
| relatedSubject | 1..1 | SHALL |  | [1198-15244](#C_1198-15244) |  |
| @classCode | 1..1 | SHALL |  | [1198-15245](#C_1198-15245) | urn:oid:2.16.840.1.113883.5.41 (HL7EntityClass) = PRS |
| code | 1..1 | SHALL |  | [1198-15246](#C_1198-15246) | urn:oid:2.16.840.1.113883.1.11.19579 (Family Member Value) |
| subject | 0..1 | SHOULD |  | [1198-15248](#C_1198-15248) |  |
| administrativeGenderCode | 1..1 | SHALL |  | [1198-15974](#C_1198-15974) | urn:oid:2.16.840.1.113883.1.11.1 (Administrative Gender (HL7 V3)) |
| birthTime | 0..1 | SHOULD |  | [1198-15976](#C_1198-15976) |  |
| component | 1..\* | SHALL |  | [1198-32428](#C_1198-32428) |  |
| observation | 1..1 | SHALL |  | [1198-32429](#C_1198-32429) | [Family History Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.46:2015-08-01](#E_Family_History_Observation_V3) |

1. SHALL contain exactly one [1..1] @classCode="CLUSTER" Cluster (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-8600).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-8601).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-8604) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.45" (CONF:1198-10497).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32606).
4. SHALL contain at least one [1..\*] id (CONF:1198-32485).
5. SHALL contain exactly one [1..1] statusCode (CONF:1198-8602).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1198-19099).
6. SHALL contain exactly one [1..1] subject (CONF:1198-8609).
   1. This subject SHALL contain exactly one [1..1] relatedSubject (CONF:1198-15244).
      1. This relatedSubject SHALL contain exactly one [1..1] @classCode="PRS" Person (CodeSystem: HL7EntityClass urn:oid:2.16.840.1.113883.5.41 STATIC) (CONF:1198-15245).
      2. This relatedSubject SHALL contain exactly one [1..1] code, which SHOULD be selected from ValueSet [Family Member Value](#Family_Member_Value) urn:oid:2.16.840.1.113883.1.11.19579 DYNAMIC (CONF:1198-15246).
      3. This relatedSubject SHOULD contain zero or one [0..1] subject (CONF:1198-15248).
         1. The subject, if present, SHALL contain exactly one [1..1] administrativeGenderCode, which SHALL be selected from ValueSet [Administrative Gender (HL7 V3)](#Administrative_Gender_HL7_V3) urn:oid:2.16.840.1.113883.1.11.1 DYNAMIC (CONF:1198-15974).
         2. The subject, if present, SHOULD contain zero or one [0..1] birthTime (CONF:1198-15976).
         3. The subject SHOULD contain zero or more [0..\*] sdtc:id. 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 id element (CONF:1198-15249).
         4. The subject MAY contain zero or one [0..1] *sdtc:deceasedInd*. 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 deceasedInd element (CONF:1198-15981).
         5. The subject MAY contain zero or one [0..1] *sdtc:deceasedTime*. 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 deceasedTime element (CONF:1198-15982).
         6. The age of a relative at the time of a family history observation SHOULD be inferred by comparing RelatedSubject/subject/birthTime with Observation/effectiveTime (CONF:1198-15983).
7. SHALL contain at least one [1..\*] component (CONF:1198-32428).
   1. Such components SHALL contain exactly one [1..1] [Family History Observation (V3)](#E_Family_History_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.46:2015-08-01) (CONF:1198-32429).

Table 291: Family Member Value

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Family Member Value urn:oid:2.16.840.1.113883.1.11.19579  (Clinical Focus: A characterization of the familial relationship between two people),(Data Element Scope: ),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 6/24/2019 with a version of 20190425.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.19579/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| AUNT | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | aunt |
| BRO | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | brother |
| BROINLAW | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | brother-in-law |
| CHILD | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | child |
| CHLDADOPT | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | adopted child |
| CHLDFOST | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | foster child |
| CHLDINLAW | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | child-in-law |
| COUSN | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | cousin |
| DAU | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | natural daughter |
| DAUADOPT | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | adopted daughter |
| ... | | | |

Figure 151: Family History Organizer (V3) Example

<organizer moodCode="EVN" classCode="CLUSTER">

<templateId root="2.16.840.1.113883.10.20.22.4.45" extension="2015-08-01" />

<statusCode code="completed" />

<subject>

<relatedSubject classCode="PRS">

<code code="FTH" displayName="Father" codeSystemName="HL7 FamilyMember" codeSystem="2.16.840.1.113883.5.111">

<translation code="9947008" displayName="Natural father" codeSystemName="SNOMED" codeSystem="2.16.840.1.113883.6.96" />

</code>

<subject>

<sdtc:id root="2.16.840.1.113883.19.5.99999.2" extension="99999999" />

<id root="2.16.840.1.113883.19.5.99999.2" extension="1234" />

<administrativeGenderCode code="M" codeSystem="2.16.840.1.113883.5.1" />

<birthTime value="1910" />

<!-- Example use of sdtc extensions :-->

<!-- <sdtc:deceasedInd value="true"/><sdtc:deceasedTime value="1967"/>

-->

</subject>

</relatedSubject>

</subject>

<component>

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.46" extension="2015-08-01" />

. . .

</observation>

</component>

</organizer>

Functional Status Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.67:2014-06-09 (open)]

Table 292: Functional Status Observation (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Functional Status Section (V2)](#S_Functional_Status_Section_V2) (optional)  [Functional Status Organizer (V2)](#E_Functional_Status_Organizer_V2) (required)  [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional) | [Caregiver Characteristics](#E_Caregiver_Characteristics) (optional)  [Assessment Scale Observation](#E_Assessment_Scale_Observation) (optional)  [Non-Medicinal Supply Activity (V2)](#NonMedicinal_Supply_Activity_V2) (optional)  [Author Participation](#U_Author_Participation) (optional) |

This template represents the patient's physical function (e.g., mobility status, instrumental activities of daily living, self-care status) and problems that limit function (dyspnea, dysphagia). The template may include assessment scale observations, identify supporting caregivers, and provide information about non-medicinal supplies. This template is used to represent physical or developmental function of all patient populations.

Table 293: Functional Status Observation (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.67:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-13905](#C_1098-13905) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-13906](#C_1098-13906) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-13889](#C_1098-13889) |  |
| @root | 1..1 | SHALL |  | [1098-13890](#C_1098-13890) | 2.16.840.1.113883.10.20.22.4.67 |
| @extension | 1..1 | SHALL |  | [1098-32568](#C_1098-32568) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-13907](#C_1098-13907) |  |
| code | 1..1 | SHALL |  | [1098-13908](#C_1098-13908) |  |
| @code | 1..1 | SHALL |  | [1098-31522](#C_1098-31522) | 54522-8 |
| @codeSystem | 1..1 | SHALL |  | [1098-31523](#C_1098-31523) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1098-13929](#C_1098-13929) |  |
| @code | 1..1 | SHALL |  | [1098-19101](#C_1098-19101) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1098-13930](#C_1098-13930) |  |
| value | 1..1 | SHALL |  | [1098-13932](#C_1098-13932) |  |
| author | 0..\* | SHOULD |  | [1098-13936](#C_1098-13936) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| entryRelationship | 0..1 | MAY |  | [1098-13892](#C_1098-13892) |  |
| @typeCode | 1..1 | SHALL |  | [1098-14596](#C_1098-14596) | REFR |
| supply | 1..1 | SHALL |  | [1098-14218](#C_1098-14218) | [Non-Medicinal Supply Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.50:2014-06-09](#NonMedicinal_Supply_Activity_V2) |
| entryRelationship | 0..1 | MAY |  | [1098-13895](#C_1098-13895) |  |
| @typeCode | 1..1 | SHALL |  | [1098-14597](#C_1098-14597) | REFR |
| observation | 1..1 | SHALL |  | [1098-13897](#C_1098-13897) | [Caregiver Characteristics (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.72](#E_Caregiver_Characteristics) |
| entryRelationship | 0..1 | MAY |  | [1098-14465](#C_1098-14465) |  |
| @typeCode | 1..1 | SHALL |  | [1098-14598](#C_1098-14598) | COMP |
| observation | 1..1 | SHALL |  | [1098-14466](#C_1098-14466) | [Assessment Scale Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69](#E_Assessment_Scale_Observation) |
| referenceRange | 0..\* | MAY |  | [1098-13937](#C_1098-13937) |  |

1. SHALL contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1098-13905).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1098-13906).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-13889) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.67" (CONF:1098-13890).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32568).
4. SHALL contain at least one [1..\*] id (CONF:1098-13907).
5. SHALL contain exactly one [1..1] code (CONF:1098-13908).
   1. This code SHALL contain exactly one [1..1] @code="54522-8" Functional status (CONF:1098-31522).
   2. 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:1098-31523).
6. SHALL contain exactly one [1..1] statusCode (CONF:1098-13929).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1098-19101).
7. SHALL contain exactly one [1..1] effectiveTime (CONF:1098-13930).
8. SHALL contain exactly one [1..1] value (CONF:1098-13932).
   1. If xsi:type=“CD”, SHOULD contain a code from SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) (CONF:1098-14234).
9. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-13936).
10. MAY contain zero or one [0..1] entryRelationship (CONF:1098-13892) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" refers to (CONF:1098-14596).
    2. SHALL contain exactly one [1..1] [Non-Medicinal Supply Activity (V2)](#NonMedicinal_Supply_Activity_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.50:2014-06-09) (CONF:1098-14218).
11. MAY contain zero or one [0..1] entryRelationship (CONF:1098-13895) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" refers to (CONF:1098-14597).
    2. SHALL contain exactly one [1..1] [Caregiver Characteristics](#E_Caregiver_Characteristics) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.72) (CONF:1098-13897).
12. MAY contain zero or one [0..1] entryRelationship (CONF:1098-14465) such that it
    1. SHALL contain exactly one [1..1] @typeCode="COMP" has component (CONF:1098-14598).
    2. SHALL contain exactly one [1..1] [Assessment Scale Observation](#E_Assessment_Scale_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69) (CONF:1098-14466).

referenceRange could be used to represent normal or expected capability for the function being evaluated.

1. MAY contain zero or more [0..\*] referenceRange (CONF:1098-13937).

Figure 152: Functional Status Observation (V2) Example

<entry>

<observation classCode="OBS" moodCode="EVN">

<!-- Functional Status Observation V2-->

<templateId root="2.16.840.1.113883.10.20.22.4.67" extension="2014-06-09" />

<id root="ce7cfb78-bd16-467e-8bcf-859a3034108e" />

<code code="54522-8" displayName="Functional status" codeSystem="2.16.840.1.113883.6.1" codeSystemName="SNOMED CT" />

<text>

<reference value="#FUNC1" />

</text>

<statusCode code="completed" />

<effectiveTime value="200130311" />

<value xsi:type="CD" code="129035000" displayName="independent with dressing" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" />

</observation>

</entry>

Functional Status Organizer (V2)

[organizer: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.66:2014-06-09 (open)]

Table 294: Functional Status Organizer (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Functional Status Section (V2)](#S_Functional_Status_Section_V2) (optional) | [Self-Care Activities (ADL and IADL)](#E_SelfCare_Activities_ADL_and_IADL) (required)  [Functional Status Observation (V2)](#E_Functional_Status_Observation_V2) (required)  [Author Participation](#U_Author_Participation) (optional) |

This template groups related functional status observations into categories (e.g., mobility, self-care).

Table 295: Functional Status Organizer (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| organizer (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.66:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-14355](#C_1098-14355) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = CLUSTER |
| @moodCode | 1..1 | SHALL |  | [1098-14357](#C_1098-14357) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-14361](#C_1098-14361) |  |
| @root | 1..1 | SHALL |  | [1098-14362](#C_1098-14362) | 2.16.840.1.113883.10.20.22.4.66 |
| @extension | 1..1 | SHALL |  | [1098-32569](#C_1098-32569) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-14363](#C_1098-14363) |  |
| code | 1..1 | SHALL |  | [1098-14364](#C_1098-14364) |  |
| statusCode | 1..1 | SHALL |  | [1098-14358](#C_1098-14358) |  |
| @code | 1..1 | SHALL |  | [1098-31434](#C_1098-31434) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| author | 0..\* | SHOULD |  | [1098-31585](#C_1098-31585) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| component | 1..\* | SHALL |  | [1098-14359](#C_1098-14359) |  |
| observation | 1..1 | SHALL |  | [1098-14368](#C_1098-14368) | [Functional Status Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.67:2014-06-09](#E_Functional_Status_Observation_V2) |
| component | 1..\* | SHALL |  | [1098-31432](#C_1098-31432) |  |
| observation | 1..1 | SHALL |  | [1098-31433](#C_1098-31433) | [Self-Care Activities (ADL and IADL) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.128](#E_SelfCare_Activities_ADL_and_IADL) |

1. SHALL contain exactly one [1..1] @classCode="CLUSTER" Cluster (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1098-14355).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1098-14357).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-14361) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.66" (CONF:1098-14362).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32569).
4. SHALL contain at least one [1..\*] id (CONF:1098-14363).

The code selected should indicate the category that groups the contained functional status evaluation observations (e.g., mobility, self-care, communication).

1. SHALL contain exactly one [1..1] code (CONF:1098-14364).
   1. SHOULD be selected from ICF (codeSystem 2.16.840.1.113883.6.254) *OR* LOINC (2.16.840.1.113883.6.1) (CONF:1098-31417).
2. SHALL contain exactly one [1..1] statusCode (CONF:1098-14358).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-31434).
3. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31585).
4. SHALL contain at least one [1..\*] component (CONF:1098-14359) such that it
   1. SHALL contain exactly one [1..1] [Functional Status Observation (V2)](#E_Functional_Status_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.67:2014-06-09) (CONF:1098-14368).
5. SHALL contain at least one [1..\*] component (CONF:1098-31432) such that it
   1. SHALL contain exactly one [1..1] [Self-Care Activities (ADL and IADL)](#E_SelfCare_Activities_ADL_and_IADL) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.128) (CONF:1098-31433).

Figure 153: Functional Status Organizer (V2) Example

<organizer classCode="CLUSTER" moodCode="EVN">

<!-- Functional Status Organizer V2-->

<templateId root="2.16.840.1.113883.10.20.22.4.66" extension="2014-06-09" />

<id root="a7bc1062-8649-42a0-833d-eed65bd017c9" />

<code code="d5" displayName="Self-Care" codeSystem="2.16.840.1.113883.6.254" codeSystemName="ICF" />

<statusCode code="completed" />

<author>

<time value="200130311" />

<assignedAuthor>

<id extension="KP00017" root="2.16.840.1.113883.19.5" />

<addr>

<streetAddressLine>1003 Health Care

Drive</streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>02368</postalCode>

<country>US</country>

</addr>

<telecom use="WP" value="tel:(555)555-1003" />

<assignedPerson>

<name>

<given>Assigned</given>

<family>Amanda</family>

</name>

</assignedPerson>

</assignedAuthor>

</author>

<component>

<observation classCode="OBS" moodCode="EVN">

<!-- Functional Status Observation V2-->

<templateId root="2.16.840.1.113883.10.20.22.4.67" extension="2014-06-09" />

...

</observation>

</component>

<component>

<observation classCode="OBS" moodCode="EVN">

<!-- Functional Status Observation V2-->

<templateId root="2.16.840.1.113883.10.20.22.4.67" extension="2014-06-09" />

...

</observation>

</component>

<component>

<observation classCode="OBS" moodCode="EVN">

<!-- Self-Care Activities (ADL and IADL)-->

<templateId root="2.16.840.1.113883.10.20.22.4.128" />

...

</observation>

</component>

</organizer>

Functional Status Problem Observation (DEPRECATED)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.68:2014-06-09 (open)]

Table 296: Functional Status Problem Observation (DEPRECATED) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Functional Status Section (V2)](#S_Functional_Status_Section_V2) (optional) |  |

A functional status problem observation is a clinical statement that represents a patient’s functional perfomance and ability.

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*: Functional Status Problem Observation has been merged, without loss of expressivity, into Functional Status Observation (2.16.840.1.113883.10.20.22.4.67:2014-06-09).

Table 297: Functional Status Problem Observation (DEPRECATED) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.68:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-14282](#C_1098-14282) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-14283](#C_1098-14283) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| @negationInd | 0..1 | MAY |  | [1098-14307](#C_1098-14307) |  |
| templateId | 1..1 | SHALL |  | [1098-14312](#C_1098-14312) |  |
| @root | 1..1 | SHALL |  | [1098-14313](#C_1098-14313) | 2.16.840.1.113883.10.20.22.4.68 |
| @extension | 1..1 | SHALL |  | [1098-32601](#C_1098-32601) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-14284](#C_1098-14284) |  |
| code | 1..1 | SHALL |  | [1098-14314](#C_1098-14314) |  |
| @code | 0..1 | SHOULD |  | [1098-14315](#C_1098-14315) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 248536006 |
| text | 0..1 | SHOULD |  | [1098-14304](#C_1098-14304) |  |
| reference | 0..1 | SHOULD |  | [1098-15552](#C_1098-15552) |  |
| @value | 0..1 | SHOULD |  | [1098-15553](#C_1098-15553) |  |
| statusCode | 1..1 | SHALL |  | [1098-14286](#C_1098-14286) |  |
| @code | 1..1 | SHALL |  | [1098-19100](#C_1098-19100) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 0..1 | SHOULD |  | [1098-14287](#C_1098-14287) |  |
| low | 1..1 | SHALL |  | [1098-26456](#C_1098-26456) |  |
| high | 0..1 | MAY |  | [1098-26457](#C_1098-26457) |  |
| value | 1..1 | SHALL | CD | [1098-14291](#C_1098-14291) | urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 (Problem) |
| @nullFlavor | 0..1 | MAY |  | [1098-14292](#C_1098-14292) |  |
| methodCode | 0..1 | MAY |  | [1098-14316](#C_1098-14316) |  |

1. SHALL contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1098-14282).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1098-14283).

Use negationInd="true" to indicate that the problem was not observed.

1. MAY contain zero or one [0..1] @negationInd (CONF:1098-14307).
2. SHALL contain exactly one [1..1] templateId (CONF:1098-14312) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.68" (CONF:1098-14313).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32601).
3. SHALL contain at least one [1..\*] id (CONF:1098-14284).
4. SHALL contain exactly one [1..1] code (CONF:1098-14314).
   1. This code SHOULD contain zero or one [0..1] @code="248536006" finding of functional performance and activity (CodeSystem: SNOMED CT urn:oid:2.16.840.1.113883.6.96 STATIC) (CONF:1098-14315).
5. SHOULD contain zero or one [0..1] text (CONF:1098-14304).
   1. The text, if present, SHOULD contain zero or one [0..1] reference (CONF:1098-15552).
      1. The reference, if present, SHOULD contain zero or one [0..1] @value (CONF:1098-15553).
         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:1098-15554).
6. SHALL contain exactly one [1..1] statusCode (CONF:1098-14286).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1098-19100).
7. SHOULD contain zero or one [0..1] effectiveTime (CONF:1098-14287).

The value of effectiveTime/low represents onset date.

* 1. The effectiveTime, if present, SHALL contain exactly one [1..1] low (CONF:1098-26456).

If the problem is resolved, record the resolution date in effectiveTime/high. If the problem is known to be resolved but the resolution date is not known, use @nullFlavor="UNK". If the problem is not resolved, do not include the high element.

* 1. The effectiveTime, if present, MAY contain zero or one [0..1] high (CONF:1098-26457).

1. SHALL contain exactly one [1..1] value with @xsi:type="CD", where the code SHOULD be selected from ValueSet [Problem](#Problem) urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 DYNAMIC (CONF:1098-14291).
   1. This value MAY contain zero or one [0..1] @nullFlavor (CONF:1098-14292).
      1. If the diagnosis is unknown or the SNOMED code is unknown, @nullFlavor SHOULD be “UNK”. If the diagnosis is known but the code cannot be found in the Value Set, @nullFlavor SHOULD be “OTH” and the known diagnosis code SHOULD be placed in the translation element (CONF:1098-14293).
2. MAY contain zero or one [0..1] methodCode (CONF:1098-14316).

Goal Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.121 (open)]

Table 298: Goal Observation Contexts

| Contained By: | Contains: |
| --- | --- |
| [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (optional)  [Goals Section](#S_Goals_Section) (required)  [Goal Observation](#E_Goal_Observation_U) (optional) | [Goal Observation](#E_Goal_Observation_U) (optional)  [Priority Preference](#E_Priority_Preference) (optional)  [Author Participation](#U_Author_Participation) (optional)  [Entry Reference](#E_Entry_Reference) (optional)  [External Document Reference](#E_External_Document_Reference) (optional) |

This template represents a patient health goal. A Goal Observation template may have related components that are acts, encounters, observations, procedures, substance administrations, or supplies.

A goal may be a patient or provider goal. If the author is set to the recordTarget (patient), this is a patient goal. If the author is set to a provider, this is a provider goal. If both patient and provider are set as authors, this is a negotiated goal.

A goal usually has a related health concern and/or risk.

A goal may have components consisting of other goals (milestones). These milestones are related to the overall goal through entryRelationships.

Table 299: Goal Observation Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.121) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-30418](#C_1098-30418) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-30419](#C_1098-30419) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = GOL |
| templateId | 1..1 | SHALL |  | [1098-8583](#C_1098-8583) |  |
| @root | 1..1 | SHALL |  | [1098-10512](#C_1098-10512) | 2.16.840.1.113883.10.20.22.4.121 |
| @extension | 0..0 | SHALL NOT |  | [1098-32953](#C_1098-32953) |  |
| id | 1..\* | SHALL |  | [1098-32332](#C_1098-32332) |  |
| code | 1..1 | SHALL |  | [1098-30784](#C_1098-30784) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| statusCode | 1..1 | SHALL |  | [1098-32333](#C_1098-32333) |  |
| @code | 1..1 | SHALL |  | [1098-32334](#C_1098-32334) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = active |
| effectiveTime | 0..1 | SHOULD |  | [1098-32335](#C_1098-32335) |  |
| value | 0..1 | MAY |  | [1098-32743](#C_1098-32743) |  |
| author | 0..\* | SHOULD |  | [1098-30995](#C_1098-30995) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| entryRelationship | 0..\* | MAY |  | [1098-30701](#C_1098-30701) |  |
| @typeCode | 1..1 | SHALL |  | [1098-30702](#C_1098-30702) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1098-30703](#C_1098-30703) | [Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122](#E_Entry_Reference) |
| entryRelationship | 0..\* | MAY |  | [1098-30704](#C_1098-30704) |  |
| @typeCode | 1..1 | SHALL |  | [1098-30705](#C_1098-30705) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| act | 1..1 | SHALL |  | [1098-32879](#C_1098-32879) | [Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122](#E_Entry_Reference) |
| entryRelationship | 0..1 | SHOULD |  | [1098-30785](#C_1098-30785) |  |
| @typeCode | 1..1 | SHALL |  | [1098-30786](#C_1098-30786) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1098-30787](#C_1098-30787) | [Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143](#E_Priority_Preference) |
| entryRelationship | 0..\* | MAY |  | [1098-31448](#C_1098-31448) |  |
| @typeCode | 1..1 | SHALL |  | [1098-31449](#C_1098-31449) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| observation | 1..1 | SHALL |  | [1098-32880](#C_1098-32880) | [Goal Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.121](#E_Goal_Observation_U) |
| entryRelationship | 0..\* | MAY |  | [1098-31559](#C_1098-31559) |  |
| @typeCode | 1..1 | SHALL |  | [1098-31560](#C_1098-31560) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1098-31588](#C_1098-31588) | [Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122](#E_Entry_Reference) |
| reference | 0..\* | MAY |  | [1098-32754](#C_1098-32754) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32755](#C_1098-32755) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| externalDocument | 1..1 | SHALL |  | [1098-32756](#C_1098-32756) | [External Document Reference (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.115:2014-06-09](#E_External_Document_Reference) |

1. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1098-30418).
2. SHALL contain exactly one [1..1] @moodCode="GOL" Goal (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1098-30419).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-8583) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.121" (CONF:1098-10512).
   2. SHALL NOT contain [0..0] @extension (CONF:1098-32953).
4. SHALL contain at least one [1..\*] id (CONF:1098-32332).
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:1098-30784).
6. SHALL contain exactly one [1..1] statusCode (CONF:1098-32333).
   1. This statusCode SHALL contain exactly one [1..1] @code="active" (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-32334).
7. SHOULD contain zero or one [0..1] effectiveTime (CONF:1098-32335).
8. MAY contain zero or one [0..1] value (CONF:1098-32743).

If the author is the recordTarget (patient), this is a patient goal. If the author is a provider, this is a provider goal. If both patient and provider are authors, this is a negotiated goal. If no author is present, it is assumed the document or section author(s) is the author of this goal.

1. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-30995).

The following entryRelationship represents the relationship between a Goal Observation and a Health Concern Act (Goal Observation REFERS TO Health Concern Act). As Health Concern Act is already defined in Health Concerns Section, rather than clone the whole Health Concern Act template, an Entry Reference may be used in entryRelationship to refer the template.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-30701) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-30702).
   2. SHALL contain exactly one [1..1] [Entry Reference](#E_Entry_Reference) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:1098-30703).

The following entryRelationship represents a planned component of the goal such as Planned Encounter (V2), Planned Observation (V2), Planned Procedure (V2), Planned Medication Activity (V2), Planned Supply (V2), Planned Act (V2) or Planned Immunization Activity. Because these entries are already described in the Interventions Section of the CDA document instance, rather than repeating the full content of the entries, the Entry Reference template may be used to reference the entries.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-30704) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" Has component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-30705).
   2. SHALL contain exactly one [1..1] [Entry Reference](#E_Entry_Reference) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:1098-32879).

The following entryRelationship represents the priority that the patient or a provider puts on the goal.

1. SHOULD contain zero or one [0..1] entryRelationship (CONF:1098-30785) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-30786).
   2. SHALL contain exactly one [1..1] [Priority Preference](#E_Priority_Preference) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:1098-30787).

The following entryRelationship represents the relationship between two Goal Observations where the target is a component of the source (Goal Observation HAS COMPONENT Goal Observation). The component goal (target) is a Milestone.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-31448) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" Has component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-31449).
   2. SHALL contain exactly one [1..1] [Goal Observation](#E_Goal_Observation_U) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.121) (CONF:1098-32880).

Where a Goal Observation needs to reference another entry already described in the CDA document instance, rather than repeating the full content of the entry, the Entry Reference template may be used to reference this entry.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-31559) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-31560).
   2. SHALL contain exactly one [1..1] [Entry Reference](#E_Entry_Reference) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:1098-31588).

Where it is necessary to reference an external clinical document such a Referral document, Discharge Summary document etc., the External Document Reference template can be used to reference this document. However, if this Care Plan document is replacing or appending another Care Plan document in the same set, that relationship is set in the header, using ClinicalDocument/relatedDocument.

1. MAY contain zero or more [0..\*] reference (CONF:1098-32754).
   1. 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:1098-32755).
   2. The reference, if present, SHALL contain exactly one [1..1] [External Document Reference](#E_External_Document_Reference) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.115:2014-06-09) (CONF:1098-32756).

Figure 154: Goal Observation Example

<observation classCode="OBS" moodCode="GOL">

<templateId root="2.16.840.1.113883.10.20.22.4.121" />

<id root="3700b3b0-fbed-11e2-b778-0800200c9a66" />

<code code="59408-5"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="Oxygen saturation in Arterial blood by Pulse oximetry" />

<statusCode code="active" />

<effectiveTime value="20130902" />

<value xsi:type="IVL\_PQ">

<low value="92" unit="%" />

</value>

<!--

If the author is set to the recordTarget (patient), this is a patient goal.

If the author is set to a provider, this is a provider goal.

If both patient and provider are set as authors, this is a negotiated goal.

-->

<!-- Provider Author -->

<author>

<templateId root="2.16.840.1.113883.10.20.22.4.119" />

...

</author>

<!-- Patient Author -->

<author typeCode="AUT">

<templateId root="2.16.840.1.113883.10.20.22.4.119" />

...

</author>

<!-- This entryRelationship represents the relationship "Goal REFERS TO Health Concern" -->

<entryRelationship typeCode="REFR">

<!-- Entry Reference Concern Act -->

<act classCode="ACT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.122" />

<!-- This id points to an already defined Health Concern in the Health Concerns Section -->

<id root="4eab0e52-dd7d-4285-99eb-72d32ddb195c" />

...

</act>

</entryRelationship>

<!-- Priority Preference -->

<entryRelationship typeCode="RSON">

<!-- Priority Preference - this is the preference that the patient

(specified by the Author Participation template)

places on the Goal -->

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.143" />

...

</observation>

</entryRelationship>

<!-- Priority Preference - this is the preference that the provider

(specified by the Author Participation template)

places on the Goal -->

<entryRelationship typeCode="RSON">

<!-- Priority Preference -->

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.143" />

...

</observation>

</entryRelationship>

</observation>

Handoff Communication Participants

[act: identifier urn:oid:2.16.840.1.113883.10.20.22.4.141 (open)]

Table 300: Handoff Communication Participants Contexts

| Contained By: | Contains: |
| --- | --- |
| [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (optional)  [Planned Intervention Act (V2)](#E_Planned_Intervention_Act_V2) (optional)  [Intervention Act (V2)](#E_Intervention_Act_V2) (optional)  [Interventions Section (V3)](#S_Interventions_Section_V3) (optional) | [Author Participation](#U_Author_Participation) (required) |

This template represents the sender (author) and receivers (participants) of a handoff communication in a plan of treatment. It does not convey details about the communication. The "handoff" process involves senders, those transmitting the patient's information and releasing the care of that patient to the next clinician, and receivers, those who accept the patient information and care of that patient.

Table 301: Handoff Communication Participants Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.141) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-30832](#C_1098-30832) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1098-30833](#C_1098-30833) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-30834](#C_1098-30834) |  |
| @root | 1..1 | SHALL |  | [1098-30835](#C_1098-30835) | 2.16.840.1.113883.10.20.22.4.141 |
| code | 1..1 | SHALL |  | [1098-30836](#C_1098-30836) |  |
| @code | 1..1 | SHALL |  | [1098-30837](#C_1098-30837) | 432138007 |
| @codeSystem | 1..1 | SHALL |  | [1098-30838](#C_1098-30838) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.6.96 |
| statusCode | 1..1 | SHALL |  | [1098-31668](#C_1098-31668) |  |
| @code | 1..1 | SHALL |  | [1098-31669](#C_1098-31669) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1098-31670](#C_1098-31670) |  |
| author | 1..\* | SHALL |  | [1098-31672](#C_1098-31672) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| participant | 1..\* | SHALL |  | [1098-31673](#C_1098-31673) |  |
| @typeCode | 1..1 | SHALL |  | [1098-31674](#C_1098-31674) | urn:oid:2.16.840.1.113883.5.110 (HL7RoleClass) = IRCP |
| participantRole | 1..1 | SHALL |  | [1098-31675](#C_1098-31675) |  |
| id | 1..\* | SHALL |  | [1098-32422](#C_1098-32422) |  |
| code | 0..1 | SHOULD |  | [1098-31676](#C_1098-31676) | urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy) |
| addr | 1..\* | SHALL |  | [1098-32392](#C_1098-32392) |  |
| playingEntity | 0..1 | MAY |  | [1098-32393](#C_1098-32393) |  |
| name | 1..\* | SHALL |  | [1098-32394](#C_1098-32394) |  |

1. SHALL contain exactly one [1..1] @classCode="ACT" Act (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1098-30832).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1098-30833).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-30834) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.141" (CONF:1098-30835).
4. SHALL contain exactly one [1..1] code (CONF:1098-30836).
   1. This code SHALL contain exactly one [1..1] @code="432138007" handoff communication (procedure) (CONF:1098-30837).
   2. 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:1098-30838).
5. SHALL contain exactly one [1..1] statusCode (CONF:1098-31668).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-31669).

The effective time is the time when the handoff process took place between the sender and receiver of the patient information. This could be the time the information was transmitted, released, or verbally communicated to the next clinician.

1. SHALL contain exactly one [1..1] effectiveTime (CONF:1098-31670).

The Author Participant contains the sender's contact information and is a resource for the Information Recipient for any follow-up questions.

1. SHALL contain at least one [1..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31672).

Documentation of the Information Recipient's name and address verifies that the information was exchanged.

1. SHALL contain at least one [1..\*] participant (CONF:1098-31673) such that it
   1. SHALL contain exactly one [1..1] @typeCode="IRCP" Information Recipient (CodeSystem: HL7RoleClass urn:oid:2.16.840.1.113883.5.110) (CONF:1098-31674).
   2. SHALL contain exactly one [1..1] participantRole (CONF:1098-31675).
      1. This participantRole SHALL contain at least one [1..\*] id (CONF:1098-32422).
      2. This participantRole SHOULD contain zero or one [0..1] code, which SHOULD be selected from ValueSet [Healthcare Provider Taxonomy](#Healthcare_Provider_Taxonomy) urn:oid:2.16.840.1.114222.4.11.1066 DYNAMIC (CONF:1098-31676).
      3. This participantRole SHALL contain at least one [1..\*] addr (CONF:1098-32392).
      4. This participantRole MAY contain zero or one [0..1] playingEntity (CONF:1098-32393).
         1. The playingEntity, if present, SHALL contain at least one [1..\*] name (CONF:1098-32394).

Figure 155: Handoff Communication Example

<entry>

<act classCode="ACT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.141" />

<code code="432138007" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="handoff communication (procedure)" />

<statusCode code="completed" />

<effectiveTime value="20130712" />

<author typeCode="AUT">

<templateId root="2.16.840.1.113883.10.20.22.4.119" />

<time value="20130730" />

<assignedAuthor>

<id root="d839038b-7171-4165-a760-467925b43857" />

...

</assignedAuthor>

</author>

<participant typeCode="IRCP">

<participantRole>

<code code="163W00000X" codeSystem="2.16.840.1.113883.6.101" codeSystemName="NUCC Health Care Provider Taxonomy" displayName="Registered Nurse" />

...

</participantRole>

</participant>

</act>

</entry>

Health Concern Act (V2)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.132:2015-08-01 (open)]

Table 302: Health Concern Act (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Health Concerns Section (V2)](#S_Health_Concerns_Section_V2) (required) | [Pregnancy Observation](#E_Pregnancy_Observation) (optional)  [Caregiver Characteristics](#E_Caregiver_Characteristics) (optional)  [Assessment Scale Observation](#E_Assessment_Scale_Observation) (optional)  [Characteristics of Home Environment](#E_Characteristics_of_Home_Environment) (optional)  [Cultural and Religious Observation](#E_Cultural_and_Religious_Observation) (optional)  [Sensory Status](#E_Sensory_Status) (optional)  [Self-Care Activities (ADL and IADL)](#E_SelfCare_Activities_ADL_and_IADL) (optional)  [Reaction Observation (V2)](#Reaction_Observation_V2) (optional)  [Nutritional Status Observation](#E_Nutritional_Status_Observation) (optional)  [Allergy - Intolerance Observation (V2)](#E_Allergy__Intolerance_Observation_V2) (optional)  [Substance or Device Allergy - Intolerance Observation (V2)](#E_Substance_or_Device_Allergy__V2) (optional)  [Nutrition Assessment](#E_Nutrition_Assessment) (optional)  [Functional Status Observation (V2)](#E_Functional_Status_Observation_V2) (optional)  [Smoking Status - Meaningful Use (V2)](#E_Smoking_Status__Meaningful_Use_V2) (optional)  [Vital Sign Observation (V2)](#E_Vital_Sign_Observation_V2) (optional)  [Priority Preference](#E_Priority_Preference) (optional)  [Tobacco Use (V2)](#Tobacco_Use_V2) (optional)  [Author Participation](#U_Author_Participation) (optional)  [Entry Reference](#E_Entry_Reference) (optional)  [External Document Reference](#E_External_Document_Reference) (optional)  [Result Observation (V3)](#E_Result_Observation_V3) (optional)  [Mental Status Observation (V3)](#E_Mental_Status_Observation_V3) (optional)  [Problem Observation (V3)](#E_Problem_Observation_V3) (optional)  [Social History Observation (V3)](#E_Social_History_Observation_V3) (optional)  [Result Organizer (V3)](#E_Result_Organizer_V3) (optional)  [Encounter Diagnosis (V3)](#E_Encounter_Diagnosis_V3) (optional)  [Family History Organizer (V3)](#E_Family_History_Organizer_V3) (optional)  [Hospital Admission Diagnosis (V3)](#E_Hospital_Admission_Diagnosis_V3) (optional)  [Problem Concern Act (V3)](#E_Problem_Concern_Act_V3) (optional)  [Preoperative Diagnosis (V3)](#E_Preoperative_Diagnosis_V3) (optional)  [Postprocedure Diagnosis (V3)](#E_Postprocedure_Diagnosis_V3) (optional)  [Longitudinal Care Wound Observation (V2)](#E_Longitudinal_Care_Wound_Observation_V2) (optional) |

This template represents a health concern.

It is a wrapper for a single health concern which may be derived from a variety of sources within an EHR (such as Problem List, Family History, Social History, Social Worker Note, etc.).

A Health Concern Act is used to track non-optimal physical or psychological situations drawing the patient to the healthcare system. These may be from the perspective of the care team or from the perspective of the patient.  
When the underlying condition is of concern (i.e., as long as the condition, whether active or resolved, is of ongoing concern and interest), the statusCode is “active”. Only when the underlying condition is no longer of concern is the statusCode set to “completed”. The effectiveTime reflects the time that the underlying condition was felt to be a concern; it may or may not correspond to the effectiveTime of the condition (e.g., even five years later, a prior heart attack may remain a concern).  
Health concerns require intervention(s) to increase the likelihood of achieving the goals of care for the patient and they specify the condition oriented reasons for creating the plan.

Table 303: Health Concern Act (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.132:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-30750](#C_1198-30750) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1198-30751](#C_1198-30751) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-30752](#C_1198-30752) |  |
| @root | 1..1 | SHALL |  | [1198-30753](#C_1198-30753) | 2.16.840.1.113883.10.20.22.4.132 |
| @extension | 1..1 | SHALL |  | [1198-32861](#C_1198-32861) | 2015-08-01 |
| id | 1..\* | SHALL |  | [1198-30754](#C_1198-30754) |  |
| code | 1..1 | SHALL |  | [1198-32310](#C_1198-32310) |  |
| @code | 1..1 | SHALL |  | [1198-32311](#C_1198-32311) | 75310-3 |
| @codeSystem | 1..1 | SHALL |  | [1198-32312](#C_1198-32312) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1198-30758](#C_1198-30758) |  |
| @code | 1..1 | SHALL |  | [1198-32313](#C_1198-32313) | urn:oid:2.16.840.1.113883.11.20.9.19 (ProblemAct statusCode) |
| effectiveTime | 0..1 | MAY |  | [1198-30759](#C_1198-30759) |  |
| author | 0..\* | SHOULD |  | [1198-31546](#C_1198-31546) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| entryRelationship | 0..\* | MAY |  | [1198-30761](#C_1198-30761) |  |
| @typeCode | 1..1 | SHALL |  | [1198-30762](#C_1198-30762) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31001](#C_1198-31001) | [Problem Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01](#E_Problem_Observation_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-31007](#C_1198-31007) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31008](#C_1198-31008) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31186](#C_1198-31186) | [Allergy - Intolerance Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.7:2014-06-09](#E_Allergy__Intolerance_Observation_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-31157](#C_1198-31157) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31158](#C_1198-31158) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-32106](#C_1198-32106) | [Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122](#E_Entry_Reference) |
| entryRelationship | 0..\* | MAY |  | [1198-31160](#C_1198-31160) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31161](#C_1198-31161) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| act | 1..1 | SHALL |  | [1198-32107](#C_1198-32107) | [Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122](#E_Entry_Reference) |
| entryRelationship | 0..\* | MAY |  | [1198-31190](#C_1198-31190) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31191](#C_1198-31191) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31192](#C_1198-31192) | [Assessment Scale Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69](#E_Assessment_Scale_Observation) |
| entryRelationship | 0..\* | MAY |  | [1198-31232](#C_1198-31232) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31264](#C_1198-31264) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31265](#C_1198-31265) | [Self-Care Activities (ADL and IADL) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.128](#E_SelfCare_Activities_ADL_and_IADL) |
| entryRelationship | 0..\* | MAY |  | [1198-31234](#C_1198-31234) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31268](#C_1198-31268) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31273](#C_1198-31273) | [Mental Status Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.74:2015-08-01](#E_Mental_Status_Observation_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-31235](#C_1198-31235) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31269](#C_1198-31269) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31275](#C_1198-31275) | [Smoking Status - Meaningful Use (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09](#E_Smoking_Status__Meaningful_Use_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-31236](#C_1198-31236) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31270](#C_1198-31270) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-31277](#C_1198-31277) | [Encounter Diagnosis (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.80:2015-08-01](#E_Encounter_Diagnosis_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-31237](#C_1198-31237) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31279](#C_1198-31279) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| organizer | 1..1 | SHALL |  | [1198-31280](#C_1198-31280) | [Family History Organizer (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.45:2015-08-01](#E_Family_History_Organizer_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-31238](#C_1198-31238) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31282](#C_1198-31282) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31283](#C_1198-31283) | [Functional Status Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.67:2014-06-09](#E_Functional_Status_Observation_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-31241](#C_1198-31241) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31291](#C_1198-31291) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-31292](#C_1198-31292) | [Hospital Admission Diagnosis (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.34:2015-08-01](#E_Hospital_Admission_Diagnosis_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-31244](#C_1198-31244) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31300](#C_1198-31300) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31301](#C_1198-31301) | [Nutrition Assessment (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.138](#E_Nutrition_Assessment) |
| entryRelationship | 0..\* | MAY |  | [1198-31246](#C_1198-31246) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31306](#C_1198-31306) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-31307](#C_1198-31307) | [Postprocedure Diagnosis (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.51:2015-08-01](#E_Postprocedure_Diagnosis_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-31247](#C_1198-31247) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31309](#C_1198-31309) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31310](#C_1198-31310) | [Pregnancy Observation (identifier: urn:oid:2.16.840.1.113883.10.20.15.3.8](#E_Pregnancy_Observation) |
| entryRelationship | 0..\* | MAY |  | [1198-31248](#C_1198-31248) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31312](#C_1198-31312) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-31313](#C_1198-31313) | [Preoperative Diagnosis (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.65:2015-08-01](#E_Preoperative_Diagnosis_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-31250](#C_1198-31250) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31318](#C_1198-31318) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31319](#C_1198-31319) | [Reaction Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09](#Reaction_Observation_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-31251](#C_1198-31251) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31321](#C_1198-31321) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31322](#C_1198-31322) | [Result Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.2:2015-08-01](#E_Result_Observation_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-31252](#C_1198-31252) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31324](#C_1198-31324) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31325](#C_1198-31325) | [Sensory Status (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.127](#E_Sensory_Status) |
| entryRelationship | 0..\* | MAY |  | [1198-31253](#C_1198-31253) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31327](#C_1198-31327) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31328](#C_1198-31328) | [Social History Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2015-08-01](#E_Social_History_Observation_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-31254](#C_1198-31254) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32955](#C_1198-32955) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31331](#C_1198-31331) | [Substance or Device Allergy - Intolerance Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.24.3.90:2014-06-09](#E_Substance_or_Device_Allergy__V2) |
| entryRelationship | 0..\* | MAY |  | [1198-31255](#C_1198-31255) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31333](#C_1198-31333) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31334](#C_1198-31334) | [Tobacco Use (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09](#Tobacco_Use_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-31256](#C_1198-31256) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31336](#C_1198-31336) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31337](#C_1198-31337) | [Vital Sign Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.27:2014-06-09](#E_Vital_Sign_Observation_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-31257](#C_1198-31257) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31339](#C_1198-31339) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31340](#C_1198-31340) | [Longitudinal Care Wound Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.114:2015-08-01](#E_Longitudinal_Care_Wound_Observation_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-31365](#C_1198-31365) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31366](#C_1198-31366) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SPRT |
| observation | 1..1 | SHALL |  | [1198-31367](#C_1198-31367) | [Problem Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01](#E_Problem_Observation_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-31368](#C_1198-31368) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31369](#C_1198-31369) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31370](#C_1198-31370) | [Caregiver Characteristics (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.72](#E_Caregiver_Characteristics) |
| entryRelationship | 0..\* | MAY |  | [1198-31371](#C_1198-31371) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31372](#C_1198-31372) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31373](#C_1198-31373) | [Cultural and Religious Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.111](#E_Cultural_and_Religious_Observation) |
| entryRelationship | 0..\* | MAY |  | [1198-31374](#C_1198-31374) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31375](#C_1198-31375) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31376](#C_1198-31376) | [Characteristics of Home Environment (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.109](#E_Characteristics_of_Home_Environment) |
| entryRelationship | 0..\* | MAY |  | [1198-31377](#C_1198-31377) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31378](#C_1198-31378) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31379](#C_1198-31379) | [Nutritional Status Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.124](#E_Nutritional_Status_Observation) |
| entryRelationship | 0..\* | MAY |  | [1198-31380](#C_1198-31380) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31381](#C_1198-31381) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| organizer | 1..1 | SHALL |  | [1198-31382](#C_1198-31382) | [Result Organizer (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.1:2015-08-01](#E_Result_Organizer_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-31442](#C_1198-31442) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31443](#C_1198-31443) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31444](#C_1198-31444) | [Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143](#E_Priority_Preference) |
| entryRelationship | 0..\* | MAY |  | [1198-31544](#C_1198-31544) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31547](#C_1198-31547) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-31548](#C_1198-31548) | [Problem Concern Act (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.3:2015-08-01](#E_Problem_Concern_Act_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-31549](#C_1198-31549) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31550](#C_1198-31550) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-31551](#C_1198-31551) | [Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122](#E_Entry_Reference) |
| reference | 0..\* | MAY |  | [1198-32757](#C_1198-32757) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32758](#C_1198-32758) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| externalDocument | 1..1 | SHALL |  | [1198-32759](#C_1198-32759) | [External Document Reference (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.115:2014-06-09](#E_External_Document_Reference) |

1. SHALL contain exactly one [1..1] @classCode="ACT" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1198-30750).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1198-30751).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-30752) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.132" (CONF:1198-30753).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32861).
4. SHALL contain at least one [1..\*] id (CONF:1198-30754).
5. SHALL contain exactly one [1..1] code (CONF:1198-32310).
   1. This code SHALL contain exactly one [1..1] @code="75310-3" Health Concern (CONF:1198-32311).
   2. 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:1198-32312).
6. SHALL contain exactly one [1..1] statusCode (CONF:1198-30758).
   1. This statusCode SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [ProblemAct statusCode](#ProblemAct_statusCode) urn:oid:2.16.840.1.113883.11.20.9.19 STATIC (CONF:1198-32313).
7. MAY contain zero or one [0..1] effectiveTime (CONF:1198-30759).

A health concern may be a patient or provider concern. If the author is set to the recordTarget (patient), this is a patient concern. If the author is set to a provider, this is a provider concern. If both patient and provider are set as authors, this is a concern of both the patient and the provider.

1. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1198-31546).
2. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-30761) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-30762).
   2. SHALL contain exactly one [1..1] [Problem Observation (V3)](#E_Problem_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01) (CONF:1198-31001).
3. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31007) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31008).
   2. SHALL contain exactly one [1..1] [Allergy - Intolerance Observation (V2)](#E_Allergy__Intolerance_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.7:2014-06-09) (CONF:1198-31186).

The following entryRelationship represents the relationship between two Health Concern Acts where there is a general relationship between the source and the target (Health Concern REFERS TO Health Concern). For example, a patient has 2 health concerns identified in a CARE Plan: Failure to Thrive and Poor Feeding, while it could be that one may have caused the other, at the time of care planning and documentation it is not necessary, nor desirable to have to assert what caused what. The Entry Reference template is used here because the target Health Concern Act will be defined elsewhere in the Health Concerns Section and thus a reference to that template is all that is required.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31157) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31158).
   2. SHALL contain exactly one [1..1] [Entry Reference](#E_Entry_Reference) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:1198-32106).
      1. The Entry Reference template SHALL contain an id that references a Health Concern Act (CONF:1198-32860).

The following entryRelationship represents the relationship between two Health Concern Acts where the target is a component of the source (Health Concern HAS COMPONENT Health Concern). For example, a patient has an Impaired Mobility Health Concern. There may then be the need to document several component health concerns, such as "Unable to Transfer Bed to Chair", "Unable to Rise from Commode", "Short of Breath Walking with Walker". The Entry Reference template is used here because the target Health Concern Act will be defined elsewhere in the Health Concerns Section and thus a reference to that template is all that is required.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31160) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" Has component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31161).
   2. SHALL contain exactly one [1..1] [Entry Reference](#E_Entry_Reference) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:1198-32107).
      1. The Entry Reference template SHALL contain an id that references a Health Concern Act (CONF:1198-32745).
2. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31190) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31191).
   2. SHALL contain exactly one [1..1] [Assessment Scale Observation](#E_Assessment_Scale_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69) (CONF:1198-31192).
3. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31232) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31264).
   2. SHALL contain exactly one [1..1] [Self-Care Activities (ADL and IADL)](#E_SelfCare_Activities_ADL_and_IADL) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.128) (CONF:1198-31265).
4. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31234) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31268).
   2. SHALL contain exactly one [1..1] [Mental Status Observation (V3)](#E_Mental_Status_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.74:2015-08-01) (CONF:1198-31273).
5. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31235) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31269).
   2. SHALL contain exactly one [1..1] [Smoking Status - Meaningful Use (V2)](#E_Smoking_Status__Meaningful_Use_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09) (CONF:1198-31275).
6. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31236) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31270).
   2. SHALL contain exactly one [1..1] [Encounter Diagnosis (V3)](#E_Encounter_Diagnosis_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.80:2015-08-01) (CONF:1198-31277).
7. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31237) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers To (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31279).
   2. SHALL contain exactly one [1..1] [Family History Organizer (V3)](#E_Family_History_Organizer_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.45:2015-08-01) (CONF:1198-31280).
8. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31238) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31282).
   2. SHALL contain exactly one [1..1] [Functional Status Observation (V2)](#E_Functional_Status_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.67:2014-06-09) (CONF:1198-31283).
9. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31241) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31291).
   2. SHALL contain exactly one [1..1] [Hospital Admission Diagnosis (V3)](#E_Hospital_Admission_Diagnosis_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.34:2015-08-01) (CONF:1198-31292).
10. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31244) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31300).
    2. SHALL contain exactly one [1..1] [Nutrition Assessment](#E_Nutrition_Assessment) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.138) (CONF:1198-31301).
11. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31246) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31306).
    2. SHALL contain exactly one [1..1] [Postprocedure Diagnosis (V3)](#E_Postprocedure_Diagnosis_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.51:2015-08-01) (CONF:1198-31307).
12. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31247) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31309).
    2. SHALL contain exactly one [1..1] [Pregnancy Observation](#E_Pregnancy_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.15.3.8) (CONF:1198-31310).
13. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31248) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31312).
    2. SHALL contain exactly one [1..1] [Preoperative Diagnosis (V3)](#E_Preoperative_Diagnosis_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.65:2015-08-01) (CONF:1198-31313).
14. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31250) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31318).
    2. SHALL contain exactly one [1..1] [Reaction Observation (V2)](#Reaction_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09) (CONF:1198-31319).
15. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31251) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31321).
    2. SHALL contain exactly one [1..1] [Result Observation (V3)](#E_Result_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.2:2015-08-01) (CONF:1198-31322).
16. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31252) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31324).
    2. SHALL contain exactly one [1..1] [Sensory Status](#E_Sensory_Status) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.127) (CONF:1198-31325).
17. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31253) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31327).
    2. SHALL contain exactly one [1..1] [Social History Observation (V3)](#E_Social_History_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2015-08-01) (CONF:1198-31328).
18. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31254) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32955).
    2. SHALL contain exactly one [1..1] [Substance or Device Allergy - Intolerance Observation (V2)](#E_Substance_or_Device_Allergy__V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.24.3.90:2014-06-09) (CONF:1198-31331).
19. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31255) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31333).
    2. SHALL contain exactly one [1..1] [Tobacco Use (V2)](#Tobacco_Use_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09) (CONF:1198-31334).
20. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31256) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31336).
    2. SHALL contain exactly one [1..1] [Vital Sign Observation (V2)](#E_Vital_Sign_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.27:2014-06-09) (CONF:1198-31337).
21. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31257) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31339).
    2. SHALL contain exactly one [1..1] [Longitudinal Care Wound Observation (V2)](#E_Longitudinal_Care_Wound_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.114:2015-08-01) (CONF:1198-31340).

The following entryRelationship represents the relationship Health Concern HAS SUPPORT Observation.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31365) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SPRT" Has support (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31366).
   2. SHALL contain exactly one [1..1] [Problem Observation (V3)](#E_Problem_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01) (CONF:1198-31367).
2. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31368) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31369).
   2. SHALL contain exactly one [1..1] [Caregiver Characteristics](#E_Caregiver_Characteristics) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.72) (CONF:1198-31370).
3. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31371) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31372).
   2. SHALL contain exactly one [1..1] [Cultural and Religious Observation](#E_Cultural_and_Religious_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.111) (CONF:1198-31373).
4. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31374) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31375).
   2. SHALL contain exactly one [1..1] [Characteristics of Home Environment](#E_Characteristics_of_Home_Environment) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.109) (CONF:1198-31376).
5. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31377) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31378).
   2. SHALL contain exactly one [1..1] [Nutritional Status Observation](#E_Nutritional_Status_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.124) (CONF:1198-31379).
6. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31380) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31381).
   2. SHALL contain exactly one [1..1] [Result Organizer (V3)](#E_Result_Organizer_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.1:2015-08-01) (CONF:1198-31382).

The following entryRelationship represents the priority that the patient or a provider puts on the health concern.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31442) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31443).
   2. SHALL contain exactly one [1..1] [Priority Preference](#E_Priority_Preference) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:1198-31444).
2. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31544) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31547).
   2. SHALL contain exactly one [1..1] [Problem Concern Act (V3)](#E_Problem_Concern_Act_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.3:2015-08-01) (CONF:1198-31548).

Where a Health Concern needs to reference another entry already described in the CDA document instance, rather than repeating the full content of the entry, the Entry Reference template may be used to reference this entry.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31549) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31550).
   2. SHALL contain exactly one [1..1] [Entry Reference](#E_Entry_Reference) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:1198-31551).

Where it is necessary to reference an external clinical document such a Referral document, Discharge Summary document etc., the External Document Reference template can be used to reference this document. However, if this Care Plan document is replacing or appending another Care Plan document in the same set, that relationship is set in the header, using ClinicalDocument/relatedDocument.

1. MAY contain zero or more [0..\*] reference (CONF:1198-32757).
   1. 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:1198-32758).
   2. The reference, if present, SHALL contain exactly one [1..1] [External Document Reference](#E_External_Document_Reference) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.115:2014-06-09) (CONF:1198-32759).

Figure 156: Health Concern Act Example

<act classCode="ACT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.132" extension="2015-08-01" />

<id root="4eab0e52-dd7d-4285-99eb-72d32ddb195c" />

<code code="75310-3"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="Health Concern" />

<!-- This Health Concern has a statusCode of active because it is an active concern -->

<statusCode code="active" />

<!-- The effective time is the date that the Health Concern started being followed -

this does not necessarily correlate to the onset date of the contained health issues-->

<effectiveTime value="20130616" />

<!-- Health Concern: Current every day smoker-->

<entryRelationship typeCode="REFR">

<!-- Tobacco Use (V2) -->

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.85" extension="2014-06-09" />

...

</observation>

</entryRelationship>

<!-- Health Concern Problem: Respiratory insufficiency -->

<entryRelationship typeCode="REFR">

<!-- Problem Observation (V2) -->

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2015-08-01" />

...

</observation>

</entryRelationship>

<!-- Health Concern Diagnosis: Pneumonia -->

<entryRelationship typeCode="REFR">

<!-- Problem Observation (V2) -->

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2015-08-01" />

...

</observation>

</entryRelationship>

<!--

This is an entry relationship of the SPRT (support) type which shows

that the productive cough supports the Health Concern (Problem: Respiratory

Insufficiency and Diagnosis: Pneumonia

This entryRelationship represents the relationship:

Health Concern HAS SUPPORT Observation

-->

<entryRelationship typeCode="SPRT">

<!-- Problem Observation (V2) -->

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2015-08-01" />

...

</observation>

</entryRelationship>

<!-- Priority Preference -->

<entryRelationship typeCode="RSON">

<!-- Priority Preference - this is the preference that the patient

(specified by the Author Participation template)

places on the Health Concern -->

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.143" />

...

</observation>

</entryRelationship>

<!-- Priority Preference - this is the preference that the provider

(specified by the Author Participation template)

places on the Health Concern -->

<entryRelationship typeCode="RSON">

<!-- Priority Preference -->

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.143" />

...

</observation>

</entryRelationship>

</act>

Health Status Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.5:2014-06-09 (open)]

Table 304: Health Status Observation (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Health Concerns Section (V2)](#S_Health_Concerns_Section_V2) (optional)  [Problem Section (entries optional) (V3)](#S_Problem_Section_entries_optional_V3) (optional)  [Problem Section (entries required) (V3)](#S_Problem_Section_entries_required_V3) (optional) |  |

This template represents information about the overall health status of the patient. To represent the impact of a specific problem or concern related to the patient's expected health outcome use the Prognosis Observation template 2.16.840.1.113883.10.20.22.4.113.

Table 305: Health Status Observation (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.5:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-9057](#C_1098-9057) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-9072](#C_1098-9072) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-16756](#C_1098-16756) |  |
| @root | 1..1 | SHALL |  | [1098-16757](#C_1098-16757) | 2.16.840.1.113883.10.20.22.4.5 |
| @extension | 1..1 | SHALL |  | [1098-32558](#C_1098-32558) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-32486](#C_1098-32486) |  |
| code | 1..1 | SHALL |  | [1098-19143](#C_1098-19143) |  |
| @code | 1..1 | SHALL |  | [1098-19144](#C_1098-19144) | 11323-3 |
| @codeSystem | 1..1 | SHALL |  | [1098-32161](#C_1098-32161) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1098-9074](#C_1098-9074) |  |
| @code | 1..1 | SHALL |  | [1098-19103](#C_1098-19103) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| value | 1..1 | SHALL | CD | [1098-9075](#C_1098-9075) | urn:oid:2.16.840.1.113883.1.11.20.12 (HealthStatus) |

1. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1098-9057).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1098-9072).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-16756) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.5" (CONF:1098-16757).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32558).
4. SHALL contain at least one [1..\*] id (CONF:1098-32486).
5. SHALL contain exactly one [1..1] code (CONF:1098-19143).
   1. This code SHALL contain exactly one [1..1] @code="11323-3" Health status (CONF:1098-19144).
   2. 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:1098-32161).
6. SHALL contain exactly one [1..1] statusCode (CONF:1098-9074).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1098-19103).
7. SHALL contain exactly one [1..1] value with @xsi:type="CD", where the code SHALL be selected from ValueSet [HealthStatus](#HealthStatus) urn:oid:2.16.840.1.113883.1.11.20.12 DYNAMIC (CONF:1098-9075).

Table 306: HealthStatus

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: HealthStatus urn:oid:2.16.840.1.113883.1.11.20.12  (Clinical Focus: The general health status of the patient),(Data Element Scope: ),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 6/25/2019 with a version of 20190517.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.20.12/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 135815002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | General health good (finding) |
| 135818000 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | General health poor (finding) |
| 161045001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Disability - severe (finding) |
| 161901003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Chronic sick (finding) |
| 162467007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Free of symptoms (situation) |
| 21134002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Disability (finding) |
| 271593001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Moribund (finding) |
| 419099009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Dead (finding) |
| 765205004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Disorder in remission (disorder) |
| 81323004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Normal general body function (finding) |

Figure 157: Health Status Observation (V2) Example

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.5" extension="2014-06-09"/>

<code code="11323-3" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Health status" />

<text>

<reference value="#healthstatus" />

</text>

<statusCode code="completed" />

<value xsi:type="CD" code="81323004" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Alive and well" />

</observation>

Highest Pressure Ulcer Stage

[observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.77 (open)]

Table 307: Highest Pressure Ulcer Stage Contexts

| Contained By: | Contains: |
| --- | --- |
| [Longitudinal Care Wound Observation (V2)](#E_Longitudinal_Care_Wound_Observation_V2) (optional) |  |

This observation contains a description of the wound tissue of the most severe or highest staged pressure ulcer observed on a patient.

Table 308: Highest Pressure Ulcer Stage Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.77) | | | | | |
| @classCode | 1..1 | SHALL |  | [81-14726](#C_81-14726) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [81-14727](#C_81-14727) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [81-14728](#C_81-14728) |  |
| @root | 1..1 | SHALL |  | [81-14729](#C_81-14729) | 2.16.840.1.113883.10.20.22.4.77 |
| id | 1..\* | SHALL |  | [81-14730](#C_81-14730) |  |
| code | 1..1 | SHALL |  | [81-14731](#C_81-14731) |  |
| @code | 1..1 | SHALL |  | [81-14732](#C_81-14732) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 420905001 |
| value | 1..1 | SHALL |  | [81-14733](#C_81-14733) |  |

1. SHALL contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:81-14726).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:81-14727).
3. SHALL contain exactly one [1..1] templateId (CONF:81-14728) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.77" (CONF:81-14729).
4. SHALL contain at least one [1..\*] id (CONF:81-14730).
5. SHALL contain exactly one [1..1] code (CONF:81-14731).
   1. This code SHALL contain exactly one [1..1] @code="420905001" Highest Pressure Ulcer Stage (CodeSystem: SNOMED CT urn:oid:2.16.840.1.113883.6.96 STATIC) (CONF:81-14732).
6. SHALL contain exactly one [1..1] value (CONF:81-14733).

Figure 158: Highest Pressure Ulcer Stage Example

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.77"/>

<id root="08edb7c0-2111-43f2-a784-9a5fdfaa67f0"/>

<code code="420905001" codeSystem="2.16.840.1.113883.6.96"

displayName=" Highest Pressure Ulcer Stage"/>

<statusCode code="completed"/>

<value xsi:type="CD" code="421306004"

codeSystem="2.16.840.1.113883.6.96"

displayName="necrotic eschar"/>

</observation>

Hospital Admission Diagnosis (V3)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.34:2015-08-01 (open)]

Table 309: Hospital Admission Diagnosis (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Admission Diagnosis Section (V3)](#S_Admission_Diagnosis_Section_V3) (optional)  [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional) | [Problem Observation (V3)](#E_Problem_Observation_V3) (required) |

This template represents problems or diagnoses identified by the clinician at the time of the patient’s admission.  
This Hospital Admission Diagnosis act may contain more than one Problem Observation to represent multiple diagnoses for a Hospital Admission.

Table 310: Hospital Admission Diagnosis (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.34:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-7671](#C_1198-7671) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1198-7672](#C_1198-7672) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-16747](#C_1198-16747) |  |
| @root | 1..1 | SHALL |  | [1198-16748](#C_1198-16748) | 2.16.840.1.113883.10.20.22.4.34 |
| @extension | 1..1 | SHALL |  | [1198-32535](#C_1198-32535) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-19145](#C_1198-19145) |  |
| @code | 1..1 | SHALL |  | [1198-19146](#C_1198-19146) | 46241-6 |
| @codeSystem | 1..1 | SHALL |  | [1198-32162](#C_1198-32162) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| entryRelationship | 1..\* | SHALL |  | [1198-7674](#C_1198-7674) |  |
| @typeCode | 1..1 | SHALL |  | [1198-7675](#C_1198-7675) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| observation | 1..1 | SHALL |  | [1198-15535](#C_1198-15535) | [Problem Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01](#E_Problem_Observation_V3) |

1. SHALL contain exactly one [1..1] @classCode="ACT" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-7671).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-7672).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-16747) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.34" (CONF:1198-16748).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32535).
4. SHALL contain exactly one [1..1] code (CONF:1198-19145).
   1. This code SHALL contain exactly one [1..1] @code="46241-6" Admission diagnosis (CONF:1198-19146).
   2. 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:1198-32162).
5. SHALL contain at least one [1..\*] entryRelationship (CONF:1198-7674) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has Subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1198-7675).
   2. SHALL contain exactly one [1..1] [Problem Observation (V3)](#E_Problem_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01) (CONF:1198-15535).

Figure 159: Hospital Admission Diagnosis (V3) Example

<act classCode="ACT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.34" extension="2015-08-01" />

<id root="5a784260-6856-4f38-9638-80c751aff2fb" />

<code code="46241-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Hospital Admission Diagnosis" />

<statusCode code="active" />

<effectiveTime>

<low value="20090303" />

</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" extension="2015-08-01" />

...

</observation>

</entryRelationship>

</act>

Hospital Discharge Diagnosis (V3)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.33:2015-08-01 (open)]

Table 311: Hospital Discharge Diagnosis (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Discharge Diagnosis Section (V3)](#S_Discharge_Diagnosis_Section_V3) (optional) | [Problem Observation (V3)](#E_Problem_Observation_V3) (required) |

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 312: Hospital Discharge Diagnosis (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.33:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-7663](#C_1198-7663) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1198-7664](#C_1198-7664) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-16764](#C_1198-16764) |  |
| @root | 1..1 | SHALL |  | [1198-16765](#C_1198-16765) | 2.16.840.1.113883.10.20.22.4.33 |
| @extension | 1..1 | SHALL |  | [1198-32534](#C_1198-32534) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-19147](#C_1198-19147) |  |
| @code | 1..1 | SHALL |  | [1198-19148](#C_1198-19148) | 11535-2 |
| @codeSystem | 1..1 | SHALL |  | [1198-32163](#C_1198-32163) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| entryRelationship | 1..\* | SHALL |  | [1198-7666](#C_1198-7666) |  |
| @typeCode | 1..1 | SHALL |  | [1198-7667](#C_1198-7667) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| observation | 1..1 | SHALL |  | [1198-15536](#C_1198-15536) | [Problem Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01](#E_Problem_Observation_V3) |

1. SHALL contain exactly one [1..1] @classCode="ACT" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-7663).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-7664).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-16764) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.33" (CONF:1198-16765).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32534).
4. SHALL contain exactly one [1..1] code (CONF:1198-19147).
   1. This code SHALL contain exactly one [1..1] @code="11535-2" Hospital discharge diagnosis (CONF:1198-19148).
   2. 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:1198-32163).
5. SHALL contain at least one [1..\*] entryRelationship (CONF:1198-7666) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has Subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1198-7667).
   2. SHALL contain exactly one [1..1] [Problem Observation (V3)](#E_Problem_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01) (CONF:1198-15536).

Figure 160: Hospital Discharge Diagnosis (V3) Example

<act classCode="ACT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.33" extension="2015-08-01"/>

<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" extension="2015-08-01" />

...

</observation>

</entryRelationship>

</act>

Immunization Activity (V3)

[substanceAdministration: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.52:2015-08-01 (open)]

Table 313: Immunization Activity (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Immunizations Section (entries required) (V3)](#S_Immunizations_Section_entries_require) (required)  [Immunizations Section (entries optional) (V3)](#S_Immunizations_Section_entries_optiona) (optional)  [Planned Intervention Act (V2)](#E_Planned_Intervention_Act_V2) (optional)  [Intervention Act (V2)](#E_Intervention_Act_V2) (optional) | [Drug Vehicle](#E_Drug_Vehicle) (optional)  [Immunization Refusal Reason](#E_Immunization_Refusal_Reason) (optional)  [Reaction Observation (V2)](#Reaction_Observation_V2) (optional)  [Indication (V2)](#Indication_V2) (optional)  [Medication Supply Order (V2)](#E_Medication_Supply_Order_V2) (optional)  [Medication Dispense (V2)](#E_Medication_Dispense_V2) (optional)  [Instruction (V2)](#Instruction_V2) (optional)  [Author Participation](#U_Author_Participation) (optional)  [Substance Administered Act](#E_Substance_Administered_Act) (optional)  [Immunization Medication Information (V2)](#Immunization_Medication_Information_V2) (required)  [Precondition for Substance Administration (V2)](#Precondition_for_Substance_Administrati) (optional) |

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)  
   Date printed on the VISDate VIS given to patient or parent/guardian.

This information should be included in an Immunization Activity when available. (Reference: [https://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/c/vis-instruct.pdf])

Table 314: Immunization Activity (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| substanceAdministration (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.52:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-8826](#C_1198-8826) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = SBADM |
| @moodCode | 1..1 | SHALL |  | [1198-8827](#C_1198-8827) | urn:oid:2.16.840.1.113883.11.20.9.18 (MoodCodeEvnInt) |
| @negationInd | 1..1 | SHALL |  | [1198-8985](#C_1198-8985) |  |
| templateId | 1..1 | SHALL |  | [1198-8828](#C_1198-8828) |  |
| @root | 1..1 | SHALL |  | [1198-10498](#C_1198-10498) | 2.16.840.1.113883.10.20.22.4.52 |
| @extension | 1..1 | SHALL |  | [1198-32528](#C_1198-32528) | 2015-08-01 |
| id | 1..\* | SHALL |  | [1198-8829](#C_1198-8829) |  |
| code | 0..1 | MAY |  | [1198-8830](#C_1198-8830) |  |
| statusCode | 1..1 | SHALL |  | [1198-8833](#C_1198-8833) |  |
| @code | 1..1 | SHALL |  | [1198-32359](#C_1198-32359) | urn:oid:2.16.840.1.113883.1.11.15933 (ActStatus) |
| effectiveTime | 1..1 | SHALL |  | [1198-8834](#C_1198-8834) |  |
| repeatNumber | 0..1 | MAY |  | [1198-8838](#C_1198-8838) |  |
| routeCode | 0..1 | MAY |  | [1198-8839](#C_1198-8839) | urn:oid:2.16.840.1.113883.3.88.12.3221.8.7 (SPL Drug Route of Administration Terminology) |
| translation | 0..\* | SHOULD |  | [1198-32960](#C_1198-32960) |  |
| @code | 1..1 | SHALL |  | [1198-32970](#C_1198-32970) | urn:oid:2.16.840.1.113762.1.4.1099.12 (Medication Route) |
| approachSiteCode | 0..1 | MAY | SET<CD> | [1198-8840](#C_1198-8840) | urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 (Body Site Value Set) |
| doseQuantity | 0..1 | SHOULD |  | [1198-8841](#C_1198-8841) |  |
| @unit | 0..1 | SHOULD |  | [1198-8842](#C_1198-8842) | urn:oid:2.16.840.1.113883.1.11.12839 (UnitsOfMeasureCaseSensitive) |
| administrationUnitCode | 0..1 | MAY |  | [1198-8846](#C_1198-8846) | urn:oid:2.16.840.1.113762.1.4.1021.30 (AdministrationUnitDoseForm) |
| consumable | 1..1 | SHALL |  | [1198-8847](#C_1198-8847) |  |
| manufacturedProduct | 1..1 | SHALL |  | [1198-15546](#C_1198-15546) | [Immunization Medication Information (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09](#Immunization_Medication_Information_V2) |
| performer | 0..1 | SHOULD |  | [1198-8849](#C_1198-8849) |  |
| author | 0..\* | SHOULD |  | [1198-31151](#C_1198-31151) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| participant | 0..\* | MAY |  | [1198-8850](#C_1198-8850) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8851](#C_1198-8851) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = CSM |
| participantRole | 1..1 | SHALL |  | [1198-15547](#C_1198-15547) | [Drug Vehicle (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.24](#E_Drug_Vehicle) |
| entryRelationship | 0..\* | MAY |  | [1198-8853](#C_1198-8853) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8854](#C_1198-8854) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [1198-15537](#C_1198-15537) | [Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09](#Indication_V2) |
| entryRelationship | 0..1 | MAY |  | [1198-8856](#C_1198-8856) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8857](#C_1198-8857) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| @inversionInd | 1..1 | SHALL |  | [1198-8858](#C_1198-8858) | true |
| act | 1..1 | SHALL |  | [1198-31392](#C_1198-31392) | [Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09](#Instruction_V2) |
| entryRelationship | 0..1 | MAY |  | [1198-8860](#C_1198-8860) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8861](#C_1198-8861) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| supply | 1..1 | SHALL |  | [1198-15539](#C_1198-15539) | [Medication Supply Order (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09](#E_Medication_Supply_Order_V2) |
| entryRelationship | 0..1 | MAY |  | [1198-8863](#C_1198-8863) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8864](#C_1198-8864) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| supply | 1..1 | SHALL |  | [1198-15540](#C_1198-15540) | [Medication Dispense (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2014-06-09](#E_Medication_Dispense_V2) |
| entryRelationship | 0..1 | MAY |  | [1198-8866](#C_1198-8866) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8867](#C_1198-8867) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = CAUS |
| observation | 1..1 | SHALL |  | [1198-15541](#C_1198-15541) | [Reaction Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09](#Reaction_Observation_V2) |
| entryRelationship | 0..1 | MAY |  | [1198-8988](#C_1198-8988) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8989](#C_1198-8989) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [1198-15542](#C_1198-15542) | [Immunization Refusal Reason (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.53](#E_Immunization_Refusal_Reason) |
| entryRelationship | 0..\* | SHOULD |  | [1198-31510](#C_1198-31510) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31511](#C_1198-31511) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| @inversionInd | 1..1 | SHALL |  | [1198-31512](#C_1198-31512) | true |
| sequenceNumber | 0..1 | MAY |  | [1198-31513](#C_1198-31513) |  |
| act | 1..1 | SHALL |  | [1198-31514](#C_1198-31514) | [Substance Administered Act (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.118](#E_Substance_Administered_Act) |
| precondition | 0..\* | MAY |  | [1198-8869](#C_1198-8869) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8870](#C_1198-8870) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = PRCN |
| criterion | 1..1 | SHALL |  | [1198-15548](#C_1198-15548) | [Precondition for Substance Administration (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09](#Precondition_for_Substance_Administrati) |

1. SHALL contain exactly one [1..1] @classCode="SBADM" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-8826).
2. SHALL contain exactly one [1..1] @moodCode, which SHALL be selected from ValueSet [MoodCodeEvnInt](#MoodCodeEvnInt) urn:oid:2.16.840.1.113883.11.20.9.18 STATIC (CONF:1198-8827).
3. SHALL contain exactly one [1..1] @negationInd (CONF:1198-8985).  
   Note: Use negationInd="true" to indicate that the immunization was not given.
4. SHALL contain exactly one [1..1] templateId (CONF:1198-8828) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.52" (CONF:1198-10498).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32528).
5. SHALL contain at least one [1..\*] id (CONF:1198-8829).
6. MAY contain zero or one [0..1] code (CONF:1198-8830).  
   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:1198-8833).
   1. This statusCode SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [ActStatus](#ActStatus) urn:oid:2.16.840.1.113883.1.11.15933 DYNAMIC (CONF:1198-32359).
8. SHALL contain exactly one [1..1] effectiveTime (CONF:1198-8834).

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.

1. MAY contain zero or one [0..1] repeatNumber (CONF:1198-8838).
2. MAY contain zero or one [0..1] routeCode, which SHALL be selected from ValueSet [SPL Drug Route of Administration Terminology](#SPL_Drug_Route_of_Administration_Termin) urn:oid:2.16.840.1.113883.3.88.12.3221.8.7 DYNAMIC (CONF:1198-8839).
   1. The routeCode, if present, SHOULD contain zero or more [0..\*] translation (CONF:1198-32960) such that it
      1. SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [Medication Route](#Medication_Route) urn:oid:2.16.840.1.113762.1.4.1099.12 DYNAMIC (CONF:1198-32970).
3. MAY contain zero or one [0..1] approachSiteCode, where the code SHALL be selected from ValueSet [Body Site Value Set](#Body_Site_Value_Set) urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 DYNAMIC (CONF:1198-8840).
4. SHOULD contain zero or one [0..1] doseQuantity (CONF:1198-8841).

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

* 1. The doseQuantity, if present, SHOULD contain zero or one [0..1] @unit, which SHOULD be selected from ValueSet [UnitsOfMeasureCaseSensitive](#UnitsOfMeasureCaseSensitive) urn:oid:2.16.840.1.113883.1.11.12839 DYNAMIC (CONF:1198-8842).

1. MAY contain zero or one [0..1] administrationUnitCode, which SHALL be selected from ValueSet [AdministrationUnitDoseForm](#AdministrationUnitDoseForm) urn:oid:2.16.840.1.113762.1.4.1021.30 DYNAMIC (CONF:1198-8846).
2. SHALL contain exactly one [1..1] consumable (CONF:1198-8847).
   1. This consumable SHALL contain exactly one [1..1] [Immunization Medication Information (V2)](#Immunization_Medication_Information_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09) (CONF:1198-15546).
3. SHOULD contain zero or one [0..1] performer (CONF:1198-8849).
4. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1198-31151).
5. MAY contain zero or more [0..\*] participant (CONF:1198-8850) such that it
   1. SHALL contain exactly one [1..1] @typeCode="CSM" (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 STATIC) (CONF:1198-8851).
   2. SHALL contain exactly one [1..1] [Drug Vehicle](#E_Drug_Vehicle) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.24) (CONF:1198-15547).
6. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-8853) such that it
   1. SHALL contain exactly one [1..1] @typeCode="RSON" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1198-8854).
   2. SHALL contain exactly one [1..1] [Indication (V2)](#Indication_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09) (CONF:1198-15537).
7. MAY contain zero or one [0..1] entryRelationship (CONF:1198-8856) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1198-8857).
   2. SHALL contain exactly one [1..1] @inversionInd="true" True (CONF:1198-8858).
   3. SHALL contain exactly one [1..1] [Instruction (V2)](#Instruction_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:1198-31392).
8. MAY contain zero or one [0..1] entryRelationship (CONF:1198-8860) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1198-8861).
   2. SHALL contain exactly one [1..1] [Medication Supply Order (V2)](#E_Medication_Supply_Order_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09) (CONF:1198-15539).
9. MAY contain zero or one [0..1] entryRelationship (CONF:1198-8863) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1198-8864).
   2. SHALL contain exactly one [1..1] [Medication Dispense (V2)](#E_Medication_Dispense_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2014-06-09) (CONF:1198-15540).
10. MAY contain zero or one [0..1] entryRelationship (CONF:1198-8866) such that it
    1. SHALL contain exactly one [1..1] @typeCode="CAUS" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1198-8867).
    2. SHALL contain exactly one [1..1] [Reaction Observation (V2)](#Reaction_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09) (CONF:1198-15541).
11. MAY contain zero or one [0..1] entryRelationship (CONF:1198-8988) such that it
    1. SHALL contain exactly one [1..1] @typeCode="RSON" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1198-8989).
    2. SHALL contain exactly one [1..1] [Immunization Refusal Reason](#E_Immunization_Refusal_Reason) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.53) (CONF:1198-15542).

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.

1. SHOULD contain zero or more [0..\*] entryRelationship (CONF:1198-31510) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31511).
   2. SHALL contain exactly one [1..1] @inversionInd="true" (CONF:1198-31512).
   3. MAY contain zero or one [0..1] sequenceNumber (CONF:1198-31513).
   4. SHALL contain exactly one [1..1] [Substance Administered Act](#E_Substance_Administered_Act) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.118) (CONF:1198-31514).
2. MAY contain zero or more [0..\*] precondition (CONF:1198-8869) such that it
   1. SHALL contain exactly one [1..1] @typeCode="PRCN" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1198-8870).
   2. SHALL contain exactly one [1..1] [Precondition for Substance Administration (V2)](#Precondition_for_Substance_Administrati) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09) (CONF:1198-15548).

Table 315: MoodCodeEvnInt

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: MoodCodeEvnInt urn:oid:2.16.840.1.113883.11.20.9.18  (Clinical Focus: Subset of HL7 ActMood codes, constrained to represent event (EVN) and intent (INT) moods.),(Data Element Scope: ),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 4/24/2019 with a version of 20190104.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.18/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| EVN | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | event (occurrence) |
| INT | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | intent |

Table 316: SPL Drug Route of Administration Terminology

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: SPL Drug Route of Administration Terminology urn:oid:2.16.840.1.113883.3.88.12.3221.8.7  (Clinical Focus: The set of route of administration concepts that may be used in structured product labeling.),(Data Element Scope: Ordered, administered, medication route),(Inclusion Criteria: Selected concepts that are descendent of C38114 as determined by the FDA. These concepts are linked to "SPL Drug Route of Administration Terminology (Code C54455)" by Concept\_In\_Subset.),(Exclusion Criteria: As determined by the FDA those routes not to be used in SPL (navigational concepts, etc.))  This value set was imported on 6/29/2019 with a version of 20190604.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.3221.8.7/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| C132737 | NCI Thesaurus (NCIt) | urn:oid:2.16.840.1.113883.3.26.1.1 | Intracanalicular Route of Administration |
| C28161 | NCI Thesaurus (NCIt) | urn:oid:2.16.840.1.113883.3.26.1.1 | Intramuscular Route of Administration |
| C38192 | NCI Thesaurus (NCIt) | urn:oid:2.16.840.1.113883.3.26.1.1 | Auricular Route of Administration |
| C38193 | NCI Thesaurus (NCIt) | urn:oid:2.16.840.1.113883.3.26.1.1 | Buccal Route of Administration |
| C38194 | NCI Thesaurus (NCIt) | urn:oid:2.16.840.1.113883.3.26.1.1 | Conjunctival Route of Administration |
| C38197 | NCI Thesaurus (NCIt) | urn:oid:2.16.840.1.113883.3.26.1.1 | Dental Route of Administration |
| C38198 | NCI Thesaurus (NCIt) | urn:oid:2.16.840.1.113883.3.26.1.1 | Soft Tissue Route of Administration |
| C38200 | NCI Thesaurus (NCIt) | urn:oid:2.16.840.1.113883.3.26.1.1 | Administration via Hemodialysis |
| C38203 | NCI Thesaurus (NCIt) | urn:oid:2.16.840.1.113883.3.26.1.1 | Iontophoresis Route of Administration |
| C38205 | NCI Thesaurus (NCIt) | urn:oid:2.16.840.1.113883.3.26.1.1 | Endocervical Route of Administration |
| ... | | | |

Table 317: Body Site Value Set

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Body Site Value Set urn:oid:2.16.840.1.113883.3.88.12.3221.8.9  (Clinical Focus: All SNOMED CT anatomic structures, locations, abnormal structures that can be considered to describe an anatomical site.),(Data Element Scope: data element describing body location),(Inclusion Criteria: SNOMED CT concepts descending from the Anatomical Structure (91723000) 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)),(Exclusion Criteria: none)  This value set was imported on 6/24/2019 with a version of 20190420.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.3221.8.9/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 10013000 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Lateral meniscus structure (body structure) |
| 10024003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Structure of base of lung (body structure) |
| 10025002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Structure of base of phalanx of index finger (body structure) |
| 10026001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Structure of ventral spinocerebellar tract of pons (body structure) |
| 10036009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Structure of nucleus pulposus of intervertebral disc of eighth thoracic vertebra (body structure) |
| 10042008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Structure of intervertebral foramen of fifth thoracic vertebra (body structure) |
| 10047002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Structure of transplanted lung (body structure) |
| 1005009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Entire diaphragmatic lymph node (body structure) |
| 10052007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Male structure (body structure) |
| 10056005 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Structure of ophthalmic nerve (body structure) |
| ... | | | |

Table 318: UnitsOfMeasureCaseSensitive

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: UnitsOfMeasureCaseSensitive urn:oid:2.16.840.1.113883.1.11.12839  (Clinical Focus: Common UCUM units. This value set is based on the Common UCUM set.),(Data Element Scope: unit of measure),(Inclusion Criteria: all valid UCUM units case sensitive),(Exclusion Criteria: )  This value set was imported on 6/29/2019 with a version of 20180509.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.12839/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| % | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | percent |
| %{Hb} | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | percent hemoglobin |
| %{RBCs} | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | percent of red blood cells |
| %{WBCs} | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | percent of white blood cells |
| %{abnormal} | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | percent abnormal |
| %{activity} | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | percent activity |
| %{aggregation} | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | percent aggregation |
| %{at\_60\_min} | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | percent at 60 minute |
| %{bacteria} | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | percent of bacteria |
| %{basal\_activity} | UCUM | urn:oid:1.3.6.1.4.1.12009.10.3.1 | percent basal activity |
| ... | | | |

Table 319: AdministrationUnitDoseForm

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: AdministrationUnitDoseForm urn:oid:2.16.840.1.113762.1.4.1021.30  (Clinical Focus: 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.),(Data Element Scope: C-CDA substanceAdministration/administrationUnitCode),(Inclusion Criteria: Unit concepts describing drug administration when the drug item is not administered as an "each" of the physical form, or is not using standard measurement units (inch, ounce, gram, etc.) Concepts have a "Concept\_In\_Subset" relationship to "SPL Unit of Presentation Terminology" (Code C87300)),(Exclusion Criteria: 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. Does not include standard measurement units (inch, ounce, gram, etc.))  This value set was imported on 6/24/2019 with a version of 20190604.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1021.30/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| C102405 | NCI Thesaurus (NCIt) | urn:oid:2.16.840.1.113883.3.26.1.1 | Capful Dosing Unit |
| C122629 | NCI Thesaurus (NCIt) | urn:oid:2.16.840.1.113883.3.26.1.1 | Actuation Dosing Unit |
| C122631 | NCI Thesaurus (NCIt) | urn:oid:2.16.840.1.113883.3.26.1.1 | Dropperful Dosing Unit |
| C25397 | NCI Thesaurus (NCIt) | urn:oid:2.16.840.1.113883.3.26.1.1 | Application Unit |
| C44278 | NCI Thesaurus (NCIt) | urn:oid:2.16.840.1.113883.3.26.1.1 | Unit |
| C48491 | NCI Thesaurus (NCIt) | urn:oid:2.16.840.1.113883.3.26.1.1 | Metric Drop |
| C48501 | NCI Thesaurus (NCIt) | urn:oid:2.16.840.1.113883.3.26.1.1 | Inhalation Dosing Unit |
| C48536 | NCI Thesaurus (NCIt) | urn:oid:2.16.840.1.113883.3.26.1.1 | Scoopful Dosing Unit |
| C48537 | NCI Thesaurus (NCIt) | urn:oid:2.16.840.1.113883.3.26.1.1 | Spray Dosing Unit |
| C65060 | NCI Thesaurus (NCIt) | urn:oid:2.16.840.1.113883.3.26.1.1 | Puff Dosing Unit |
| ... | | | |

Table 320: Medication Route

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Medication Route urn:oid:2.16.840.1.113762.1.4.1099.12  (Clinical Focus: Terms used to describe the path by which a substance is taken into the body.),(Data Element Scope: ),(Inclusion Criteria: All SNOMED\_CT values descending from 284009009 route of administration value),(Exclusion Criteria: )  This value set was imported on 6/25/2019 with a version of 20190521.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1099.12/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 10547007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Otic route (qualifier value) |
| 12130007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Intra-articular route (qualifier value) |
| 127490009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Gastrostomy route (qualifier value) |
| 127491008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Jejunostomy route (qualifier value) |
| 127492001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Nasogastric route (qualifier value) |
| 1611000175109 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Sublesional route (qualifier value) |
| 16857009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Vaginal route (qualifier value) |
| 26643006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Oral route (qualifier value) |
| 34206005 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Subcutaneous route (qualifier value) |
| 37161004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Rectal route (qualifier value) |
| ... | | | |

Figure 161: Immunization Activity (V3) Example

<substanceAdministration classCode="SBADM" moodCode="EVN" negationInd="false">

<!-- \*\* Immunization activity \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.52" extension="2015-08-01" />

<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>

Immunization Medication Information (V2)

[manufacturedProduct: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09 (open)]

Table 321: Immunization Medication Information (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Planned Supply (V2)](#E_Planned_Supply_V2) (optional)  [Medication Supply Order (V2)](#E_Medication_Supply_Order_V2) (optional)  [Medication Dispense (V2)](#E_Medication_Dispense_V2) (optional)  [Planned Immunization Activity](#E_Planned_Immunization_Activity) (required)  [Immunization Activity (V3)](#E_Immunization_Activity_V3) (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 322: 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 |  | [1098-9002](#C_1098-9002) | urn:oid:2.16.840.1.113883.5.110 (HL7RoleClass) = MANU |
| templateId | 1..1 | SHALL |  | [1098-9004](#C_1098-9004) |  |
| @root | 1..1 | SHALL |  | [1098-10499](#C_1098-10499) | 2.16.840.1.113883.10.20.22.4.54 |
| @extension | 1..1 | SHALL |  | [1098-32602](#C_1098-32602) | 2014-06-09 |
| id | 0..\* | MAY |  | [1098-9005](#C_1098-9005) |  |
| manufacturedMaterial | 1..1 | SHALL |  | [1098-9006](#C_1098-9006) |  |
| code | 1..1 | SHALL |  | [1098-9007](#C_1098-9007) | urn:oid:2.16.840.1.113762.1.4.1010.6 (CVX Vaccines Administered Vaccine Set) |
| translation | 0..\* | MAY |  | [1098-31543](#C_1098-31543) | urn:oid:2.16.840.1.113762.1.4.1010.8 (Vaccine Clinical Drug) |
| translation | 0..\* | MAY |  | [1098-31881](#C_1098-31881) |  |
| lotNumberText | 0..1 | SHOULD |  | [1098-9014](#C_1098-9014) |  |
| manufacturerOrganization | 0..1 | SHOULD |  | [1098-9012](#C_1098-9012) |  |

1. SHALL contain exactly one [1..1] @classCode="MANU" (CodeSystem: HL7RoleClass 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
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.54" (CONF:1098-10499).
   2. 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).
   1. This manufacturedMaterial SHALL contain exactly one [1..1] code, which SHALL be selected from ValueSet [CVX Vaccines Administered Vaccine Set](#CVX_Vaccines_Administered_Vaccine_Set) urn:oid:2.16.840.1.113762.1.4.1010.6 DYNAMIC (CONF:1098-9007).
      1. This code MAY contain zero or more [0..\*] translation, which MAY be selected from ValueSet [Vaccine Clinical Drug](#Vaccine_Clinical_Drug) urn:oid:2.16.840.1.113762.1.4.1010.8 DYNAMIC (CONF:1098-31543).
      2. This code MAY contain zero or more [0..\*] translation (CONF:1098-31881).

lotNumberText should be included if known. It may not be known for historical immunizations, planned immunizations, or refused/deferred immunizations.

* 1. This manufacturedMaterial SHOULD contain zero or one [0..1] lotNumberText (CONF:1098-9014).

1. SHOULD contain zero or one [0..1] manufacturerOrganization (CONF:1098-9012).

Table 323: CVX Vaccines Administered Vaccine Set

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: CVX Vaccines Administered Vaccine Set urn:oid:2.16.840.1.113762.1.4.1010.6  (Clinical Focus: CVX vaccine concepts that represent actual vaccines types, including those that are historical record of a vaccine administered where the exact formulation is unknown. This does not include the identifiers for CVX codes that are administrative codes or never active codes. Available at http://www2a.cdc.gov/vaccines/iis/iisstandards/vaccines.asp?rpt=cvx),(Data Element Scope: Vaccine representation),(Inclusion Criteria: Any CVX code with "CVX status" (VSAC Property) = Active, Inactive, Non-US except those noted in exclusions),(Exclusion Criteria: CVX codes that have a CVX "status" of either "Pending" or "Never Active" AND CVX codes with CVX "Nonvaccine" property = True.)  This value set was imported on 8/11/2021 with a version of Latest.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1010.6/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 01 | CDC Vaccine Code (CVX) | urn:oid:2.16.840.1.113883.12.292 | diphtheria, tetanus toxoids and pertussis vaccine |
| 02 | CDC Vaccine Code (CVX) | urn:oid:2.16.840.1.113883.12.292 | trivalent poliovirus vaccine, live, oral |
| 03 | CDC Vaccine Code (CVX) | urn:oid:2.16.840.1.113883.12.292 | measles, mumps and rubella virus vaccine |
| 04 | CDC Vaccine Code (CVX) | urn:oid:2.16.840.1.113883.12.292 | measles and rubella virus vaccine |
| 05 | CDC Vaccine Code (CVX) | urn:oid:2.16.840.1.113883.12.292 | measles virus vaccine |
| 06 | CDC Vaccine Code (CVX) | urn:oid:2.16.840.1.113883.12.292 | rubella virus vaccine |
| 07 | CDC Vaccine Code (CVX) | urn:oid:2.16.840.1.113883.12.292 | mumps virus vaccine |
| 08 | CDC Vaccine Code (CVX) | urn:oid:2.16.840.1.113883.12.292 | hepatitis B vaccine, pediatric or pediatric/adolescent dosage |
| 09 | CDC Vaccine Code (CVX) | urn:oid:2.16.840.1.113883.12.292 | tetanus and diphtheria toxoids, adsorbed, preservative free, for adult use (2 Lf of tetanus toxoid and 2 Lf of diphtheria toxoid) |
| 10 | CDC Vaccine Code (CVX) | urn:oid:2.16.840.1.113883.12.292 | poliovirus vaccine, inactivated |
| ... | | | |

Table 324: Vaccine Clinical Drug

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Vaccine Clinical Drug urn:oid:2.16.840.1.113762.1.4.1010.8  (Clinical Focus: Administrable vaccine medication formulations represented using either a "generic" or "brand-specific" concept.),(Data Element Scope: vaccine medication),(Inclusion Criteria: Currently Active RxNorm clinical drug concepts that have the a mapped CVX code. Limit to SBD or SCD TTY.),(Exclusion Criteria: Any drug not meeting the inclusion criteria)  This value set was imported on 6/29/2019 with a version of 20190620.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1010.8/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 1099936 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | Adenovirus Type 4 Vaccine Live 32000 UNT Delayed Release Oral Tablet |
| 1099940 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | Adenovirus Type 7 Vaccine Live 32000 UNT Delayed Release Oral Tablet |
| 1190916 | 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 Injection [Tenivac] |
| 1190919 | 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 [Tenivac] |
| 1244205 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | 0.5 ML diphtheria toxoid vaccine, inactivated 50 UNT/ML / tetanus toxoid vaccine, inactivated 10 UNT/ML Injection |
| 1292435 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | 0.65 ML Varicella-Zoster Virus Vaccine Live (Oka-Merck) strain 29800 UNT/ML Injection [Zostavax] |
| 1292443 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | 0.5 ML Measles Virus Vaccine Live, Enders' attenuated Edmonston strain 2000 UNT/ML / Mumps Virus Vaccine Live, Jeryl Lynn Strain 40000 UNT/ML / Rubella Virus Vaccine Live (Wistar RA 27-3 Strain) 2000 UNT/ML / Varicella-Zoster Virus Vaccine Live (Oka-Merck) strain 20000 UNT/ML Injection [ProQuad] |
| 1292459 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | 0.5 ML Varicella-Zoster Virus Vaccine Live (Oka-Merck) strain 2700 UNT/ML Injection [Varivax] |
| 1292828 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | Yellow-Fever Virus Vaccine, 17D-204 strain 4000 UNT/ML Injectable Suspension [YF-Vax] |
| 1298819 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | influenza A-California-7-2009-(H1N1)v-like virus vaccine 158000000 UNT/ML Nasal Spray |
| ... | | | |

Figure 162: 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>

Immunization Refusal Reason

[observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.53 (open)]

Table 325: Immunization Refusal Reason Contexts

| Contained By: | Contains: |
| --- | --- |
| [Immunization Activity (V3)](#E_Immunization_Activity_V3) (optional) |  |

The Immunization Refusal Reason documents the rationale for the patient declining an immunization.

Table 326: 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 |  | [81-8991](#C_81-8991) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [81-8992](#C_81-8992) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [81-8993](#C_81-8993) |  |
| @root | 1..1 | SHALL |  | [81-10500](#C_81-10500) | 2.16.840.1.113883.10.20.22.4.53 |
| id | 1..\* | SHALL |  | [81-8994](#C_81-8994) |  |
| code | 1..1 | SHALL |  | [81-8995](#C_81-8995) | urn:oid:2.16.840.1.113883.1.11.19717 (No Immunization Reason) |
| statusCode | 1..1 | SHALL |  | [81-8996](#C_81-8996) |  |
| @code | 1..1 | SHALL |  | [81-19104](#C_81-19104) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = 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: HL7ActMood 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
   1. 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](#No_Immunization_Reason) 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).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:81-19104).

Table 327: No Immunization Reason

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: No Immunization Reason urn:oid:2.16.840.1.113883.1.11.19717  (Clinical Focus: Rationale for not administering indicated immunization),(Data Element Scope: ),(Inclusion Criteria: All descendant codes from ActNoImmunizationReason in code system ActReason),(Exclusion Criteria: )  This value set was imported on 6/25/2019 with a version of 20190425.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.19717/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| IMMUNE | HL7ActReason | urn:oid:2.16.840.1.113883.5.8 | immunity |
| MEDPREC | HL7ActReason | urn:oid:2.16.840.1.113883.5.8 | medical precaution |
| OSTOCK | HL7ActReason | urn:oid:2.16.840.1.113883.5.8 | product out of stock |
| PATOBJ | HL7ActReason | urn:oid:2.16.840.1.113883.5.8 | patient objection |
| PHILISOP | HL7ActReason | urn:oid:2.16.840.1.113883.5.8 | philosophical objection |
| RELIG | HL7ActReason | urn:oid:2.16.840.1.113883.5.8 | religious objection |
| VACEFF | HL7ActReason | urn:oid:2.16.840.1.113883.5.8 | vaccine efficacy concerns |
| VACSAF | HL7ActReason | urn:oid:2.16.840.1.113883.5.8 | vaccine safety concerns |

Figure 163: 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>

Indication (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09 (open)]

Table 328: Indication (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Medication Activity (V2)](#Medication_Activity_V2) (optional)  [Procedure Activity Act (V2)](#E_Procedure_Activity_Act_V2) (optional)  [Procedure Activity Procedure (V2)](#E_Procedure_Activity_Procedure_V2) (optional)  [Procedure Activity Observation (V2)](#E_Procedure_Activity_Observation_V2) (optional)  [Planned Act (V2)](#E_Planned_Act_V2) (optional)  [Planned Encounter (V2)](#E_Planned_Encounter_V2) (optional)  [Planned Procedure (V2)](#E_Planned_Procedure_V2) (optional)  [Planned Observation (V2)](#E_Planned_Observation_V2) (optional)  [Planned Supply (V2)](#E_Planned_Supply_V2) (optional)  [Planned Medication Activity (V2)](#E_Planned_Medication_Activity_V2) (optional)  [Procedure Indications Section (V2)](#Procedure_Indications_Section_V2) (optional)  [Patient Referral Act](#E_Patient_Referral_Act) (optional)  [Planned Immunization Activity](#E_Planned_Immunization_Activity) (optional)  [Immunization Activity (V3)](#E_Immunization_Activity_V3) (optional)  [Encounter Activity (V3)](#E_Encounter_Activity_V3) (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 cited (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 329: 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 |  | [1098-7480](#C_1098-7480) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-7481](#C_1098-7481) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-7482](#C_1098-7482) |  |
| @root | 1..1 | SHALL |  | [1098-10502](#C_1098-10502) | 2.16.840.1.113883.10.20.22.4.19 |
| @extension | 1..1 | SHALL |  | [1098-32570](#C_1098-32570) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-7483](#C_1098-7483) |  |
| code | 1..1 | SHALL |  | [1098-31229](#C_1098-31229) | urn:oid:2.16.840.1.113883.3.88.12.3221.7.2 (Problem Type (SNOMEDCT)) |
| statusCode | 1..1 | SHALL |  | [1098-7487](#C_1098-7487) |  |
| @code | 1..1 | SHALL |  | [1098-19105](#C_1098-19105) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 0..1 | SHOULD |  | [1098-7488](#C_1098-7488) |  |
| value | 0..1 | MAY | CD | [1098-7489](#C_1098-7489) | 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: HL7ActMood 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
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.19" (CONF:1098-10502).
   2. 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 elsewhere 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 (SNOMEDCT)](#Problem_Type_SNOMEDCT) urn:oid:2.16.840.1.113883.3.88.12.3221.7.2 DYNAMIC (CONF:1098-31229).
6. SHALL contain exactly one [1..1] statusCode (CONF:1098-7487).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus 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](#Problem) urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 DYNAMIC (CONF:1098-7489).

Figure 164: 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"/> -->

Instruction (V2)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09 (open)]

Table 330: Instruction (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Medication Activity (V2)](#Medication_Activity_V2) (optional)  [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (optional)  [Procedure Activity Act (V2)](#E_Procedure_Activity_Act_V2) (optional)  [Procedure Activity Procedure (V2)](#E_Procedure_Activity_Procedure_V2) (optional)  [Procedure Activity Observation (V2)](#E_Procedure_Activity_Observation_V2) (optional)  [Non-Medicinal Supply Activity (V2)](#NonMedicinal_Supply_Activity_V2) (optional)  [Planned Act (V2)](#E_Planned_Act_V2) (optional)  [Planned Procedure (V2)](#E_Planned_Procedure_V2) (optional)  [Planned Observation (V2)](#E_Planned_Observation_V2) (optional)  [Planned Supply (V2)](#E_Planned_Supply_V2) (optional)  [Planned Medication Activity (V2)](#E_Planned_Medication_Activity_V2) (optional)  [Medication Supply Order (V2)](#E_Medication_Supply_Order_V2) (optional)  [Instructions Section (V2)](#Instructions_Section_V2) (required)  [Planned Immunization Activity](#E_Planned_Immunization_Activity) (optional)  [Immunization Activity (V3)](#E_Immunization_Activity_V3) (optional)  [Planned Intervention Act (V2)](#E_Planned_Intervention_Act_V2) (optional)  [Intervention Act (V2)](#E_Intervention_Act_V2) (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 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 331: 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 |  | [1098-7391](#C_1098-7391) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1098-7392](#C_1098-7392) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = INT |
| templateId | 1..1 | SHALL |  | [1098-7393](#C_1098-7393) |  |
| @root | 1..1 | SHALL |  | [1098-10503](#C_1098-10503) | 2.16.840.1.113883.10.20.22.4.20 |
| @extension | 1..1 | SHALL |  | [1098-32598](#C_1098-32598) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-16884](#C_1098-16884) | urn:oid:2.16.840.1.113883.11.20.9.34 (Patient Education) |
| statusCode | 1..1 | SHALL |  | [1098-7396](#C_1098-7396) |  |
| @code | 1..1 | SHALL |  | [1098-19106](#C_1098-19106) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = 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: HL7ActMood 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
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.20" (CONF:1098-10503).
   2. 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](#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).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1098-19106).

Table 332: Patient Education

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Patient Education urn:oid:2.16.840.1.113883.11.20.9.34  (Clinical Focus: Interventions intended to inform the patient about a condition, its treatment, and the patient's role in the treatment),(Data Element Scope: procedure or communication),(Inclusion Criteria: All concepts descending from the Education (409073007) or the Education with explicit context (460615006) hierarchies in SNOMED CT.),(Exclusion Criteria: any concept not in the hierarchies described)  This value set was imported on 6/25/2019 with a version of 20190413.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.34/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 10189761000046105 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Hypertension exercise education (procedure) |
| 10756541000119104 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Childbirth education done (situation) |
| 108247002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Visual correction training AND/OR re-education procedure (procedure) |
| 113145005 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Biofeedback training in conduction disorder, arrhythmia (regime/therapy) |
| 113155009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Myocardial infarction education (procedure) |
| 114641000119104 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Natural contraception education done (situation) |
| 11581009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Swinging transfer training (regime/therapy) |
| 11816003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Diet education (procedure) |
| 118629009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Functional training (procedure) |
| 11924009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Orthotics training of upper extremities (procedure) |
| ... | | | |

Figure 165: Instruction (V2) Example

<act classCode="ACT" moodCode="INT">

<templateId root="2.16.840.1.113883.10.20.22.4.20" extension="2014-06-09" />

<code code="171044003" codeSystem="2.16.840.1.113883.6.96" displayName="immunization education" />

<text>

<reference value="#immunSect" />

Possible flu-like symptoms for three days.

</text>

<statusCode code="completed" />

</act>

Intervention Act (V2)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.131:2015-08-01 (open)]

Table 333: Intervention Act (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Planned Intervention Act (V2)](#E_Planned_Intervention_Act_V2) (optional)  [Intervention Act (V2)](#E_Intervention_Act_V2) (optional)  [Interventions Section (V3)](#S_Interventions_Section_V3) (optional) | [Medication Activity (V2)](#Medication_Activity_V2) (optional)  [Procedure Activity Act (V2)](#E_Procedure_Activity_Act_V2) (optional)  [Procedure Activity Procedure (V2)](#E_Procedure_Activity_Procedure_V2) (optional)  [Procedure Activity Observation (V2)](#E_Procedure_Activity_Observation_V2) (optional)  [Non-Medicinal Supply Activity (V2)](#NonMedicinal_Supply_Activity_V2) (optional)  [Nutrition Recommendation](#E_Nutrition_Recommendation) (optional)  [Handoff Communication Participants](#E_Handoff_Communication_Participants) (optional)  [Instruction (V2)](#Instruction_V2) (optional)  [Author Participation](#U_Author_Participation) (optional)  [Entry Reference](#E_Entry_Reference) (optional)  [External Document Reference](#E_External_Document_Reference) (optional)  [Immunization Activity (V3)](#E_Immunization_Activity_V3) (optional)  [Advance Directive Observation (V3)](#E_Advance_Directive_Observation_V3) (optional)  [Planned Intervention Act (V2)](#E_Planned_Intervention_Act_V2) (optional)  [Intervention Act (V2)](#E_Intervention_Act_V2) (optional)  [Encounter Activity (V3)](#E_Encounter_Activity_V3) (optional) |

This template represents an Intervention Act. It is a wrapper for intervention-type activities considered to be parts of the same intervention. For example, an activity such as "elevate head of bed" combined with "provide humidified O2 per nasal cannula" may be the interventions performed for a health concern of "respiratory insufficiency" to achieve a goal of "pulse oximetry greater than 92%". These intervention activities may be newly described or derived from a variety of sources within an EHR.

Interventions are actions taken to increase the likelihood of achieving the patient's or providers' goals. An Intervention Act should contain a reference to a Goal Observation representing the reason for the intervention.

Intervention Acts can be related to each other, or to Planned Intervention Acts. (E.g., a Planned Intervention Act with moodCode of INT could be related to a series of Intervention Acts with moodCode of EVN, each having an effectiveTime containing the time of the intervention.)

All interventions referenced in an Intervention Act must have a moodCode of EVN, indicating that they have occurred.

Table 334: Intervention Act (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.131:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-30971](#C_1198-30971) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1198-30972](#C_1198-30972) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-30973](#C_1198-30973) |  |
| @root | 1..1 | SHALL |  | [1198-30974](#C_1198-30974) | 2.16.840.1.113883.10.20.22.4.131 |
| @extension | 1..1 | SHALL |  | [1198-32916](#C_1198-32916) | 2015-08-01 |
| id | 1..\* | SHALL |  | [1198-30975](#C_1198-30975) |  |
| code | 1..1 | SHALL |  | [1198-30976](#C_1198-30976) |  |
| @code | 1..1 | SHALL |  | [1198-30977](#C_1198-30977) | 362956003 |
| @codeSystem | 1..1 | SHALL |  | [1198-30978](#C_1198-30978) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.6.96 |
| statusCode | 1..1 | SHALL |  | [1198-30979](#C_1198-30979) |  |
| @code | 1..1 | SHALL |  | [1198-32316](#C_1198-32316) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 0..1 | SHOULD |  | [1198-31624](#C_1198-31624) |  |
| author | 0..\* | SHOULD |  | [1198-31552](#C_1198-31552) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| entryRelationship | 0..\* | MAY |  | [1198-30980](#C_1198-30980) |  |
| @typeCode | 1..1 | SHALL |  | [1198-30981](#C_1198-30981) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-30982](#C_1198-30982) | [Advance Directive Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.48:2015-08-01](#E_Advance_Directive_Observation_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-30984](#C_1198-30984) |  |
| @typeCode | 1..1 | SHALL |  | [1198-30985](#C_1198-30985) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| substanceAdministration | 1..1 | SHALL |  | [1198-30986](#C_1198-30986) | [Immunization Activity (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.52:2015-08-01](#E_Immunization_Activity_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-30988](#C_1198-30988) |  |
| @typeCode | 1..1 | SHALL |  | [1198-30989](#C_1198-30989) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| substanceAdministration | 1..1 | SHALL |  | [1198-30990](#C_1198-30990) | [Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09](#Medication_Activity_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-30991](#C_1198-30991) |  |
| @typeCode | 1..1 | SHALL |  | [1198-30992](#C_1198-30992) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-30993](#C_1198-30993) | [Procedure Activity Act (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.12:2014-06-09](#E_Procedure_Activity_Act_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-31154](#C_1198-31154) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31155](#C_1198-31155) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-32460](#C_1198-32460) | [Intervention Act (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.131:2015-08-01](#E_Intervention_Act_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-31164](#C_1198-31164) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31165](#C_1198-31165) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31166](#C_1198-31166) | [Procedure Activity Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.13:2014-06-09](#E_Procedure_Activity_Observation_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-31168](#C_1198-31168) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31169](#C_1198-31169) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| procedure | 1..1 | SHALL |  | [1198-31170](#C_1198-31170) | [Procedure Activity Procedure (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09](#E_Procedure_Activity_Procedure_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-31171](#C_1198-31171) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31172](#C_1198-31172) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| encounter | 1..1 | SHALL |  | [1198-31173](#C_1198-31173) | [Encounter Activity (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2015-08-01](#E_Encounter_Activity_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-31174](#C_1198-31174) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32956](#C_1198-32956) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-31176](#C_1198-31176) | [Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09](#Instruction_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-31177](#C_1198-31177) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31178](#C_1198-31178) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| supply | 1..1 | SHALL |  | [1198-31179](#C_1198-31179) | [Non-Medicinal Supply Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.50:2014-06-09](#NonMedicinal_Supply_Activity_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-31413](#C_1198-31413) |  |
| act | 1..1 | SHALL |  | [1198-31414](#C_1198-31414) | [Nutrition Recommendation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.130](#E_Nutrition_Recommendation) |
| entryRelationship | 0..\* | MAY |  | [1198-31545](#C_1198-31545) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31554](#C_1198-31554) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-31555](#C_1198-31555) | [Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122](#E_Entry_Reference) |
| entryRelationship | 0..\* | SHOULD |  | [1198-31621](#C_1198-31621) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31622](#C_1198-31622) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| act | 1..1 | SHALL |  | [1198-31623](#C_1198-31623) | [Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122](#E_Entry_Reference) |
| entryRelationship | 0..\* | MAY |  | [1198-32317](#C_1198-32317) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32318](#C_1198-32318) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-32319](#C_1198-32319) | [Handoff Communication Participants (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.141](#E_Handoff_Communication_Participants) |
| entryRelationship | 0..\* | MAY |  | [1198-32914](#C_1198-32914) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32773](#C_1198-32773) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-32915](#C_1198-32915) | [Planned Intervention Act (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.146:2015-08-01](#E_Planned_Intervention_Act_V2) |
| reference | 0..\* | MAY |  | [1198-32760](#C_1198-32760) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32761](#C_1198-32761) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| externalDocument | 1..1 | SHALL |  | [1198-32762](#C_1198-32762) | [External Document Reference (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.115:2014-06-09](#E_External_Document_Reference) |

1. SHALL contain exactly one [1..1] @classCode="ACT" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1198-30971).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-30972).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-30973) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.131" (CONF:1198-30974).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32916).
4. SHALL contain at least one [1..\*] id (CONF:1198-30975).
5. SHALL contain exactly one [1..1] code (CONF:1198-30976).
   1. This code SHALL contain exactly one [1..1] @code="362956003" procedure / intervention (navigational concept) (CONF:1198-30977).
   2. 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:1198-30978).
6. SHALL contain exactly one [1..1] statusCode (CONF:1198-30979).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1198-32316).
7. SHOULD contain zero or one [0..1] effectiveTime (CONF:1198-31624).
8. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1198-31552).
9. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-30980) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-30981).
   2. SHALL contain exactly one [1..1] [Advance Directive Observation (V3)](#E_Advance_Directive_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.48:2015-08-01) (CONF:1198-30982).
10. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-30984) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-30985).
    2. SHALL contain exactly one [1..1] [Immunization Activity (V3)](#E_Immunization_Activity_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.52:2015-08-01) (CONF:1198-30986).
11. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-30988) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-30989).
    2. SHALL contain exactly one [1..1] [Medication Activity (V2)](#Medication_Activity_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09) (CONF:1198-30990).
12. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-30991) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-30992).
    2. SHALL contain exactly one [1..1] [Procedure Activity Act (V2)](#E_Procedure_Activity_Act_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.12:2014-06-09) (CONF:1198-30993).

The following entryRelationship represents the relationship between two Intervention Acts (Intervention RELATES TO Intervention).

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31154) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31155).
   2. SHALL contain exactly one [1..1] [Intervention Act (V2)](#E_Intervention_Act_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.131:2015-08-01) (CONF:1198-32460).
2. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31164) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31165).
   2. SHALL contain exactly one [1..1] [Procedure Activity Observation (V2)](#E_Procedure_Activity_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.13:2014-06-09) (CONF:1198-31166).
3. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31168) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31169).
   2. SHALL contain exactly one [1..1] [Procedure Activity Procedure (V2)](#E_Procedure_Activity_Procedure_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09) (CONF:1198-31170).
4. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31171) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31172).
   2. SHALL contain exactly one [1..1] [Encounter Activity (V3)](#E_Encounter_Activity_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2015-08-01) (CONF:1198-31173).
5. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31174) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32956).
   2. SHALL contain exactly one [1..1] [Instruction (V2)](#Instruction_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:1198-31176).
6. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31177) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31178).
   2. SHALL contain exactly one [1..1] [Non-Medicinal Supply Activity (V2)](#NonMedicinal_Supply_Activity_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.50:2014-06-09) (CONF:1198-31179).
7. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31413) such that it
   1. SHALL contain exactly one [1..1] [Nutrition Recommendation](#E_Nutrition_Recommendation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.130) (CONF:1198-31414).

Where an Intervention needs to reference another entry already described in the CDA document instance, rather than repeating the full content of the entry, the Entry Reference template may be used to reference this entry.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31545) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31554).
   2. SHALL contain exactly one [1..1] [Entry Reference](#E_Entry_Reference) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:1198-31555).

An Intervention Act should reference a Goal Observation. Because the Goal Observation is already described in the CDA document instance's Goals section, rather than repeating the full content of the Goal Observation, the Entry Reference template can be used to reference this entry. The following entryRelationship represents an Entry Reference to Goal Observation.

1. SHOULD contain zero or more [0..\*] entryRelationship (CONF:1198-31621) such that it
   1. SHALL contain exactly one [1..1] @typeCode="RSON" Has reason (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31622).
   2. SHALL contain exactly one [1..1] [Entry Reference](#E_Entry_Reference) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:1198-31623).
   3. This entryReference template SHALL reference an instance of a Goal Observation template (CONF:1198-32459).
2. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32317) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32318).
   2. SHALL contain exactly one [1..1] [Handoff Communication Participants](#E_Handoff_Communication_Participants) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.141) (CONF:1198-32319).
3. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32914) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32773).
   2. SHALL contain exactly one [1..1] [Planned Intervention Act (V2)](#E_Planned_Intervention_Act_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.146:2015-08-01) (CONF:1198-32915).
4. MAY contain zero or more [0..\*] reference (CONF:1198-32760).
   1. 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:1198-32761).
   2. The reference, if present, SHALL contain exactly one [1..1] [External Document Reference](#E_External_Document_Reference) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.115:2014-06-09) (CONF:1198-32762).

Figure 166: Intervention Act (moodCode="INT") Example

<!--

This entry shows an act in intent mood (planned intervention-

meaning this is intended to be done), with the reason "RSN" for the act

being the already defined Goal (pulse ox reading > 92)

The intervention contains relationships to different components of

the intervention.

-->

<!-- Intervention Act -->

<act classCode="ACT" moodCode="INT">

<templateId root="2.16.840.1.113883.10.20.22.4.131" />

<id root="85fa4b62-e3a9-4385-b064-fe04cca35adb" />

<code code="code\_for\_intervention" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Intervention" />

<statusCode code="active" />

<entryRelationship typeCode="REFR">

<!-- The following act is one part of the intervention -

"Elevate head of bed" -->

<!-- Procedure Activity Act -->

<act classCode="ACT" moodCode="INT">

<templateId root="2.16.840.1.113883.10.20.22.4.12" extension="2015-08-01" />

<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" />

</act>

</entryRelationship>

<entryRelationship typeCode="REFR">

<!-- The following procedure is one part of the intervention -

"Oxygen administration by nasal cannula" -->

<!-- Procedure Activity Procedure -->

<procedure classCode="PROC" moodCode="INT">

<templateId root="2.16.840.1.113883.10.20.22.4.14" extension="2014-06-09" />

<id root="6a560f3d-88fd-4292-9415-f9371adaec46" />

<code code="371907003" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Oxygen administration by nasal cannula" />

<statusCode code="active" />

</procedure>

</entryRelationship>

<!-- This entryRelationship represents the relationship between an

Intervention Act and a Goal Observation (Intervention HAS REASON Goal).

The Entry Reference template is being used here as this Goal is

defined elsewhere in the CDA document -->

<entryRelationship typeCode="RSON">

<!-- Entry Reference template -->

<act classCode="ACT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.122" />

<!-- This id points to an already defined Goal

(pulse ox reading > 92) in the Goals Section -->

<id root="3700b3b0-fbed-11e2-b778-0800200c9a66" />

<code nullFlavor="NP" />

<statusCode code="completed" />

</act>

</entryRelationship>

</act>

Medical Equipment Organizer

[organizer: identifier urn:oid:2.16.840.1.113883.10.20.22.4.135 (open)]

Table 335: Medical Equipment Organizer Contexts

| Contained By: | Contains: |
| --- | --- |
| [Medical Equipment Section (V2)](#S_Medical_Equipment_Section_V2) (optional) | [Procedure Activity Procedure (V2)](#E_Procedure_Activity_Procedure_V2) (optional)  [Non-Medicinal Supply Activity (V2)](#NonMedicinal_Supply_Activity_V2) (optional) |

This template represents a set of current or historical medical devices, supplies, aids and equipment used by the patient. Examples are hearing aids, orthotic devices, ostomy supplies, visual aids, diabetic supplies such as syringes and pumps, and wheelchairs.  
Devices that are applied during a procedure (e.g., cardiac pacemaker, gastrosomy tube, port catheter), whether permanent or temporary, are represented within the Procedure Activity Procedure (V2) template (templateId: 2.16.840.1.113883.10.20.22.4.14.2).

Table 336: Medical Equipment Organizer Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| organizer (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.135) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-31020](#C_1098-31020) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = CLUSTER |
| @moodCode | 1..1 | SHALL |  | [1098-31021](#C_1098-31021) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-31022](#C_1098-31022) |  |
| @root | 1..1 | SHALL |  | [1098-31023](#C_1098-31023) | 2.16.840.1.113883.10.20.22.4.135 |
| id | 1..\* | SHALL |  | [1098-31024](#C_1098-31024) |  |
| code | 0..1 | MAY |  | [1098-31025](#C_1098-31025) |  |
| statusCode | 1..1 | SHALL |  | [1098-31026](#C_1098-31026) |  |
| @code | 1..1 | SHALL |  | [1098-31029](#C_1098-31029) | urn:oid:2.16.840.1.113883.11.20.9.39 (Result Status) |
| effectiveTime | 1..1 | SHALL |  | [1098-32136](#C_1098-32136) |  |
| low | 1..1 | SHALL |  | [1098-32378](#C_1098-32378) |  |
| high | 1..1 | SHALL |  | [1098-32379](#C_1098-32379) |  |
| component | 0..\* | MAY |  | [1098-31027](#C_1098-31027) |  |
| supply | 1..1 | SHALL |  | [1098-31862](#C_1098-31862) | [Non-Medicinal Supply Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.50:2014-06-09](#NonMedicinal_Supply_Activity_V2) |
| component | 0..\* | MAY |  | [1098-31887](#C_1098-31887) |  |
| procedure | 1..1 | SHALL |  | [1098-31888](#C_1098-31888) | [Procedure Activity Procedure (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09](#E_Procedure_Activity_Procedure_V2) |

1. SHALL contain exactly one [1..1] @classCode="CLUSTER" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1098-31020).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1098-31021).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-31022) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.135" (CONF:1098-31023).
4. SHALL contain at least one [1..\*] id (CONF:1098-31024).

This code can represent a category of devices. The code is strictly optional, and is not currently limited to any value set or code system. Implementers may use it if they wish to provide optional coded information about this grouping of medical equipment.

1. MAY contain zero or one [0..1] code (CONF:1098-31025).

The organizer is a collection of statuses for contained entries. The organizer remains active until all contained entries are done.

1. SHALL contain exactly one [1..1] statusCode (CONF:1098-31026).
   1. This statusCode SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [Result Status](#Result_Status) urn:oid:2.16.840.1.113883.11.20.9.39 STATIC 2014-09-01 (CONF:1098-31029).

The effectiveTime can be used to show the time period over which the patient will be using the set of equipment. The organizer would probably not be used with devices applied in or on the patient.

1. SHALL contain exactly one [1..1] effectiveTime (CONF:1098-32136).
   1. This effectiveTime SHALL contain exactly one [1..1] low (CONF:1098-32378).
   2. This effectiveTime SHALL contain exactly one [1..1] high (CONF:1098-32379).
2. MAY contain zero or more [0..\*] component (CONF:1098-31027) such that it
   1. SHALL contain exactly one [1..1] [Non-Medicinal Supply Activity (V2)](#NonMedicinal_Supply_Activity_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.50:2014-06-09) (CONF:1098-31862).
3. MAY contain zero or more [0..\*] component (CONF:1098-31887) such that it
   1. SHALL contain exactly one [1..1] [Procedure Activity Procedure (V2)](#E_Procedure_Activity_Procedure_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09) (CONF:1098-31888).
4. Either Non-Medicinal Supply Activity (V2) (templateId:2.16.840.1.113883.10.20.22.4.50:2014-06-09) **OR** Procedure Activity Procedure (V2) (templateId:2.16.840.1.113883.10.20.22.4.14:2014-06-09) SHALL be present (CONF:1098-32380).

Table 337: Result Status

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Result Status urn:oid:2.16.840.1.113883.11.20.9.39  (Clinical Focus: The processing status of a laboratory test or panel),(Data Element Scope: ),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 4/24/2019 with a version of 20190103.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.39/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| aborted | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | aborted |
| active | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | active |
| cancelled | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | cancelled |
| completed | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | completed |
| held | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | held |
| suspended | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | suspended |

Figure 167: Medical Equipment Organizer Example

<organizer classCode="CLUSTER" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.135" />

<!-- Medical Equipment Organizer template -->

<id root="3e414708-0e61-4d48-8863-484a2d473a02" />

<code code="337588003" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Incontinence appliances">

<originalText>Incontinence appliances</originalText>

</code>

<statusCode code="completed" />

<effectiveTime xsi:type="IVL\_TS">

<low value="20070103" />

<high nullFlavor="UNK" />

</effectiveTime>

<component>

<supply classCode="SPLY" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.50" extension="2014-06-09" />

<!-- Non-medicinal supply activity V2 template \*\*\*\*\*\*\* -->

...

</supply>

</component>

<component>

<supply classCode="SPLY" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.50" extension="2014-06-09" />

<!-- Non-medicinal supply activity V2 template \*\*\*\*\*\*\* -->

...

</supply>

</component>

</organizer>

Medication Activity (V2)

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

Table 338: Medication Activity (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Medications Section (entries required) (V2)](#S_Medications_Section_entries_required_) (required)  [Medications Section (entries optional) (V2)](#S_Medications_Section_entries_optional_) (optional)  [Reaction Observation (V2)](#Reaction_Observation_V2) (optional)  [Procedure Activity Act (V2)](#E_Procedure_Activity_Act_V2) (optional)  [Procedure Activity Procedure (V2)](#E_Procedure_Activity_Procedure_V2) (optional)  [Procedure Activity Observation (V2)](#E_Procedure_Activity_Observation_V2) (optional)  [Admission Medication (V2)](#Admission_Medication_V2) (required)  [Medications Administered Section (V2)](#S_Medications_Administered_Section_V2) (optional)  [Anesthesia Section (V2)](#S_Anesthesia_Section_V2) (optional)  [Planned Intervention Act (V2)](#E_Planned_Intervention_Act_V2) (optional)  [Intervention Act (V2)](#E_Intervention_Act_V2) (optional)  [Discharge Medication (V3)](#E_Discharge_Med_V3) (required) | [Drug Vehicle](#E_Drug_Vehicle) (optional)  [Drug Monitoring Act](#E_Drug_Monitoring_Act) (optional)  [Reaction Observation (V2)](#Reaction_Observation_V2) (optional)  [Indication (V2)](#Indication_V2) (optional)  [Medication Supply Order (V2)](#E_Medication_Supply_Order_V2) (optional)  [Medication Information (V2)](#E_Medication_Information_V2) (required)  [Medication Dispense (V2)](#E_Medication_Dispense_V2) (optional)  [Instruction (V2)](#Instruction_V2) (optional)  [Author Participation](#U_Author_Participation) (optional)  [Substance Administered Act](#E_Substance_Administered_Act) (optional)  [Precondition for Substance Administration (V2)](#Precondition_for_Substance_Administrati) (optional)  [Medication Free Text Sig](#E_Medication_Free_Text_Sig) (optional) |

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

A moodCode of INT is allowed, but it is recommended that the Planned Medication Activity (V2) template be used for moodCodes other than EVN if the document type contains a section that includes Planned Medication Activity (V2) (for example a Care Plan document with Plan of Treatment, Intervention, or Goal sections).  
At a minimum, a Medication Activity shall include an effectiveTime indicating the duration of the administration (or single-administration timestamp). Ambulatory medication lists generally provide a summary of use for a given medication over time - a medication activity in event mood with the duration reflecting when the medication started and stopped. Ongoing medications will not have a stop date (or will have a stop date with a suitable NULL value). Ambulatory medication lists will generally also have a frequency (e.g., a medication is being taken twice a day). Inpatient medications generally record each administration as a separate act.

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

Table 339: Medication Activity (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| substanceAdministration (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-7496](#C_1098-7496) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = SBADM |
| @moodCode | 1..1 | SHALL |  | [1098-7497](#C_1098-7497) | urn:oid:2.16.840.1.113883.11.20.9.18 (MoodCodeEvnInt) |
| templateId | 1..1 | SHALL |  | [1098-7499](#C_1098-7499) |  |
| @root | 1..1 | SHALL |  | [1098-10504](#C_1098-10504) | 2.16.840.1.113883.10.20.22.4.16 |
| @extension | 1..1 | SHALL |  | [1098-32498](#C_1098-32498) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-7500](#C_1098-7500) |  |
| code | 0..1 | MAY |  | [1098-7506](#C_1098-7506) |  |
| statusCode | 1..1 | SHALL |  | [1098-7507](#C_1098-7507) |  |
| @code | 1..1 | SHALL |  | [1098-32360](#C_1098-32360) | urn:oid:2.16.840.1.113762.1.4.1099.11 (Medication Status) |
| effectiveTime | 1..1 | SHALL |  | [1098-7508](#C_1098-7508) |  |
| @value | 0..1 | SHOULD |  | [1098-32775](#C_1098-32775) |  |
| low | 0..1 | SHOULD |  | [1098-32776](#C_1098-32776) |  |
| high | 0..1 | MAY |  | [1098-32777](#C_1098-32777) |  |
| effectiveTime | 0..1 | SHOULD |  | [1098-7513](#C_1098-7513) |  |
| @operator | 1..1 | SHALL |  | [1098-9106](#C_1098-9106) | A |
| repeatNumber | 0..1 | MAY |  | [1098-7555](#C_1098-7555) |  |
| routeCode | 0..1 | SHOULD |  | [1098-7514](#C_1098-7514) | urn:oid:2.16.840.1.113883.3.88.12.3221.8.7 (SPL Drug Route of Administration Terminology) |
| translation | 0..\* | SHOULD |  | [1098-32950](#C_1098-32950) | urn:oid:2.16.840.1.113762.1.4.1099.12 (Medication Route) |
| approachSiteCode | 0..1 | MAY | SET<CD> | [1098-7515](#C_1098-7515) | urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 (Body Site Value Set) |
| doseQuantity | 1..1 | SHALL |  | [1098-7516](#C_1098-7516) |  |
| @unit | 0..1 | SHOULD |  | [1098-7526](#C_1098-7526) | urn:oid:2.16.840.1.113883.1.11.12839 (UnitsOfMeasureCaseSensitive) |
| rateQuantity | 0..1 | MAY |  | [1098-7517](#C_1098-7517) |  |
| @unit | 1..1 | SHALL |  | [1098-7525](#C_1098-7525) | urn:oid:2.16.840.1.113883.1.11.12839 (UnitsOfMeasureCaseSensitive) |
| maxDoseQuantity | 0..1 | MAY | RTO<PQ, PQ> | [1098-7518](#C_1098-7518) |  |
| administrationUnitCode | 0..1 | MAY |  | [1098-7519](#C_1098-7519) | urn:oid:2.16.840.1.113762.1.4.1021.30 (AdministrationUnitDoseForm) |
| consumable | 1..1 | SHALL |  | [1098-7520](#C_1098-7520) |  |
| manufacturedProduct | 1..1 | SHALL |  | [1098-16085](#C_1098-16085) | [Medication Information (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09](#E_Medication_Information_V2) |
| performer | 0..1 | MAY |  | [1098-7522](#C_1098-7522) |  |
| author | 0..\* | SHOULD |  | [1098-31150](#C_1098-31150) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| participant | 0..\* | MAY |  | [1098-7523](#C_1098-7523) |  |
| @typeCode | 1..1 | SHALL |  | [1098-7524](#C_1098-7524) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = CSM |
| participantRole | 1..1 | SHALL |  | [1098-16086](#C_1098-16086) | [Drug Vehicle (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.24](#E_Drug_Vehicle) |
| entryRelationship | 0..\* | MAY |  | [1098-7536](#C_1098-7536) |  |
| @typeCode | 1..1 | SHALL |  | [1098-7537](#C_1098-7537) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [1098-16087](#C_1098-16087) | [Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09](#Indication_V2) |
| entryRelationship | 0..1 | MAY |  | [1098-7539](#C_1098-7539) |  |
| @typeCode | 1..1 | SHALL |  | [1098-7540](#C_1098-7540) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| @inversionInd | 1..1 | SHALL |  | [1098-7542](#C_1098-7542) | true |
| act | 1..1 | SHALL |  | [1098-31387](#C_1098-31387) | [Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09](#Instruction_V2) |
| entryRelationship | 0..1 | MAY |  | [1098-7543](#C_1098-7543) |  |
| @typeCode | 1..1 | SHALL |  | [1098-7547](#C_1098-7547) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| supply | 1..1 | SHALL |  | [1098-16089](#C_1098-16089) | [Medication Supply Order (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09](#E_Medication_Supply_Order_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-7549](#C_1098-7549) |  |
| @typeCode | 1..1 | SHALL |  | [1098-7553](#C_1098-7553) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| supply | 1..1 | SHALL |  | [1098-16090](#C_1098-16090) | [Medication Dispense (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2014-06-09](#E_Medication_Dispense_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-7552](#C_1098-7552) |  |
| @typeCode | 1..1 | SHALL |  | [1098-7544](#C_1098-7544) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = CAUS |
| observation | 1..1 | SHALL |  | [1098-16091](#C_1098-16091) | [Reaction Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09](#Reaction_Observation_V2) |
| entryRelationship | 0..1 | MAY |  | [1098-30820](#C_1098-30820) |  |
| @typeCode | 1..1 | SHALL |  | [1098-30821](#C_1098-30821) | COMP |
| act | 1..1 | SHALL |  | [1098-30822](#C_1098-30822) | [Drug Monitoring Act (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.123](#E_Drug_Monitoring_Act) |
| entryRelationship | 0..\* | MAY |  | [1098-31515](#C_1098-31515) |  |
| @typeCode | 1..1 | SHALL |  | [1098-31516](#C_1098-31516) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| @inversionInd | 1..1 | SHALL |  | [1098-31517](#C_1098-31517) | true |
| sequenceNumber | 0..1 | MAY |  | [1098-31518](#C_1098-31518) |  |
| act | 1..1 | SHALL |  | [1098-31519](#C_1098-31519) | [Substance Administered Act (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.118](#E_Substance_Administered_Act) |
| entryRelationship | 0..\* | MAY |  | [1098-32907](#C_1098-32907) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32908](#C_1098-32908) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| substanceAdministration | 1..1 | SHALL |  | [1098-32909](#C_1098-32909) | [Medication Free Text Sig (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.147](#E_Medication_Free_Text_Sig) |
| precondition | 0..\* | MAY |  | [1098-31520](#C_1098-31520) |  |
| @typeCode | 1..1 | SHALL |  | [1098-31882](#C_1098-31882) | PRCN |
| criterion | 1..1 | SHALL |  | [1098-31883](#C_1098-31883) | [Precondition for Substance Administration (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09](#Precondition_for_Substance_Administrati) |

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](#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
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.16" (CONF:1098-10504).
   2. 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).
   1. This statusCode SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [Medication Status](#Medication_Status) urn:oid:2.16.840.1.113762.1.4.1099.11 DYNAMIC (CONF:1098-32360).

The substance administration effectiveTime field can repeat, in order to represent varying levels of complex dosing. effectiveTime can be used to represent the duration of administration (e.g., "10 days"), the frequency of administration (e.g., "every 8 hours"), and more. Here, we require that there SHALL be an effectiveTime documentation of the duration (or single-administration timestamp), and that there SHOULD be an effectiveTime documentation of the frequency. Other timing nuances, supported by the base CDA R2 standard, may also be included.

1. 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.
   1. SHOULD contain zero or one [0..1] @value (CONF:1098-32775).  
      Note: indicates a single-administration timestamp
   2. SHOULD contain zero or one [0..1] low (CONF:1098-32776).  
      Note: indicates when medication started
   3. MAY contain zero or one [0..1] high (CONF:1098-32777).  
      Note: indicates when medication stopped
   4. This effectiveTime SHALL contain either a low or a @value but not both (CONF:1098-32890).
2. 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).
   1. SHALL contain exactly one [1..1] @operator="A" (CONF:1098-9106).
   2. 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.

1. MAY contain zero or one [0..1] repeatNumber (CONF:1098-7555).
2. SHOULD contain zero or one [0..1] routeCode, which SHALL be selected from ValueSet [SPL Drug Route of Administration Terminology](#SPL_Drug_Route_of_Administration_Termin) urn:oid:2.16.840.1.113883.3.88.12.3221.8.7 DYNAMIC (CONF:1098-7514).
   1. The routeCode, if present, SHOULD contain zero or more [0..\*] translation, which SHALL be selected from ValueSet [Medication Route](#Medication_Route) urn:oid:2.16.840.1.113762.1.4.1099.12 DYNAMIC (CONF:1098-32950).
3. MAY contain zero or one [0..1] approachSiteCode, where the code SHALL be selected from ValueSet [Body Site Value Set](#Body_Site_Value_Set) urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 DYNAMIC (CONF:1098-7515).
4. SHALL contain exactly one [1..1] doseQuantity (CONF:1098-7516).

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

* 1. This doseQuantity SHOULD contain zero or one [0..1] @unit, which SHOULD be selected from ValueSet [UnitsOfMeasureCaseSensitive](#UnitsOfMeasureCaseSensitive) urn:oid:2.16.840.1.113883.1.11.12839 DYNAMIC (CONF:1098-7526).
  2. 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).
  3. 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).

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

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

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

1. 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.

1. MAY contain zero or one [0..1] administrationUnitCode, which SHALL be selected from ValueSet [AdministrationUnitDoseForm](#AdministrationUnitDoseForm) urn:oid:2.16.840.1.113762.1.4.1021.30 DYNAMIC (CONF:1098-7519).
2. SHALL contain exactly one [1..1] consumable (CONF:1098-7520).
   1. This consumable SHALL contain exactly one [1..1] [Medication Information (V2)](#E_Medication_Information_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09) (CONF:1098-16085).
3. MAY contain zero or one [0..1] performer (CONF:1098-7522).
4. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31150).
5. MAY contain zero or more [0..\*] participant (CONF:1098-7523) such that it
   1. SHALL contain exactly one [1..1] @typeCode="CSM" (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 STATIC) (CONF:1098-7524).
   2. SHALL contain exactly one [1..1] [Drug Vehicle](#E_Drug_Vehicle) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.24) (CONF:1098-16086).
6. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-7536) such that it
   1. SHALL contain exactly one [1..1] @typeCode="RSON" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1098-7537).
   2. SHALL contain exactly one [1..1] [Indication (V2)](#Indication_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09) (CONF:1098-16087).
7. MAY contain zero or one [0..1] entryRelationship (CONF:1098-7539) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1098-7540).
   2. SHALL contain exactly one [1..1] @inversionInd="true" True (CONF:1098-7542).
   3. SHALL contain exactly one [1..1] [Instruction (V2)](#Instruction_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:1098-31387).
8. MAY contain zero or one [0..1] entryRelationship (CONF:1098-7543) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1098-7547).
   2. SHALL contain exactly one [1..1] [Medication Supply Order (V2)](#E_Medication_Supply_Order_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09) (CONF:1098-16089).
9. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-7549) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1098-7553).
   2. SHALL contain exactly one [1..1] [Medication Dispense (V2)](#E_Medication_Dispense_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2014-06-09) (CONF:1098-16090).
10. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-7552) such that it
    1. SHALL contain exactly one [1..1] @typeCode="CAUS" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1098-7544).
    2. SHALL contain exactly one [1..1] [Reaction Observation (V2)](#Reaction_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09) (CONF:1098-16091).
11. MAY contain zero or one [0..1] entryRelationship (CONF:1098-30820) such that it
    1. SHALL contain exactly one [1..1] @typeCode="COMP" Has component (CONF:1098-30821).
    2. SHALL contain exactly one [1..1] [Drug Monitoring Act](#E_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.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-31515) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-31516).
   2. SHALL contain exactly one [1..1] @inversionInd="true" (CONF:1098-31517).
   3. MAY contain zero or one [0..1] sequenceNumber (CONF:1098-31518).
   4. SHALL contain exactly one [1..1] [Substance Administered Act](#E_Substance_Administered_Act) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.118) (CONF:1098-31519).
2. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-32907) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" Has component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32908).
   2. SHALL contain exactly one [1..1] [Medication Free Text Sig](#E_Medication_Free_Text_Sig) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.147) (CONF:1098-32909).
3. MAY contain zero or more [0..\*] precondition (CONF:1098-31520).
   1. The precondition, if present, SHALL contain exactly one [1..1] @typeCode="PRCN" (CONF:1098-31882).
   2. The precondition, if present, SHALL contain exactly one [1..1] [Precondition for Substance Administration (V2)](#Precondition_for_Substance_Administrati) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09) (CONF:1098-31883).
4. Medication Activity SHOULD include doseQuantity **OR** rateQuantity (CONF:1098-30800).

Table 340: Medication Status

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

Figure 168: Medication Activity (V2) Example

<substanceAdministration classCode="SBADM" moodCode="EVN">

<!-- \*\* Medication Activity (V2) \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.16"

extension="2014-06-09"/>

<id root="6c844c75-aa34-411c-b7bd-5e4a9f206e29"/>

<statusCode code="active"/>

<effectiveTime xsi:type="IVL\_TS">

<low value="20120318"/>

</effectiveTime>

<effectiveTime xsi:type="PIVL\_TS" institutionSpecified="true" operator="A">

<period value="12" unit="h"/>

</effectiveTime>

<routeCode code="C38288"

codeSystem="2.16.840.1.113883.3.26.1.1"

codeSystemName="NCI Thesaurus"

displayName="ORAL"/>

<doseQuantity value="1"/>

<consumable>

<manufacturedProduct classCode="MANU">

<!-- \*\* Medication information \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.23"

extension="2014-06-09"/>

<id root="2a620155-9d11-439e-92b3-5d9815ff4ee8"/>

<manufacturedMaterial>

<code code="197380"

displayName="Atenolol 25 MG Oral Tablet"

codeSystem="2.16.840.1.113883.6.88" codeSystemName="RxNorm"/>

</manufacturedMaterial>

</manufacturedProduct>

</consumable>

<entryRelationship typeCode="RSON">

<observation classCode="OBS" moodCode="EVN">

<!-- \*\* Indication \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.19"

extension="2014-06-09"/>

<id root="e63166c7-6482-4a44-83a1-37ccdbde725b"/>

<code code="75321-0"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="Clinical finding"/>

<statusCode code="completed"/>

<value xsi:type="CD"

code="38341003"

displayName="Hypertension"

codeSystem="2.16.840.1.113883.6.96"/>

</observation>

</entryRelationship>

</substanceAdministration>

Figure 169: No Known Medications Example

<substanceAdministration classCode="SBADM" moodCode="EVN" negationInd="true">

<!-- \*\* Medication activity \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.16" extension="2014-06-09" />

<id root="072f00fc-4f9d-4516-8d6f-ed00ed523fe0" />

<statusCode code="active" />

<effectiveTime xsi:type="IVL\_TS">

<low value="20110103" />

</effectiveTime>

<consumable>

<manufacturedProduct classCode="MANU">

<!-- \*\* Medication information \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.23" extension="2014-06-09" />

<manufacturedMaterial>

<code nullFlavor="OTH" codeSystem="2.16.840.1.113883.6.88">

<translation code="410942007" displayName="drug or medication" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" />

</code>

</manufacturedMaterial>

</manufacturedProduct>

</consumable>

</substanceAdministration>

Medication Dispense (V2)

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

Table 341: Medication Dispense (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Medication Activity (V2)](#Medication_Activity_V2) (optional)  [Immunization Activity (V3)](#E_Immunization_Activity_V3) (optional) | [US Realm Address (AD.US.FIELDED)](#U_US_Realm_Address_ADUSFIELDED) (optional)  [Medication Supply Order (V2)](#E_Medication_Supply_Order_V2) (optional)  [Medication Information (V2)](#E_Medication_Information_V2) (optional)  [Immunization Medication Information (V2)](#Immunization_Medication_Information_V2) (optional) |

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

Table 342: Medication Dispense (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| supply (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-7451](#C_1098-7451) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = SPLY |
| @moodCode | 1..1 | SHALL |  | [1098-7452](#C_1098-7452) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-7453](#C_1098-7453) |  |
| @root | 1..1 | SHALL |  | [1098-10505](#C_1098-10505) | 2.16.840.1.113883.10.20.22.4.18 |
| @extension | 1..1 | SHALL |  | [1098-32580](#C_1098-32580) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-7454](#C_1098-7454) |  |
| statusCode | 1..1 | SHALL |  | [1098-7455](#C_1098-7455) |  |
| @code | 1..1 | SHALL |  | [1098-32361](#C_1098-32361) | urn:oid:2.16.840.1.113883.3.88.12.80.64 (Medication Fill Status) |
| effectiveTime | 0..1 | SHOULD |  | [1098-7456](#C_1098-7456) |  |
| repeatNumber | 0..1 | SHOULD |  | [1098-7457](#C_1098-7457) |  |
| quantity | 0..1 | SHOULD |  | [1098-7458](#C_1098-7458) |  |
| product | 0..1 | MAY |  | [1098-7459](#C_1098-7459) |  |
| manufacturedProduct | 1..1 | SHALL |  | [1098-15607](#C_1098-15607) | [Medication Information (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09](#E_Medication_Information_V2) |
| product | 0..1 | MAY |  | [1098-9331](#C_1098-9331) |  |
| manufacturedProduct | 1..1 | SHALL |  | [1098-31696](#C_1098-31696) | [Immunization Medication Information (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09](#Immunization_Medication_Information_V2) |
| performer | 0..1 | MAY |  | [1098-7461](#C_1098-7461) |  |
| assignedEntity | 1..1 | SHALL |  | [1098-7467](#C_1098-7467) |  |
| addr | 0..1 | SHOULD |  | [1098-7468](#C_1098-7468) | [US Realm Address (AD.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2](#U_US_Realm_Address_ADUSFIELDED) |
| entryRelationship | 0..1 | MAY |  | [1098-7473](#C_1098-7473) |  |
| @typeCode | 1..1 | SHALL |  | [1098-7474](#C_1098-7474) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| supply | 1..1 | SHALL |  | [1098-15606](#C_1098-15606) | [Medication Supply Order (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09](#E_Medication_Supply_Order_V2) |

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: HL7ActMood 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
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.18" (CONF:1098-10505).
   2. 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).
   1. This statusCode SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [Medication Fill Status](#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.

1. SHOULD contain zero or one [0..1] repeatNumber (CONF:1098-7457).
2. SHOULD contain zero or one [0..1] quantity (CONF:1098-7458).
3. MAY contain zero or one [0..1] product (CONF:1098-7459) such that it
   1. SHALL contain exactly one [1..1] [Medication Information (V2)](#E_Medication_Information_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09) (CONF:1098-15607).
4. MAY contain zero or one [0..1] product (CONF:1098-9331) such that it
   1. SHALL contain exactly one [1..1] [Immunization Medication Information (V2)](#Immunization_Medication_Information_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09) (CONF:1098-31696).
5. MAY contain zero or one [0..1] performer (CONF:1098-7461).
   1. The performer, if present, SHALL contain exactly one [1..1] assignedEntity (CONF:1098-7467).
      1. This assignedEntity SHOULD contain zero or one [0..1] [US Realm Address (AD.US.FIELDED)](#U_US_Realm_Address_ADUSFIELDED) (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.FIELDED) (2.16.840.1.113883.10.20.22.5.2) (CONF:1098-10565).
6. MAY contain zero or one [0..1] entryRelationship (CONF:1098-7473) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1098-7474).
   2. SHALL contain exactly one [1..1] [Medication Supply Order (V2)](#E_Medication_Supply_Order_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09) (CONF:1098-15606).
7. A supply act SHALL contain one product/Medication Information *OR* one product/Immunization Medication Information template (CONF:1098-9333).

Table 343: Medication Fill Status

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Medication Fill Status urn:oid:2.16.840.1.113883.3.88.12.80.64  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.80.64/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| aborted | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | Aborted |
| completed | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | Completed |

Figure 170: 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>

Medication Free Text Sig

[substanceAdministration: identifier urn:oid:2.16.840.1.113883.10.20.22.4.147 (closed)]

Table 344: Medication Free Text Sig Contexts

| Contained By: | Contains: |
| --- | --- |
| [Medication Activity (V2)](#Medication_Activity_V2) (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 345: 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 |  | [81-32770](#C_81-32770) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = SBADM |
| @moodCode | 1..1 | SHALL |  | [81-32771](#C_81-32771) | urn:oid:2.16.840.1.113883.11.20.9.18 (MoodCodeEvnInt) |
| templateId | 1..1 | SHALL |  | [81-32753](#C_81-32753) |  |
| @root | 1..1 | SHALL |  | [81-32772](#C_81-32772) | 2.16.840.1.113883.10.20.22.4.147 |
| code | 1..1 | SHALL |  | [81-32775](#C_81-32775) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| @code | 1..1 | SHALL |  | [81-32780](#C_81-32780) | 76662-6 |
| @codeSystem | 1..1 | SHALL |  | [81-32781](#C_81-32781) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| text | 1..1 | SHALL |  | [81-32754](#C_81-32754) |  |
| reference | 1..1 | SHALL |  | [81-32755](#C_81-32755) |  |
| @value | 0..1 | SHOULD |  | [81-32756](#C_81-32756) |  |
| consumable | 1..1 | SHALL |  | [81-32776](#C_81-32776) |  |
| manufacturedProduct | 1..1 | SHALL |  | [81-32777](#C_81-32777) |  |
| manufacturedLabeledDrug | 1..1 | SHALL |  | [81-32778](#C_81-32778) |  |
| @nullFlavor | 1..1 | SHALL |  | [81-32779](#C_81-32779) | NA |

1. SHALL contain exactly one [1..1] @classCode="SBADM" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:81-32770).
2. SHALL contain exactly one [1..1] @moodCode, which SHALL be selected from ValueSet [MoodCodeEvnInt](#MoodCodeEvnInt) urn:oid:2.16.840.1.113883.11.20.9.18 STATIC 2011-04-03 (CONF:81-32771).  
   Note: moodCode must match the parent substanceAdministration EVN or INT
3. SHALL contain exactly one [1..1] templateId (CONF:81-32753) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.147" (CONF:81-32772).
4. SHALL contain exactly one [1..1] code (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:81-32775).
   1. This code SHALL contain exactly one [1..1] @code="76662-6" Instructions Medication (CONF:81-32780).
   2. 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:81-32781).
5. SHALL contain exactly one [1..1] text (CONF:81-32754).

Reference into the section/text to a tag that only contains free text sig.

* 1. This text SHALL contain exactly one [1..1] reference (CONF:81-32755).
     1. This reference SHOULD contain zero or one [0..1] @value (CONF:81-32756).
        1. This reference/@value SHALL begin with a '#' and SHALL point to its corresponding narrative (using the approach defined in CDA Release 2, section 4.3.5.1) (CONF:81-32774).

1. SHALL contain exactly one [1..1] consumable (CONF:81-32776).
   1. This consumable SHALL contain exactly one [1..1] manufacturedProduct (CONF:81-32777).
      1. This manufacturedProduct SHALL contain exactly one [1..1] manufacturedLabeledDrug (CONF:81-32778).
         1. This manufacturedLabeledDrug SHALL contain exactly one [1..1] @nullFlavor="NA" Not Applicable (CONF:81-32779).

Figure 171: Medication Free Text Sig Example

<!-- moodCode matches the parent substanceAdministration EVN or INT -->

<substanceAdministration classCode="SBADM" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.147"/>

<code code="76662-6"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="Medication Instructions"/>

<text>

<!-- Reference into the section.text to a tag that ONLY contains free text SIG -->

<reference value="#AD1"/>

</text>

<consumable>

<manufacturedProduct>

<manufacturedLabeledDrug nullFlavor="NA"/>

</manufacturedProduct>

</consumable>

</substanceAdministration>

Medication Information (V2)

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

Table 346: Medication Information (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Medication Activity (V2)](#Medication_Activity_V2) (required)  [Planned Supply (V2)](#E_Planned_Supply_V2) (optional)  [Planned Medication Activity (V2)](#E_Planned_Medication_Activity_V2) (required)  [Medication Supply Order (V2)](#E_Medication_Supply_Order_V2) (optional)  [Medication Dispense (V2)](#E_Medication_Dispense_V2) (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 347: Medication Information (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| manufacturedProduct (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-7408](#C_1098-7408) | urn:oid:2.16.840.1.113883.5.110 (HL7RoleClass) = MANU |
| templateId | 1..1 | SHALL |  | [1098-7409](#C_1098-7409) |  |
| @root | 1..1 | SHALL |  | [1098-10506](#C_1098-10506) | 2.16.840.1.113883.10.20.22.4.23 |
| @extension | 1..1 | SHALL |  | [1098-32579](#C_1098-32579) | 2014-06-09 |
| id | 0..\* | MAY |  | [1098-7410](#C_1098-7410) |  |
| manufacturedMaterial | 1..1 | SHALL |  | [1098-7411](#C_1098-7411) |  |
| code | 1..1 | SHALL |  | [1098-7412](#C_1098-7412) | urn:oid:2.16.840.1.113762.1.4.1010.4 (Medication Clinical Drug) |
| translation | 0..\* | MAY |  | [1098-31884](#C_1098-31884) | urn:oid:2.16.840.1.113762.1.4.1010.2 (Clinical Substance) |
| manufacturerOrganization | 0..1 | MAY |  | [1098-7416](#C_1098-7416) |  |

1. SHALL contain exactly one [1..1] @classCode="MANU" (CodeSystem: HL7RoleClass urn:oid:2.16.840.1.113883.5.110 STATIC) (CONF:1098-7408).
2. SHALL contain exactly one [1..1] templateId (CONF:1098-7409) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.23" (CONF:1098-10506).
   2. 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).
   1. This manufacturedMaterial SHALL contain exactly one [1..1] code, which SHALL be selected from ValueSet [Medication Clinical Drug](#Medication_Clinical_Drug) urn:oid:2.16.840.1.113762.1.4.1010.4 DYNAMIC (CONF:1098-7412).
      1. This code MAY contain zero or more [0..\*] translation, which MAY be selected from ValueSet [Clinical Substance](#Clinical_Substance) urn:oid:2.16.840.1.113762.1.4.1010.2 DYNAMIC (CONF:1098-31884).
5. MAY contain zero or one [0..1] manufacturerOrganization (CONF:1098-7416).

Table 348: Medication Clinical Drug

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Medication Clinical Drug urn:oid:2.16.840.1.113762.1.4.1010.4  (Clinical Focus: All prescribable medication formulations represented using either a "generic" or "brand-specific" concept developed to support HL7 C-CDA R2 October 2013 ballot.),(Data Element Scope: Medication orderable),(Inclusion Criteria: GROUPING value set made up of: UNION( Value set: Medication Clinical General Drug OID: 2.16.840.1.113883.3.88.12.80.17 Value set: Medication Clinical Brand-specific Drug OID: 2.16.840.1.113762.1.4.1010.5 ).),(Exclusion Criteria: none)  This value set was imported on 6/25/2019 with a version of 20190620.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1010.4/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 1000000 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | Amlodipine 5 MG / Hydrochlorothiazide 12.5 MG / Olmesartan medoxomil 40 MG Oral Tablet [Tribenzor] |
| 1000001 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | Amlodipine 5 MG / Hydrochlorothiazide 25 MG / Olmesartan medoxomil 40 MG Oral Tablet |
| 1000003 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | Amlodipine 5 MG / Hydrochlorothiazide 25 MG / Olmesartan medoxomil 40 MG [Tribenzor] |
| 1000005 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | Amlodipine 5 MG / Hydrochlorothiazide 25 MG / Olmesartan medoxomil 40 MG Oral Tablet [Tribenzor] |
| 1000009 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | dimethicone 100 MG/ML / Miconazole Nitrate 20 MG/ML / Zinc Oxide 100 MG/ML Topical Spray |
| 1000012 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | whole wheat allergenic extract 50 MG/ML |
| 1000013 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | whole wheat allergenic extract 50 MG/ML Injectable Solution |
| 1000014 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | western wheatgrass pollen extract 10000 UNT/ML |
| 1000015 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | western wheatgrass pollen extract 10000 UNT/ML Injectable Solution |
| 1000023 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | methenamine mandelate 100 MG/ML |
| ... | | | |

Table 349: Clinical Substance

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Clinical Substance urn:oid:2.16.840.1.113762.1.4.1010.2  (Clinical Focus: Any substance that can be ordered or is included in a clinical record. This is not restricted to medications.),(Data Element Scope: Clinical Substance ManufacturedProduct/manufacturedMaterial/code/translation/),(Inclusion Criteria: As defined in grouped value sets),(Exclusion Criteria: No drug classes)  This value set was imported on 6/24/2019 with a version of 20190620.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1010.2/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 1000000 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | Amlodipine 5 MG / Hydrochlorothiazide 12.5 MG / Olmesartan medoxomil 40 MG Oral Tablet [Tribenzor] |
| 1000001 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | Amlodipine 5 MG / Hydrochlorothiazide 25 MG / Olmesartan medoxomil 40 MG Oral Tablet |
| 1000003 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | Amlodipine 5 MG / Hydrochlorothiazide 25 MG / Olmesartan medoxomil 40 MG [Tribenzor] |
| 1000005 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | Amlodipine 5 MG / Hydrochlorothiazide 25 MG / Olmesartan medoxomil 40 MG Oral Tablet [Tribenzor] |
| 1000009 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | dimethicone 100 MG/ML / Miconazole Nitrate 20 MG/ML / Zinc Oxide 100 MG/ML Topical Spray |
| 1000012 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | whole wheat allergenic extract 50 MG/ML |
| 1000013 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | whole wheat allergenic extract 50 MG/ML Injectable Solution |
| 1000014 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | western wheatgrass pollen extract 10000 UNT/ML |
| 1000015 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | western wheatgrass pollen extract 10000 UNT/ML Injectable Solution |
| 1000023 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | methenamine mandelate 100 MG/ML |
| ... | | | |

Figure 172: Medication Information (V2) Example

<manufacturedProduct classCode="MANU">

<!-- \*\* Medication information \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.23" extension="2014-06-09" />

<id root="2a620155-9d11-439e-92b3-5d9815ff4ee8" />

<manufacturedMaterial>

<code code="745679" displayName="200 ACTUAT Albuterol 0.09 MG/ACTUAT Metered Dose Inhaler" codeSystem="2.16.840.1.113883.6.88" codeSystemName="RxNorm" />

</manufacturedMaterial>

<manufacturerOrganization>

<name>Medication Factory Inc.</name>

</manufacturerOrganization>

</manufacturedProduct>

Medication Supply Order (V2)

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

Table 350: Medication Supply Order (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Medication Activity (V2)](#Medication_Activity_V2) (optional)  [Medication Dispense (V2)](#E_Medication_Dispense_V2) (optional)  [Immunization Activity (V3)](#E_Immunization_Activity_V3) (optional) | [Medication Information (V2)](#E_Medication_Information_V2) (optional)  [Instruction (V2)](#Instruction_V2) (optional)  [Immunization Medication Information (V2)](#Immunization_Medication_Information_V2) (optional) |

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

Table 351: Medication Supply Order (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| supply (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-7427](#C_1098-7427) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = SPLY |
| @moodCode | 1..1 | SHALL |  | [1098-7428](#C_1098-7428) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = INT |
| templateId | 1..1 | SHALL |  | [1098-7429](#C_1098-7429) |  |
| @root | 1..1 | SHALL |  | [1098-10507](#C_1098-10507) | 2.16.840.1.113883.10.20.22.4.17 |
| @extension | 1..1 | SHALL |  | [1098-32578](#C_1098-32578) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-7430](#C_1098-7430) |  |
| statusCode | 1..1 | SHALL |  | [1098-7432](#C_1098-7432) |  |
| @code | 1..1 | SHALL |  | [1098-32362](#C_1098-32362) | urn:oid:2.16.840.1.113883.1.11.15933 (ActStatus) |
| effectiveTime | 0..1 | SHOULD | IVL\_TS | [1098-15143](#C_1098-15143) |  |
| high | 1..1 | SHALL |  | [1098-15144](#C_1098-15144) |  |
| repeatNumber | 0..1 | SHOULD |  | [1098-7434](#C_1098-7434) |  |
| quantity | 0..1 | SHOULD |  | [1098-7436](#C_1098-7436) |  |
| product | 0..1 | MAY |  | [1098-7439](#C_1098-7439) |  |
| manufacturedProduct | 1..1 | SHALL |  | [1098-16093](#C_1098-16093) | [Medication Information (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09](#E_Medication_Information_V2) |
| product | 0..1 | MAY |  | [1098-9334](#C_1098-9334) |  |
| manufacturedProduct | 1..1 | SHALL |  | [1098-31695](#C_1098-31695) | [Immunization Medication Information (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09](#Immunization_Medication_Information_V2) |
| author | 0..1 | MAY |  | [1098-7438](#C_1098-7438) |  |
| entryRelationship | 0..1 | MAY |  | [1098-7442](#C_1098-7442) |  |
| @typeCode | 1..1 | SHALL |  | [1098-7444](#C_1098-7444) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| @inversionInd | 1..1 | SHALL |  | [1098-7445](#C_1098-7445) | true |
| act | 1..1 | SHALL |  | [1098-31391](#C_1098-31391) | [Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09](#Instruction_V2) |

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: HL7ActMood 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
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.17" (CONF:1098-10507).
   2. 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).
   1. This statusCode SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [ActStatus](#ActStatus) urn:oid:2.16.840.1.113883.1.11.15933 DYNAMIC (CONF:1098-32362).
6. SHOULD contain zero or one [0..1] effectiveTime (CONF:1098-15143) such that it
   1. 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.

1. SHOULD contain zero or one [0..1] repeatNumber (CONF:1098-7434).
2. SHOULD contain zero or one [0..1] quantity (CONF:1098-7436).
3. MAY contain zero or one [0..1] product (CONF:1098-7439) such that it
   1. SHALL contain exactly one [1..1] [Medication Information (V2)](#E_Medication_Information_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09) (CONF:1098-16093).
4. MAY contain zero or one [0..1] product (CONF:1098-9334) such that it
   1. SHALL contain exactly one [1..1] [Immunization Medication Information (V2)](#Immunization_Medication_Information_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09) (CONF:1098-31695).
      1. A supply act SHALL contain one product/Medication Information *OR* one product/Immunization Medication Information template (CONF:1098-16870).
5. MAY contain zero or one [0..1] author (CONF:1098-7438).
6. MAY contain zero or one [0..1] entryRelationship (CONF:1098-7442).
   1. 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).
   2. The entryRelationship, if present, SHALL contain exactly one [1..1] @inversionInd="true" True (CONF:1098-7445).
   3. The entryRelationship, if present, SHALL contain exactly one [1..1] [Instruction (V2)](#Instruction_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:1098-31391).

Figure 173: 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>

Mental Status Observation (V3)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.74:2015-08-01 (open)]

Table 352: Mental Status Observation (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Mental Status Organizer (V3)](#E_Mental_Status_Organizer_V3) (required)  [Mental Status Section (V2)](#S_Mental_Status_Section_V2) (optional)  [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional) | [Assessment Scale Observation](#E_Assessment_Scale_Observation) (optional)  [Author Participation](#U_Author_Participation) (optional) |

The Mental Status Observation template represents an observation about mental status that can come from a broad range of subjective and objective information (including measured data) to address those categories described in the Mental Status Section. See also Assessment Scale Observation for specific collections of observations that together yield a summary evaluation of a particular condition.

Table 353: Mental Status Observation (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.74:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-14249](#C_1198-14249) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1198-14250](#C_1198-14250) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-14255](#C_1198-14255) |  |
| @root | 1..1 | SHALL |  | [1198-14256](#C_1198-14256) | 2.16.840.1.113883.10.20.22.4.74 |
| @extension | 1..1 | SHALL |  | [1198-32565](#C_1198-32565) | 2015-08-01 |
| id | 1..\* | SHALL |  | [1198-14257](#C_1198-14257) |  |
| code | 1..1 | SHALL |  | [1198-14591](#C_1198-14591) |  |
| @code | 1..1 | SHALL |  | [1198-32788](#C_1198-32788) | 373930000 |
| @codeSystem | 1..1 | SHALL |  | [1198-32789](#C_1198-32789) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.6.96 |
| translation | 1..1 | SHALL |  | [1198-32790](#C_1198-32790) |  |
| @code | 1..1 | SHALL |  | [1198-32791](#C_1198-32791) | 75275-8 |
| @codeSystem | 1..1 | SHALL |  | [1198-32792](#C_1198-32792) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1198-14254](#C_1198-14254) |  |
| @code | 1..1 | SHALL |  | [1198-19092](#C_1198-19092) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1198-14261](#C_1198-14261) |  |
| value | 1..1 | SHALL |  | [1198-14263](#C_1198-14263) |  |
| author | 0..\* | SHOULD |  | [1198-14266](#C_1198-14266) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| entryRelationship | 0..\* | MAY |  | [1198-14469](#C_1198-14469) |  |
| @typeCode | 1..1 | SHALL |  | [1198-14595](#C_1198-14595) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| observation | 1..1 | SHALL |  | [1198-14470](#C_1198-14470) | [Assessment Scale Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69](#E_Assessment_Scale_Observation) |
| referenceRange | 0..\* | MAY |  | [1198-14267](#C_1198-14267) |  |

1. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-14249).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-14250).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-14255) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.74" (CONF:1198-14256).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32565).
4. SHALL contain at least one [1..\*] id (CONF:1198-14257).
5. SHALL contain exactly one [1..1] code (CONF:1198-14591).
   1. This code SHALL contain exactly one [1..1] @code="373930000" Cognitive function (CONF:1198-32788).
   2. 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:1198-32789).
   3. This code SHALL contain exactly one [1..1] translation (CONF:1198-32790) such that it
      1. SHALL contain exactly one [1..1] @code="75275-8" Cognitive Function (CONF:1198-32791).
      2. 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:1198-32792).
6. SHALL contain exactly one [1..1] statusCode (CONF:1198-14254).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1198-19092).
7. SHALL contain exactly one [1..1] effectiveTime (CONF:1198-14261).
8. SHALL contain exactly one [1..1] value (CONF:1198-14263).
   1. If xsi:type=“CD”, SHOULD contain a code from SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) (CONF:1198-14271).
9. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1198-14266).
10. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-14469) such that it
    1. SHALL contain exactly one [1..1] @typeCode="COMP" has component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1198-14595).
    2. SHALL contain exactly one [1..1] [Assessment Scale Observation](#E_Assessment_Scale_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69) (CONF:1198-14470).

The referenceRange could be used to represent normal or expected capability for the mental function being evaluated.

1. MAY contain zero or more [0..\*] referenceRange (CONF:1198-14267).

Figure 174: Mental Status Observation (V3) Example

<entry>

<organizer classCode="CLUSTER" moodCode="EVN">

<!-- Mental Status Organizer-->

<templateId root="2.16.840.1.113883.10.20.22.4.75" extension="2015-08-01" />

<id root="a7bc1062-8649-42a0-833d-ekd65bd013c9" />

<code code="75275-8"

displayName="Cognitive function"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" />

<statusCode code="completed" />

<component>

<observation classCode="OBS" moodCode="EVN">

<!-- Mental Status Observation V3 -->

<templateId root="2.16.840.1.113883.10.20.22.4.74" extension="2015-08-01" />

...

<code code="373930000" displayName="Cognitive function"

codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT">

<translation code="75275-8"

displayName="Cognitive function"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"></translation>

</code>

<statusCode code="completed"/>

...

<!-- Value element holds the Cognitive Function assessment -->

...

</observation>

</component>

<component>

<observation classCode="OBS" moodCode="EVN">

<!-- Mental Status Observation V3 -->

<templateId root="2.16.840.1.113883.10.20.22.4.74" extension="2015-08-01" />

...

</observation>

</component>

</organizer>

</entry>

Mental Status Organizer (V3)

[organizer: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.75:2015-08-01 (open)]

Table 354: Mental Status Organizer (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Mental Status Section (V2)](#S_Mental_Status_Section_V2) (optional) | [Mental Status Observation (V3)](#E_Mental_Status_Observation_V3) (required) |

The Mental Status Organizer template may be used to group related Mental Status Observations (e.g., results of mental tests) and associated Assessment Scale Observations into subcategories and/or groupings by time. Subcategories can be things such as Mood and Affect, Behavior, Thought Process, Perception, Cognition, etc.

Table 355: Mental Status Organizer (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| organizer (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.75:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-14369](#C_1198-14369) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = CLUSTER |
| @moodCode | 1..1 | SHALL |  | [1198-14371](#C_1198-14371) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-14375](#C_1198-14375) |  |
| @root | 1..1 | SHALL |  | [1198-14376](#C_1198-14376) | 2.16.840.1.113883.10.20.22.4.75 |
| @extension | 1..1 | SHALL |  | [1198-32566](#C_1198-32566) | 2015-08-01 |
| id | 1..\* | SHALL |  | [1198-14377](#C_1198-14377) |  |
| code | 1..1 | SHALL |  | [1198-14378](#C_1198-14378) |  |
| @code | 1..1 | SHALL |  | [1198-14697](#C_1198-14697) |  |
| statusCode | 1..1 | SHALL |  | [1198-14372](#C_1198-14372) |  |
| @code | 1..1 | SHALL |  | [1198-19093](#C_1198-19093) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 0..1 | SHOULD |  | [1198-32424](#C_1198-32424) |  |
| component | 1..\* | SHALL |  | [1198-14373](#C_1198-14373) |  |
| observation | 1..1 | SHALL |  | [1198-14381](#C_1198-14381) | [Mental Status Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.74:2015-08-01](#E_Mental_Status_Observation_V3) |

1. SHALL contain exactly one [1..1] @classCode="CLUSTER" Cluster (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1198-14369).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-14371).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-14375) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.75" (CONF:1198-14376).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32566).
4. SHALL contain at least one [1..\*] id (CONF:1198-14377).

The code selected indicates the category that groups the contained mental status observations (e.g., communication, learning and applying knowledge).

1. SHALL contain exactly one [1..1] code (CONF:1198-14378).
   1. This code SHALL contain exactly one [1..1] @code (CONF:1198-14697).
      1. SHOULD be selected from ICF (codeSystem 2.16.840.1.113883.6.254) *OR* LOINC (codeSystem 2.16.840.1.113883.6.96) (CONF:1198-14698).
2. SHALL contain exactly one [1..1] statusCode (CONF:1198-14372).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1198-19093).

The effectiveTime is an interval that spans the effectiveTimes of the contained mental status observations. Because all contained mental status observations have a required time stamp, it is not required that this effectiveTime be populated.

1. SHOULD contain zero or one [0..1] effectiveTime (CONF:1198-32424).
2. SHALL contain at least one [1..\*] component (CONF:1198-14373) such that it
   1. SHALL contain exactly one [1..1] [Mental Status Observation (V3)](#E_Mental_Status_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.74:2015-08-01) (CONF:1198-14381).

Figure 175: Mental Status Organizer (V3) Example

<entry>

<organizer classCode="CLUSTER" moodCode="EVN">

<!-- Mental Status Organizer V3-->

<templateId root="2.16.840.1.113883.10.20.22.4.75" extension="2015-08-01" />

<id root="a7bc1062-8649-42a0-833d-ekd65bd013c9" />

<code code="75275-8"

displayName="Cognitive function"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" />

<statusCode code="completed" />

<component>

<observation classCode="OBS" moodCode="EVN">

<!-- Mental Status Observation V3-->

<templateId root="2.16.840.1.113883.10.20.22.4.74" extension="2015-08-01" />

...

<code code="373930000" displayName="Cognitive function"

codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT">

<translation code="75275-8"

displayName="Cognitive function"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"></translation>

</code>

<statusCode code="completed"/>

...

<!-- Value element holds the Cognitive Function assessment -->

...

</observation>

</component>

<component>

<observation classCode="OBS" moodCode="EVN">

<!-- Mental Status Observation V3 -->

<templateId root="2.16.840.1.113883.10.20.22.4.74" extension="2015-08-01" />

...

</observation>

</component>

</organizer>

</entry>

Non-Medicinal Supply Activity (V2)

[supply: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.50:2014-06-09 (open)]

Table 356: Non-Medicinal Supply Activity (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Medical Equipment Section (V2)](#S_Medical_Equipment_Section_V2) (optional)  [Medical Equipment Organizer](#E_Medical_Equipment_Organizer) (optional)  [Functional Status Section (V2)](#S_Functional_Status_Section_V2) (optional)  [Functional Status Observation (V2)](#E_Functional_Status_Observation_V2) (optional)  [Planned Intervention Act (V2)](#E_Planned_Intervention_Act_V2) (optional)  [Intervention Act (V2)](#E_Intervention_Act_V2) (optional) | [Product Instance](#E_Product_Instance) (optional)  [Instruction (V2)](#Instruction_V2) (optional) |

This template represents equipment supplied to the patient (e.g., pumps, inhalers, wheelchairs). Devices applied to, or placed in, the patient are represented with the Product Instance entry contained within a Procedure Activity Procedure (V2) (identifier: urn:hl7ii: 2.16.840.1.113883.10.20.22.4.14)

Table 357: Non-Medicinal Supply Activity (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| supply (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.50:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-8745](#C_1098-8745) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = SPLY |
| @moodCode | 1..1 | SHALL |  | [1098-8746](#C_1098-8746) | urn:oid:2.16.840.1.113883.11.20.9.18 (MoodCodeEvnInt) |
| templateId | 1..1 | SHALL |  | [1098-8747](#C_1098-8747) |  |
| @root | 1..1 | SHALL |  | [1098-10509](#C_1098-10509) | 2.16.840.1.113883.10.20.22.4.50 |
| @extension | 1..1 | SHALL |  | [1098-32514](#C_1098-32514) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-8748](#C_1098-8748) |  |
| statusCode | 1..1 | SHALL |  | [1098-8749](#C_1098-8749) |  |
| @code | 1..1 | SHALL |  | [1098-32363](#C_1098-32363) | urn:oid:2.16.840.1.113883.1.11.15933 (ActStatus) |
| effectiveTime | 0..1 | SHOULD | IVL\_TS | [1098-15498](#C_1098-15498) |  |
| quantity | 0..1 | SHOULD |  | [1098-8751](#C_1098-8751) |  |
| participant | 0..1 | MAY |  | [1098-8752](#C_1098-8752) |  |
| @typeCode | 1..1 | SHALL |  | [1098-8754](#C_1098-8754) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = PRD |
| participantRole | 1..1 | SHALL |  | [1098-15900](#C_1098-15900) | [Product Instance (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.37](#E_Product_Instance) |
| entryRelationship | 0..1 | MAY |  | [1098-30277](#C_1098-30277) |  |
| @typeCode | 1..1 | SHALL |  | [1098-30278](#C_1098-30278) | SUBJ |
| @inversionInd | 1..1 | SHALL |  | [1098-30279](#C_1098-30279) | TRUE |
| act | 1..1 | SHALL |  | [1098-31393](#C_1098-31393) | [Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09](#Instruction_V2) |

1. SHALL contain exactly one [1..1] @classCode="SPLY" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1098-8745).
2. SHALL contain exactly one [1..1] @moodCode, which SHALL be selected from ValueSet [MoodCodeEvnInt](#MoodCodeEvnInt) urn:oid:2.16.840.1.113883.11.20.9.18 STATIC 2011-04-03 (CONF:1098-8746).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-8747) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.50" (CONF:1098-10509).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32514).
4. SHALL contain at least one [1..\*] id (CONF:1098-8748).
5. SHALL contain exactly one [1..1] statusCode (CONF:1098-8749).
   1. This statusCode SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [ActStatus](#ActStatus) urn:oid:2.16.840.1.113883.1.11.15933 DYNAMIC (CONF:1098-32363).
6. SHOULD contain zero or one [0..1] effectiveTime (CONF:1098-15498).
   1. The effectiveTime, if present, SHOULD contain zero or one [0..1] *high* (CONF:1098-16867).
7. SHOULD contain zero or one [0..1] quantity (CONF:1098-8751).
8. MAY contain zero or one [0..1] participant (CONF:1098-8752) such that it
   1. SHALL contain exactly one [1..1] @typeCode="PRD" Product (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 STATIC) (CONF:1098-8754).
   2. SHALL contain exactly one [1..1] [Product Instance](#E_Product_Instance) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.37) (CONF:1098-15900).
9. MAY contain zero or one [0..1] entryRelationship (CONF:1098-30277) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" (CONF:1098-30278).
   2. SHALL contain exactly one [1..1] @inversionInd="TRUE" (CONF:1098-30279).
   3. SHALL contain exactly one [1..1] [Instruction (V2)](#Instruction_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:1098-31393).

Figure 176: Non-Medicinal Supply Activity (V2) Example

<supply classCode="SPLY" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.50" extension="2014-06-09" />

<!-- Non-medicinal supply activity V2 template \*\*\*\*\*\*\* -->

<id root="39b5f1b4-a8e1-4ad7-8849-0deab10c97b1" />

<statusCode code="completed" />

<effectiveTime xsi:type="IVL\_TS">

<high value="20130703" />

</effectiveTime>

<quantity value="1" />

<participant typeCode="PRD">

<participantRole classCode="MANU">

<templateId root="2.16.840.1.113883.10.20.22.4.37" />

<!-- Product instance template -->

<id root="24993f33-6222-41ce-add6-37a9d3da6acb" />

<playingDevice>

<code code="14106009" displayName="cardiac pacemaker, device (physical object)" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT">

<originalText>Cardiac Pacemaker</originalText>

</code>

</playingDevice>

<scopingEntity>

<id root="eb936010-7b17-11db-9fe1-0800200c9b65" />

<desc>Good Health Durable Medical Equipment</desc>

</scopingEntity>

</participantRole>

</participant>

</supply>

Number of Pressure Ulcers Observation (V3)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.76:2015-08-01 (open)]

Table 358: Number of Pressure Ulcers Observation (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Longitudinal Care Wound Observation (V2)](#E_Longitudinal_Care_Wound_Observation_V2) (optional) |  |

This template represents the number of pressure ulcers observed at a particular stage.

Table 359: Number of Pressure Ulcers Observation (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.76:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-14705](#C_1198-14705) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1198-14706](#C_1198-14706) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-14707](#C_1198-14707) |  |
| @root | 1..1 | SHALL |  | [1198-14708](#C_1198-14708) | 2.16.840.1.113883.10.20.22.4.76 |
| @extension | 1..1 | SHALL |  | [1198-32604](#C_1198-32604) | 2015-08-01 |
| id | 1..\* | SHALL |  | [1198-14709](#C_1198-14709) |  |
| code | 1..1 | SHALL |  | [1198-14767](#C_1198-14767) |  |
| @code | 1..1 | SHALL |  | [1198-14768](#C_1198-14768) | 2264892003 |
| @codeSystem | 1..1 | SHALL |  | [1198-32164](#C_1198-32164) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.6.96 |
| translation | 1..1 | SHALL |  | [1198-32849](#C_1198-32849) |  |
| @code | 1..1 | SHALL |  | [1198-32850](#C_1198-32850) | 75277-4 |
| @codeSystem | 1..1 | SHALL |  | [1198-32851](#C_1198-32851) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1198-14714](#C_1198-14714) |  |
| @code | 1..1 | SHALL |  | [1198-19108](#C_1198-19108) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1198-14715](#C_1198-14715) |  |
| value | 1..1 | SHALL | INT | [1198-14771](#C_1198-14771) |  |
| author | 0..1 | MAY |  | [1198-14717](#C_1198-14717) |  |
| entryRelationship | 1..1 | SHALL |  | [1198-14718](#C_1198-14718) |  |
| @typeCode | 1..1 | SHALL |  | [1198-14719](#C_1198-14719) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| observation | 1..1 | SHALL |  | [1198-14720](#C_1198-14720) |  |
| @classCode | 1..1 | SHALL |  | [1198-14721](#C_1198-14721) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1198-14722](#C_1198-14722) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| code | 1..1 | SHALL |  | [1198-31930](#C_1198-31930) | urn:oid:2.16.840.1.113883.5.4 (HL7ActCode) = ASSERTION |
| value | 1..1 | SHALL | CD | [1198-14725](#C_1198-14725) | urn:oid:2.16.840.1.113883.11.20.9.35 (Pressure Ulcer Stage) |

1. SHALL contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-14705).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-14706).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-14707) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.76" (CONF:1198-14708).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32604).
4. SHALL contain at least one [1..\*] id (CONF:1198-14709).
5. SHALL contain exactly one [1..1] code (CONF:1198-14767).
   1. This code SHALL contain exactly one [1..1] @code="2264892003" Number of pressure ulcers (CONF:1198-14768).
   2. 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 STATIC) (CONF:1198-32164).
   3. This code SHALL contain exactly one [1..1] translation (CONF:1198-32849) such that it
      1. SHALL contain exactly one [1..1] @code="75277-4" Number of pressure ulcers (CONF:1198-32850).
      2. 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:1198-32851).
6. SHALL contain exactly one [1..1] statusCode (CONF:1198-14714).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1198-19108).
7. SHALL contain exactly one [1..1] effectiveTime (CONF:1198-14715).
8. SHALL contain exactly one [1..1] value with @xsi:type="INT" (CONF:1198-14771).
9. MAY contain zero or one [0..1] author (CONF:1198-14717).
10. SHALL contain exactly one [1..1] entryRelationship (CONF:1198-14718) such that it
    1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1198-14719).
    2. SHALL contain exactly one [1..1] observation (CONF:1198-14720).
       1. This observation SHALL contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-14721).
       2. This observation SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-14722).
       3. This observation SHALL contain exactly one [1..1] code="ASSERTION" Assertion (CodeSystem: HL7ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:1198-31930).
       4. This observation SHALL contain exactly one [1..1] value with @xsi:type="CD", where the code SHOULD be selected from ValueSet [Pressure Ulcer Stage](#Pressure_Ulcer_Stage) urn:oid:2.16.840.1.113883.11.20.9.35 DYNAMIC (CONF:1198-14725).

Table 360: Pressure Ulcer Stage

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Pressure Ulcer Stage urn:oid:2.16.840.1.113883.11.20.9.35  (Clinical Focus: Pressure Injury (ulcer) stages),(Data Element Scope: ),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 6/26/2019 with a version of 20190319.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.35/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 420324007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Pressure ulcer stage 2 (disorder) |
| 420597008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Pressure ulcer stage 4 (disorder) |
| 421076008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Pressure ulcer stage 1 (disorder) |
| 421594008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Nonstageable pressure ulcer (disorder) |
| 421927004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Pressure ulcer stage 3 (disorder) |
| 723071003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Pressure injury of deep tissue (disorder) |

Figure 177: Number of Pressure Ulcers Observation (V3) Example

<entryRelationship typeCode="COMP">

<observation classCode="OBS" moodCode="EVN">

<!-- Number of Pressure Ulcers -->

<templateId root="2.16.840.1.113883.10.20.22.4.76" extension="2015-08-01"/>

<id root="08edb7c0-2111-43f2-a784-9a5fdfaa67f0" />

<code code="2264892003" displayName="Number of pressure ulcers"

codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT">

<translation code="75277-4"

displayName="Number of pressure ulcers"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"></translation>

</code>

<statusCode code="completed" />

<value xsi:type="INT" value="3" />

<entryRelationship typeCode="SUBJ">

<observation classCode="OBS" moodCode="EVN">

<code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4" />

<value xsi:type="CD" code="421927004" codeSystem="2.16.840.1.113883.6.96" displayName="Pressure ulcer stage 3" />

</observation>

</entryRelationship>

</observation>

</entryRelationship>

Nutrition Assessment

[observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.138 (open)]

Table 361: Nutrition Assessment Contexts

| Contained By: | Contains: |
| --- | --- |
| [Nutritional Status Observation](#E_Nutritional_Status_Observation) (required)  [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional) | [Author Participation](#U_Author_Participation) (optional) |

This template represents the patient's nutrition abilities and habits including intake, diet requirements or diet followed.

Table 362: Nutrition Assessment Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.138) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-32914](#C_1098-32914) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-32915](#C_1098-32915) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-32916](#C_1098-32916) |  |
| @root | 1..1 | SHALL |  | [1098-32917](#C_1098-32917) | 2.16.840.1.113883.10.20.22.4.138 |
| id | 1..\* | SHALL |  | [1098-32918](#C_1098-32918) |  |
| code | 1..1 | SHALL |  | [1098-32919](#C_1098-32919) |  |
| @code | 1..1 | SHALL |  | [1098-32926](#C_1098-32926) | 75303-8 |
| @codeSystem | 1..1 | SHALL |  | [1098-32927](#C_1098-32927) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1098-32920](#C_1098-32920) |  |
| @code | 1..1 | SHALL |  | [1098-32921](#C_1098-32921) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1098-32923](#C_1098-32923) |  |
| value | 1..1 | SHALL |  | [1098-32922](#C_1098-32922) |  |
| author | 0..\* | SHOULD |  | [1098-32924](#C_1098-32924) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |

1. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1098-32914).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1098-32915).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-32916) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.138" (CONF:1098-32917).
4. SHALL contain at least one [1..\*] id (CONF:1098-32918).
5. SHALL contain exactly one [1..1] code (CONF:1098-32919).
   1. This code SHALL contain exactly one [1..1] @code="75303-8" Nutrition assessment (CONF:1098-32926).
   2. 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:1098-32927).
6. SHALL contain exactly one [1..1] statusCode (CONF:1098-32920).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1098-32921).
7. SHALL contain exactly one [1..1] effectiveTime (CONF:1098-32923).
8. SHALL contain exactly one [1..1] value (CONF:1098-32922).
   1. If xsi:type=“CD”, SHOULD contain a code from SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) (CONF:1098-32925).
9. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-32924).

Figure 178: Nutrition Assessment Example

<entryRelationship typeCode="SUBJ">

<observation classCode="OBS" moodCode="EVN">

<!-- \*\* Nutrition Assessment\*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.138" />

<id root="ab1791b0-5c71-11db-b0de-0800200c9a66" />

<code code="75303-8"

displayName="Nutrition assessment"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" />

<statusCode code="completed" />

<effectiveTime value="20130512" />

<value xsi:type="CD" code="437421000124105"

displayName="Decreased sodium diet (regime/therapy)"

codeSystem="2.16.840.1.113883.6.96"

codeSystemName="SNOMED CT" />

<author typeCode="AUT">

<templateId root="2.16.840.1.113883.10.20.22.4.119" />

<time value="201300512" />

...

</author>

</observation>

</entryRelationship>

Nutrition Recommendation

[act: identifier urn:oid:2.16.840.1.113883.10.20.22.4.130 (open)]

Table 363: Nutrition Recommendation Contexts

| Contained By: | Contains: |
| --- | --- |
| [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (optional)  [Planned Intervention Act (V2)](#E_Planned_Intervention_Act_V2) (optional)  [Intervention Act (V2)](#E_Intervention_Act_V2) (optional) | [Planned Act (V2)](#E_Planned_Act_V2) (optional)  [Planned Encounter (V2)](#E_Planned_Encounter_V2) (optional)  [Planned Procedure (V2)](#E_Planned_Procedure_V2) (optional)  [Planned Observation (V2)](#E_Planned_Observation_V2) (optional)  [Planned Supply (V2)](#E_Planned_Supply_V2) (optional)  [Planned Medication Activity (V2)](#E_Planned_Medication_Activity_V2) (optional) |

This template represents nutrition regimens (e.g., fluid restrictions, calorie minimum), interventions (e.g., NPO, nutritional supplements), and procedures (e.g., G-Tube by bolus, TPN by central line). It may also depict the need for nutrition education.

Table 364: Nutrition Recommendation Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.130) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-30385](#C_1098-30385) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1098-30386](#C_1098-30386) | urn:oid:2.16.840.1.113883.11.20.9.23 (Planned moodCode (Act/Encounter/Procedure)) |
| templateId | 1..1 | SHALL |  | [1098-30340](#C_1098-30340) |  |
| @root | 1..1 | SHALL |  | [1098-30341](#C_1098-30341) | 2.16.840.1.113883.10.20.22.4.130 |
| code | 1..1 | SHALL |  | [1098-30342](#C_1098-30342) | urn:oid:2.16.840.1.113883.1.11.20.2.9 (Nutrition Recommendations) |
| statusCode | 1..1 | SHALL |  | [1098-31697](#C_1098-31697) |  |
| @code | 1..1 | SHALL |  | [1098-31698](#C_1098-31698) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = active |
| effectiveTime | 0..1 | SHOULD |  | [1098-31699](#C_1098-31699) |  |
| entryRelationship | 0..\* | MAY |  | [1098-32382](#C_1098-32382) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32928](#C_1098-32928) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| encounter | 1..1 | SHALL |  | [1098-32383](#C_1098-32383) | [Planned Encounter (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.40:2014-06-09](#E_Planned_Encounter_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-32384](#C_1098-32384) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32929](#C_1098-32929) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| substanceAdministration | 1..1 | SHALL |  | [1098-32385](#C_1098-32385) | [Planned Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09](#E_Planned_Medication_Activity_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-32386](#C_1098-32386) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32930](#C_1098-32930) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1098-32387](#C_1098-32387) | [Planned Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.44:2014-06-09](#E_Planned_Observation_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-32388](#C_1098-32388) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32931](#C_1098-32931) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| procedure | 1..1 | SHALL |  | [1098-32389](#C_1098-32389) | [Planned Procedure (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2014-06-09](#E_Planned_Procedure_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-32390](#C_1098-32390) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32932](#C_1098-32932) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| supply | 1..1 | SHALL |  | [1098-32391](#C_1098-32391) | [Planned Supply (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.43:2014-06-09](#E_Planned_Supply_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-32632](#C_1098-32632) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32933](#C_1098-32933) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1098-32633](#C_1098-32633) | [Planned Act (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.39:2014-06-09](#E_Planned_Act_V2) |

1. SHALL contain exactly one [1..1] @classCode="ACT" act (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1098-30385).
2. SHALL contain exactly one [1..1] @moodCode, which SHALL be selected from ValueSet [Planned moodCode (Act/Encounter/Procedure)](#Planned_moodCode_ActEncounterProcedure) urn:oid:2.16.840.1.113883.11.20.9.23 STATIC 2014-09-01 (CONF:1098-30386).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-30340) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.130" (CONF:1098-30341).
4. SHALL contain exactly one [1..1] code, which SHOULD be selected from ValueSet [Nutrition Recommendations](#Nutrition_Recommendations) urn:oid:2.16.840.1.113883.1.11.20.2.9 DYNAMIC (CONF:1098-30342).
5. SHALL contain exactly one [1..1] statusCode (CONF:1098-31697).
   1. This statusCode SHALL contain exactly one [1..1] @code="active" Active (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-31698).

The effectiveTime indicates the time when the activity is intended to take place.

1. SHOULD contain zero or one [0..1] effectiveTime (CONF:1098-31699).
2. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-32382) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32928).
   2. SHALL contain exactly one [1..1] [Planned Encounter (V2)](#E_Planned_Encounter_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.40:2014-06-09) (CONF:1098-32383).
3. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-32384) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32929).
   2. SHALL contain exactly one [1..1] [Planned Medication Activity (V2)](#E_Planned_Medication_Activity_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09) (CONF:1098-32385).
4. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-32386) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32930).
   2. SHALL contain exactly one [1..1] [Planned Observation (V2)](#E_Planned_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.44:2014-06-09) (CONF:1098-32387).
5. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-32388) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32931).
   2. SHALL contain exactly one [1..1] [Planned Procedure (V2)](#E_Planned_Procedure_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2014-06-09) (CONF:1098-32389).
6. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-32390) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32932).
   2. SHALL contain exactly one [1..1] [Planned Supply (V2)](#E_Planned_Supply_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.43:2014-06-09) (CONF:1098-32391).
7. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-32632) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32933).
   2. SHALL contain exactly one [1..1] [Planned Act (V2)](#E_Planned_Act_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.39:2014-06-09) (CONF:1098-32633).

Table 365: Nutrition Recommendations

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Nutrition Recommendations urn:oid:2.16.840.1.113883.1.11.20.2.9  (Clinical Focus: Types of nutritional regimes, therapies or interventions.),(Data Element Scope: @Code in Nutrition Recommendation template C-CDA r2.1 [act: identifier urn:oid:2.16.840.1.113883.10.20.22.4.130 (open)]),(Inclusion Criteria: Specified codes for high level types of nutritional regimes),(Exclusion Criteria: )  This value set was imported on 6/25/2019 with a version of 20190319.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.20.2.9/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 182922004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Dietary regime (regime/therapy) |
| 225372007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Total parenteral nutrition (regime/therapy) |
| 229912004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Enteral feeding (regime/therapy) |
| 386373004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Nutrition therapy (regime/therapy) |
| 413315001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Nutrition / feeding management (regime/therapy) |
| 418995006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Feeding regime (regime/therapy) |
| 428461000124101 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Referral to nutrition professional (procedure) |
| 435691000124100 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Diet modified for specific foods or ingredients (regime/therapy) |
| 441041000124100 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Counseling about nutrition (procedure) |
| 448556005 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Oral nutritional support (regime/therapy) |
| ... | | | |

Table 366: 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: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.23/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| INT | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Intent |
| ARQ | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Appointment Request |
| PRMS | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Promise |
| PRP | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Proposal |
| RQO | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Request |
| APT | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Appointment |

Figure 179: Nutrition Recommendation Example

<entry>

<act moodCode="INT" classCode="ACT">

<!-- Nutrition Recommendation ACT-->

<templateId root="2.16.840.1.113883.10.20.22.4.130" />

<id root="9a6d1bac-17d3-4195-89a4-1121bc809a5c" />

<code code="61310001"

displayName="nutrition education"

codeSystem="2.16.840.1.113883.6.96"

codeSystemName="SNOMED CT" />

<statusCode code="active" />

<effectiveTime value="20130512" />

</act>

</entry>

Nutritional Status Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.124 (open)]

Table 367: Nutritional Status Observation Contexts

| Contained By: | Contains: |
| --- | --- |
| [Nutrition Section](#S_Nutrition_Section) (optional)  [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional) | [Nutrition Assessment](#E_Nutrition_Assessment) (required) |

This template describes the overall nutritional status of the patient including findings related to nutritional status.

Table 368: Nutritional Status Observation Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.124) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-29841](#C_1098-29841) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-29842](#C_1098-29842) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-29843](#C_1098-29843) |  |
| @root | 1..1 | SHALL |  | [1098-29844](#C_1098-29844) | 2.16.840.1.113883.10.20.22.4.124 |
| id | 1..\* | SHALL |  | [1098-29845](#C_1098-29845) |  |
| code | 1..1 | SHALL |  | [1098-29846](#C_1098-29846) |  |
| @code | 1..1 | SHALL |  | [1098-29897](#C_1098-29897) | 75305-3 |
| @codeSystem | 1..1 | SHALL |  | [1098-29898](#C_1098-29898) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1098-29852](#C_1098-29852) |  |
| @code | 1..1 | SHALL |  | [1098-29853](#C_1098-29853) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1098-31867](#C_1098-31867) |  |
| value | 1..1 | SHALL |  | [1098-29854](#C_1098-29854) | urn:oid:2.16.840.1.113883.1.11.20.2.7 (Nutritional Status) |
| entryRelationship | 1..\* | SHALL |  | [1098-30323](#C_1098-30323) |  |
| @typeCode | 1..1 | SHALL |  | [1098-30335](#C_1098-30335) | SUBJ |
| observation | 1..1 | SHALL |  | [1098-30336](#C_1098-30336) | [Nutrition Assessment (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.138](#E_Nutrition_Assessment) |

1. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1098-29841).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1098-29842).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-29843) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.124" (CONF:1098-29844).
4. SHALL contain at least one [1..\*] id (CONF:1098-29845).
5. SHALL contain exactly one [1..1] code (CONF:1098-29846).
   1. This code SHALL contain exactly one [1..1] @code="75305-3" Nutrition status (CONF:1098-29897).
   2. 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:1098-29898).
6. SHALL contain exactly one [1..1] statusCode (CONF:1098-29852).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1098-29853).
7. SHALL contain exactly one [1..1] effectiveTime (CONF:1098-31867).
8. SHALL contain exactly one [1..1] value, which SHOULD be selected from ValueSet [Nutritional Status](#Nutritional_Status) urn:oid:2.16.840.1.113883.1.11.20.2.7 DYNAMIC (CONF:1098-29854).
9. SHALL contain at least one [1..\*] entryRelationship (CONF:1098-30323) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has subject (CONF:1098-30335).
   2. SHALL contain exactly one [1..1] [Nutrition Assessment](#E_Nutrition_Assessment) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.138) (CONF:1098-30336).

Table 369: Nutritional Status

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Nutritional Status urn:oid:2.16.840.1.113883.1.11.20.2.7  (Clinical Focus: A Value Set of SNOMED-CT codes representing nutrition problems.),(Data Element Scope: Condition),(Inclusion Criteria: Individually identified conditions that in some way may provide insight into the patient's nutritional status.),(Exclusion Criteria: )  This value set was imported on 6/25/2019 with a version of 20190319.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.20.2.7/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 105726004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Age AND/OR growth finding (finding) |
| 107647005 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Weight finding (finding) |
| 129689002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | At risk for nutritional problem (finding) |
| 129845004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | At risk for imbalanced nutrition, less than body requirements (finding) |
| 162020001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Difficulty chewing (finding) |
| 1881003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Increased nutritional requirement (finding) |
| 206568009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Difficulty in feeding at breast (finding) |
| 248324001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Well nourished (finding) |
| 284670008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Nutritionally compromised (finding) |
| 288939007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Difficulty swallowing (finding) |
| ... | | | |

Figure 180: Nutritional Status Observation Example

<observation classCode="OBS" moodCode="EVN">

<!-- Nutritional Status Observation -->

<templateId root="2.16.840.1.113883.10.20.22.4.124" />

<id root="c12ecaaf-53f8-4593-8f79-359aeaa3948b" />

<code code="75305-3"

displayName="Nutrition status"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC">

<originalText>Nutritional Status</originalText>

</code>

<statusCode code="completed" />

<effectiveTime value="20130512" />

<value xsi:type="CD" code="248324001"

codeSystem="2.16.840.1.113883.6.96"

codeSystemName="SNOMED-CT"

displayName="well nourished" />

<entryRelationship typeCode="SUBJ">

<observation classCode="OBS" moodCode="EVN">

<!-- \*\* Nutrition Assessment\*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.138" />

...

</observation>

<observation classCode="OBS" moodCode="EVN">

<!-- \*\* Nutrition Assessment\*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.138" />

...

</observation>

</entryRelationship>

</observation>

Outcome Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.144 (open)]

Table 370: Outcome Observation Contexts

| Contained By: | Contains: |
| --- | --- |
| [Health Status Evaluations and Outcomes Section](#S_Health_Status_Evaluations_and_Outcome) (required) | [Progress Toward Goal Observation](#E_Progress_Toward_Goal_Observation) (optional)  [Author Participation](#U_Author_Participation) (optional)  [Entry Reference](#E_Entry_Reference) (optional)  [External Document Reference](#E_External_Document_Reference) (optional) |

This template represents the outcome of care resulting from the interventions used to treat the patient. In the Care Planning workflow, the judgment about how well the person is progressing towards the goal is based on the observations made about the status of the patient with respect to interventions performed in the pursuit of achieving that goal.

Often thought of as an "actual outcome", the Outcome Observation may be related to goals, progression toward goals, and the associated interventions. For example, an observation outcome of a blood oxygen saturation level of 95% is related to the goal of "Maintain Pulse Ox greater than 92", which in turn is related to the health concern of respiratory insufficiency and the problem of pneumonia. The template makes use of the Entry Reference (templateId:2.16.840.1.113883.10.20.22.4.122) to reference the interventions and goals defined elsewhere in the Care Plan CDA instance.

Table 371: Outcome Observation Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.144) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-31219](#C_1098-31219) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-31220](#C_1098-31220) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-31221](#C_1098-31221) |  |
| @root | 1..1 | SHALL |  | [1098-31222](#C_1098-31222) | 2.16.840.1.113883.10.20.22.4.144 |
| id | 1..\* | SHALL |  | [1098-31223](#C_1098-31223) |  |
| code | 1..1 | SHALL |  | [1098-32746](#C_1098-32746) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| value | 0..1 | SHOULD |  | [1098-32747](#C_1098-32747) |  |
| author | 0..\* | SHOULD |  | [1098-31553](#C_1098-31553) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| entryRelationship | 0..\* | SHOULD |  | [1098-31224](#C_1098-31224) |  |
| @typeCode | 1..1 | SHALL |  | [1098-31225](#C_1098-31225) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = GEVL |
| act | 1..1 | SHALL |  | [1098-32465](#C_1098-32465) | [Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122](#E_Entry_Reference) |
| entryRelationship | 0..1 | SHOULD |  | [1098-31427](#C_1098-31427) |  |
| @typeCode | 1..1 | SHALL |  | [1098-31428](#C_1098-31428) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SPRT |
| @inversionInd | 1..1 | SHALL |  | [1098-31429](#C_1098-31429) | true |
| observation | 1..1 | SHALL |  | [1098-31430](#C_1098-31430) | [Progress Toward Goal Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.110](#E_Progress_Toward_Goal_Observation) |
| entryRelationship | 0..\* | MAY |  | [1098-31688](#C_1098-31688) |  |
| @typeCode | 1..1 | SHALL |  | [1098-31689](#C_1098-31689) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| act | 1..1 | SHALL |  | [1098-31690](#C_1098-31690) | [Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122](#E_Entry_Reference) |
| entryRelationship | 1..\* | SHALL |  | [1098-32782](#C_1098-32782) |  |
| reference | 0..\* | MAY |  | [1098-32763](#C_1098-32763) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32764](#C_1098-32764) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| externalDocument | 1..1 | SHALL |  | [1098-32765](#C_1098-32765) | [External Document Reference (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.115:2014-06-09](#E_External_Document_Reference) |

1. SHALL contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1098-31219).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1098-31220).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-31221) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.144" (CONF:1098-31222).
4. SHALL contain at least one [1..\*] id (CONF:1098-31223).
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:1098-32746).
6. SHOULD contain zero or one [0..1] value (CONF:1098-32747).
7. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31553).

The following entryRelationship represents the relationship between an Outcome Observation and a Goal Observation. Because the Goal Observation is already described in the CDA document instance's Goals section, rather than repeating the full content of the Goal Observation, the Entry Reference template can be used to reference this entry.

1. SHOULD contain zero or more [0..\*] entryRelationship (CONF:1098-31224) such that it
   1. SHALL contain exactly one [1..1] @typeCode="GEVL" Evaluates goal (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-31225).
   2. SHALL contain exactly one [1..1] [Entry Reference](#E_Entry_Reference) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:1098-32465).
   3. This entryReference template SHALL reference an instance of a Goal Observation template (CONF:1098-32461).

The following entryRelationship represents the relationship between an Outcome Observation and a Progress Toward Goal Observation (Outcome Observation SUPPORTS Progress Toward Goal Observation). In the Care Planning workflow, the judgment about how well the person is progressing towards the goal is based on the observations made about the status of the patient with respect to interventions performed in the pursuit of achieving that goal.

1. SHOULD contain zero or one [0..1] entryRelationship (CONF:1098-31427) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SPRT" Has support (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-31428).
   2. SHALL contain exactly one [1..1] @inversionInd="true" (CONF:1098-31429).
   3. SHALL contain exactly one [1..1] [Progress Toward Goal Observation](#E_Progress_Toward_Goal_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.110) (CONF:1098-31430).

Where an Outcome Observation needs to reference an Intervention Act already described in the CDA document instance, rather than repeating the full content of the Intervention Act, the Entry Reference template may be used to reference this entry.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-31688) such that it
   1. SHALL contain exactly one [1..1] @typeCode="RSON" Has reason (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-31689).
   2. SHALL contain exactly one [1..1] [Entry Reference](#E_Entry_Reference) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:1098-31690).
   3. This entryReference template SHALL reference an instance of a Intervention Act template (CONF:1098-32462).

Where an Outcome Observation needs to reference an Intervention Act already described in the CDA document instance, rather than repeating the full content of the Intervention Act, the Entry Reference template may be used to reference this entry.

1. SHALL contain at least one [1..\*] entryRelationship (CONF:1098-32782).
2. MAY contain zero or more [0..\*] reference (CONF:1098-32763).
   1. 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:1098-32764).
   2. The reference, if present, SHALL contain exactly one [1..1] [External Document Reference](#E_External_Document_Reference) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.115:2014-06-09) (CONF:1098-32765).

Figure 181: Outcome Observation Example

<!-- Outcome Observation -->

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.144" />

<id root="0aaaa123-24e2-46b3-9d49-6b753c712dec" />

<code code="44616-1" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Pulse oximetry panel" />

<statusCode code="completed" />

<effectiveTime value="20130806" />

<value xsi:type="PQ" value="95" unit="%" />

<author>

...

</author>

<!-- This Outcome Observation EVALUATES a Goal

(Pulse ox reading of 95 evaluates the goal of Pulse ox reading > 92) -->

<entryRelationship typeCode="GEVL">

...

</entryRelationship>

<!-- This Outcome Observation SUPPORTS the Progress Toward Goal Observation -->

<entryRelationship typeCode="SPRT" inversionInd="true">

...

</entryRelationship>

</observation>

Patient Referral Act

[act: identifier urn:oid:2.16.840.1.113883.10.20.22.4.140 (open)]

Table 372: Patient Referral Act Contexts

| Contained By: | Contains: |
| --- | --- |
| [Reason for Referral Section (V2)](#Reason_for_Referral_Section_V2) (optional) | [Indication (V2)](#Indication_V2) (optional)  [Author Participation](#U_Author_Participation) (optional) |

This template represents the type of referral (e.g., for dental care, to a specialist, for aging problems) and represents whether the referral is for full care or shared care. It may contain a reference to another act in the document instance representing the clinical reason for the referral (e.g., problem, concern, procedure).

Table 373: Patient Referral Act Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.140) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-30884](#C_1098-30884) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = PCPR |
| @moodCode | 1..1 | SHALL |  | [1098-30885](#C_1098-30885) | urn:oid:2.16.840.1.113883.11.20.9.66 (Patient Referral Act moodCode) |
| templateId | 1..1 | SHALL |  | [1098-30886](#C_1098-30886) |  |
| @root | 1..1 | SHALL |  | [1098-30887](#C_1098-30887) | 2.16.840.1.113883.10.20.22.4.140 |
| id | 1..\* | SHALL |  | [1098-30888](#C_1098-30888) |  |
| code | 1..1 | SHALL |  | [1098-30889](#C_1098-30889) | urn:oid:2.16.840.1.113883.11.20.9.56 (Referral Types) |
| statusCode | 1..1 | SHALL |  | [1098-30892](#C_1098-30892) |  |
| @code | 1..1 | SHALL |  | [1098-31598](#C_1098-31598) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = active |
| effectiveTime | 1..1 | SHALL |  | [1098-30893](#C_1098-30893) |  |
| priorityCode | 0..1 | SHOULD |  | [1098-32623](#C_1098-32623) |  |
| author | 0..\* | SHOULD |  | [1098-31612](#C_1098-31612) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| participant | 0..\* | MAY |  | [1098-32635](#C_1098-32635) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32638](#C_1098-32638) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFT |
| participantRole | 1..1 | SHALL |  | [1098-32636](#C_1098-32636) |  |
| code | 0..1 | MAY |  | [1098-32637](#C_1098-32637) | urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy) |
| entryRelationship | 0..\* | MAY |  | [1098-31604](#C_1098-31604) |  |
| @typeCode | 1..1 | SHALL |  | [1098-31613](#C_1098-31613) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| observation | 1..1 | SHALL |  | [1098-31605](#C_1098-31605) |  |
| @classCode | 1..1 | SHALL |  | [1098-31606](#C_1098-31606) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-31607](#C_1098-31607) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = RQO |
| code | 1..1 | SHALL |  | [1098-31608](#C_1098-31608) |  |
| @code | 1..1 | SHALL |  | [1098-31619](#C_1098-31619) | ASSERTION |
| @codeSystem | 1..1 | SHALL |  | [1098-31620](#C_1098-31620) | urn:oid:2.16.840.1.113883.5.4 (HL7ActCode) = 2.16.840.1.113883.5.4 |
| statusCode | 1..1 | SHALL |  | [1098-31614](#C_1098-31614) |  |
| @code | 1..1 | SHALL |  | [1098-31615](#C_1098-31615) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| priorityCode | 0..1 | SHOULD |  | [1098-32443](#C_1098-32443) | urn:oid:2.16.840.1.113883.1.11.16866 (ActPriority) |
| value | 1..1 | SHALL | CD | [1098-31611](#C_1098-31611) | urn:oid:2.16.840.1.113883.11.20.9.61 (Care Model) |
| entryRelationship | 0..\* | MAY |  | [1098-31635](#C_1098-31635) |  |
| @typeCode | 1..1 | SHALL |  | [1098-31636](#C_1098-31636) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [1098-32634](#C_1098-32634) | [Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09](#Indication_V2) |

1. SHALL contain exactly one [1..1] @classCode="PCPR" provision of care (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1098-30884).
2. SHALL contain exactly one [1..1] @moodCode, which SHALL be selected from ValueSet [Patient Referral Act moodCode](#Patient_Referral_Act_moodCode) urn:oid:2.16.840.1.113883.11.20.9.66 STATIC 2014-09-01 (CONF:1098-30885).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-30886) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.140" (CONF:1098-30887).

In the case of a Consultation Note where this referral is being fulfilled by this consultation, this id would be referenced in the inFullfilmentOf/order/id of the Consultation Note.

1. SHALL contain at least one [1..\*] id (CONF:1098-30888).
2. SHALL contain exactly one [1..1] code, which SHALL be selected from ValueSet [Referral Types](#Referral_Types) urn:oid:2.16.840.1.113883.11.20.9.56 DYNAMIC (CONF:1098-30889).
3. SHALL contain exactly one [1..1] statusCode (CONF:1098-30892).
   1. This statusCode SHALL contain exactly one [1..1] @code="active" Active (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-31598).

The effectiveTime represents the time when the future referral is intended to take place.

1. SHALL contain exactly one [1..1] effectiveTime (CONF:1098-30893).
2. SHOULD contain zero or one [0..1] priorityCode (CONF:1098-32623).
3. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31612).
4. MAY contain zero or more [0..\*] participant (CONF:1098-32635).
   1. The participant, if present, SHALL contain exactly one [1..1] @typeCode="REFT" Referred to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32638).
   2. The participant, if present, SHALL contain exactly one [1..1] participantRole (CONF:1098-32636).
      1. This participantRole MAY contain zero or one [0..1] code, which SHOULD be selected from ValueSet [Healthcare Provider Taxonomy](#Healthcare_Provider_Taxonomy) urn:oid:2.16.840.1.114222.4.11.1066 DYNAMIC (CONF:1098-32637).

The following entryRelationship represents whether the referral is for full or shared care.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-31604) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" has subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-31613).
   2. SHALL contain exactly one [1..1] observation (CONF:1098-31605).
      1. This observation SHALL contain exactly one [1..1] @classCode="OBS" observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1098-31606).
      2. This observation SHALL contain exactly one [1..1] @moodCode="RQO" request (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1098-31607).
      3. This observation SHALL contain exactly one [1..1] code (CONF:1098-31608).
         1. This code SHALL contain exactly one [1..1] @code="ASSERTION" assertion (CONF:1098-31619).
         2. This code SHALL contain exactly one [1..1] @codeSystem="2.16.840.1.113883.5.4 " (CodeSystem: HL7ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:1098-31620).
      4. This observation SHALL contain exactly one [1..1] statusCode (CONF:1098-31614).
         1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-31615).
      5. This observation SHOULD contain zero or one [0..1] priorityCode, which SHOULD be selected from ValueSet [ActPriority](#ActPriority) urn:oid:2.16.840.1.113883.1.11.16866 DYNAMIC (CONF:1098-32443).
      6. This observation SHALL contain exactly one [1..1] value with @xsi:type="CD", where the code SHOULD be selected from ValueSet [Care Model](#Care_Model) urn:oid:2.16.840.1.113883.11.20.9.61 DYNAMIC (CONF:1098-31611).

The following entryRelationship represents a reference to another act in the document instance representing the clinical reason for the referral (e.g., problem, concern, procedure).

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-31635) such that it
   1. SHALL contain exactly one [1..1] @typeCode="RSON" has reason (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-31636).
   2. SHALL contain exactly one [1..1] [Indication (V2)](#Indication_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09) (CONF:1098-32634).

Table 374: Patient Referral Act moodCode

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Patient Referral Act moodCode urn:oid:2.16.840.1.113883.11.20.9.66  Contains all the moodCode values it is possible to have for an Patient Referral Act.  Value Set Source: <http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html> | | | |
| Code | Code System | Code System OID | Print Name |
| INT | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Intent |
| RQO | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Request |

Table 375: Referral Types

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Referral Types urn:oid:2.16.840.1.113883.11.20.9.56  (Clinical Focus: Concepts representing procedures that characterize a patient referral),(Data Element Scope: C-CDA r2.1 @code in Patient Referral Act [act: identifier urn:oid:2.16.840.1.113883.10.20.22.4.140 (open)] DYNAMIC),(Inclusion Criteria: SNOMED CT codes descending from "3457005" patient referral (procedure)),(Exclusion Criteria: only as in inclusion)  This value set was imported on 6/29/2019 with a version of 20190416.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.56/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 103696004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Patient referral to specialist (procedure) |
| 103697008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Patient referral for dental care (procedure) |
| 103698003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Patient referral to non-physician provider (procedure) |
| 103699006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Patient referral to dietitian (procedure) |
| 103700007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Patient referral to massage therapist (procedure) |
| 103701006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Patient referral to homeopath (procedure) |
| 103702004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Patient referral to naturopath (procedure) |
| 103703009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Patient referral to acupuncturist (procedure) |
| 103704003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Patient referral to sex therapist (procedure) |
| 105406002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Referral of patient to certified pastoral caregiver (procedure) |
| ... | | | |

Table 376: Care Model

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Care Model urn:oid:2.16.840.1.113883.11.20.9.61  (Clinical Focus: Concepts representing care management styles),(Data Element Scope: Finding),(Inclusion Criteria: A value set of SNOMED-CT codes representing care management styles (e.g., shared care, full care) descending from "170932006" "Chronic disease - care arrangement".),(Exclusion Criteria: none)  This value set was imported on 6/24/2019 with a version of 20190319.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.61/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 170935008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Full care by hospice (finding) |
| 170936009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Shared care - hospice and general practitioner (finding) |
| 170937000 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Shared care: district nurse and general practitioner (finding) |
| 170939002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Full care: nurse practitioner (finding) |
| 170940000 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Shared care: practice nurse and general practitioner (finding) |
| 170941001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Full care by general practitioner (finding) |
| 268528005 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Full care by specialist (finding) |
| 268529002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Shared care - consultant and general practitioner (finding) |
| 370985002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Care by local physician (finding) |

Table 377: ActPriority

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: ActPriority urn:oid:2.16.840.1.113883.1.11.16866  (Clinical Focus: The urgency under which the Act happened, can happen, is happening, is intended to happen, or is requested/demanded to happen.),(Data Element Scope: ),(Inclusion Criteria: All members of system 2.16.840.1.113883.5.7),(Exclusion Criteria: )  This value set was imported on 6/24/2019 with a version of 20190425.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.16866/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| A | HL7ActPriority | urn:oid:2.16.840.1.113883.5.7 | ASAP |
| CR | HL7ActPriority | urn:oid:2.16.840.1.113883.5.7 | callback results |
| CS | HL7ActPriority | urn:oid:2.16.840.1.113883.5.7 | callback for scheduling |
| CSP | HL7ActPriority | urn:oid:2.16.840.1.113883.5.7 | callback placer for scheduling |
| CSR | HL7ActPriority | urn:oid:2.16.840.1.113883.5.7 | contact recipient for scheduling |
| EL | HL7ActPriority | urn:oid:2.16.840.1.113883.5.7 | elective |
| EM | HL7ActPriority | urn:oid:2.16.840.1.113883.5.7 | emergency |
| P | HL7ActPriority | urn:oid:2.16.840.1.113883.5.7 | preop |
| PRN | HL7ActPriority | urn:oid:2.16.840.1.113883.5.7 | as needed |
| R | HL7ActPriority | urn:oid:2.16.840.1.113883.5.7 | routine |
| ... | | | |

Figure 182: Patient Referral Act Example

<entry>

<act classCode="ACT" moodCode="INT">

<!--Patient Referral Act-->

<templateId root="2.16.840.1.113883.10.20.22.4.140" />

<id root="70bdd7db-e02d-4eff-9829-35e3b7d9e154" />

<code code="44383000" displayName="Patient referral for consultation" codeSystemName="SNOMED" codeSystem="2.16.840.1.113883.6.96" />

<statusCode code="active" />

<effectiveTime value="20130311" />

<priorityCode code="A"

codeSystem="2.16.840.1.113883.5.7"

codeSystemName="ActPriority"

displayName="ASAP"/>

<author>

<time value="200130311" />

<assignedAuthor>

<id extension="KP00017" root="2.16.840.1.113883.19.5" />

<addr>

<streetAddressLine>1003 Health Care

Drive</streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>02368</postalCode>

<country>US</country>

</addr>

<telecom use="WP" value="tel:(555)555-1003" />

<assignedPerson>

<name>

<given>Assigned</given>

<family>Amanda</family>

</name>

</assignedPerson>

</assignedAuthor>

</author>

<entryRelationship typeCode="SUBJ">

<observation classCode="OBS" moodCode="EVN">

<code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4" />

<statusCode code="completed" />

<value xsi:type="CD" code="268528005" displayName="full care by specialist" codeSystem="2.16.840.1.113883.6.96" />

</observation>

</entryRelationship>

</act>

</entry>

Planned Act (V2)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.39:2014-06-09 (open)]

Table 378: Planned Act (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (optional)  [Nutrition Recommendation](#E_Nutrition_Recommendation) (optional)  [Assessment and Plan Section (V2)](#S_Assessment_and_Plan_Section_V2) (optional)  [Planned Intervention Act (V2)](#E_Planned_Intervention_Act_V2) (optional) | [Indication (V2)](#Indication_V2) (optional)  [Priority Preference](#E_Priority_Preference) (optional)  [Instruction (V2)](#Instruction_V2) (optional)  [Author Participation](#U_Author_Participation) (optional) |

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 379: Planned Act (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.39:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-8538](#C_1098-8538) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1098-8539](#C_1098-8539) | urn:oid:2.16.840.1.113883.11.20.9.23 (Planned moodCode (Act/Encounter/Procedure)) |
| templateId | 1..1 | SHALL |  | [1098-30430](#C_1098-30430) |  |
| @root | 1..1 | SHALL |  | [1098-30431](#C_1098-30431) | 2.16.840.1.113883.10.20.22.4.39 |
| @extension | 1..1 | SHALL |  | [1098-32552](#C_1098-32552) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-8546](#C_1098-8546) |  |
| code | 1..1 | SHALL |  | [1098-31687](#C_1098-31687) |  |
| statusCode | 1..1 | SHALL |  | [1098-30432](#C_1098-30432) |  |
| @code | 1..1 | SHALL |  | [1098-32019](#C_1098-32019) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = active |
| effectiveTime | 0..1 | SHOULD |  | [1098-30433](#C_1098-30433) |  |
| performer | 0..\* | MAY |  | [1098-30435](#C_1098-30435) |  |
| author | 0..1 | SHOULD |  | [1098-32020](#C_1098-32020) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| entryRelationship | 0..\* | MAY |  | [1098-31067](#C_1098-31067) |  |
| @typeCode | 1..1 | SHALL |  | [1098-31068](#C_1098-31068) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1098-31069](#C_1098-31069) | [Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143](#E_Priority_Preference) |
| entryRelationship | 0..\* | MAY |  | [1098-32021](#C_1098-32021) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32022](#C_1098-32022) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [1098-32023](#C_1098-32023) | [Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09](#Indication_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-32024](#C_1098-32024) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32025](#C_1098-32025) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| act | 1..1 | SHALL |  | [1098-32026](#C_1098-32026) | [Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09](#Instruction_V2) |

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)](#Planned_moodCode_ActEncounterProcedure) urn:oid:2.16.840.1.113883.11.20.9.23 STATIC 2014-09-01 (CONF:1098-8539).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-30430) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.39" (CONF:1098-30431).
   2. 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).
   1. 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).
   1. This statusCode SHALL contain exactly one [1..1] @code="active" Active (CodeSystem: HL7ActStatus 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.

1. 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.

1. 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.

1. SHOULD contain zero or one [0..1] [Author Participation](#U_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.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-31067) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-31068).
   2. SHALL contain exactly one [1..1] [Priority Preference](#E_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.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-32021) such that it
   1. SHALL contain exactly one [1..1] @typeCode="RSON" Has Reason (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32022).
   2. SHALL contain exactly one [1..1] [Indication (V2)](#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.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-32024) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32025).
   2. SHALL contain exactly one [1..1] [Instruction (V2)](#Instruction_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:1098-32026).

Figure 183: 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>

Planned Coverage

[act: identifier urn:oid:2.16.840.1.113883.10.20.22.4.129 (open)]

Table 380: Planned Coverage Contexts

| Contained By: | Contains: |
| --- | --- |
| [Planned Procedure (V2)](#E_Planned_Procedure_V2) (optional)  [Planned Observation (V2)](#E_Planned_Observation_V2) (optional)  [Planned Supply (V2)](#E_Planned_Supply_V2) (optional) | [Author Participation](#U_Author_Participation) (optional) |

This template represents the insurance coverage intended to cover an act or procedure.

Table 381: Planned Coverage Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.129) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-31945](#C_1098-31945) | urn:oid:2.16.840.1.113883.5.4 (HL7ActCode) = ACT |
| @moodCode | 1..1 | SHALL |  | [1098-31946](#C_1098-31946) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = INT |
| templateId | 1..1 | SHALL |  | [1098-31947](#C_1098-31947) |  |
| @root | 1..1 | SHALL |  | [1098-31948](#C_1098-31948) | 2.16.840.1.113883.10.20.22.4.129 |
| id | 1..\* | SHALL |  | [1098-31950](#C_1098-31950) |  |
| code | 1..1 | SHALL |  | [1098-31951](#C_1098-31951) |  |
| @code | 1..1 | SHALL |  | [1098-31952](#C_1098-31952) | 48768-6 |
| @codeSystem | 1..1 | SHALL |  | [1098-31953](#C_1098-31953) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1098-31954](#C_1098-31954) |  |
| @code | 1..1 | SHALL |  | [1098-31955](#C_1098-31955) | urn:oid:2.16.840.1.113883.5.4 (HL7ActCode) = active |
| author | 0..\* | MAY |  | [1098-32178](#C_1098-32178) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| entryRelationship | 1..1 | SHALL |  | [1098-31967](#C_1098-31967) |  |
| @typeCode | 1..1 | SHALL |  | [1098-31968](#C_1098-31968) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| act | 1..1 | SHALL |  | [1098-31969](#C_1098-31969) |  |
| @classCode | 1..1 | SHALL |  | [1098-31970](#C_1098-31970) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1098-31971](#C_1098-31971) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = INT |
| id | 1..\* | SHALL |  | [1098-31972](#C_1098-31972) |  |
| code | 1..1 | SHALL |  | [1098-31973](#C_1098-31973) | urn:oid:2.16.840.1.114222.4.11.3591 (Payer) |
| statusCode | 1..1 | SHALL |  | [1098-31974](#C_1098-31974) |  |
| @code | 1..1 | SHALL |  | [1098-31975](#C_1098-31975) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = active |

1. SHALL contain exactly one [1..1] @classCode="ACT" act (CodeSystem: HL7ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:1098-31945).
2. SHALL contain exactly one [1..1] @moodCode="INT" Intent (CodeSystem: HL7ActMood 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
   1. 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).
   1. This code SHALL contain exactly one [1..1] @code="48768-6" Payment Sources (CONF:1098-31952).
   2. 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).
   1. This statusCode SHALL contain exactly one [1..1] @code="active" Active (CodeSystem: HL7ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:1098-31955).
7. MAY contain zero or more [0..\*] [Author Participation](#U_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
   1. SHALL contain exactly one [1..1] @typeCode="COMP" has component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-31968).
   2. SHALL contain exactly one [1..1] act (CONF:1098-31969).
      1. 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).
      2. This act SHALL contain exactly one [1..1] @moodCode="INT" intent (CodeSystem: HL7ActMood 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.

* + 1. This act SHALL contain at least one [1..\*] id (CONF:1098-31972).
    2. This act SHALL contain exactly one [1..1] code, which SHALL be selected from ValueSet [Payer](#Payer) urn:oid:2.16.840.1.114222.4.11.3591 DYNAMIC (CONF:1098-31973).
    3. 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: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-31975).

Table 382: Payer

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Payer urn:oid:2.16.840.1.114222.4.11.3591  (Clinical Focus: Categories of types of health care payor entities as defined by the US Public Health Data Consortium SOP code system),(Data Element Scope: @code in CCDA r2.1 template Planned Coverage [act: identifier urn:oid:2.16.840.1.113883.10.20.22.4.129 (open)] DYNAMIC),(Inclusion Criteria: All codes in the code system),(Exclusion Criteria: none)  This value set was imported on 7/25/2019 with a version of 20180718.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.3591/expansion> | | | |
| 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 |
| 11 | Source of Payment Typology (PHDSC) | urn:oid:2.16.840.1.113883.3.221.5 | Medicare (Managed Care) |
| 111 | Source of Payment Typology (PHDSC) | urn:oid:2.16.840.1.113883.3.221.5 | Medicare HMO |
| 112 | Source of Payment Typology (PHDSC) | urn:oid:2.16.840.1.113883.3.221.5 | Medicare PPO |
| 113 | Source of Payment Typology (PHDSC) | urn:oid:2.16.840.1.113883.3.221.5 | Medicare POS |
| 119 | Source of Payment Typology (PHDSC) | urn:oid:2.16.840.1.113883.3.221.5 | Medicare Managed Care Other |
| 12 | Source of Payment Typology (PHDSC) | urn:oid:2.16.840.1.113883.3.221.5 | Medicare (Non-managed Care) |
| 121 | Source of Payment Typology (PHDSC) | urn:oid:2.16.840.1.113883.3.221.5 | Medicare FFS |
| 122 | Source of Payment Typology (PHDSC) | urn:oid:2.16.840.1.113883.3.221.5 | Medicare Drug Benefit |
| 123 | Source of Payment Typology (PHDSC) | urn:oid:2.16.840.1.113883.3.221.5 | Medicare Medical Savings Account (MSA) |
| ... | | | |

Figure 184: Planned Coverage Example

<act classCode="ACT" moodCode="INT">

<templateId root="2.16.840.1.113883.10.20.22.4.129" />

<id root="03f5e10b-7e79-4610-9626-d2984ff10cc1" />

<code code="48768-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Payment Sources" />

<statusCode code="active" />

<entryRelationship typeCode="COMP">

<act classCode="ACT" moodCode="INT">

<!-- These act/identifiers are unique identifiers

for the policy or program providing the coverage. -->

<id root="4c9a3be1-5f09-46dd-88e7-14c8ec612e4c" />

<code code="111" displayName="Medicare HMO"

codeSystemName="Source of Payment Typology (PHDSC)"

codeSystem="2.16.840.1.113883.3.221.5" />

<statusCode code="active" />

</act>

</entryRelationship>

</act>

Planned Encounter (V2)

[encounter: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.40:2014-06-09 (open)]

Table 383: Planned Encounter (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (optional)  [Nutrition Recommendation](#E_Nutrition_Recommendation) (optional)  [Planned Intervention Act (V2)](#E_Planned_Intervention_Act_V2) (optional) | [Service Delivery Location](#E_Service_Delivery_Location) (optional)  [Indication (V2)](#Indication_V2) (optional)  [Priority Preference](#E_Priority_Preference) (optional)  [Author Participation](#U_Author_Participation) (optional) |

This template represents a planned or ordered encounter. The type of encounter (e.g., comprehensive outpatient visit) is represented. Clinicians participating in the encounter and the location of the planned encounter may be captured. The priority that the patient and providers place on the encounter may be represented.

Table 384: Planned Encounter (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| encounter (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.40:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-8564](#C_1098-8564) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ENC |
| @moodCode | 1..1 | SHALL |  | [1098-8565](#C_1098-8565) | urn:oid:2.16.840.1.113883.11.20.9.23 (Planned moodCode (Act/Encounter/Procedure)) |
| templateId | 1..1 | SHALL |  | [1098-30437](#C_1098-30437) |  |
| @root | 1..1 | SHALL |  | [1098-30438](#C_1098-30438) | 2.16.840.1.113883.10.20.22.4.40 |
| @extension | 1..1 | SHALL |  | [1098-32553](#C_1098-32553) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-8567](#C_1098-8567) |  |
| code | 0..1 | SHOULD |  | [1098-31032](#C_1098-31032) | urn:oid:2.16.840.1.113883.11.20.9.52 (Encounter Planned) |
| statusCode | 1..1 | SHALL |  | [1098-30439](#C_1098-30439) |  |
| @code | 1..1 | SHALL |  | [1098-31880](#C_1098-31880) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = active |
| effectiveTime | 0..1 | SHOULD |  | [1098-30440](#C_1098-30440) |  |
| performer | 0..\* | MAY |  | [1098-30442](#C_1098-30442) |  |
| assignedEntity | 1..1 | SHALL |  | [1098-31874](#C_1098-31874) |  |
| author | 0..\* | SHOULD |  | [1098-32045](#C_1098-32045) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| participant | 0..\* | MAY |  | [1098-30443](#C_1098-30443) |  |
| @typeCode | 1..1 | SHALL |  | [1098-31875](#C_1098-31875) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = LOC |
| participantRole | 1..1 | SHALL |  | [1098-31876](#C_1098-31876) | [Service Delivery Location (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32](#E_Service_Delivery_Location) |
| entryRelationship | 0..1 | MAY |  | [1098-31033](#C_1098-31033) |  |
| @typeCode | 1..1 | SHALL |  | [1098-31034](#C_1098-31034) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1098-31035](#C_1098-31035) | [Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143](#E_Priority_Preference) |
| entryRelationship | 0..\* | MAY |  | [1098-31877](#C_1098-31877) |  |
| @typeCode | 1..1 | SHALL |  | [1098-31878](#C_1098-31878) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [1098-31879](#C_1098-31879) | [Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09](#Indication_V2) |

1. SHALL contain exactly one [1..1] @classCode="ENC" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1098-8564).
2. SHALL contain exactly one [1..1] @moodCode, which SHALL be selected from ValueSet [Planned moodCode (Act/Encounter/Procedure)](#Planned_moodCode_ActEncounterProcedure) urn:oid:2.16.840.1.113883.11.20.9.23 STATIC 2014-09-01 (CONF:1098-8565).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-30437) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.40" (CONF:1098-30438).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32553).
4. SHALL contain at least one [1..\*] id (CONF:1098-8567).

Records the type of encounter ordered or recommended.

1. SHOULD contain zero or one [0..1] code, which SHOULD be selected from ValueSet [Encounter Planned](#Encounter_Planned) urn:oid:2.16.840.1.113883.11.20.9.52 DYNAMIC (CONF:1098-31032).
2. SHALL contain exactly one [1..1] statusCode (CONF:1098-30439).
   1. This statusCode SHALL contain exactly one [1..1] @code="active" Active (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-31880).
3. SHOULD contain zero or one [0..1] effectiveTime (CONF:1098-30440).

Performers represent clinicians who are responsible for assessing and treating the patient.

1. MAY contain zero or more [0..\*] performer (CONF:1098-30442) such that it
   1. SHALL contain exactly one [1..1] assignedEntity (CONF:1098-31874).

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

1. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-32045).

This location participation captures where the planned or ordered encounter may take place.

1. MAY contain zero or more [0..\*] participant (CONF:1098-30443) such that it
   1. SHALL contain exactly one [1..1] @typeCode="LOC" Location (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90) (CONF:1098-31875).
   2. SHALL contain exactly one [1..1] [Service Delivery Location](#E_Service_Delivery_Location) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32) (CONF:1098-31876).

The following entryRelationship represents the priority that a patient or a provider places on the encounter.

1. MAY contain zero or one [0..1] entryRelationship (CONF:1098-31033) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-31034).
   2. SHALL contain exactly one [1..1] [Priority Preference](#E_Priority_Preference) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:1098-31035).

The following entryRelationship captures the reason for the planned or ordered encounter

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-31877) such that it
   1. SHALL contain exactly one [1..1] @typeCode="RSON" Has Reason (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-31878).
   2. SHALL contain exactly one [1..1] [Indication (V2)](#Indication_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09) (CONF:1098-31879).

Figure 185: Planned Encounter (V2) Example

<entry>

<encounter moodCode="INT" classCode="ENC">

<templateId root="2.16.840.1.113883.10.20.22.4.40" extension="2014-06-09" />

<!-- Planned Encounter V2 template -->

<id root="9a6d1bac-17d3-4195-89a4-1121bc809b4d" />

<code code="185349003" displayName="encounter for check-up (procedure)" codeSystemName="SNOMED CT" codeSystem="2.16.840.1.113883.6.96"> </code>

<statusCode code="active" />

<effectiveTime value="20130615" />

<performer>

<assignedEntity>

...

</assignedEntity>

</performer>

<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-->

...

</observation>

</entryRelationship>

</encounter>

</entry>

Planned Immunization Activity

[substanceAdministration: identifier urn:oid:2.16.840.1.113883.10.20.22.4.120 (open)]

Table 385: Planned Immunization Activity Contexts

| Contained By: | Contains: |
| --- | --- |
| [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (optional)  [Planned Intervention Act (V2)](#E_Planned_Intervention_Act_V2) (optional) | [Indication (V2)](#Indication_V2) (optional)  [Priority Preference](#E_Priority_Preference) (optional)  [Instruction (V2)](#Instruction_V2) (optional)  [Author Participation](#U_Author_Participation) (optional)  [Immunization Medication Information (V2)](#Immunization_Medication_Information_V2) (required)  [Precondition for Substance Administration (V2)](#Precondition_for_Substance_Administrati) (optional) |

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 386: Planned Immunization Activity Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| substanceAdministration (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.120) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-32091](#C_1098-32091) | SBADM |
| @moodCode | 1..1 | SHALL |  | [1098-32097](#C_1098-32097) | urn:oid:2.16.840.1.113883.11.20.9.24 (Planned moodCode (SubstanceAdministration/Supply)) |
| templateId | 1..1 | SHALL |  | [1098-32098](#C_1098-32098) |  |
| @root | 1..1 | SHALL |  | [1098-32099](#C_1098-32099) | 2.16.840.1.113883.10.20.22.4.120 |
| id | 1..\* | SHALL |  | [1098-32100](#C_1098-32100) |  |
| statusCode | 1..1 | SHALL |  | [1098-32101](#C_1098-32101) |  |
| @code | 1..1 | SHALL |  | [1098-32102](#C_1098-32102) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = active |
| effectiveTime | 1..1 | SHALL |  | [1098-32103](#C_1098-32103) |  |
| repeatNumber | 0..1 | MAY |  | [1098-32126](#C_1098-32126) |  |
| routeCode | 0..1 | MAY |  | [1098-32127](#C_1098-32127) | urn:oid:2.16.840.1.113883.3.88.12.3221.8.7 (SPL Drug Route of Administration Terminology) |
| translation | 0..\* | SHOULD |  | [1098-32951](#C_1098-32951) | urn:oid:2.16.840.1.113762.1.4.1099.12 (Medication Route) |
| approachSiteCode | 0..\* | MAY |  | [1098-32128](#C_1098-32128) | urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 (Body Site Value Set) |
| doseQuantity | 0..1 | MAY |  | [1098-32129](#C_1098-32129) |  |
| @unit | 0..1 | SHOULD |  | [1098-32130](#C_1098-32130) | urn:oid:2.16.840.1.113883.1.11.12839 (UnitsOfMeasureCaseSensitive) |
| consumable | 1..1 | SHALL |  | [1098-32131](#C_1098-32131) |  |
| manufacturedProduct | 1..1 | SHALL |  | [1098-32132](#C_1098-32132) | [Immunization Medication Information (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09](#Immunization_Medication_Information_V2) |
| performer | 0..\* | MAY |  | [1098-32104](#C_1098-32104) |  |
| author | 0..\* | MAY |  | [1098-32105](#C_1098-32105) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| entryRelationship | 0..\* | MAY |  | [1098-32108](#C_1098-32108) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32109](#C_1098-32109) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1098-32110](#C_1098-32110) | [Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143](#E_Priority_Preference) |
| entryRelationship | 0..\* | MAY |  | [1098-32114](#C_1098-32114) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32115](#C_1098-32115) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [1098-32116](#C_1098-32116) | [Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09](#Indication_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-32117](#C_1098-32117) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32118](#C_1098-32118) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| act | 1..1 | SHALL |  | [1098-32119](#C_1098-32119) | [Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09](#Instruction_V2) |
| precondition | 0..\* | MAY |  | [1098-32123](#C_1098-32123) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32124](#C_1098-32124) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = PRCN |
| criterion | 1..1 | SHALL |  | [1098-32125](#C_1098-32125) | [Precondition for Substance Administration (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09](#Precondition_for_Substance_Administrati) |

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)](#Planned_moodCode_SubstanceAdministratio) 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
   1. 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).
   1. This statusCode SHALL contain exactly one [1..1] @code="active" Active (CodeSystem: HL7ActStatus 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.

1. 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.

1. MAY contain zero or one [0..1] repeatNumber (CONF:1098-32126).
2. MAY contain zero or one [0..1] routeCode, which SHALL be selected from ValueSet [SPL Drug Route of Administration Terminology](#SPL_Drug_Route_of_Administration_Termin) urn:oid:2.16.840.1.113883.3.88.12.3221.8.7 DYNAMIC (CONF:1098-32127).
   1. The routeCode, if present, SHOULD contain zero or more [0..\*] translation, which SHALL be selected from ValueSet [Medication Route](#Medication_Route) urn:oid:2.16.840.1.113762.1.4.1099.12 DYNAMIC (CONF:1098-32951).
3. MAY contain zero or more [0..\*] approachSiteCode, which SHALL be selected from ValueSet [Body Site Value Set](#Body_Site_Value_Set) urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 DYNAMIC (CONF:1098-32128).
4. MAY contain zero or one [0..1] doseQuantity (CONF:1098-32129).

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

* 1. The doseQuantity, if present, SHOULD contain zero or one [0..1] @unit, which SHOULD be selected from ValueSet [UnitsOfMeasureCaseSensitive](#UnitsOfMeasureCaseSensitive) urn:oid:2.16.840.1.113883.1.11.12839 DYNAMIC (CONF:1098-32130).

1. SHALL contain exactly one [1..1] consumable (CONF:1098-32131).
   1. This consumable SHALL contain exactly one [1..1] [Immunization Medication Information (V2)](#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.

1. 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.

1. MAY contain zero or more [0..\*] [Author Participation](#U_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.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-32108) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32109).
   2. SHALL contain exactly one [1..1] [Priority Preference](#E_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.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-32114) such that it
   1. SHALL contain exactly one [1..1] @typeCode="RSON" Has Reason (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32115).
   2. SHALL contain exactly one [1..1] [Indication (V2)](#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.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-32117) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has Subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32118).
   2. SHALL contain exactly one [1..1] [Instruction (V2)](#Instruction_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:1098-32119).
2. MAY contain zero or more [0..\*] precondition (CONF:1098-32123) such that it
   1. SHALL contain exactly one [1..1] @typeCode="PRCN" Precondition (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32124).
   2. SHALL contain exactly one [1..1] [Precondition for Substance Administration (V2)](#Precondition_for_Substance_Administrati) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09) (CONF:1098-32125).

Table 387: 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: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.24/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| INT | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Intent |
| PRMS | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Promise |
| PRP | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Proposal |
| RQO | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Request |

Figure 186: 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>

Planned Intervention Act (V2)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.146:2015-08-01 (open)]

Table 388: Planned Intervention Act (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Intervention Act (V2)](#E_Intervention_Act_V2) (optional)  [Interventions Section (V3)](#S_Interventions_Section_V3) (optional) | [Medication Activity (V2)](#Medication_Activity_V2) (optional)  [Non-Medicinal Supply Activity (V2)](#NonMedicinal_Supply_Activity_V2) (optional)  [Nutrition Recommendation](#E_Nutrition_Recommendation) (optional)  [Planned Act (V2)](#E_Planned_Act_V2) (optional)  [Planned Encounter (V2)](#E_Planned_Encounter_V2) (optional)  [Planned Procedure (V2)](#E_Planned_Procedure_V2) (optional)  [Planned Observation (V2)](#E_Planned_Observation_V2) (optional)  [Planned Supply (V2)](#E_Planned_Supply_V2) (optional)  [Planned Medication Activity (V2)](#E_Planned_Medication_Activity_V2) (optional)  [Handoff Communication Participants](#E_Handoff_Communication_Participants) (optional)  [Instruction (V2)](#Instruction_V2) (optional)  [Author Participation](#U_Author_Participation) (optional)  [Entry Reference](#E_Entry_Reference) (optional)  [Entry Reference](#E_Entry_Reference) (required)  [External Document Reference](#E_External_Document_Reference) (optional)  [Planned Immunization Activity](#E_Planned_Immunization_Activity) (optional)  [Immunization Activity (V3)](#E_Immunization_Activity_V3) (optional)  [Advance Directive Observation (V3)](#E_Advance_Directive_Observation_V3) (optional)  [Intervention Act (V2)](#E_Intervention_Act_V2) (optional)  [Encounter Activity (V3)](#E_Encounter_Activity_V3) (optional) |

This template represents a Planned Intervention Act. It is a wrapper for planned intervention-type activities considered to be parts of the same intervention. For example, an activity such as "elevate head of bed" combined with "provide humidified O2 per nasal cannula" may be the interventions planned for a health concern of "respiratory insufficiency" in order to attempt to achieve a goal of "pulse oximetry greater than 92%". These intervention activities may be newly described or derived from a variety of sources within an EHR.

Interventions are actions taken to increase the likelihood of achieving the patient's or providers' goals. An Intervention Act should contain a reference to a Goal Observation representing the reason for the intervention.

Planned Intervention Acts can be related to each other or to Intervention Acts. (E.g., a Planned Intervention Act with moodCode of INT could be related to a series of Intervention Acts with moodCode of EVN, each having an effectiveTime containing the time of the intervention.)

All interventions referenced in a Planned Intervention Act must have moodCodes indicating that that are planned (have not yet occurred).

Table 389: Planned Intervention Act (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.146:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-32678](#C_1198-32678) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1198-32679](#C_1198-32679) | urn:oid:2.16.840.1.113883.11.20.9.54 (Planned Intervention moodCode) |
| templateId | 1..1 | SHALL |  | [1198-32653](#C_1198-32653) |  |
| @root | 1..1 | SHALL |  | [1198-32680](#C_1198-32680) | 2.16.840.1.113883.10.20.22.4.146 |
| @extension | 1..1 | SHALL |  | [1198-32912](#C_1198-32912) | 2015-08-01 |
| id | 1..\* | SHALL |  | [1198-32681](#C_1198-32681) |  |
| code | 1..1 | SHALL |  | [1198-32654](#C_1198-32654) |  |
| @code | 1..1 | SHALL |  | [1198-32682](#C_1198-32682) | 362956003 |
| @codeSystem | 1..1 | SHALL |  | [1198-32683](#C_1198-32683) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.6.96 |
| statusCode | 1..1 | SHALL |  | [1198-32655](#C_1198-32655) |  |
| @code | 1..1 | SHALL |  | [1198-32684](#C_1198-32684) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = active |
| effectiveTime | 0..1 | SHOULD |  | [1198-32723](#C_1198-32723) |  |
| author | 0..\* | SHOULD |  | [1198-32719](#C_1198-32719) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| entryRelationship | 0..\* | MAY |  | [1198-32652](#C_1198-32652) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32685](#C_1198-32685) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32677](#C_1198-32677) | [Advance Directive Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.48:2015-08-01](#E_Advance_Directive_Observation_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-32656](#C_1198-32656) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32686](#C_1198-32686) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| substanceAdministration | 1..1 | SHALL |  | [1198-32687](#C_1198-32687) | [Immunization Activity (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.52:2015-08-01](#E_Immunization_Activity_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-32657](#C_1198-32657) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32688](#C_1198-32688) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| substanceAdministration | 1..1 | SHALL |  | [1198-32689](#C_1198-32689) | [Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09](#Medication_Activity_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-32659](#C_1198-32659) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32692](#C_1198-32692) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-32693](#C_1198-32693) | [Intervention Act (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.131:2015-08-01](#E_Intervention_Act_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-32662](#C_1198-32662) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32698](#C_1198-32698) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| encounter | 1..1 | SHALL |  | [1198-32699](#C_1198-32699) | [Encounter Activity (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2015-08-01](#E_Encounter_Activity_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-32663](#C_1198-32663) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32957](#C_1198-32957) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-32701](#C_1198-32701) | [Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09](#Instruction_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-32664](#C_1198-32664) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32702](#C_1198-32702) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| supply | 1..1 | SHALL |  | [1198-32703](#C_1198-32703) | [Non-Medicinal Supply Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.50:2014-06-09](#NonMedicinal_Supply_Activity_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-32665](#C_1198-32665) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32704](#C_1198-32704) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-32705](#C_1198-32705) | [Planned Act (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.39:2014-06-09](#E_Planned_Act_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-32666](#C_1198-32666) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32706](#C_1198-32706) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| encounter | 1..1 | SHALL |  | [1198-32707](#C_1198-32707) | [Planned Encounter (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.40:2014-06-09](#E_Planned_Encounter_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-32667](#C_1198-32667) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32708](#C_1198-32708) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32709](#C_1198-32709) | [Planned Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.44:2014-06-09](#E_Planned_Observation_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-32668](#C_1198-32668) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32710](#C_1198-32710) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| procedure | 1..1 | SHALL |  | [1198-32711](#C_1198-32711) | [Planned Procedure (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2014-06-09](#E_Planned_Procedure_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-32669](#C_1198-32669) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32712](#C_1198-32712) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| substanceAdministration | 1..1 | SHALL |  | [1198-32713](#C_1198-32713) | [Planned Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09](#E_Planned_Medication_Activity_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-32670](#C_1198-32670) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32714](#C_1198-32714) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| supply | 1..1 | SHALL |  | [1198-32715](#C_1198-32715) | [Planned Supply (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.43:2014-06-09](#E_Planned_Supply_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-32671](#C_1198-32671) |  |
| act | 1..1 | SHALL |  | [1198-32716](#C_1198-32716) | [Nutrition Recommendation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.130](#E_Nutrition_Recommendation) |
| entryRelationship | 0..\* | MAY |  | [1198-32672](#C_1198-32672) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32717](#C_1198-32717) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-32718](#C_1198-32718) | [Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122](#E_Entry_Reference) |
| entryRelationship | 1..\* | SHALL |  | [1198-32673](#C_1198-32673) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32720](#C_1198-32720) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| act | 1..1 | SHALL |  | [1198-32721](#C_1198-32721) | [Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122](#E_Entry_Reference) |
| entryRelationship | 0..\* | MAY |  | [1198-32675](#C_1198-32675) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32726](#C_1198-32726) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-32727](#C_1198-32727) | [Handoff Communication Participants (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.141](#E_Handoff_Communication_Participants) |
| entryRelationship | 0..\* | MAY |  | [1198-32676](#C_1198-32676) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32728](#C_1198-32728) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| substanceAdministration | 1..1 | SHALL |  | [1198-32729](#C_1198-32729) | [Planned Immunization Activity (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.120](#E_Planned_Immunization_Activity) |
| reference | 0..\* | MAY |  | [1198-32766](#C_1198-32766) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32767](#C_1198-32767) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| externalDocument | 1..1 | SHALL |  | [1198-32768](#C_1198-32768) | [External Document Reference (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.115:2014-06-09](#E_External_Document_Reference) |

1. SHALL contain exactly one [1..1] @classCode="ACT" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1198-32678).
2. SHALL contain exactly one [1..1] @moodCode, which SHALL be selected from ValueSet [Planned Intervention moodCode](#Planned_Intervention_moodCode) urn:oid:2.16.840.1.113883.11.20.9.54 DYNAMIC (CONF:1198-32679).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-32653) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.146" (CONF:1198-32680).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32912).
4. SHALL contain at least one [1..\*] id (CONF:1198-32681).
5. SHALL contain exactly one [1..1] code (CONF:1198-32654).
   1. This code SHALL contain exactly one [1..1] @code="362956003" procedure / intervention (navigational concept) (CONF:1198-32682).
   2. 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:1198-32683).
6. SHALL contain exactly one [1..1] statusCode (CONF:1198-32655).
   1. This statusCode SHALL contain exactly one [1..1] @code="active" Active (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1198-32684).
7. SHOULD contain zero or one [0..1] effectiveTime (CONF:1198-32723).
8. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1198-32719).
9. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32652) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32685).
   2. SHALL contain exactly one [1..1] [Advance Directive Observation (V3)](#E_Advance_Directive_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.48:2015-08-01) (CONF:1198-32677).
10. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32656) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32686).
    2. SHALL contain exactly one [1..1] [Immunization Activity (V3)](#E_Immunization_Activity_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.52:2015-08-01) (CONF:1198-32687).
11. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32657) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32688).
    2. SHALL contain exactly one [1..1] [Medication Activity (V2)](#Medication_Activity_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09) (CONF:1198-32689).

The following entryRelationship represents the relationship between two Intervention Acts (Intervention RELATES TO Intervention).

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32659) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32692).
   2. SHALL contain exactly one [1..1] [Intervention Act (V2)](#E_Intervention_Act_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.131:2015-08-01) (CONF:1198-32693).
2. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32662) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32698).
   2. SHALL contain exactly one [1..1] [Encounter Activity (V3)](#E_Encounter_Activity_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.49:2015-08-01) (CONF:1198-32699).
3. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32663) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32957).
   2. SHALL contain exactly one [1..1] [Instruction (V2)](#Instruction_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:1198-32701).
4. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32664) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32702).
   2. SHALL contain exactly one [1..1] [Non-Medicinal Supply Activity (V2)](#NonMedicinal_Supply_Activity_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.50:2014-06-09) (CONF:1198-32703).
5. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32665) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32704).
   2. SHALL contain exactly one [1..1] [Planned Act (V2)](#E_Planned_Act_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.39:2014-06-09) (CONF:1198-32705).
6. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32666) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32706).
   2. SHALL contain exactly one [1..1] [Planned Encounter (V2)](#E_Planned_Encounter_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.40:2014-06-09) (CONF:1198-32707).
7. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32667) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32708).
   2. SHALL contain exactly one [1..1] [Planned Observation (V2)](#E_Planned_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.44:2014-06-09) (CONF:1198-32709).
8. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32668) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32710).
   2. SHALL contain exactly one [1..1] [Planned Procedure (V2)](#E_Planned_Procedure_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2014-06-09) (CONF:1198-32711).
9. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32669) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32712).
   2. SHALL contain exactly one [1..1] [Planned Medication Activity (V2)](#E_Planned_Medication_Activity_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09) (CONF:1198-32713).
10. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32670) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32714).
    2. SHALL contain exactly one [1..1] [Planned Supply (V2)](#E_Planned_Supply_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.43:2014-06-09) (CONF:1198-32715).
11. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32671) such that it
    1. SHALL contain exactly one [1..1] [Nutrition Recommendation](#E_Nutrition_Recommendation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.130) (CONF:1198-32716).

Where an Intervention needs to reference another entry already described in the CDA document instance, rather than repeating the full content of the entry, the Entry Reference template may be used to reference this entry.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32672) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32717).
   2. SHALL contain exactly one [1..1] [Entry Reference](#E_Entry_Reference) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:1198-32718).

An Intervention Act SHALL reference a Goal Observation. Because the Goal Observation is already described in the CDA document instance's Goals section, rather than repeating the full content of the Goal Observation, the Entry Reference template can be used to reference this entry. The following entryRelationship represents an Entry Reference to Goal Observation.

1. SHALL contain at least one [1..\*] entryRelationship (CONF:1198-32673) such that it
   1. SHALL contain exactly one [1..1] @typeCode="RSON" Has reason (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32720).
   2. SHALL contain exactly one [1..1] [Entry Reference](#E_Entry_Reference) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:1198-32721).
   3. This entryReference template SHALL reference an instance of a Goal Observation template (CONF:1198-32722).
2. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32675) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32726).
   2. SHALL contain exactly one [1..1] [Handoff Communication Participants](#E_Handoff_Communication_Participants) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.141) (CONF:1198-32727).
3. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32676) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32728).
   2. SHALL contain exactly one [1..1] [Planned Immunization Activity](#E_Planned_Immunization_Activity) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.120) (CONF:1198-32729).
4. MAY contain zero or more [0..\*] reference (CONF:1198-32766).
   1. 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:1198-32767).
   2. The reference, if present, SHALL contain exactly one [1..1] [External Document Reference](#E_External_Document_Reference) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.115:2014-06-09) (CONF:1198-32768).

Table 390: Planned Intervention moodCode

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Planned Intervention moodCode urn:oid:2.16.840.1.113883.11.20.9.54  Contains all the moodCode values it is possible to have for a Planned Intervention.  Value Set Source: [http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary\_tables/infrastructure/vocabulary/vocabulary.html](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html%20) | | | |
| Code | Code System | Code System OID | Print Name |
| APT | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Appointment |
| ARQ | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Appointment Request |
| INT | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Intent |
| PRMS | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Promise |
| PRP | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Proposal |
| RQO | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Request |

Planned Medication Activity (V2)

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

Table 391: Planned Medication Activity (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (optional)  [Nutrition Recommendation](#E_Nutrition_Recommendation) (optional)  [Planned Intervention Act (V2)](#E_Planned_Intervention_Act_V2) (optional) | [Indication (V2)](#Indication_V2) (optional)  [Medication Information (V2)](#E_Medication_Information_V2) (required)  [Priority Preference](#E_Priority_Preference) (optional)  [Instruction (V2)](#Instruction_V2) (optional)  [Author Participation](#U_Author_Participation) (optional)  [Precondition for Substance Administration (V2)](#Precondition_for_Substance_Administrati) (optional) |

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

Table 392: Planned Medication Activity (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| substanceAdministration (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-8572](#C_1098-8572) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = SBADM |
| @moodCode | 1..1 | SHALL |  | [1098-8573](#C_1098-8573) | urn:oid:2.16.840.1.113883.11.20.9.24 (Planned moodCode (SubstanceAdministration/Supply)) |
| templateId | 1..1 | SHALL |  | [1098-30465](#C_1098-30465) |  |
| @root | 1..1 | SHALL |  | [1098-30466](#C_1098-30466) | 2.16.840.1.113883.10.20.22.4.42 |
| @extension | 1..1 | SHALL |  | [1098-32557](#C_1098-32557) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-8575](#C_1098-8575) |  |
| statusCode | 1..1 | SHALL |  | [1098-32087](#C_1098-32087) |  |
| @code | 1..1 | SHALL |  | [1098-32088](#C_1098-32088) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = active |
| effectiveTime | 1..1 | SHALL | IVL\_TS | [1098-30468](#C_1098-30468) |  |
| @value | 0..1 | SHOULD |  | [1098-32944](#C_1098-32944) |  |
| low | 0..1 | SHOULD |  | [1098-32948](#C_1098-32948) |  |
| high | 0..1 | MAY |  | [1098-32949](#C_1098-32949) |  |
| effectiveTime | 0..1 | SHOULD |  | [1098-32943](#C_1098-32943) |  |
| @operator | 1..1 | SHALL |  | [1098-32945](#C_1098-32945) | A |
| repeatNumber | 0..1 | MAY |  | [1098-32066](#C_1098-32066) |  |
| routeCode | 0..1 | MAY |  | [1098-32067](#C_1098-32067) | urn:oid:2.16.840.1.113883.3.88.12.3221.8.7 (SPL Drug Route of Administration Terminology) |
| translation | 0..\* | SHOULD |  | [1098-32952](#C_1098-32952) | urn:oid:2.16.840.1.113762.1.4.1099.12 (Medication Route) |
| approachSiteCode | 0..\* | MAY |  | [1098-32078](#C_1098-32078) | urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 (Body Site Value Set) |
| doseQuantity | 0..1 | MAY |  | [1098-32068](#C_1098-32068) |  |
| @unit | 0..1 | SHOULD |  | [1098-32133](#C_1098-32133) | urn:oid:2.16.840.1.113883.1.11.12839 (UnitsOfMeasureCaseSensitive) |
| rateQuantity | 0..1 | MAY |  | [1098-32079](#C_1098-32079) |  |
| @unit | 0..1 | SHOULD |  | [1098-32134](#C_1098-32134) | urn:oid:2.16.840.1.113883.1.11.12839 (UnitsOfMeasureCaseSensitive) |
| maxDoseQuantity | 0..1 | MAY |  | [1098-32080](#C_1098-32080) |  |
| administrationUnitCode | 0..1 | MAY |  | [1098-32081](#C_1098-32081) | urn:oid:2.16.840.1.113762.1.4.1021.30 (AdministrationUnitDoseForm) |
| consumable | 1..1 | SHALL |  | [1098-32082](#C_1098-32082) |  |
| manufacturedProduct | 1..1 | SHALL |  | [1098-32083](#C_1098-32083) | [Medication Information (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09](#E_Medication_Information_V2) |
| performer | 0..\* | MAY |  | [1098-30470](#C_1098-30470) |  |
| author | 0..1 | SHOULD |  | [1098-32046](#C_1098-32046) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| entryRelationship | 0..\* | MAY |  | [1098-31104](#C_1098-31104) |  |
| @typeCode | 1..1 | SHALL |  | [1098-31105](#C_1098-31105) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1098-31106](#C_1098-31106) | [Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143](#E_Priority_Preference) |
| entryRelationship | 0..\* | MAY |  | [1098-32069](#C_1098-32069) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32070](#C_1098-32070) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [1098-32071](#C_1098-32071) | [Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09](#Indication_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-32072](#C_1098-32072) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32073](#C_1098-32073) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| act | 1..1 | SHALL |  | [1098-32074](#C_1098-32074) | [Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09](#Instruction_V2) |
| precondition | 0..\* | MAY |  | [1098-32084](#C_1098-32084) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32085](#C_1098-32085) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = PRCN |
| criterion | 1..1 | SHALL |  | [1098-32086](#C_1098-32086) | [Precondition for Substance Administration (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09](#Precondition_for_Substance_Administrati) |

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)](#Planned_moodCode_SubstanceAdministratio) 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
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.42" (CONF:1098-30466).
   2. 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).
   1. This statusCode SHALL contain exactly one [1..1] @code="active" Active (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-32088).

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

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

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

1. SHOULD contain zero or one [0..1] effectiveTime (CONF:1098-32943) such that it
   1. SHALL contain exactly one [1..1] @operator="A" (CONF:1098-32945).
   2. SHALL contain exactly one [1..1] @xsi:type="PIVL\_TS" or "EIVL\_TS" (CONF:1098-32946).

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

1. MAY contain zero or one [0..1] repeatNumber (CONF:1098-32066).
2. MAY contain zero or one [0..1] routeCode, which SHALL be selected from ValueSet [SPL Drug Route of Administration Terminology](#SPL_Drug_Route_of_Administration_Termin) urn:oid:2.16.840.1.113883.3.88.12.3221.8.7 DYNAMIC (CONF:1098-32067).
   1. The routeCode, if present, SHOULD contain zero or more [0..\*] translation, which SHALL be selected from ValueSet [Medication Route](#Medication_Route) urn:oid:2.16.840.1.113762.1.4.1099.12 DYNAMIC (CONF:1098-32952).
3. MAY contain zero or more [0..\*] approachSiteCode, which SHALL be selected from ValueSet [Body Site Value Set](#Body_Site_Value_Set) urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 DYNAMIC (CONF:1098-32078).
4. MAY contain zero or one [0..1] doseQuantity (CONF:1098-32068).

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

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

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

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

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

1. MAY contain zero or one [0..1] maxDoseQuantity (CONF:1098-32080).
2. MAY contain zero or one [0..1] administrationUnitCode, which SHALL be selected from ValueSet [AdministrationUnitDoseForm](#AdministrationUnitDoseForm) urn:oid:2.16.840.1.113762.1.4.1021.30 DYNAMIC (CONF:1098-32081).
3. SHALL contain exactly one [1..1] consumable (CONF:1098-32082).
   1. This consumable SHALL contain exactly one [1..1] [Medication Information (V2)](#E_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.

1. 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.

1. SHOULD contain zero or one [0..1] [Author Participation](#U_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.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-31104) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-31105).
   2. SHALL contain exactly one [1..1] [Priority Preference](#E_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.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-32069) such that it
   1. SHALL contain exactly one [1..1] @typeCode="RSON" Has Reason (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32070).
   2. SHALL contain exactly one [1..1] [Indication (V2)](#Indication_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09) (CONF:1098-32071).

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

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-32072) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has Subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32073).
   2. SHALL contain exactly one [1..1] [Instruction (V2)](#Instruction_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:1098-32074).
2. MAY contain zero or more [0..\*] precondition (CONF:1098-32084).
   1. 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).
   2. The precondition, if present, SHALL contain exactly one [1..1] [Precondition for Substance Administration (V2)](#Precondition_for_Substance_Administrati) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09) (CONF:1098-32086).

Figure 187: Planned Medication Activity (V2) Example

<substanceAdministration moodCode="INT" classCode="SBADM">

<templateId root="2.16.840.1.113883.10.20.22.4.42" extension="2014-06-09" />

<!-- Planned Medication Activity (V2)-->

<id root="cdbd33f0-6cde-11db-9fe1-0800200c9a66" />

<text>Heparin 0.25 ml Prefilled Syringe</text>

<statusCode code="active" />

<!-- The effectiveTime in a planned medication activity

represents the time that the medication activity should occur. -->

<effectiveTime value="20130905" />

<consumable>

<manufacturedProduct classCode="MANU">

<!-- Medication Information (V2) -->

...

</manufacturedProduct>

</consumable>

<entryRelationship typeCode="REFR">

<observation classCode="OBS" moodCode="EVN">

<!-- Patient Priority Preference-->

...

</observation>

</entryRelationship>

<entryRelationship typeCode="REFR">

<observation classCode="OBS" moodCode="EVN">

<!-- Provider Priority Preference-->

...

</observation>

</entryRelationship>

<entryRelationship typeCode="RSON">

<!-- Indication (V2) -->

...

</entryRelationship>

<entryRelationship typeCode="SUBJ">

<!-- Instruction (V2) -->

...

</entryRelationship>

</substanceAdministration>

Planned Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.44:2014-06-09 (open)]

Table 393: Planned Observation (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (optional)  [Nutrition Recommendation](#E_Nutrition_Recommendation) (optional)  [Planned Intervention Act (V2)](#E_Planned_Intervention_Act_V2) (optional) | [Indication (V2)](#Indication_V2) (optional)  [Priority Preference](#E_Priority_Preference) (optional)  [Instruction (V2)](#Instruction_V2) (optional)  [Author Participation](#U_Author_Participation) (optional)  [Planned Coverage](#E_Planned_Coverage) (optional) |

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 394: Planned Observation (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.44:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-8581](#C_1098-8581) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-8582](#C_1098-8582) | urn:oid:2.16.840.1.113883.11.20.9.25 (Planned moodCode (Observation)) |
| templateId | 1..1 | SHALL |  | [1098-30451](#C_1098-30451) |  |
| @root | 1..1 | SHALL |  | [1098-30452](#C_1098-30452) | 2.16.840.1.113883.10.20.22.4.44 |
| @extension | 1..1 | SHALL |  | [1098-32555](#C_1098-32555) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-8584](#C_1098-8584) |  |
| code | 1..1 | SHALL |  | [1098-31030](#C_1098-31030) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| statusCode | 1..1 | SHALL |  | [1098-30453](#C_1098-30453) |  |
| @code | 1..1 | SHALL |  | [1098-32032](#C_1098-32032) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = active |
| effectiveTime | 0..1 | SHOULD |  | [1098-30454](#C_1098-30454) |  |
| value | 0..1 | MAY |  | [1098-31031](#C_1098-31031) |  |
| methodCode | 0..1 | MAY |  | [1098-32043](#C_1098-32043) |  |
| targetSiteCode | 0..\* | SHOULD |  | [1098-32044](#C_1098-32044) | urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 (Body Site Value Set) |
| performer | 0..\* | MAY |  | [1098-30456](#C_1098-30456) |  |
| author | 0..\* | SHOULD |  | [1098-32033](#C_1098-32033) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| entryRelationship | 0..\* | MAY |  | [1098-31073](#C_1098-31073) |  |
| @typeCode | 1..1 | SHALL |  | [1098-31074](#C_1098-31074) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1098-31075](#C_1098-31075) | [Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143](#E_Priority_Preference) |
| entryRelationship | 0..\* | MAY |  | [1098-32034](#C_1098-32034) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32035](#C_1098-32035) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [1098-32036](#C_1098-32036) | [Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09](#Indication_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-32037](#C_1098-32037) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32038](#C_1098-32038) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| act | 1..1 | SHALL |  | [1098-32039](#C_1098-32039) | [Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09](#Instruction_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-32040](#C_1098-32040) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32041](#C_1098-32041) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| act | 1..1 | SHALL |  | [1098-32042](#C_1098-32042) | [Planned Coverage (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.129](#E_Planned_Coverage) |

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)](#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
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.44" (CONF:1098-30452).
   2. 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).
   1. This statusCode SHALL contain exactly one [1..1] @code="active" Active (CodeSystem: HL7ActStatus 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.

1. SHOULD contain zero or one [0..1] effectiveTime (CONF:1098-30454).
2. 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.

1. 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.

1. SHOULD contain zero or more [0..\*] targetSiteCode, which SHALL be selected from ValueSet [Body Site Value Set](#Body_Site_Value_Set) 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.

1. 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.

1. SHOULD contain zero or more [0..\*] [Author Participation](#U_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.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-31073) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-31074).
   2. SHALL contain exactly one [1..1] [Priority Preference](#E_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.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-32034) such that it
   1. SHALL contain exactly one [1..1] @typeCode="RSON" Has Reason (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32035).
   2. SHALL contain exactly one [1..1] [Indication (V2)](#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.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-32037) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32038).
   2. SHALL contain exactly one [1..1] [Instruction (V2)](#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.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-32040) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" Has Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32041).
   2. SHALL contain exactly one [1..1] [Planned Coverage](#E_Planned_Coverage) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.129) (CONF:1098-32042).

Table 395: 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: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.25/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| INT | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Intent |
| GOL | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Goal |
| PRMS | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Promise |
| PRP | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Proposal |
| RQO | HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 | Request |

Figure 188: 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="59408-5"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="Oxygen saturation in Arterial blood by Pulse 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>

Planned Procedure (V2)

[procedure: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2014-06-09 (open)]

Table 396: Planned Procedure (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (optional)  [Nutrition Recommendation](#E_Nutrition_Recommendation) (optional)  [Planned Procedure Section (V2)](#Planned_Procedure_Section_V2) (optional)  [Planned Intervention Act (V2)](#E_Planned_Intervention_Act_V2) (optional) | [Indication (V2)](#Indication_V2) (optional)  [Priority Preference](#E_Priority_Preference) (optional)  [Instruction (V2)](#Instruction_V2) (optional)  [Author Participation](#U_Author_Participation) (optional)  [Planned Coverage](#E_Planned_Coverage) (optional) |

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 397: Planned Procedure (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| procedure (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-8568](#C_1098-8568) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = PROC |
| @moodCode | 1..1 | SHALL |  | [1098-8569](#C_1098-8569) | urn:oid:2.16.840.1.113883.11.20.9.23 (Planned moodCode (Act/Encounter/Procedure)) |
| templateId | 1..1 | SHALL |  | [1098-30444](#C_1098-30444) |  |
| @root | 1..1 | SHALL |  | [1098-30445](#C_1098-30445) | 2.16.840.1.113883.10.20.22.4.41 |
| @extension | 1..1 | SHALL |  | [1098-32554](#C_1098-32554) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-8571](#C_1098-8571) |  |
| code | 1..1 | SHALL |  | [1098-31976](#C_1098-31976) |  |
| statusCode | 1..1 | SHALL |  | [1098-30446](#C_1098-30446) |  |
| @code | 1..1 | SHALL |  | [1098-31978](#C_1098-31978) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = active |
| effectiveTime | 0..1 | SHOULD |  | [1098-30447](#C_1098-30447) |  |
| methodCode | 0..\* | MAY |  | [1098-31980](#C_1098-31980) |  |
| targetSiteCode | 0..\* | MAY |  | [1098-31981](#C_1098-31981) | urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 (Body Site Value Set) |
| performer | 0..\* | MAY |  | [1098-30449](#C_1098-30449) |  |
| author | 0..1 | SHOULD |  | [1098-31979](#C_1098-31979) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| entryRelationship | 0..\* | MAY |  | [1098-31079](#C_1098-31079) |  |
| @typeCode | 1..1 | SHALL |  | [1098-31080](#C_1098-31080) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1098-31081](#C_1098-31081) | [Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143](#E_Priority_Preference) |
| entryRelationship | 0..\* | MAY |  | [1098-31982](#C_1098-31982) |  |
| @typeCode | 1..1 | SHALL |  | [1098-31983](#C_1098-31983) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [1098-31984](#C_1098-31984) | [Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09](#Indication_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-31985](#C_1098-31985) |  |
| @typeCode | 1..1 | SHALL |  | [1098-31986](#C_1098-31986) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| @inversionInd | 1..1 | SHALL |  | [1098-31987](#C_1098-31987) | true |
| act | 1..1 | SHALL |  | [1098-31989](#C_1098-31989) | [Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09](#Instruction_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-31990](#C_1098-31990) |  |
| @typeCode | 1..1 | SHALL |  | [1098-31991](#C_1098-31991) | COMP |
| act | 1..1 | SHALL |  | [1098-31992](#C_1098-31992) | [Planned Coverage (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.129](#E_Planned_Coverage) |

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)](#Planned_moodCode_ActEncounterProcedure) 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
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.41" (CONF:1098-30445).
   2. 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).
   1. 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 (CodeSystem: 2.16.840.1.113883.6.12) **OR** ICD-10-PCS (CodeSystem: 2.16.840.1.113883.6.4) (CONF:1098-31977).
6. SHALL contain exactly one [1..1] statusCode (CONF:1098-30446).
   1. This statusCode SHALL contain exactly one [1..1] @code="active" Active (CodeSystem: HL7ActStatus 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.

1. 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.

1. 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.

1. MAY contain zero or more [0..\*] targetSiteCode, which SHALL be selected from ValueSet [Body Site Value Set](#Body_Site_Value_Set) 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.

1. 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.

1. SHOULD contain zero or one [0..1] [Author Participation](#U_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.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-31079) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-31080).
   2. SHALL contain exactly one [1..1] [Priority Preference](#E_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.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-31982) such that it
   1. SHALL contain exactly one [1..1] @typeCode="RSON" Has Reason (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-31983).
   2. SHALL contain exactly one [1..1] [Indication (V2)](#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.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-31985) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has Subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-31986).
   2. SHALL contain exactly one [1..1] @inversionInd="true" True (CONF:1098-31987).
   3. SHALL contain exactly one [1..1] [Instruction (V2)](#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.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-31990) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" Has component (CONF:1098-31991).
   2. SHALL contain exactly one [1..1] [Planned Coverage](#E_Planned_Coverage) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.129) (CONF:1098-31992).

Figure 189: 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>

Planned Supply (V2)

[supply: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.43:2014-06-09 (open)]

Table 398: Planned Supply (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Plan of Treatment Section (V2)](#S_Plan_of_Treatment_Section_V2) (optional)  [Nutrition Recommendation](#E_Nutrition_Recommendation) (optional)  [Planned Intervention Act (V2)](#E_Planned_Intervention_Act_V2) (optional) | [Product Instance](#E_Product_Instance) (optional)  [Indication (V2)](#Indication_V2) (optional)  [Medication Information (V2)](#E_Medication_Information_V2) (optional)  [Priority Preference](#E_Priority_Preference) (optional)  [Instruction (V2)](#Instruction_V2) (optional)  [Author Participation](#U_Author_Participation) (optional)  [Immunization Medication Information (V2)](#Immunization_Medication_Information_V2) (optional)  [Planned Coverage](#E_Planned_Coverage) (optional) |

This template represents both medicinal and non-medicinal supplies ordered, requested, or intended for the patient (e.g., medication prescription, order for wheelchair). The importance of the supply order or request to the patient and provider may be indicated in the Priority Preference.  
The effective time indicates the time when the supply is intended to take place and author time indicates when the documentation of the plan occurred. The Planned Supply template may also indicate the potential insurance coverage for the procedure.  
Depending on the type of supply, the product or participant will be either a Medication Information product (medication), an Immunization Medication Information product (immunization), or a Product Instance participant (device/equipment).

Table 399: Planned Supply (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| supply (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.43:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-8577](#C_1098-8577) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = SPLY |
| @moodCode | 1..1 | SHALL |  | [1098-8578](#C_1098-8578) | urn:oid:2.16.840.1.113883.11.20.9.24 (Planned moodCode (SubstanceAdministration/Supply)) |
| templateId | 1..1 | SHALL |  | [1098-30463](#C_1098-30463) |  |
| @root | 1..1 | SHALL |  | [1098-30464](#C_1098-30464) | 2.16.840.1.113883.10.20.22.4.43 |
| @extension | 1..1 | SHALL |  | [1098-32556](#C_1098-32556) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-8580](#C_1098-8580) |  |
| statusCode | 1..1 | SHALL |  | [1098-30458](#C_1098-30458) |  |
| @code | 1..1 | SHALL |  | [1098-32047](#C_1098-32047) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = active |
| effectiveTime | 0..1 | SHOULD |  | [1098-30459](#C_1098-30459) |  |
| repeatNumber | 0..1 | MAY |  | [1098-32063](#C_1098-32063) |  |
| quantity | 0..1 | MAY |  | [1098-32064](#C_1098-32064) |  |
| product | 0..1 | MAY |  | [1098-32049](#C_1098-32049) |  |
| manufacturedProduct | 1..1 | SHALL |  | [1098-32050](#C_1098-32050) | [Medication Information (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09](#E_Medication_Information_V2) |
| product | 0..1 | MAY |  | [1098-32051](#C_1098-32051) |  |
| manufacturedProduct | 1..1 | SHALL |  | [1098-32052](#C_1098-32052) | [Immunization Medication Information (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09](#Immunization_Medication_Information_V2) |
| product | 0..1 | SHOULD |  | [1098-32325](#C_1098-32325) |  |
| performer | 0..\* | MAY |  | [1098-32048](#C_1098-32048) |  |
| author | 0..1 | SHOULD |  | [1098-31129](#C_1098-31129) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| participant | 0..1 | MAY |  | [1098-32094](#C_1098-32094) |  |
| participantRole | 1..1 | SHALL |  | [1098-32095](#C_1098-32095) | [Product Instance (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.37](#E_Product_Instance) |
| entryRelationship | 0..\* | MAY |  | [1098-31110](#C_1098-31110) |  |
| @typeCode | 1..1 | SHALL |  | [1098-31111](#C_1098-31111) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1098-31112](#C_1098-31112) | [Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143](#E_Priority_Preference) |
| entryRelationship | 0..\* | MAY |  | [1098-32054](#C_1098-32054) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32055](#C_1098-32055) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [1098-32056](#C_1098-32056) | [Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09](#Indication_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-32057](#C_1098-32057) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32058](#C_1098-32058) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| act | 1..1 | SHALL |  | [1098-32059](#C_1098-32059) | [Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09](#Instruction_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-32060](#C_1098-32060) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32061](#C_1098-32061) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| act | 1..1 | SHALL |  | [1098-32062](#C_1098-32062) | [Planned Coverage (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.129](#E_Planned_Coverage) |

1. SHALL contain exactly one [1..1] @classCode="SPLY" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1098-8577).
2. SHALL contain exactly one [1..1] @moodCode, which SHALL be selected from ValueSet [Planned moodCode (SubstanceAdministration/Supply)](#Planned_moodCode_SubstanceAdministratio) urn:oid:2.16.840.1.113883.11.20.9.24 STATIC 2011-09-30 (CONF:1098-8578).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-30463) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.43" (CONF:1098-30464).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32556).
4. SHALL contain at least one [1..\*] id (CONF:1098-8580).
5. SHALL contain exactly one [1..1] statusCode (CONF:1098-30458).
   1. This statusCode SHALL contain exactly one [1..1] @code="active" Active (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-32047).

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

1. SHOULD contain zero or one [0..1] effectiveTime (CONF:1098-30459).

In a Planned Supply, repeatNumber indicates the number of times the supply event can occur. For example, if a medication is filled at a pharmacy and the prescription may be refilled 3 more times, the supply RepeatNumber equals 4.

1. MAY contain zero or one [0..1] repeatNumber (CONF:1098-32063).
2. MAY contain zero or one [0..1] quantity (CONF:1098-32064).

This product represents medication that is ordered, requested or intended for the patient.

1. MAY contain zero or one [0..1] product (CONF:1098-32049) such that it
   1. SHALL contain exactly one [1..1] [Medication Information (V2)](#E_Medication_Information_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09) (CONF:1098-32050).
   2. If the product is Medication Information (V2) (2.16.840.1.113883.10.20.22.4.23.2) then the product SHALL NOT be Immunization Medication Information (2.16.840.1.113883.10.20.22.4.54.2) and the participant SHALL NOT be Product Instance (CONF:1098-32092).

This product represents immunization medication that is ordered, requested or intended for the patient.

1. MAY contain zero or one [0..1] product (CONF:1098-32051) such that it
   1. SHALL contain exactly one [1..1] [Immunization Medication Information (V2)](#Immunization_Medication_Information_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09) (CONF:1098-32052).
   2. If the product is Medication Information (V2) (2.16.840.1.113883.10.20.22.4.23.2) then the product SHALL NOT be Immunization Medication Information (2.16.840.1.113883.10.20.22.4.54.2) and the participant SHALL NOT be Product Instance (CONF:1098-32093).

A product is recommended or even required under certain implementations. This IG makes product as recommended (SHOULD).

1. SHOULD contain zero or one [0..1] product (CONF:1098-32325).

The clinician who is expected to perform the supply could be identified using supply/performer.

1. MAY contain zero or more [0..\*] performer (CONF:1098-32048).

The author in a supply represents the clinician who is requesting or planning the supply.

1. SHOULD contain zero or one [0..1] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31129).

This participant represents a device that is ordered, requested or intended for the patient.

1. MAY contain zero or one [0..1] participant (CONF:1098-32094) such that it
   1. SHALL contain exactly one [1..1] [Product Instance](#E_Product_Instance) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.37) (CONF:1098-32095).
   2. If the participant is Product Instance then the product SHALL NOT be Medication Information (V2) (2.16.840.1.113883.10.20.22.4.23.2) and the product SHALL NOT be Immunization Medication Information (V2) (2.16.840.1.113883.10.20.22.4.54.2) (CONF:1098-32096).

The following entryRelationship represents the priority that a patient or a provider places on the supply.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-31110) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-31111).
   2. SHALL contain exactly one [1..1] [Priority Preference](#E_Priority_Preference) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:1098-31112).

The following entryRelationship represents the indication for the supply.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-32054) such that it
   1. SHALL contain exactly one [1..1] @typeCode="RSON" Has Reason (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32055).
   2. SHALL contain exactly one [1..1] [Indication (V2)](#Indication_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09) (CONF:1098-32056).

The following entryRelationship captures any instructions associated with the planned supply.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-32057) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has Subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32058).
   2. SHALL contain exactly one [1..1] [Instruction (V2)](#Instruction_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:1098-32059).

The following entryRelationship represents the insurance coverage the patient may have for the supply.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-32060) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" Has Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32061).
   2. SHALL contain exactly one [1..1] [Planned Coverage](#E_Planned_Coverage) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.129) (CONF:1098-32062).

Figure 190: Planned Supply (V2) Example

<supply moodCode="INT" classCode="SPLY">

<templateId root="2.16.840.1.113883.10.20.22.4.43" extension="2014-06-09" />

<!-- Planned Supply (V2) -->

<id root="9a6d1bac-17d3-4195-89c4-1121bc809b5d" />

<statusCode code="active" />

<!-- The effectiveTime in a planned supply represents

the time that the supply should occur. -->

<effectiveTime value="20130615" />

<repeatNumber value="1" />

<quantity value="3" />

<!-- This product represents medication that is ordered,

requested or intended for the patient. -->

<product>

<manufacturedProduct classCode="MANU">

<!-- Medication Information (V2) -->

<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" codeSystem="2.16.840.1.113883.6.88" displayName="Proventil 0.09 MG/ACTUAT inhalant solution">

<originalText>

<reference value="#MedSec\_1" />

</originalText>

<translation code="573621" displayName="Proventil 0.09 MG/ACTUAT inhalant solution" codeSystem="2.16.840.1.113883.6.88" codeSystemName="RxNorm" />

</code>

</manufacturedMaterial>

<manufacturerOrganization>

<name>Medication Factory Inc.</name>

</manufacturerOrganization>

</manufacturedProduct>

</product>

<!-- The clinician who is expected to perform the supply

could be identified using supply/performer. -->

<performer>

...

</performer>

<!-- The author in a supply represents the clinician

who is requesting or planning the supply. -->

<author typeCode="AUT">

...

</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>

<entryRelationship typeCode="COMP">

<!-- Planned Coverage -->

...

</entryRelationship>

</supply>

Policy Activity (V3)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.61:2015-08-01 (open)]

Table 400: Policy Activity (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Coverage Activity (V3)](#E_Coverage_Activity_V3) (required) | [US Realm Address (AD.US.FIELDED)](#U_US_Realm_Address_ADUSFIELDED) (optional) |

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 401: Policy Activity (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.61:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-8898](#C_1198-8898) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1198-8899](#C_1198-8899) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-8900](#C_1198-8900) |  |
| @root | 1..1 | SHALL |  | [1198-10516](#C_1198-10516) | 2.16.840.1.113883.10.20.22.4.61 |
| @extension | 1..1 | SHALL |  | [1198-32595](#C_1198-32595) | 2015-08-01 |
| id | 1..\* | SHALL |  | [1198-8901](#C_1198-8901) |  |
| code | 1..1 | SHALL |  | [1198-8903](#C_1198-8903) | urn:oid:2.16.840.1.113883.3.88.12.3221.5.2 (Health Insurance Type) |
| translation | 1..\* | SHALL |  | [1198-32852](#C_1198-32852) | urn:oid:2.16.840.1.114222.4.11.3591 (Payer) |
| statusCode | 1..1 | SHALL |  | [1198-8902](#C_1198-8902) |  |
| @code | 1..1 | SHALL |  | [1198-19109](#C_1198-19109) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| performer | 1..1 | SHALL |  | [1198-8906](#C_1198-8906) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8907](#C_1198-8907) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = PRF |
| templateId | 1..1 | SHALL |  | [1198-16808](#C_1198-16808) |  |
| @root | 1..1 | SHALL |  | [1198-16809](#C_1198-16809) | 2.16.840.1.113883.10.20.22.4.87 |
| assignedEntity | 1..1 | SHALL |  | [1198-8908](#C_1198-8908) |  |
| id | 1..\* | SHALL |  | [1198-8909](#C_1198-8909) |  |
| code | 0..1 | SHOULD |  | [1198-8914](#C_1198-8914) |  |
| @code | 1..1 | SHALL |  | [1198-15992](#C_1198-15992) | urn:oid:2.16.840.1.113883.1.11.10416 (Financially Responsible Party Type Value Set) |
| addr | 0..1 | MAY |  | [1198-8910](#C_1198-8910) | [US Realm Address (AD.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2](#U_US_Realm_Address_ADUSFIELDED) |
| telecom | 0..\* | MAY |  | [1198-8911](#C_1198-8911) |  |
| representedOrganization | 0..1 | SHOULD |  | [1198-8912](#C_1198-8912) |  |
| name | 0..1 | SHOULD |  | [1198-8913](#C_1198-8913) |  |
| performer | 0..\* | SHOULD |  | [1198-8961](#C_1198-8961) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32971](#C_1198-32971) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = PRF |
| templateId | 1..1 | SHALL |  | [1198-16810](#C_1198-16810) |  |
| @root | 1..1 | SHALL |  | [1198-16811](#C_1198-16811) | 2.16.840.1.113883.10.20.22.4.88 |
| time | 0..1 | SHOULD |  | [1198-8963](#C_1198-8963) |  |
| assignedEntity | 1..1 | SHALL |  | [1198-8962](#C_1198-8962) |  |
| code | 1..1 | SHALL |  | [1198-8968](#C_1198-8968) |  |
| @code | 1..1 | SHALL |  | [1198-16096](#C_1198-16096) | GUAR |
| @codeSystem | 1..1 | SHALL |  | [1198-32165](#C_1198-32165) | 2.16.840.1.113883.5.110 |
| addr | 0..1 | SHOULD |  | [1198-8964](#C_1198-8964) | [US Realm Address (AD.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2](#U_US_Realm_Address_ADUSFIELDED) |
| telecom | 0..\* | SHOULD |  | [1198-8965](#C_1198-8965) |  |
| participant | 1..1 | SHALL |  | [1198-8916](#C_1198-8916) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8917](#C_1198-8917) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = COV |
| templateId | 1..1 | SHALL |  | [1198-16812](#C_1198-16812) |  |
| @root | 1..1 | SHALL |  | [1198-16814](#C_1198-16814) | 2.16.840.1.113883.10.20.22.4.89 |
| time | 0..1 | SHOULD |  | [1198-8918](#C_1198-8918) |  |
| low | 0..1 | SHOULD |  | [1198-8919](#C_1198-8919) |  |
| high | 0..1 | SHOULD |  | [1198-8920](#C_1198-8920) |  |
| participantRole | 1..1 | SHALL |  | [1198-8921](#C_1198-8921) |  |
| id | 1..\* | SHALL |  | [1198-8922](#C_1198-8922) |  |
| code | 1..1 | SHALL |  | [1198-8923](#C_1198-8923) |  |
| @code | 0..1 | SHOULD |  | [1198-16078](#C_1198-16078) | urn:oid:2.16.840.1.113883.1.11.18877 (Coverage Role Type Value Set) |
| addr | 0..1 | SHOULD |  | [1198-8956](#C_1198-8956) | [US Realm Address (AD.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2](#U_US_Realm_Address_ADUSFIELDED) |
| playingEntity | 0..1 | SHOULD |  | [1198-8932](#C_1198-8932) |  |
| name | 1..\* | SHALL |  | [1198-8930](#C_1198-8930) |  |
| sdtc:birthTime | 1..1 | SHALL |  | [1198-31344](#C_1198-31344) |  |
| participant | 0..1 | SHOULD |  | [1198-8934](#C_1198-8934) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8935](#C_1198-8935) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = HLD |
| templateId | 1..1 | SHALL |  | [1198-16813](#C_1198-16813) |  |
| @root | 1..1 | SHALL |  | [1198-16815](#C_1198-16815) | 2.16.840.1.113883.10.20.22.4.90 |
| time | 0..1 | MAY |  | [1198-8938](#C_1198-8938) |  |
| participantRole | 1..1 | SHALL |  | [1198-8936](#C_1198-8936) |  |
| id | 1..\* | SHALL |  | [1198-8937](#C_1198-8937) |  |
| addr | 0..1 | SHOULD |  | [1198-8925](#C_1198-8925) | [US Realm Address (AD.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2](#U_US_Realm_Address_ADUSFIELDED) |
| entryRelationship | 1..\* | SHALL |  | [1198-8939](#C_1198-8939) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8940](#C_1198-8940) | 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:1198-8898).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-8899).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-8900) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.61" (CONF:1198-10516).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32595).

This id is a unique identifier for the policy or program providing the coverage

1. SHALL contain at least one [1..\*] id (CONF:1198-8901).
2. SHALL contain exactly one [1..1] code, which SHOULD be selected from ValueSet [Health Insurance Type](#Health_Insurance_Type) urn:oid:2.16.840.1.113883.3.88.12.3221.5.2 DYNAMIC (CONF:1198-8903).
   1. This code SHALL contain at least one [1..\*] translation, which SHOULD be selected from ValueSet [Payer](#Payer) urn:oid:2.16.840.1.114222.4.11.3591 (CONF:1198-32852).
3. SHALL contain exactly one [1..1] statusCode (CONF:1198-8902).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1198-19109).

This performer represents the Payer.

1. SHALL contain exactly one [1..1] performer (CONF:1198-8906) such that it
   1. SHALL contain exactly one [1..1] @typeCode="PRF" Performer (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 STATIC) (CONF:1198-8907).
   2. SHALL contain exactly one [1..1] templateId (CONF:1198-16808).
      1. This templateId SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.87" Payer Performer (CONF:1198-16809).
   3. SHALL contain exactly one [1..1] assignedEntity (CONF:1198-8908).
      1. This assignedEntity SHALL contain at least one [1..\*] id (CONF:1198-8909).
      2. This assignedEntity SHOULD contain zero or one [0..1] code (CONF:1198-8914).
         1. The code, if present, SHALL contain exactly one [1..1] @code, which SHOULD be selected from ValueSet [Financially Responsible Party Type Value Set](#Financially_Responsible_Party_Type_Valu) urn:oid:2.16.840.1.113883.1.11.10416 DYNAMIC (CONF:1198-15992).
      3. This assignedEntity MAY contain zero or one [0..1] [US Realm Address (AD.US.FIELDED)](#U_US_Realm_Address_ADUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1198-8910).
      4. This assignedEntity MAY contain zero or more [0..\*] telecom (CONF:1198-8911).
      5. This assignedEntity SHOULD contain zero or one [0..1] representedOrganization (CONF:1198-8912).
         1. The representedOrganization, if present, SHOULD contain zero or one [0..1] name (CONF:1198-8913).

This performer represents the Guarantor.

1. SHOULD contain zero or more [0..\*] performer (CONF:1198-8961) such that it
   1. SHALL contain exactly one [1..1] @typeCode="PRF" Performer (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90) (CONF:1198-32971).
   2. SHALL contain exactly one [1..1] templateId (CONF:1198-16810).
      1. This templateId SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.88" Guarantor Performer (CONF:1198-16811).
   3. SHOULD contain zero or one [0..1] time (CONF:1198-8963).
   4. SHALL contain exactly one [1..1] assignedEntity (CONF:1198-8962).
      1. This assignedEntity SHALL contain exactly one [1..1] code (CONF:1198-8968).
         1. This code SHALL contain exactly one [1..1] @code="GUAR" Guarantor (CONF:1198-16096).
         2. This code SHALL contain exactly one [1..1] @codeSystem="2.16.840.1.113883.5.110" (CONF:1198-32165).
      2. This assignedEntity SHOULD contain zero or one [0..1] [US Realm Address (AD.US.FIELDED)](#U_US_Realm_Address_ADUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1198-8964).
      3. This assignedEntity SHOULD contain zero or more [0..\*] telecom (CONF:1198-8965).
      4. SHOULD include assignedEntity/assignedPerson/name AND/OR assignedEntity/representedOrganization/name (CONF:1198-8967).
2. SHALL contain exactly one [1..1] participant (CONF:1198-8916) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COV" Coverage target (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 STATIC) (CONF:1198-8917).
   2. SHALL contain exactly one [1..1] templateId (CONF:1198-16812).
      1. This templateId SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.89" Covered Party Participant (CONF:1198-16814).
   3. SHOULD contain zero or one [0..1] time (CONF:1198-8918).
      1. The time, if present, SHOULD contain zero or one [0..1] low (CONF:1198-8919).
      2. The time, if present, SHOULD contain zero or one [0..1] high (CONF:1198-8920).
   4. SHALL contain exactly one [1..1] participantRole (CONF:1198-8921).
      1. This participantRole SHALL contain at least one [1..\*] id (CONF:1198-8922).
         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:1198-8984).
      2. This participantRole SHALL contain exactly one [1..1] code (CONF:1198-8923).
         1. This code SHOULD contain zero or one [0..1] @code, which SHOULD be selected from ValueSet [Coverage Role Type Value Set](#Coverage_Role_Type_Value_Set) urn:oid:2.16.840.1.113883.1.11.18877 DYNAMIC (CONF:1198-16078).
      3. This participantRole SHOULD contain zero or one [0..1] [US Realm Address (AD.US.FIELDED)](#U_US_Realm_Address_ADUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1198-8956).
      4. This participantRole SHOULD contain zero or one [0..1] playingEntity (CONF:1198-8932).

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:1198-8930).

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.

* + - 1. The playingEntity, if present, SHALL contain exactly one [1..1] sdtc:birthTime (CONF:1198-31344).
         1. 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:1198-31345).

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.

1. SHOULD contain zero or one [0..1] participant (CONF:1198-8934) such that it
   1. SHALL contain exactly one [1..1] @typeCode="HLD" Holder (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 STATIC) (CONF:1198-8935).
   2. SHALL contain exactly one [1..1] templateId (CONF:1198-16813).
      1. This templateId SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.90" Policy Holder Participant (CONF:1198-16815).
   3. MAY contain zero or one [0..1] time (CONF:1198-8938).
   4. SHALL contain exactly one [1..1] participantRole (CONF:1198-8936).
      1. This participantRole SHALL contain at least one [1..\*] id (CONF:1198-8937).
         1. This id is a unique identifier for the subscriber of the coverage (CONF:1198-10120).
      2. This participantRole SHOULD contain zero or one [0..1] [US Realm Address (AD.US.FIELDED)](#U_US_Realm_Address_ADUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1198-8925).
   5. 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:1198-17139).
2. SHALL contain at least one [1..\*] entryRelationship (CONF:1198-8939) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1198-8940).
   2. 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:1198-8942).
   3. 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:1198-8943).

Table 402: Health Insurance Type

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Health Insurance Type urn:oid:2.16.840.1.113883.3.88.12.3221.5.2 | | | |
| Code | Code System | Code System OID | Print Name |
| 12 | Insurance Type Code | urn:oid:2.16.840.1.113883.3.88.12.3221.5.2 | Medicare Secondary Working Aged Beneficiary or Spouse with Employer Group Health Plan |
| 13 | Insurance Type Code | urn:oid:2.16.840.1.113883.3.88.12.3221.5.2 | Medicare Secondary End-Stage Renal Disease Beneficiary in the 12 month coordination period with an employer's group health plan |
| 14 | Insurance Type Code | urn:oid:2.16.840.1.113883.3.88.12.3221.5.2 | Medicare Secondary, No-fault Insurance including Auto is Primary |
| 15 | Insurance Type Code | urn:oid:2.16.840.1.113883.3.88.12.3221.5.2 | Medicare Secondary Worker's Compensation |
| 16 | Insurance Type Code | urn:oid:2.16.840.1.113883.3.88.12.3221.5.2 | Medicare Secondary Public Health Service (PHS)or Other Federal Agency |
| 41 | Insurance Type Code | urn:oid:2.16.840.1.113883.3.88.12.3221.5.2 | Medicare Secondary Black Lung |
| 42 | Insurance Type Code | urn:oid:2.16.840.1.113883.3.88.12.3221.5.2 | Medicare Secondary Veteran's Administration |
| 43 | Insurance Type Code | urn:oid:2.16.840.1.113883.3.88.12.3221.5.2 | Medicare Secondary Disabled Beneficiary Under Age 65 with Large Group Health Plan (LGHP) |
| 47 | Insurance Type Code | urn:oid:2.16.840.1.113883.3.88.12.3221.5.2 | Medicare Secondary, Other Liability Insurance is Primary |
| AP | Insurance Type Code | urn:oid:2.16.840.1.113883.3.88.12.3221.5.2 | Auto Insurance Policy |
| ... | | | |

Table 403: Financially Responsible Party Type Value Set

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Financially Responsible Party Type Value Set urn:oid:2.16.840.1.113883.1.11.10416  (Clinical Focus: A relationship between two entities that is formally recognized, frequently by a contract or similar agreement),(Data Element Scope: Financially responsible person code),(Inclusion Criteria: All selectable descendants of RoleClassRelationshipFormal from the RoleClass HL7 code system),(Exclusion Criteria: none)  This value set was imported on 6/24/2019 with a version of 20190517.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.10416/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| AFFL | HL7RoleClass | urn:oid:2.16.840.1.113883.5.110 | affiliate |
| AGNT | HL7RoleClass | urn:oid:2.16.840.1.113883.5.110 | agent |
| ASSIGNED | HL7RoleClass | urn:oid:2.16.840.1.113883.5.110 | assigned entity |
| CASEBJ | HL7RoleClass | urn:oid:2.16.840.1.113883.5.110 | Case Subject |
| CIT | HL7RoleClass | urn:oid:2.16.840.1.113883.5.110 | citizen |
| CLAIM | HL7RoleClass | urn:oid:2.16.840.1.113883.5.110 | claimant |
| COMPAR | HL7RoleClass | urn:oid:2.16.840.1.113883.5.110 | commissioning party |
| CON | HL7RoleClass | urn:oid:2.16.840.1.113883.5.110 | contact |
| COVPTY | HL7RoleClass | urn:oid:2.16.840.1.113883.5.110 | covered party |
| CRINV | HL7RoleClass | urn:oid:2.16.840.1.113883.5.110 | clinical research investigator |
| ... | | | |

Table 404: Coverage Role Type Value Set

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Coverage Role Type Value Set urn:oid:2.16.840.1.113883.1.11.18877  (Clinical Focus: The role of the covered patient with respect to the coverage holder),(Data Element Scope: ),(Inclusion Criteria: descendants of \_CoverageRoleType [abstract term] in RoleCode 2.16.840.1.113883.5.111),(Exclusion Criteria: )  This value set was imported on 6/24/2019 with a version of 20190425.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.18877/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| FAMDEP | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | family dependent |
| FSTUD | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | full-time student |
| HANDIC | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | handicapped dependent |
| INJ | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | injured plaintiff |
| PSTUD | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | part-time student |
| SELF | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | self |
| SPON | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | sponsored dependent |
| STUD | HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 | student |

Figure 191: Policy Activity (V3) Example

<act classCode="ACT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.61" extension="2015-08-01" />

<id root="3e676a50-7aac-11db-9fe1-0800200c9a66" />

<code code="12" displayName="Medicare Secondary Working Aged Beneficiary or Spouse with Employer Group Health Plan"

codeSystemName="Insurance Type Code (x12N-1336)"

codeSystem="2.16.840.1.113883.6.255.1336">

<translation code="2" displayName="Medicare"

codeSystem="2.16.840.1.113883.3.221.5" codeSystemName="Source of Payment Typology (PHDSC)"></translation>

</code>

<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="329fcdf0-7ab3-11db-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="1.1.1.1.1.1.1.1.14" 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>

Postprocedure Diagnosis (V3)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.51:2015-08-01 (open)]

Table 405: Postprocedure Diagnosis (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional)  [Postprocedure Diagnosis Section (V3)](#S_Postprocedure_Diagnosis_Section_V3) (optional) | [Problem Observation (V3)](#E_Problem_Observation_V3) (required) |

This template represents the diagnosis or diagnoses discovered or confirmed during the procedure. They may be the same as preprocedure diagnoses or indications.

Table 406: Postprocedure Diagnosis (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.51:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-8756](#C_1198-8756) | ACT |
| @moodCode | 1..1 | SHALL |  | [1198-8757](#C_1198-8757) | EVN |
| templateId | 1..1 | SHALL |  | [1198-16766](#C_1198-16766) |  |
| @root | 1..1 | SHALL |  | [1198-16767](#C_1198-16767) | 2.16.840.1.113883.10.20.22.4.51 |
| @extension | 1..1 | SHALL |  | [1198-32539](#C_1198-32539) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-19151](#C_1198-19151) |  |
| @code | 1..1 | SHALL |  | [1198-19152](#C_1198-19152) | 59769-0 |
| @codeSystem | 1..1 | SHALL |  | [1198-32166](#C_1198-32166) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| entryRelationship | 1..\* | SHALL |  | [1198-8759](#C_1198-8759) |  |
| @typeCode | 1..1 | SHALL |  | [1198-8760](#C_1198-8760) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| observation | 1..1 | SHALL |  | [1198-15583](#C_1198-15583) | [Problem Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01](#E_Problem_Observation_V3) |

1. SHALL contain exactly one [1..1] @classCode="ACT" (CONF:1198-8756).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CONF:1198-8757).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-16766) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.51" (CONF:1198-16767).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32539).
4. SHALL contain exactly one [1..1] code (CONF:1198-19151).
   1. This code SHALL contain exactly one [1..1] @code="59769-0" Postprocedure diagnosis (CONF:1198-19152).
   2. 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:1198-32166).
5. SHALL contain at least one [1..\*] entryRelationship (CONF:1198-8759) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1198-8760).
   2. SHALL contain exactly one [1..1] [Problem Observation (V3)](#E_Problem_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01) (CONF:1198-15583).

Figure 192: Postprocedure Diagnosis (V3) Example

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.36" extension="2015-08-01" />

<code code="59769-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="POSTPROCEDURE DIAGNOSIS" />

<title>Postprocedure Diagnosis</title>

<text>

...

</text>

<entry>

<act moodCode="EVN" classCode="ACT">

<templateId root="2.16.840.1.113883.10.20.22.4.51" extension="2015-08-01" />

<!-- \*\* Postprocedure Diagnosis \*\* -->

...

</act>

</entry>

</section>

Precondition for Substance Administration (V2)

[criterion: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09 (open)]

Table 407: Precondition for Substance Administration (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Medication Activity (V2)](#Medication_Activity_V2) (optional)  [Planned Medication Activity (V2)](#E_Planned_Medication_Activity_V2) (optional)  [Planned Immunization Activity](#E_Planned_Immunization_Activity) (optional)  [Immunization Activity (V3)](#E_Immunization_Activity_V3) (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 408: 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 |  | [1098-7372](#C_1098-7372) |  |
| @root | 1..1 | SHALL |  | [1098-10517](#C_1098-10517) | 2.16.840.1.113883.10.20.22.4.25 |
| @extension | 1..1 | SHALL |  | [1098-32603](#C_1098-32603) | 2014-06-09 |
| code | 1..1 | SHALL | CD | [1098-32396](#C_1098-32396) |  |
| @code | 1..1 | SHALL |  | [1098-32397](#C_1098-32397) | ASSERTION |
| @codeSystem | 1..1 | SHALL |  | [1098-32398](#C_1098-32398) | urn:oid:2.16.840.1.113883.5.4 (HL7ActCode) = 2.16.840.1.113883.5.4 |
| value | 1..1 | SHALL | CD | [1098-7369](#C_1098-7369) | urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 (Problem) |

1. SHALL contain exactly one [1..1] templateId (CONF:1098-7372) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.25" (CONF:1098-10517).
   2. 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).
   1. This code SHALL contain exactly one [1..1] @code="ASSERTION" Assertion (CONF:1098-32397).
   2. This code SHALL contain exactly one [1..1] @codeSystem="2.16.840.1.113883.5.4" (CodeSystem: HL7ActCode 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](#Problem) urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 DYNAMIC (CONF:1098-7369).

Figure 193: 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>

Pregnancy Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.15.3.8 (open)]

Table 409: Pregnancy Observation Contexts

| Contained By: | Contains: |
| --- | --- |
| [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional)  [Social History Section (V3)](#S_Social_History_Section_V3) (optional) | [Estimated Date of Delivery](#E_Estimated_Date_of_Delivery) (optional) |

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 410: 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 |  | [81-451](#C_81-451) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [81-452](#C_81-452) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [81-16768](#C_81-16768) |  |
| @root | 1..1 | SHALL |  | [81-16868](#C_81-16868) | 2.16.840.1.113883.10.20.15.3.8 |
| code | 1..1 | SHALL |  | [81-19153](#C_81-19153) |  |
| @code | 1..1 | SHALL |  | [81-19154](#C_81-19154) | ASSERTION |
| @codeSystem | 1..1 | SHALL |  | [81-26505](#C_81-26505) | urn:oid:2.16.840.1.113883.5.4 (HL7ActCode) = 2.16.840.1.113883.5.4 |
| statusCode | 1..1 | SHALL |  | [81-455](#C_81-455) |  |
| @code | 1..1 | SHALL |  | [81-19110](#C_81-19110) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 0..1 | SHOULD |  | [81-2018](#C_81-2018) |  |
| value | 1..1 | SHALL | CD | [81-457](#C_81-457) | urn:oid:2.16.840.1.113762.1.4.1099.24 (Extended Pregnancy Status) |
| entryRelationship | 0..1 | MAY |  | [81-458](#C_81-458) |  |
| @typeCode | 1..1 | SHALL |  | [81-459](#C_81-459) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [81-15584](#C_81-15584) | [Estimated Date of Delivery (identifier: urn:oid:2.16.840.1.113883.10.20.15.3.1](#E_Estimated_Date_of_Delivery) |

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: HL7ActMood 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
   1. 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).
   1. This code SHALL contain exactly one [1..1] @code="ASSERTION" Assertion (CONF:81-19154).
   2. This code SHALL contain exactly one [1..1] @codeSystem="2.16.840.1.113883.5.4" (CodeSystem: HL7ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:81-26505).
5. SHALL contain exactly one [1..1] statusCode (CONF:81-455).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus 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", where the code SHALL be selected from ValueSet [Extended Pregnancy Status](#Extended_Pregnancy_Status) urn:oid:2.16.840.1.113762.1.4.1099.24 DYNAMIC (CONF:81-457).
8. MAY contain zero or one [0..1] entryRelationship (CONF:81-458) such that it
   1. 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).
   2. SHALL contain exactly one [1..1] [Estimated Date of Delivery](#E_Estimated_Date_of_Delivery) (identifier: urn:oid:2.16.840.1.113883.10.20.15.3.1) (CONF:81-15584).

Table 411: Extended Pregnancy Status

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Extended Pregnancy Status urn:oid:2.16.840.1.113762.1.4.1099.24  (Clinical Focus: Defines the status of pregnancy),(Data Element Scope: Pregnancy status at time of encounter),(Inclusion Criteria: SNOMED CT concepts intended to indicate whether a patient is pregnant, not pregnant or possibly pregnant.),(Exclusion Criteria: None)  This value set was imported on 6/24/2019 with a version of 20190319.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1099.24/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 102874004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Possible pregnancy (finding) |
| 60001007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Not pregnant (finding) |
| 77386006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Pregnant (finding) |

Figure 194: 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>

Preoperative Diagnosis (V3)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.65:2015-08-01 (open)]

Table 412: Preoperative Diagnosis (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional)  [Preoperative Diagnosis Section (V3)](#S_Preoperative_Diagnosis_Section_V3) (optional) | [Problem Observation (V3)](#E_Problem_Observation_V3) (required) |

This template represents the surgical diagnosis or diagnoses assigned to the patient before the surgical procedure and is the reason for the surgery. The preoperative diagnosis is, in the opinion of the surgeon, the diagnosis that will be confirmed during surgery.

Table 413: Preoperative Diagnosis (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.65:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-10090](#C_1198-10090) | ACT |
| @moodCode | 1..1 | SHALL |  | [1198-10091](#C_1198-10091) | EVN |
| templateId | 1..1 | SHALL |  | [1198-16770](#C_1198-16770) |  |
| @root | 1..1 | SHALL |  | [1198-16771](#C_1198-16771) | 2.16.840.1.113883.10.20.22.4.65 |
| @extension | 1..1 | SHALL |  | [1198-32540](#C_1198-32540) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-19155](#C_1198-19155) |  |
| @code | 1..1 | SHALL |  | [1198-19156](#C_1198-19156) | 10219-4 |
| @codeSystem | 1..1 | SHALL |  | [1198-32167](#C_1198-32167) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| entryRelationship | 1..\* | SHALL |  | [1198-10093](#C_1198-10093) |  |
| @typeCode | 1..1 | SHALL |  | [1198-10094](#C_1198-10094) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| observation | 1..1 | SHALL |  | [1198-15605](#C_1198-15605) | [Problem Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01](#E_Problem_Observation_V3) |

1. SHALL contain exactly one [1..1] @classCode="ACT" (CONF:1198-10090).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CONF:1198-10091).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-16770) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.65" (CONF:1198-16771).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32540).
4. SHALL contain exactly one [1..1] code (CONF:1198-19155).
   1. This code SHALL contain exactly one [1..1] @code="10219-4" Preoperative Diagnosis (CONF:1198-19156).
   2. 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:1198-32167).
5. SHALL contain at least one [1..\*] entryRelationship (CONF:1198-10093) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1198-10094).
   2. SHALL contain exactly one [1..1] [Problem Observation (V3)](#E_Problem_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01) (CONF:1198-15605).

Figure 195: Preoperative Diagnosis (V3) Example

<act moodCode="EVN" classCode="ACT">

<templateId root="2.16.840.1.113883.10.20.22.4.65" extension="2015-08-01" />

<code code="10219-4" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Preoperative Diagnosis" />

<entryRelationship typeCode="SUBJ">

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2015-08-01" />

. . .

</observation>

</entryRelationship>

</act>

Pressure Ulcer Observation (DEPRECATED)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.70:2014-06-09 (open)]

Table 414: Pressure Ulcer Observation (DEPRECATED) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Functional Status Section (V2)](#S_Functional_Status_Section_V2) (optional) |  |

The pressure ulcer observation contains details about the pressure ulcer such as the stage of the ulcer, location, and dimensions. If the pressure ulcer is a diagnosis, you may find this on the problem list. An example of how this would appear is in the Problem Section.

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*: This template has been replaced by Longitudinal Care Wound Observation (2.16.840.1.113883.10.20.22.4.114).

Table 415: Pressure Ulcer Observation (DEPRECATED) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.70:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-14383](#C_1098-14383) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-14384](#C_1098-14384) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| @negationInd | 0..1 | MAY |  | [1098-14385](#C_1098-14385) |  |
| templateId | 1..1 | SHALL |  | [1098-14387](#C_1098-14387) |  |
| @root | 1..1 | SHALL |  | [1098-14388](#C_1098-14388) | 2.16.840.1.113883.10.20.22.4.70 |
| @extension | 1..1 | SHALL |  | [1098-32594](#C_1098-32594) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-14389](#C_1098-14389) |  |
| code | 1..1 | SHALL |  | [1098-14759](#C_1098-14759) |  |
| @code | 1..1 | SHALL |  | [1098-14760](#C_1098-14760) | urn:oid:2.16.840.1.113883.5.4 (HL7ActCode) = ASSERTION |
| text | 0..1 | SHOULD |  | [1098-14391](#C_1098-14391) |  |
| reference | 0..1 | SHOULD |  | [1098-14392](#C_1098-14392) |  |
| @value | 1..1 | SHALL |  | [1098-15585](#C_1098-15585) |  |
| statusCode | 1..1 | SHALL |  | [1098-14394](#C_1098-14394) |  |
| @code | 1..1 | SHALL |  | [1098-19111](#C_1098-19111) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1098-14395](#C_1098-14395) |  |
| value | 1..1 | SHALL | CD | [1098-14396](#C_1098-14396) | urn:oid:2.16.840.1.113883.11.20.9.35 (Pressure Ulcer Stage) |
| targetSiteCode | 0..\* | SHOULD |  | [1098-14797](#C_1098-14797) |  |
| @code | 1..1 | SHALL |  | [1098-14798](#C_1098-14798) | urn:oid:2.16.840.1.113883.11.20.9.36 (Pressure Point ) |
| qualifier | 0..1 | SHOULD |  | [1098-14799](#C_1098-14799) |  |
| name | 1..1 | SHALL |  | [1098-14800](#C_1098-14800) |  |
| @code | 0..1 | SHOULD |  | [1098-14801](#C_1098-14801) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 272741003 |
| value | 1..1 | SHALL |  | [1098-14802](#C_1098-14802) |  |
| @code | 0..1 | SHOULD |  | [1098-14803](#C_1098-14803) | urn:oid:2.16.840.1.113883.11.20.9.37 (TargetSite Qualifiers) |
| entryRelationship | 0..1 | SHOULD |  | [1098-14410](#C_1098-14410) |  |
| @typeCode | 1..1 | SHALL |  | [1098-14411](#C_1098-14411) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| observation | 1..1 | SHALL |  | [1098-14619](#C_1098-14619) |  |
| @classCode | 1..1 | SHALL |  | [1098-14685](#C_1098-14685) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-14686](#C_1098-14686) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| code | 1..1 | SHALL |  | [1098-14620](#C_1098-14620) |  |
| @code | 1..1 | SHALL |  | [1098-14621](#C_1098-14621) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 401238003 |
| value | 1..1 | SHALL | PQ | [1098-14622](#C_1098-14622) |  |
| entryRelationship | 0..1 | SHOULD |  | [1098-14601](#C_1098-14601) |  |
| @typeCode | 1..1 | SHALL |  | [1098-14602](#C_1098-14602) | COMP |
| observation | 1..1 | SHALL |  | [1098-14623](#C_1098-14623) |  |
| @classCode | 1..1 | SHALL |  | [1098-14687](#C_1098-14687) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-14688](#C_1098-14688) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| code | 1..1 | SHALL |  | [1098-14624](#C_1098-14624) |  |
| @code | 1..1 | SHALL |  | [1098-14625](#C_1098-14625) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 401239006 |
| value | 1..1 | SHALL | PQ | [1098-14626](#C_1098-14626) |  |
| entryRelationship | 0..1 | SHOULD |  | [1098-14605](#C_1098-14605) |  |
| @typeCode | 1..1 | SHALL |  | [1098-14606](#C_1098-14606) | COMP |
| observation | 1..1 | SHALL |  | [1098-14627](#C_1098-14627) |  |
| @classCode | 1..1 | SHALL |  | [1098-14689](#C_1098-14689) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-14690](#C_1098-14690) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| code | 1..1 | SHALL |  | [1098-14628](#C_1098-14628) |  |
| @code | 1..1 | SHALL |  | [1098-14629](#C_1098-14629) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 425094009 |
| value | 1..1 | SHALL | PQ | [1098-14630](#C_1098-14630) |  |

1. SHALL contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1098-14383).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1098-14384).

Use negationInd="true" to indicate that the problem was not observed.

1. MAY contain zero or one [0..1] @negationInd (CONF:1098-14385).
2. SHALL contain exactly one [1..1] templateId (CONF:1098-14387) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.70" (CONF:1098-14388).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32594).
3. SHALL contain at least one [1..\*] id (CONF:1098-14389).
4. SHALL contain exactly one [1..1] code (CONF:1098-14759).
   1. This code SHALL contain exactly one [1..1] @code="ASSERTION" Assertion (CodeSystem: HL7ActCode urn:oid:2.16.840.1.113883.5.4 STATIC) (CONF:1098-14760).
5. SHOULD contain zero or one [0..1] text (CONF:1098-14391).
   1. The text, if present, SHOULD contain zero or one [0..1] reference (CONF:1098-14392).
      1. The reference, if present, SHALL contain exactly one [1..1] @value (CONF:1098-15585).
         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:1098-15586).
6. SHALL contain exactly one [1..1] statusCode (CONF:1098-14394).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1098-19111).
7. SHALL contain exactly one [1..1] effectiveTime (CONF:1098-14395).
8. SHALL contain exactly one [1..1] value with @xsi:type="CD", where the code SHOULD be selected from ValueSet [Pressure Ulcer Stage](#Pressure_Ulcer_Stage) urn:oid:2.16.840.1.113883.11.20.9.35 STATIC 2014-09-01 (CONF:1098-14396).
9. SHOULD contain zero or more [0..\*] targetSiteCode (CONF:1098-14797).
   1. The targetSiteCode, if present, SHALL contain exactly one [1..1] @code, which SHOULD be selected from ValueSet [Pressure Point](#Pressure_Point_) urn:oid:2.16.840.1.113883.11.20.9.36 STATIC (CONF:1098-14798).
   2. The targetSiteCode, if present, SHOULD contain zero or one [0..1] qualifier (CONF:1098-14799).
      1. The qualifier, if present, SHALL contain exactly one [1..1] name (CONF:1098-14800).
         1. This name SHOULD contain zero or one [0..1] @code="272741003" laterality (CodeSystem: SNOMED CT urn:oid:2.16.840.1.113883.6.96 STATIC) (CONF:1098-14801).
      2. The qualifier, if present, SHALL contain exactly one [1..1] value (CONF:1098-14802).
         1. This value SHOULD contain zero or one [0..1] @code, which SHOULD be selected from ValueSet [TargetSite Qualifiers](#TargetSite_Qualifiers) urn:oid:2.16.840.1.113883.11.20.9.37 STATIC 2014-09-01 (CONF:1098-14803).
10. SHOULD contain zero or one [0..1] entryRelationship (CONF:1098-14410) such that it
    1. SHALL contain exactly one [1..1] @typeCode="COMP" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1098-14411).
    2. SHALL contain exactly one [1..1] observation (CONF:1098-14619).
       1. This observation SHALL contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1098-14685).
       2. This observation SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1098-14686).
       3. This observation SHALL contain exactly one [1..1] code (CONF:1098-14620).
          1. This code SHALL contain exactly one [1..1] @code="401238003" Length of Wound (CodeSystem: SNOMED CT urn:oid:2.16.840.1.113883.6.96 STATIC) (CONF:1098-14621).
       4. This observation SHALL contain exactly one [1..1] value with @xsi:type="PQ" (CONF:1098-14622).
11. SHOULD contain zero or one [0..1] entryRelationship (CONF:1098-14601) such that it
    1. SHALL contain exactly one [1..1] @typeCode="COMP" (CONF:1098-14602).
    2. SHALL contain exactly one [1..1] observation (CONF:1098-14623).
       1. This observation SHALL contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1098-14687).
       2. This observation SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1098-14688).
       3. This observation SHALL contain exactly one [1..1] code (CONF:1098-14624).
          1. This code SHALL contain exactly one [1..1] @code="401239006" Width of Wound (CodeSystem: SNOMED CT urn:oid:2.16.840.1.113883.6.96 STATIC) (CONF:1098-14625).
       4. This observation SHALL contain exactly one [1..1] value with @xsi:type="PQ" (CONF:1098-14626).
12. SHOULD contain zero or one [0..1] entryRelationship (CONF:1098-14605) such that it
    1. SHALL contain exactly one [1..1] @typeCode="COMP" (CONF:1098-14606).
    2. SHALL contain exactly one [1..1] observation (CONF:1098-14627).
       1. This observation SHALL contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1098-14689).
       2. This observation SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1098-14690).
       3. This observation SHALL contain exactly one [1..1] code (CONF:1098-14628).
          1. This code SHALL contain exactly one [1..1] @code="425094009" Depth of Wound (CodeSystem: SNOMED CT urn:oid:2.16.840.1.113883.6.96 STATIC) (CONF:1098-14629).
       4. This observation SHALL contain exactly one [1..1] value with @xsi:type="PQ" (CONF:1098-14630).

Table 416: Pressure Point

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Pressure Point urn:oid:2.16.840.1.113883.11.20.9.36  This value set represents points on the body that are susceptible to pressure ulcer development. Specific URL Pending  Value Set Source: <https://vsac.nlm.nih.gov> | | | |
| Code | Code System | Code System OID | Print Name |
| 43631005 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | occipital region structure |
| 23747009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | skin structure of chin |
| 91774008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | structure of right shoulder |
| 7874003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | structure of scapular region of back; 272741003 = laterality; 24028007 = right (qualifier value) |
| 368149001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | right elbow region structure |
| 368148009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | left elbow region structure |
| 87141009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | sacral vertebra structure |
| 122495006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | thoracic spine structure |
| 122496007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | lumbar spine structure |
| 287579007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | right hip region structure |
| ... | | | |

Table 417: TargetSite Qualifiers

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: TargetSite Qualifiers urn:oid:2.16.840.1.113883.11.20.9.37  (Clinical Focus: Spatial refinements to anatomical site concepts),(Data Element Scope: ),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 6/29/2019 with a version of 20190319.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.37/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 24028007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Right (qualifier value) |
| 255549009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Anterior (qualifier value) |
| 255551008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Posterior (qualifier value) |
| 255561001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Medial (qualifier value) |
| 7771000 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Left (qualifier value) |

Priority Preference

[observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.143 (open)]

Table 418: Priority Preference Contexts

| Contained By: | Contains: |
| --- | --- |
| [Goal Observation](#E_Goal_Observation_U) (optional)  [Planned Act (V2)](#E_Planned_Act_V2) (optional)  [Planned Encounter (V2)](#E_Planned_Encounter_V2) (optional)  [Planned Procedure (V2)](#E_Planned_Procedure_V2) (optional)  [Planned Observation (V2)](#E_Planned_Observation_V2) (optional)  [Planned Supply (V2)](#E_Planned_Supply_V2) (optional)  [Planned Medication Activity (V2)](#E_Planned_Medication_Activity_V2) (optional)  [Planned Immunization Activity](#E_Planned_Immunization_Activity) (optional)  [Problem Observation (V3)](#E_Problem_Observation_V3) (optional)  [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional)  [Problem Concern Act (V3)](#E_Problem_Concern_Act_V3) (optional) | [Author Participation](#U_Author_Participation) (optional) |

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 419: 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 |  | [1098-30949](#C_1098-30949) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-30950](#C_1098-30950) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-30951](#C_1098-30951) |  |
| @root | 1..1 | SHALL |  | [1098-30952](#C_1098-30952) | 2.16.840.1.113883.10.20.22.4.143 |
| id | 1..\* | SHALL |  | [1098-30953](#C_1098-30953) |  |
| code | 1..1 | SHALL |  | [1098-30954](#C_1098-30954) |  |
| @code | 1..1 | SHALL |  | [1098-30955](#C_1098-30955) | 225773000 |
| @codeSystem | 1..1 | SHALL |  | [1098-30956](#C_1098-30956) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.6.96 |
| effectiveTime | 0..1 | SHOULD |  | [1098-32327](#C_1098-32327) |  |
| value | 1..1 | SHALL | CD | [1098-30957](#C_1098-30957) | urn:oid:2.16.840.1.113883.11.20.9.60 (Priority Level) |
| author | 0..\* | SHOULD |  | [1098-30958](#C_1098-30958) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |

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: HL7ActMood 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
   1. 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).
   1. This code SHALL contain exactly one [1..1] @code="225773000" Preference (CONF:1098-30955).
   2. 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](#Priority_Level) urn:oid:2.16.840.1.113883.11.20.9.60 DYNAMIC (CONF:1098-30957).
8. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-30958).

Table 420: Priority Level

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Priority Level urn:oid:2.16.840.1.113883.11.20.9.60  (Clinical Focus: Qualifier representing the priority of an action),(Data Element Scope: qualifier for an action),(Inclusion Criteria: selected concepts for priority),(Exclusion Criteria: only concepts identified; excludes scheduled - priority)  This value set was imported on 6/26/2019 with a version of 20190319.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.60/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 394848005 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Normal priority (qualifier value) |
| 394849002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | High priority (qualifier value) |
| 441808003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Delayed priority (qualifier value) |

Figure 196: 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>

Problem Concern Act (V3)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.3:2015-08-01 (open)]

Table 421: Problem Concern Act (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional)  [Problem Section (entries optional) (V3)](#S_Problem_Section_entries_optional_V3) (optional)  [Problem Section (entries required) (V3)](#S_Problem_Section_entries_required_V3) (required) | [Priority Preference](#E_Priority_Preference) (optional)  [Author Participation](#U_Author_Participation) (optional)  [Problem Observation (V3)](#E_Problem_Observation_V3) (required) |

This template reflects an ongoing concern on behalf of the provider that placed the concern on a patient’s problem list. So long as the underlying condition is of concern to the provider (i.e., as long as the condition, whether active or resolved, is of ongoing concern and interest to the provider), the statusCode is “active”. Only when the underlying condition is no longer of concern is the statusCode set to “completed”. The effectiveTime reflects the time that the underlying condition was felt to be a concern; it may or may not correspond to the effectiveTime of the condition (e.g., even five years later, the clinician may remain concerned about a prior heart attack).

The statusCode of the Problem Concern Act is the definitive indication of the status of the concern, whereas the effectiveTime of the nested Problem Observation is the definitive indication of whether or not the underlying condition is resolved.

The effectiveTime/low of the Problem Concern Act asserts when the concern became active. The effectiveTime/high asserts when the concern was completed (e.g., when the clinician deemed there is no longer any need to track the underlying condition).

A Problem Concern Act can contain many Problem Observations (templateId 2.16.840.1.113883.10.20.22.4.4). Each Problem Observation is a discrete observation of a condition, and therefore will have a statusCode of “completed”. The many Problem Observations nested under a Problem Concern Act reflect the change in the clinical understanding of a condition over time. For instance, a Concern may initially contain a Problem Observation of “chest pain”:

* Problem Concern 1  
  --- Problem Observation: Chest Pain  
  Later, a new Problem Observation of “esophagitis” will be added, reflecting a better understanding of the nature of the chest pain. The later problem observation will have a more recent author time stamp.
* Problem Concern 1  
  --- Problem Observation (author/time Jan 3, 2012): Chest Pain  
  --- Problem Observation (author/time Jan 6, 2012): Esophagitis  
  Many systems display the nested Problem Observation with the most recent author time stamp, and provide a mechanism for viewing prior observations.

Table 422: Problem Concern Act (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.3:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-9024](#C_1198-9024) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1198-9025](#C_1198-9025) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-16772](#C_1198-16772) |  |
| @root | 1..1 | SHALL |  | [1198-16773](#C_1198-16773) | 2.16.840.1.113883.10.20.22.4.3 |
| @extension | 1..1 | SHALL |  | [1198-32509](#C_1198-32509) | 2015-08-01 |
| id | 1..\* | SHALL |  | [1198-9026](#C_1198-9026) |  |
| code | 1..1 | SHALL |  | [1198-9027](#C_1198-9027) |  |
| @code | 1..1 | SHALL |  | [1198-19184](#C_1198-19184) | CONC |
| @codeSystem | 1..1 | SHALL |  | [1198-32168](#C_1198-32168) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = 2.16.840.1.113883.5.6 |
| statusCode | 1..1 | SHALL |  | [1198-9029](#C_1198-9029) |  |
| @code | 1..1 | SHALL |  | [1198-31525](#C_1198-31525) | urn:oid:2.16.840.1.113883.11.20.9.19 (ProblemAct statusCode) |
| effectiveTime | 1..1 | SHALL |  | [1198-9030](#C_1198-9030) |  |
| low | 1..1 | SHALL |  | [1198-9032](#C_1198-9032) |  |
| high | 0..1 | MAY |  | [1198-9033](#C_1198-9033) |  |
| author | 0..\* | SHOULD |  | [1198-31146](#C_1198-31146) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| entryRelationship | 1..\* | SHALL |  | [1198-9034](#C_1198-9034) |  |
| @typeCode | 1..1 | SHALL |  | [1198-9035](#C_1198-9035) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| observation | 1..1 | SHALL |  | [1198-15980](#C_1198-15980) | [Problem Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01](#E_Problem_Observation_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-31638](#C_1198-31638) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31639](#C_1198-31639) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31640](#C_1198-31640) | [Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143](#E_Priority_Preference) |

1. SHALL contain exactly one [1..1] @classCode="ACT" Act (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-9024).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-9025).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-16772) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.3" (CONF:1198-16773).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32509).
4. SHALL contain at least one [1..\*] id (CONF:1198-9026).
5. SHALL contain exactly one [1..1] code (CONF:1198-9027).
   1. This code SHALL contain exactly one [1..1] @code="CONC" Concern (CONF:1198-19184).
   2. This code SHALL contain exactly one [1..1] @codeSystem="2.16.840.1.113883.5.6" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1198-32168).
6. SHALL contain exactly one [1..1] statusCode (CONF:1198-9029).

The statusCode of the Problem Concern Act is the definitive indication of the status of the concern, whereas the effectiveTime of the nested Problem Observation is the definitive indication of whether or not the underlying condition is resolved.

* 1. This statusCode SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [ProblemAct statusCode](#ProblemAct_statusCode) urn:oid:2.16.840.1.113883.11.20.9.19 STATIC (CONF:1198-31525).

1. SHALL contain exactly one [1..1] effectiveTime (CONF:1198-9030).
   1. This effectiveTime SHALL contain exactly one [1..1] low (CONF:1198-9032).  
      Note: The effectiveTime/low of the Problem Concern Act asserts when the concern became active.
   2. This effectiveTime MAY contain zero or one [0..1] high (CONF:1198-9033).  
      Note: The effectiveTime/high asserts when the concern was completed (e.g., when the clinician deemed there is no longer any need to track the underlying condition).
2. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1198-31146).
3. SHALL contain at least one [1..\*] entryRelationship (CONF:1198-9034) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1198-9035).
   2. SHALL contain exactly one [1..1] [Problem Observation (V3)](#E_Problem_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01) (CONF:1198-15980).

The following entryRelationship represents the importance of the concern to a provider.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31638) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31639).
   2. SHALL contain exactly one [1..1] [Priority Preference](#E_Priority_Preference) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:1198-31640).

Figure 197: Problem Concern Act (V3) Example

<act classCode="ACT" moodCode="EVN">

<!-- \*\* Problem Concern Act (V3) \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.3"

extension="2015-08-01" />

<id root="ec8a6ff8-ed4b-4f7e-82c3-e98e58b45de7" />

<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 of ongoing concern to the provider -->

<statusCode code="active" />

<effectiveTime>

<!-- The low value represents when the problem was first recorded in the patient's chart -->

<!-- Concern was documented on July 6, 2013 -->

<low value="201307061145-0800" />

</effectiveTime>

<author typeCode="AUT">

<templateId root="2.16.840.1.113883.10.20.22.4.119" />

<!-- Same as Concern effectiveTime/low -->

<time value="201307061145-0800" />

<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 (V3) \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2015-08-01" />

<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>

</entryRelationship>

</act>

Problem Observation (V3)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01 (open)]

Table 423: Problem Observation (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Complications Section (V3)](#S_Complications_Section_V3) (optional)  [Deceased Observation (V3)](#E_Deceased_Observation_V3) (optional)  [Hospital Discharge Diagnosis (V3)](#E_Hospital_Discharge_Diagnosis_V3) (required)  [Encounter Diagnosis (V3)](#E_Encounter_Diagnosis_V3) (required)  [Past Medical History (V3)](#S_Past_Medical_History_V3) (optional)  [Hospital Admission Diagnosis (V3)](#E_Hospital_Admission_Diagnosis_V3) (required)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional)  [Procedure Findings Section (V3)](#S_Procedure_Findings_Section_V3) (optional)  [Problem Concern Act (V3)](#E_Problem_Concern_Act_V3) (required)  [Preoperative Diagnosis (V3)](#E_Preoperative_Diagnosis_V3) (required)  [Postprocedure Diagnosis (V3)](#E_Postprocedure_Diagnosis_V3) (required) | [Age Observation](#E_Age_Observation) (optional)  [Prognosis Observation](#E_Prognosis_Observation) (optional)  [Priority Preference](#E_Priority_Preference) (optional)  [Author Participation](#U_Author_Participation) (optional)  [Problem Status](#E_Problem_Status_20190620) (optional) |

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 “clinically 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 424: Problem Observation (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-9041](#C_1198-9041) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1198-9042](#C_1198-9042) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| @negationInd | 0..1 | MAY |  | [1198-10139](#C_1198-10139) |  |
| templateId | 1..1 | SHALL |  | [1198-14926](#C_1198-14926) |  |
| @root | 1..1 | SHALL |  | [1198-14927](#C_1198-14927) | 2.16.840.1.113883.10.20.22.4.4 |
| @extension | 1..1 | SHALL |  | [1198-32508](#C_1198-32508) | 2015-08-01 |
| id | 1..\* | SHALL |  | [1198-9043](#C_1198-9043) |  |
| code | 1..1 | SHALL |  | [1198-9045](#C_1198-9045) | urn:oid:2.16.840.1.113883.3.88.12.3221.7.2 (Problem Type (SNOMEDCT)) |
| statusCode | 1..1 | SHALL |  | [1198-9049](#C_1198-9049) |  |
| @code | 1..1 | SHALL |  | [1198-19112](#C_1198-19112) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1198-9050](#C_1198-9050) |  |
| low | 1..1 | SHALL |  | [1198-15603](#C_1198-15603) |  |
| high | 0..1 | MAY |  | [1198-15604](#C_1198-15604) |  |
| value | 1..1 | SHALL | CD | [1198-9058](#C_1198-9058) | urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 (Problem) |
| @code | 0..1 | MAY |  | [1198-31871](#C_1198-31871) |  |
| qualifier | 0..\* | MAY |  | [1198-31870](#C_1198-31870) |  |
| translation | 0..\* | MAY |  | [1198-16749](#C_1198-16749) |  |
| @code | 0..1 | MAY |  | [1198-16750](#C_1198-16750) | urn:oid:2.16.840.1.113883.6.90 (ICD-10-CM) |
| author | 0..\* | SHOULD |  | [1198-31147](#C_1198-31147) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| entryRelationship | 0..1 | MAY |  | [1198-9059](#C_1198-9059) |  |
| @typeCode | 1..1 | SHALL |  | [1198-9060](#C_1198-9060) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| @inversionInd | 1..1 | SHALL |  | [1198-9069](#C_1198-9069) | true |
| observation | 1..1 | SHALL |  | [1198-15590](#C_1198-15590) | [Age Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.31](#E_Age_Observation) |
| entryRelationship | 0..1 | MAY |  | [1198-29951](#C_1198-29951) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31531](#C_1198-31531) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-29952](#C_1198-29952) | [Prognosis Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.113](#E_Prognosis_Observation) |
| entryRelationship | 0..\* | MAY |  | [1198-31063](#C_1198-31063) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31532](#C_1198-31532) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-31064](#C_1198-31064) | [Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143](#E_Priority_Preference) |
| entryRelationship | 0..1 | MAY |  | [1198-9063](#C_1198-9063) |  |
| @typeCode | 1..1 | SHALL |  | [1198-9068](#C_1198-9068) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-15591](#C_1198-15591) | [Problem Status (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.6:2019-06-20](#E_Problem_Status_20190620) |

1. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-9041).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-9042).

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.

1. MAY contain zero or one [0..1] @negationInd (CONF:1198-10139).
2. SHALL contain exactly one [1..1] templateId (CONF:1198-14926) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.4" (CONF:1198-14927).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32508).
3. SHALL contain at least one [1..\*] id (CONF:1198-9043).
4. SHALL contain exactly one [1..1] code, which SHOULD be selected from ValueSet [Problem Type (SNOMEDCT)](#Problem_Type_SNOMEDCT) urn:oid:2.16.840.1.113883.3.88.12.3221.7.2 DYNAMIC (CONF:1198-9045).
   1. If code is selected from ValueSet Problem Type (SNOMEDCT) urn:oid:2.16.840.1.113883.3.88.12.3221.7.2 DYNAMIC, then it SHALL have at least one [1..\*] translation, which SHOULD be selected from ValueSet Problem Type (LOINC) urn:oid:2.16.840.1.113762.1.4.1099.28 DYNAMIC (CONF:1198-32950) (CONF:1198-32950).
5. SHALL contain exactly one [1..1] statusCode (CONF:1198-9049).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1198-19112).

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 a high element within a problem does indicate that the problem has been resolved.

1. SHALL contain exactly one [1..1] effectiveTime (CONF:1198-9050).

The effectiveTime/low (a.k.a. "onset date") asserts when the condition became clinically active.

* 1. This effectiveTime SHALL contain exactly one [1..1] low (CONF:1198-15603).

The effectiveTime/high (a.k.a. "resolution date") asserts when the condition became clinically resolved.

* 1. This effectiveTime MAY contain zero or one [0..1] high (CONF:1198-15604).

1. SHALL contain exactly one [1..1] value with @xsi:type="CD", where the code SHOULD be selected from ValueSet [Problem](#Problem) urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 DYNAMIC (CONF:1198-9058).

A negationInd of "true" coupled with an observation/value/@code of SNOMED code 64572001 "Disease (disorder)" indicates that the patient has no known conditions.

* 1. This value MAY contain zero or one [0..1] @code (CONF:1198-31871).

The observation/value and all the qualifiers together (often referred to as a post-coordinated expression) make up one concept. Qualifiers constrain, or provide greater specificity to, 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, in cases where SNOMED CT does not have a precoordinated code that would be appropriate for the problem list, concept post coordination may be used in CDA following the principles outlined in [HL7 Version 3 Implementation Guide: TermInfo -  
Using SNOMED CT in CDA R2 Models, Release 1 |https://www.hl7.org/documentcenter/public/standards/dstu/V3\_IG\_SNOMED\_R1\_DSTU\_2015DEC.pdf] using the V3 CD Data type 1 style. This is shown in the Problem Observation (V3) Post-coordinated Problem Example. This example represents a family history condition that was also elevated to the problem list to avoid missing pertinent data that may or may not be present in the Family History Section.

* 1. This value MAY contain zero or more [0..\*] qualifier (CONF:1198-31870).
  2. This value MAY contain zero or more [0..\*] translation (CONF:1198-16749) such that it
     1. MAY contain zero or one [0..1] @code (CodeSystem: ICD-10-CM urn:oid:2.16.840.1.113883.6.90 STATIC) (CONF:1198-16750).

1. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1198-31147).
2. MAY contain zero or one [0..1] entryRelationship (CONF:1198-9059) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1198-9060).
   2. SHALL contain exactly one [1..1] @inversionInd="true" True (CONF:1198-9069).
   3. SHALL contain exactly one [1..1] [Age Observation](#E_Age_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.31) (CONF:1198-15590).
3. MAY contain zero or one [0..1] entryRelationship (CONF:1198-29951) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31531).
   2. SHALL contain exactly one [1..1] [Prognosis Observation](#E_Prognosis_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.113) (CONF:1198-29952).
4. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31063) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31532).
   2. SHALL contain exactly one [1..1] [Priority Preference](#E_Priority_Preference) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:1198-31064).
5. MAY contain zero or one [0..1] entryRelationship (CONF:1198-9063) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-9068).
   2. SHALL contain exactly one [1..1] [Problem Status](#E_Problem_Status_20190620) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.6:2019-06-20) (CONF:1198-15591).

Figure 198: Problem Observation (V3) Example

<observation classCode="OBS" moodCode="EVN">

<!-- \*\* Problem Observation (V3) \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2015-08-01" />

<id root="ab1791b0-5c71-11db-b0de-0800200c9a66" />

<code code="64572001" displayName="Condition"

codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT">

<translation code="75323-6"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="Condition"/>

</code>

<!-- 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 199: Problem Observation (V3) Post-Coordinated Problem Example

<!-- Name/value pair problem example -->

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.4"

extension="2015-08-01"/>

<id root="093A5380-00CE-11E6-B4C5-0050568B000B" extension="1.1"/>

<code code="55607006" codeSystem="2.16.840.1.113883.6.96"

codeSystemName="SNOMED CT" displayName="Problem">

<originalText>

<reference value="#ProblemConcern\_1\_PT1"/>

</originalText>

<translation code="75326-9" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Problem"/>

</code>

<text>

<reference value="#ProblemConcern\_1"/>

</text>

<statusCode code="completed"/>

<effectiveTime>

<low value="20140909"/>

</effectiveTime>

<!-- Example of a problem from problem list, that is not present in SNOMED CT as a precoordinated concept -->

<value xsi:type="CD" code="281666001" codeSystem="2.16.840.1.113883.6.96" displayName="Family history of disorder">

<qualifier>

<name code="246090004" displayName="Associated finding"/>

<value code="254167000" displayName="Bullous ichthyosiform erythroderma"/>

</qualifier>

</value>

<author>

<time value="20160412161448+0000"/>

<assignedAuthor>

<id extension="1" root="1.2.840.114350.1.13.6289.1.7.2.697780"/>

<addr>

<streetAddressLine>123 Anywhere

St.</streetAddressLine>

<city>Verona</city>

<state>WI</state>

<postalCode>53753</postalCode>

</addr>

<telecom use="WP" value="tel:555-5555"/>

<assignedPerson>

<name>

<given>Andrew</given>

<family>Moreland</family>

</name>

</assignedPerson>

</assignedAuthor>

</author>

</observation>

Longitudinal Care Wound Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.114:2015-08-01 (open)]

Table 425: Longitudinal Care Wound Observation (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional)  [Physical Exam Section (V3)](#S_Physical_Exam_Section_V3) (optional) | [Highest Pressure Ulcer Stage](#E_Highest_Pressure_Ulcer_Stage) (optional)  [Wound Measurement Observation](#E_Wound_Measurement_Observation) (optional)  [Wound Characteristic](#E_Wound_Characteristic) (optional)  [Author Participation](#U_Author_Participation) (optional)  [Number of Pressure Ulcers Observation (V3)](#E_Num_of_Pressure_Ulcers_ObservationV3) (optional) |

This template represents acquired or surgical wounds and is not intended to encompass all wound types. The template applies to wounds such as pressure ulcers, surgical incisions, and deep tissue injury wounds. Information in this template may include information about the wound measurements characteristics.

Table 426: Longitudinal Care Wound Observation (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.114:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-31012](#C_1198-31012) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1198-31013](#C_1198-31013) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-32947](#C_1198-32947) |  |
| @root | 1..1 | SHALL |  | [1198-29474](#C_1198-29474) | 2.16.840.1.113883.10.20.22.4.114 |
| @extension | 1..1 | SHALL |  | [1198-32913](#C_1198-32913) | 2015-08-01 |
| code | 1..1 | SHALL |  | [1198-29476](#C_1198-29476) |  |
| @code | 1..1 | SHALL |  | [1198-29477](#C_1198-29477) | ASSERTION |
| @codeSystem | 1..1 | SHALL |  | [1198-31010](#C_1198-31010) | urn:oid:2.16.840.1.113883.5.4 (HL7ActCode) = 2.16.840.1.113883.5.4 |
| value | 1..1 | SHALL | CD | [1198-29485](#C_1198-29485) | urn:oid:2.16.840.1.113883.1.11.20.2.6 (Wound Type) |
| targetSiteCode | 0..1 | SHOULD |  | [1198-29488](#C_1198-29488) | urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 (Body Site Value Set) |
| qualifier | 0..\* | MAY |  | [1198-29490](#C_1198-29490) |  |
| name | 1..1 | SHALL |  | [1198-29491](#C_1198-29491) |  |
| @code | 1..1 | SHALL |  | [1198-29492](#C_1198-29492) | 272741003 |
| @codeSystem | 1..1 | SHALL |  | [1198-31524](#C_1198-31524) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.6.96 |
| value | 1..1 | SHALL |  | [1198-29493](#C_1198-29493) |  |
| @code | 1..1 | SHALL |  | [1198-29494](#C_1198-29494) | urn:oid:2.16.840.1.113883.11.20.9.37 (TargetSite Qualifiers) |
| author | 0..\* | SHOULD |  | [1198-31542](#C_1198-31542) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| entryRelationship | 0..\* | SHOULD |  | [1198-29495](#C_1198-29495) |  |
| @typeCode | 1..1 | SHALL |  | [1198-29496](#C_1198-29496) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| observation | 1..1 | SHALL |  | [1198-29497](#C_1198-29497) | [Wound Measurement Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.133](#E_Wound_Measurement_Observation) |
| entryRelationship | 0..\* | SHOULD |  | [1198-29503](#C_1198-29503) |  |
| @typeCode | 1..1 | SHALL |  | [1198-29504](#C_1198-29504) | COMP |
| observation | 1..1 | SHALL |  | [1198-29505](#C_1198-29505) | [Wound Characteristic (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.134](#E_Wound_Characteristic) |
| entryRelationship | 0..\* | MAY |  | [1198-31890](#C_1198-31890) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31891](#C_1198-31891) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| observation | 1..1 | SHALL |  | [1198-31892](#C_1198-31892) | [Number of Pressure Ulcers Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.76:2015-08-01](#E_Num_of_Pressure_Ulcers_ObservationV3) |
| entryRelationship | 0..1 | MAY |  | [1198-31893](#C_1198-31893) |  |
| @typeCode | 1..1 | SHALL |  | [1198-31894](#C_1198-31894) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| observation | 1..1 | SHALL |  | [1198-31919](#C_1198-31919) | [Highest Pressure Ulcer Stage (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.77](#E_Highest_Pressure_Ulcer_Stage) |

1. Conforms to [Problem Observation (V3)](#E_Problem_Observation_V3) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01).
2. SHALL contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1198-31012).
3. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1198-31013).
4. SHALL contain exactly one [1..1] templateId (CONF:1198-32947) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.114" (CONF:1198-29474).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32913).
5. SHALL contain exactly one [1..1] code (CONF:1198-29476).
   1. This code SHALL contain exactly one [1..1] @code="ASSERTION" assertion (CONF:1198-29477).
   2. This code SHALL contain exactly one [1..1] @codeSystem="2.16.840.1.113883.5.4" (CodeSystem: HL7ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:1198-31010).
6. SHALL contain exactly one [1..1] value with @xsi:type="CD", where the code SHOULD be selected from ValueSet [Wound Type](#Wound_Type) urn:oid:2.16.840.1.113883.1.11.20.2.6 DYNAMIC (CONF:1198-29485).
7. SHOULD contain zero or one [0..1] targetSiteCode, which SHOULD be selected from ValueSet [Body Site Value Set](#Body_Site_Value_Set) urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 DYNAMIC (CONF:1198-29488) such that it

If targetSite/qualifierCode name/value pairs are used, care must be taken to avoid conflict with the SNOMED-CT body structure code used in observation/value. SNOMED-CT body structure codes are often pre-coordinated with laterality.

* 1. MAY contain zero or more [0..\*] qualifier (CONF:1198-29490).
     1. The qualifier, if present, SHALL contain exactly one [1..1] name (CONF:1198-29491).
        1. This name SHALL contain exactly one [1..1] @code="272741003" laterality (CONF:1198-29492).
        2. This name 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:1198-31524).
     2. The qualifier, if present, SHALL contain exactly one [1..1] value (CONF:1198-29493).
        1. This value SHALL contain exactly one [1..1] @code, which SHOULD be selected from ValueSet [TargetSite Qualifiers](#TargetSite_Qualifiers) urn:oid:2.16.840.1.113883.11.20.9.37 DYNAMIC (CONF:1198-29494).

1. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1198-31542).
2. SHOULD contain zero or more [0..\*] entryRelationship (CONF:1198-29495) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1198-29496).
   2. SHALL contain exactly one [1..1] [Wound Measurement Observation](#E_Wound_Measurement_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.133) (CONF:1198-29497).
3. SHOULD contain zero or more [0..\*] entryRelationship (CONF:1198-29503) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" (CONF:1198-29504).
   2. SHALL contain exactly one [1..1] [Wound Characteristic](#E_Wound_Characteristic) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.134) (CONF:1198-29505).

When the wound observed is a type of pressure ulcer, then this template SHOULD contain an entry for the Number of Pressure Ulcers.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-31890) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" Has component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31891).
   2. SHALL contain exactly one [1..1] [Number of Pressure Ulcers Observation (V3)](#E_Num_of_Pressure_Ulcers_ObservationV3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.76:2015-08-01) (CONF:1198-31892).

When the wound observed is a type of pressure ulcer, then this template SHOULD contain an entry for the Highest Pressure Ulcer Stage.

1. MAY contain zero or one [0..1] entryRelationship (CONF:1198-31893) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" Has component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-31894).
   2. SHALL contain exactly one [1..1] [Highest Pressure Ulcer Stage](#E_Highest_Pressure_Ulcer_Stage) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.77) (CONF:1198-31919).

Table 427: Wound Type

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Wound Type urn:oid:2.16.840.1.113883.1.11.20.2.6  (Clinical Focus: General concepts representing injuries to the skin as seen commonly in long term care.),(Data Element Scope: condition),(Inclusion Criteria: Specific concepts consistent with the scope),(Exclusion Criteria: Any concept not identified)  This value set was imported on 6/29/2019 with a version of 20190319.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.20.2.6/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 125667009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Contusion (disorder) |
| 128045006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Cellulitis (disorder) |
| 129902007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Skin incision finding (finding) |
| 13954005 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Ischemic ulcer (disorder) |
| 238792006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Mixed arteriovenous leg ulcer (disorder) |
| 247444006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Excoriation of skin (disorder) |
| 247464001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Blistering eruption (disorder) |
| 271761007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Scaly skin (finding) |
| 271767006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Peeling of skin (finding) |
| 271807003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Eruption of skin (disorder) |
| ... | | | |

Figure 200: Longitudinal Care Wound Observation Example

<entry>

<observation classCode="OBS" moodCode="EVN">

<!-- Wound Observation template -->

<templateId root="2.16.840.1.113883.10.20.22.4.114" extension="2015-08-01" />

<id root="ab1791b0-5c71-11db-b0de-0800200c9a66" />

<code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4" />

<statusCode code="completed" />

<effectiveTime>

<low value="20013103" />

</effectiveTime>

<value xsi:type="CD" code="425144005" codeSystem="2.16.840.1.113883.6.6" displayName="Minor open wound" />

<targetSiteCode code="182295001" codeSystem="2.16.840.1.113883.6.96" displayName="anterior aspect of knee" />

<author>

...

</author>

<entryRelationship typeCode="COMP">

<observation classCode="OBS" moodCode="EVN">

<!-- Wound Measurements Observation -->

<templateId root="2.16.840.1.113883.10.20.22.4.133" />

...

</observation>

</entryRelationship>

<entryRelationship typeCode="COMP">

<observation classCode="OBS" moodCode="EVN">

<!-- Wound Measurements Observation . -->

<templateId root="2.16.840.1.113883.10.20.22.4.133" />

...

</observation>

</entryRelationship>

<entryRelationship typeCode="COMP">

<observation classCode="OBS" moodCode="EVN">

<!-- Wound Characteristic -->

<templateId root="2.16.840.1.113883.10.20.22.4.134" />

...

</observation>

</entryRelationship>

<entryRelationship typeCode="COMP">

<observation classCode="OBS" moodCode="EVN">

<!-- Number of Pressure Ulcers -->

<templateId root="2.16.840.1.113883.10.20.22.4.76" />

...

</observation>

</entryRelationship>

<entryRelationship typeCode="COMP">

<observation classCode="OBS" moodCode="EVN">

<!-- Highest Pressure Ulcers Stage -->

<templateId root="2.16.840.1.113883.10.20.22.4.77" />

...

</observation>

</entryRelationship>

</observation>

</entry>

Problem Status

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.6:2019-06-20 (open)]

Table 428: Problem Status Contexts

| Contained By: | Contains: |
| --- | --- |
| [Problem Observation (V3)](#E_Problem_Observation_V3) (optional) |  |

The Problem Status records the clinical status attributed to the problem.

Table 429: Problem Status Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.6:2019-06-20) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-7357](#C_1198-7357) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1198-7358](#C_1198-7358) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-7359](#C_1198-7359) |  |
| @root | 1..1 | SHALL |  | [1198-10518](#C_1198-10518) | 2.16.840.1.113883.10.20.22.4.6 |
| @extension | 1..1 | SHALL |  | [1198-32961](#C_1198-32961) | 2019-06-20 |
| code | 1..1 | SHALL |  | [1198-19162](#C_1198-19162) |  |
| @code | 1..1 | SHALL |  | [1198-19163](#C_1198-19163) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 33999-4 |
| statusCode | 1..1 | SHALL |  | [1198-7364](#C_1198-7364) |  |
| @code | 1..1 | SHALL |  | [1198-19113](#C_1198-19113) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| value | 1..1 | SHALL | CD | [1198-7365](#C_1198-7365) | 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:1198-7357).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-7358).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-7359) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.6" (CONF:1198-10518).
   2. SHALL contain exactly one [1..1] @extension="2019-06-20" (CONF:1198-32961).
4. SHALL contain exactly one [1..1] code (CONF:1198-19162).
   1. 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:1198-19163).
5. SHALL contain exactly one [1..1] statusCode (CONF:1198-7364).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1198-19113).
6. SHALL contain exactly one [1..1] value with @xsi:type="CD", where the code SHALL be selected from ValueSet [Problem Status](#Problem_Status) urn:oid:2.16.840.1.113883.3.88.12.80.68 DYNAMIC (CONF:1198-7365).

Table 430: Problem Status

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Problem Status urn:oid:2.16.840.1.113883.3.88.12.80.68  (Clinical Focus: The clinical status of a problem),(Data Element Scope: Status value),(Inclusion Criteria: Selected qualifier values that represent the clinical status of a problem),(Exclusion Criteria: none specific)  This value set was imported on 6/26/2019 with a version of 20190418.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.80.68/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 246455001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Recurrence (qualifier value) |
| 263855007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Relapse phase (qualifier value) |
| 277022003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Remission phase (qualifier value) |
| 413322009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Problem resolved (finding) |
| 55561003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Active (qualifier value) |
| 73425007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Inactive (qualifier value) |

Procedure Activity Act (V2)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.12:2014-06-09 (open)]

Table 431: Procedure Activity Act (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Procedures Section (entries optional) (V2)](#Procedures_Section_entries_optional_V2) (optional)  [Procedures Section (entries required) (V2)](#S_Procedures_Section_entries_required_V) (optional)  [Intervention Act (V2)](#E_Intervention_Act_V2) (optional) | [Service Delivery Location](#E_Service_Delivery_Location) (optional)  [Medication Activity (V2)](#Medication_Activity_V2) (optional)  [Indication (V2)](#Indication_V2) (optional)  [Instruction (V2)](#Instruction_V2) (optional)  [Author Participation](#U_Author_Participation) (optional) |

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 432: Procedure Activity Act (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.12:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-8289](#C_1098-8289) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1098-8290](#C_1098-8290) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-8291](#C_1098-8291) |  |
| @root | 1..1 | SHALL |  | [1098-10519](#C_1098-10519) | 2.16.840.1.113883.10.20.22.4.12 |
| @extension | 1..1 | SHALL |  | [1098-32505](#C_1098-32505) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-8292](#C_1098-8292) |  |
| code | 1..1 | SHALL |  | [1098-8293](#C_1098-8293) |  |
| originalText | 0..1 | SHOULD |  | [1098-19186](#C_1098-19186) |  |
| reference | 0..1 | MAY |  | [1098-19187](#C_1098-19187) |  |
| @value | 0..1 | MAY |  | [1098-19188](#C_1098-19188) |  |
| statusCode | 1..1 | SHALL |  | [1098-8298](#C_1098-8298) |  |
| @code | 1..1 | SHALL |  | [1098-32364](#C_1098-32364) | urn:oid:2.16.840.1.113883.11.20.9.22 (ProcedureAct statusCode) |
| effectiveTime | 1..1 | SHALL |  | [1098-8299](#C_1098-8299) |  |
| priorityCode | 0..1 | MAY |  | [1098-8300](#C_1098-8300) | urn:oid:2.16.840.1.113883.1.11.16866 (ActPriority) |
| performer | 0..\* | SHOULD |  | [1098-8301](#C_1098-8301) |  |
| assignedEntity | 1..1 | SHALL |  | [1098-8302](#C_1098-8302) |  |
| id | 1..\* | SHALL |  | [1098-8303](#C_1098-8303) |  |
| addr | 1..\* | SHALL |  | [1098-8304](#C_1098-8304) |  |
| telecom | 1..\* | SHALL |  | [1098-8305](#C_1098-8305) |  |
| representedOrganization | 0..1 | SHOULD |  | [1098-8306](#C_1098-8306) |  |
| id | 0..\* | SHOULD |  | [1098-8307](#C_1098-8307) |  |
| name | 0..\* | MAY |  | [1098-8308](#C_1098-8308) |  |
| telecom | 1..\* | SHALL |  | [1098-8310](#C_1098-8310) |  |
| addr | 1..\* | SHALL |  | [1098-8309](#C_1098-8309) |  |
| author | 0..\* | SHOULD |  | [1098-32477](#C_1098-32477) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| participant | 0..\* | MAY |  | [1098-8311](#C_1098-8311) |  |
| @typeCode | 1..1 | SHALL |  | [1098-8312](#C_1098-8312) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = LOC |
| participantRole | 1..1 | SHALL |  | [1098-15599](#C_1098-15599) | [Service Delivery Location (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32](#E_Service_Delivery_Location) |
| entryRelationship | 0..\* | MAY |  | [1098-8314](#C_1098-8314) |  |
| @typeCode | 1..1 | SHALL |  | [1098-8315](#C_1098-8315) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| @inversionInd | 1..1 | SHALL |  | [1098-8316](#C_1098-8316) | true |
| encounter | 1..1 | SHALL |  | [1098-8317](#C_1098-8317) |  |
| @classCode | 1..1 | SHALL |  | [1098-8318](#C_1098-8318) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ENC |
| @moodCode | 1..1 | SHALL |  | [1098-8319](#C_1098-8319) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| id | 1..1 | SHALL |  | [1098-8320](#C_1098-8320) |  |
| entryRelationship | 0..1 | MAY |  | [1098-8322](#C_1098-8322) |  |
| @typeCode | 1..1 | SHALL |  | [1098-8323](#C_1098-8323) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| @inversionInd | 1..1 | SHALL |  | [1098-8324](#C_1098-8324) | true |
| act | 1..1 | SHALL |  | [1098-31396](#C_1098-31396) | [Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09](#Instruction_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-8326](#C_1098-8326) |  |
| @typeCode | 1..1 | SHALL |  | [1098-8327](#C_1098-8327) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [1098-15601](#C_1098-15601) | [Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09](#Indication_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-8329](#C_1098-8329) |  |
| @typeCode | 1..1 | SHALL |  | [1098-8330](#C_1098-8330) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| substanceAdministration | 1..1 | SHALL |  | [1098-15602](#C_1098-15602) | [Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09](#Medication_Activity_V2) |

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: HL7ActMood 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
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.12" (CONF:1098-10519).
   2. 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).
   1. This code SHOULD contain zero or one [0..1] originalText (CONF:1098-19186).
      1. 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).
            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:1098-19189).
   2. 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 (CodeSystem: 2.16.840.1.113883.6.12) or ICD-10-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).
   1. This statusCode SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [ProcedureAct statusCode](#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 [ActPriority](#ActPriority) 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).
   1. The performer, if present, SHALL contain exactly one [1..1] assignedEntity (CONF:1098-8302).
      1. This assignedEntity SHALL contain at least one [1..\*] id (CONF:1098-8303).
      2. This assignedEntity SHALL contain at least one [1..\*] addr (CONF:1098-8304).
      3. This assignedEntity SHALL contain at least one [1..\*] telecom (CONF:1098-8305).
      4. 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 zero or more [0..\*] [Author Participation](#U_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
    1. SHALL contain exactly one [1..1] @typeCode="LOC" Location (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 STATIC) (CONF:1098-8312).
    2. SHALL contain exactly one [1..1] [Service Delivery Location](#E_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
    1. 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).
    2. SHALL contain exactly one [1..1] @inversionInd="true" true (CONF:1098-8316).
    3. SHALL contain exactly one [1..1] encounter (CONF:1098-8317).
       1. 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).
       2. This encounter SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1098-8319).
       3. 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
    1. 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).
    2. SHALL contain exactly one [1..1] @inversionInd="true" true (CONF:1098-8324).
    3. SHALL contain exactly one [1..1] [Instruction (V2)](#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
    1. 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).
    2. SHALL contain exactly one [1..1] [Indication (V2)](#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
    1. 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).
    2. SHALL contain exactly one [1..1] [Medication Activity (V2)](#Medication_Activity_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09) (CONF:1098-15602).

Table 433: ProcedureAct statusCode

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: ProcedureAct statusCode urn:oid:2.16.840.1.113883.11.20.9.22  (Clinical Focus: Status of a procedure activity),(Data Element Scope: ),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 4/24/2019 with a version of 20190103.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.22/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| aborted | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | aborted |
| active | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | active |
| cancelled | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | cancelled |
| completed | HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 | completed |

Figure 201: 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>

Procedure Activity Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.13:2014-06-09 (open)]

Table 434: Procedure Activity Observation (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Procedures Section (entries optional) (V2)](#Procedures_Section_entries_optional_V2) (optional)  [Procedures Section (entries required) (V2)](#S_Procedures_Section_entries_required_V) (optional)  [Intervention Act (V2)](#E_Intervention_Act_V2) (optional) | [Service Delivery Location](#E_Service_Delivery_Location) (optional)  [Medication Activity (V2)](#Medication_Activity_V2) (optional)  [Reaction Observation (V2)](#Reaction_Observation_V2) (optional)  [Indication (V2)](#Indication_V2) (optional)  [Instruction (V2)](#Instruction_V2) (optional)  [Author Participation](#U_Author_Participation) (optional) |

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 435: Procedure Activity Observation (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.13:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-8282](#C_1098-8282) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-8237](#C_1098-8237) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-8238](#C_1098-8238) |  |
| @root | 1..1 | SHALL |  | [1098-10520](#C_1098-10520) | 2.16.840.1.113883.10.20.22.4.13 |
| @extension | 1..1 | SHALL |  | [1098-32507](#C_1098-32507) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-8239](#C_1098-8239) |  |
| code | 1..1 | SHALL |  | [1098-19197](#C_1098-19197) |  |
| originalText | 0..1 | SHOULD |  | [1098-19198](#C_1098-19198) |  |
| reference | 0..1 | SHOULD |  | [1098-19199](#C_1098-19199) |  |
| @value | 0..1 | SHOULD |  | [1098-19200](#C_1098-19200) |  |
| statusCode | 1..1 | SHALL |  | [1098-8245](#C_1098-8245) |  |
| @code | 1..1 | SHALL |  | [1098-32365](#C_1098-32365) | urn:oid:2.16.840.1.113883.11.20.9.22 (ProcedureAct statusCode) |
| effectiveTime | 0..1 | SHOULD |  | [1098-8246](#C_1098-8246) |  |
| priorityCode | 0..1 | MAY |  | [1098-8247](#C_1098-8247) | urn:oid:2.16.840.1.113883.1.11.16866 (ActPriority) |
| value | 1..1 | SHALL |  | [1098-16846](#C_1098-16846) |  |
| @nullFlavor | 0..1 | MAY |  | [1098-32778](#C_1098-32778) |  |
| methodCode | 0..1 | MAY |  | [1098-8248](#C_1098-8248) |  |
| targetSiteCode | 0..\* | SHOULD |  | [1098-8250](#C_1098-8250) | urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 (Body Site Value Set) |
| performer | 0..\* | SHOULD |  | [1098-8251](#C_1098-8251) |  |
| assignedEntity | 1..1 | SHALL |  | [1098-8252](#C_1098-8252) |  |
| id | 1..\* | SHALL |  | [1098-8253](#C_1098-8253) |  |
| addr | 1..\* | SHALL |  | [1098-8254](#C_1098-8254) |  |
| telecom | 1..\* | SHALL |  | [1098-8255](#C_1098-8255) |  |
| representedOrganization | 0..1 | SHOULD |  | [1098-8256](#C_1098-8256) |  |
| id | 0..\* | SHOULD |  | [1098-8257](#C_1098-8257) |  |
| name | 0..\* | MAY |  | [1098-8258](#C_1098-8258) |  |
| telecom | 1..\* | SHALL |  | [1098-8260](#C_1098-8260) |  |
| addr | 1..\* | SHALL |  | [1098-8259](#C_1098-8259) |  |
| author | 0..\* | SHOULD |  | [1098-32478](#C_1098-32478) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| participant | 0..\* | MAY |  | [1098-8261](#C_1098-8261) |  |
| @typeCode | 1..1 | SHALL |  | [1098-8262](#C_1098-8262) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = LOC |
| participantRole | 1..1 | SHALL |  | [1098-15904](#C_1098-15904) | [Service Delivery Location (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32](#E_Service_Delivery_Location) |
| entryRelationship | 0..\* | MAY |  | [1098-8264](#C_1098-8264) |  |
| @typeCode | 1..1 | SHALL |  | [1098-8265](#C_1098-8265) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| @inversionInd | 1..1 | SHALL |  | [1098-8266](#C_1098-8266) | true |
| encounter | 1..1 | SHALL |  | [1098-8267](#C_1098-8267) |  |
| @classCode | 1..1 | SHALL |  | [1098-8268](#C_1098-8268) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ENC |
| @moodCode | 1..1 | SHALL |  | [1098-8269](#C_1098-8269) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| id | 1..1 | SHALL |  | [1098-8270](#C_1098-8270) |  |
| entryRelationship | 0..1 | MAY |  | [1098-8272](#C_1098-8272) |  |
| @typeCode | 1..1 | SHALL |  | [1098-8273](#C_1098-8273) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| @inversionInd | 1..1 | SHALL |  | [1098-8274](#C_1098-8274) | true |
| act | 1..1 | SHALL |  | [1098-31394](#C_1098-31394) | [Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09](#Instruction_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-8276](#C_1098-8276) |  |
| @typeCode | 1..1 | SHALL |  | [1098-8277](#C_1098-8277) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [1098-15906](#C_1098-15906) | [Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09](#Indication_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-8279](#C_1098-8279) |  |
| @typeCode | 1..1 | SHALL |  | [1098-8280](#C_1098-8280) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| substanceAdministration | 1..1 | SHALL |  | [1098-15907](#C_1098-15907) | [Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09](#Medication_Activity_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-32470](#C_1098-32470) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32471](#C_1098-32471) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| observation | 1..1 | SHALL |  | [1098-32472](#C_1098-32472) | [Reaction Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09](#Reaction_Observation_V2) |

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: HL7ActMood 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
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.13" (CONF:1098-10520).
   2. 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).
   1. This code SHOULD contain zero or one [0..1] originalText (CONF:1098-19198).
      1. 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).
            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:1098-19201).
   2. 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 (CodeSystem: 2.16.840.1.113883.6.12) or ICD-10-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).
   1. This statusCode SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [ProcedureAct statusCode](#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 [ActPriority](#ActPriority) 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.

* 1. This value MAY contain zero or one [0..1] @nullFlavor (CONF:1098-32778).

1. MAY contain zero or one [0..1] methodCode (CONF:1098-8248).
   1. MethodCode SHALL NOT conflict with the method inherent in Observation / code (CONF:1098-8249).
2. SHOULD contain zero or more [0..\*] targetSiteCode, which SHALL be selected from ValueSet [Body Site Value Set](#Body_Site_Value_Set) urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 DYNAMIC (CONF:1098-8250).
3. SHOULD contain zero or more [0..\*] performer (CONF:1098-8251).
   1. The performer, if present, SHALL contain exactly one [1..1] assignedEntity (CONF:1098-8252).
      1. This assignedEntity SHALL contain at least one [1..\*] id (CONF:1098-8253).
      2. This assignedEntity SHALL contain at least one [1..\*] addr (CONF:1098-8254).
      3. This assignedEntity SHALL contain at least one [1..\*] telecom (CONF:1098-8255).
      4. 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 at least one [1..\*] telecom (CONF:1098-8260).
         4. The representedOrganization, if present, SHALL contain at least one [1..\*] addr (CONF:1098-8259).
4. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-32478).
5. MAY contain zero or more [0..\*] participant (CONF:1098-8261) such that it
   1. SHALL contain exactly one [1..1] @typeCode="LOC" Location (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 STATIC) (CONF:1098-8262).
   2. SHALL contain exactly one [1..1] [Service Delivery Location](#E_Service_Delivery_Location) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32) (CONF:1098-15904).
6. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-8264) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1098-8265).
   2. SHALL contain exactly one [1..1] @inversionInd="true" true (CONF:1098-8266).
   3. SHALL contain exactly one [1..1] encounter (CONF:1098-8267).
      1. 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).
      2. This encounter SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1098-8269).
      3. This encounter SHALL contain exactly one [1..1] id (CONF:1098-8270).
         1. Set encounter/id to the id of an encounter in another section to signify they are the same encounter (CONF:1098-16847).
7. MAY contain zero or one [0..1] entryRelationship (CONF:1098-8272) such that it
   1. 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).
   2. SHALL contain exactly one [1..1] @inversionInd="true" true (CONF:1098-8274).
   3. SHALL contain exactly one [1..1] [Instruction (V2)](#Instruction_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:1098-31394).
8. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-8276) such that it
   1. 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).
   2. SHALL contain exactly one [1..1] [Indication (V2)](#Indication_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09) (CONF:1098-15906).
9. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-8279) such that it
   1. 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).
   2. SHALL contain exactly one [1..1] [Medication Activity (V2)](#Medication_Activity_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09) (CONF:1098-15907).
10. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-32470) such that it
    1. SHALL contain exactly one [1..1] @typeCode="COMP" Has Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32471).
    2. SHALL contain exactly one [1..1] [Reaction Observation (V2)](#Reaction_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09) (CONF:1098-32472).

Figure 202: 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="#Proc1" />

</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>

<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>

Procedure Activity Procedure (V2)

[procedure: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09 (open)]

Table 436: Procedure Activity Procedure (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Reaction Observation (V2)](#Reaction_Observation_V2) (optional)  [Medical Equipment Section (V2)](#S_Medical_Equipment_Section_V2) (optional)  [Anesthesia Section (V2)](#S_Anesthesia_Section_V2) (optional)  [Procedures Section (entries optional) (V2)](#Procedures_Section_entries_optional_V2) (optional)  [Procedures Section (entries required) (V2)](#S_Procedures_Section_entries_required_V) (optional)  [Medical Equipment Organizer](#E_Medical_Equipment_Organizer) (optional)  [Intervention Act (V2)](#E_Intervention_Act_V2) (optional) | [Service Delivery Location](#E_Service_Delivery_Location) (optional)  [Product Instance](#E_Product_Instance) (optional)  [Medication Activity (V2)](#Medication_Activity_V2) (optional)  [Reaction Observation (V2)](#Reaction_Observation_V2) (optional)  [Indication (V2)](#Indication_V2) (optional)  [Instruction (V2)](#Instruction_V2) (optional)  [Author Participation](#U_Author_Participation) (optional) |

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 437: Procedure Activity Procedure (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| procedure (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-7652](#C_1098-7652) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = PROC |
| @moodCode | 1..1 | SHALL |  | [1098-7653](#C_1098-7653) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-7654](#C_1098-7654) |  |
| @root | 1..1 | SHALL |  | [1098-10521](#C_1098-10521) | 2.16.840.1.113883.10.20.22.4.14 |
| @extension | 1..1 | SHALL |  | [1098-32506](#C_1098-32506) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-7655](#C_1098-7655) |  |
| code | 1..1 | SHALL |  | [1098-7656](#C_1098-7656) |  |
| originalText | 0..1 | SHOULD |  | [1098-19203](#C_1098-19203) |  |
| reference | 0..1 | SHOULD |  | [1098-19204](#C_1098-19204) |  |
| @value | 0..1 | SHOULD |  | [1098-19205](#C_1098-19205) |  |
| statusCode | 1..1 | SHALL |  | [1098-7661](#C_1098-7661) |  |
| @code | 1..1 | SHALL |  | [1098-32366](#C_1098-32366) | urn:oid:2.16.840.1.113883.11.20.9.22 (ProcedureAct statusCode) |
| effectiveTime | 0..1 | SHOULD |  | [1098-7662](#C_1098-7662) |  |
| priorityCode | 0..1 | MAY |  | [1098-7668](#C_1098-7668) | urn:oid:2.16.840.1.113883.1.11.16866 (ActPriority) |
| methodCode | 0..1 | MAY |  | [1098-7670](#C_1098-7670) |  |
| targetSiteCode | 0..\* | SHOULD |  | [1098-7683](#C_1098-7683) | urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 (Body Site Value Set) |
| specimen | 0..\* | MAY |  | [1098-7697](#C_1098-7697) |  |
| specimenRole | 1..1 | SHALL |  | [1098-7704](#C_1098-7704) |  |
| id | 0..\* | SHOULD |  | [1098-7716](#C_1098-7716) |  |
| performer | 0..\* | SHOULD |  | [1098-7718](#C_1098-7718) |  |
| assignedEntity | 1..1 | SHALL |  | [1098-7720](#C_1098-7720) |  |
| id | 1..\* | SHALL |  | [1098-7722](#C_1098-7722) |  |
| addr | 1..\* | SHALL |  | [1098-7731](#C_1098-7731) |  |
| telecom | 1..\* | SHALL |  | [1098-7732](#C_1098-7732) |  |
| representedOrganization | 0..1 | SHOULD |  | [1098-7733](#C_1098-7733) |  |
| id | 0..\* | SHOULD |  | [1098-7734](#C_1098-7734) |  |
| name | 0..\* | MAY |  | [1098-7735](#C_1098-7735) |  |
| telecom | 1..\* | SHALL |  | [1098-7737](#C_1098-7737) |  |
| addr | 1..\* | SHALL |  | [1098-7736](#C_1098-7736) |  |
| author | 0..\* | SHOULD |  | [1098-32479](#C_1098-32479) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| participant | 0..\* | MAY |  | [1098-7751](#C_1098-7751) |  |
| @typeCode | 1..1 | SHALL |  | [1098-7752](#C_1098-7752) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = DEV |
| participantRole | 1..1 | SHALL |  | [1098-15911](#C_1098-15911) | [Product Instance (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.37](#E_Product_Instance) |
| participant | 0..\* | MAY |  | [1098-7765](#C_1098-7765) |  |
| @typeCode | 1..1 | SHALL |  | [1098-7766](#C_1098-7766) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = LOC |
| participantRole | 1..1 | SHALL |  | [1098-15912](#C_1098-15912) | [Service Delivery Location (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32](#E_Service_Delivery_Location) |
| entryRelationship | 0..\* | MAY |  | [1098-7768](#C_1098-7768) |  |
| @typeCode | 1..1 | SHALL |  | [1098-7769](#C_1098-7769) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| @inversionInd | 1..1 | SHALL |  | [1098-8009](#C_1098-8009) | true |
| encounter | 1..1 | SHALL |  | [1098-7770](#C_1098-7770) |  |
| @classCode | 1..1 | SHALL |  | [1098-7771](#C_1098-7771) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ENC |
| @moodCode | 1..1 | SHALL |  | [1098-7772](#C_1098-7772) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| id | 1..1 | SHALL |  | [1098-7773](#C_1098-7773) |  |
| entryRelationship | 0..1 | MAY |  | [1098-7775](#C_1098-7775) |  |
| @typeCode | 1..1 | SHALL |  | [1098-7776](#C_1098-7776) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| @inversionInd | 1..1 | SHALL |  | [1098-7777](#C_1098-7777) | true |
| act | 1..1 | SHALL |  | [1098-31395](#C_1098-31395) | [Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09](#Instruction_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-7779](#C_1098-7779) |  |
| @typeCode | 1..1 | SHALL |  | [1098-7780](#C_1098-7780) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [1098-15914](#C_1098-15914) | [Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09](#Indication_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-7886](#C_1098-7886) |  |
| @typeCode | 1..1 | SHALL |  | [1098-7887](#C_1098-7887) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| substanceAdministration | 1..1 | SHALL |  | [1098-15915](#C_1098-15915) | [Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09](#Medication_Activity_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-32473](#C_1098-32473) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32474](#C_1098-32474) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| observation | 1..1 | SHALL |  | [1098-32475](#C_1098-32475) | [Reaction Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09](#Reaction_Observation_V2) |

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: HL7ActMood 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
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.14" (CONF:1098-10521).
   2. 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).
   1. This code SHOULD contain zero or one [0..1] originalText (CONF:1098-19203).
      1. 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).
            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:1098-19206).
   2. 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 (CodeSystem: 2.16.840.1.113883.6.12) or ICD-10-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).
   1. This statusCode SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [ProcedureAct statusCode](#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 [ActPriority](#ActPriority) 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).
   1. 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.

1. SHOULD contain zero or more [0..\*] targetSiteCode, which SHALL be selected from ValueSet [Body Site Value Set](#Body_Site_Value_Set) urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 DYNAMIC (CONF:1098-7683).
2. MAY contain zero or more [0..\*] specimen (CONF:1098-7697).
   1. The specimen, if present, SHALL contain exactly one [1..1] specimenRole (CONF:1098-7704).
      1. 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).
   2. This specimen is for representing specimens obtained from a procedure (CONF:1098-16842).
3. SHOULD contain zero or more [0..\*] performer (CONF:1098-7718) such that it
   1. SHALL contain exactly one [1..1] assignedEntity (CONF:1098-7720).
      1. This assignedEntity SHALL contain at least one [1..\*] id (CONF:1098-7722).
      2. This assignedEntity SHALL contain at least one [1..\*] addr (CONF:1098-7731).
      3. This assignedEntity SHALL contain at least one [1..\*] telecom (CONF:1098-7732).
      4. 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 at least one [1..\*] telecom (CONF:1098-7737).
         4. The representedOrganization, if present, SHALL contain at least one [1..\*] addr (CONF:1098-7736).
4. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-32479).
5. MAY contain zero or more [0..\*] participant (CONF:1098-7751) such that it
   1. SHALL contain exactly one [1..1] @typeCode="DEV" Device (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1098-7752).
   2. SHALL contain exactly one [1..1] [Product Instance](#E_Product_Instance) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.37) (CONF:1098-15911).
6. MAY contain zero or more [0..\*] participant (CONF:1098-7765) such that it
   1. SHALL contain exactly one [1..1] @typeCode="LOC" Location (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 STATIC) (CONF:1098-7766).
   2. SHALL contain exactly one [1..1] [Service Delivery Location](#E_Service_Delivery_Location) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32) (CONF:1098-15912).
7. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-7768) such that it
   1. 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).
   2. SHALL contain exactly one [1..1] @inversionInd="true" true (CONF:1098-8009).
   3. SHALL contain exactly one [1..1] encounter (CONF:1098-7770).
      1. 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).
      2. This encounter SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1098-7772).
      3. 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).
8. MAY contain zero or one [0..1] entryRelationship (CONF:1098-7775) such that it
   1. 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).
   2. SHALL contain exactly one [1..1] @inversionInd="true" true (CONF:1098-7777).
   3. SHALL contain exactly one [1..1] [Instruction (V2)](#Instruction_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:1098-31395).
9. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-7779) such that it
   1. 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).
   2. SHALL contain exactly one [1..1] [Indication (V2)](#Indication_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09) (CONF:1098-15914).
10. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-7886) such that it
    1. 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).
    2. SHALL contain exactly one [1..1] [Medication Activity (V2)](#Medication_Activity_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09) (CONF:1098-15915).
11. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-32473) such that it
    1. SHALL contain exactly one [1..1] @typeCode="COMP" Has Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32474).
    2. SHALL contain exactly one [1..1] [Reaction Observation (V2)](#Reaction_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09) (CONF:1098-32475).

Figure 203: 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>

Procedure Context

[act: identifier urn:oid:2.16.840.1.113883.10.20.6.2.5 (open)]

Table 438: Procedure Context Contexts

| Contained By: | Contains: |
| --- | --- |
| [Diagnostic Imaging Report (V3)](#D_Diagnostic_Imaging_Report_V3) (optional) |  |

The ServiceEvent Procedure Context of the document header may be overridden in the CDA structured body if there is a need to refer to multiple imaging procedures or acts. The selection of the Procedure or Act entry from the clinical statement choice box depends on the nature of the imaging service that has been performed. The Procedure entry shall be used for image-guided interventions and minimally invasive imaging services, whereas the Act entry shall be used for diagnostic imaging services.

Table 439: Procedure Context Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.5) | | | | | |
| @classCode | 1..1 | SHALL |  | [81-26452](#C_81-26452) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [81-26453](#C_81-26453) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [81-9200](#C_81-9200) |  |
| @root | 1..1 | SHALL |  | [81-10530](#C_81-10530) | 2.16.840.1.113883.10.20.6.2.5 |
| code | 1..1 | SHALL |  | [81-9201](#C_81-9201) |  |
| effectiveTime | 0..1 | SHOULD | TS | [81-9203](#C_81-9203) |  |
| @value | 1..1 | SHALL |  | [81-17173](#C_81-17173) |  |

1. SHALL contain exactly one [1..1] @classCode="ACT" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:81-26452).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:81-26453).
3. SHALL contain exactly one [1..1] templateId (CONF:81-9200) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.6.2.5" (CONF:81-10530).
4. SHALL contain exactly one [1..1] code (CONF:81-9201).
5. SHOULD contain zero or one [0..1] effectiveTime (CONF:81-9203).
   1. The effectiveTime, if present, SHALL contain exactly one [1..1] @value (CONF:81-17173).
6. Procedure Context SHALL be represented with the procedure or act elements depending on the nature of the procedure (CONF:81-9199).

Figure 204: Procedure Context Example

<act moodCode="EVN" classCode="ACT">

<templateId root="2.16.840.1.113883.10.20.6.2.5"/>

<code code="70548"

displayName="Magnetic resonance angiography, head; with contrast material(s)"

codeSystem="2.16.840.1.113883.6.12" codeSystemName="CPT"/>

<!-- Note: This code is slightly different from the code used in the header

documentationOf and overrides it, which is what this entry is for. -->

<effectiveTime value="20060823123529+0400"/>

</act>

Product Instance

[participantRole: identifier urn:oid:2.16.840.1.113883.10.20.22.4.37 (open)]

Table 440: Product Instance Contexts

| Contained By: | Contains: |
| --- | --- |
| [Procedure Activity Procedure (V2)](#E_Procedure_Activity_Procedure_V2) (optional)  [Non-Medicinal Supply Activity (V2)](#NonMedicinal_Supply_Activity_V2) (optional)  [Planned Supply (V2)](#E_Planned_Supply_V2) (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 441: 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 |  | [81-7900](#C_81-7900) | urn:oid:2.16.840.1.113883.5.110 (HL7RoleClass) = MANU |
| templateId | 1..1 | SHALL |  | [81-7901](#C_81-7901) |  |
| @root | 1..1 | SHALL |  | [81-10522](#C_81-10522) | 2.16.840.1.113883.10.20.22.4.37 |
| id | 1..\* | SHALL |  | [81-7902](#C_81-7902) |  |
| playingDevice | 1..1 | SHALL |  | [81-7903](#C_81-7903) |  |
| code | 0..1 | SHOULD |  | [81-16837](#C_81-16837) |  |
| scopingEntity | 1..1 | SHALL |  | [81-7905](#C_81-7905) |  |
| id | 1..\* | SHALL |  | [81-7908](#C_81-7908) |  |

1. SHALL contain exactly one [1..1] @classCode="MANU" Manufactured Product (CodeSystem: HL7RoleClass 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
   1. 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).
   1. This playingDevice SHOULD contain zero or one [0..1] code (CONF:81-16837).
5. SHALL contain exactly one [1..1] scopingEntity (CONF:81-7905).
   1. This scopingEntity SHALL contain at least one [1..\*] id (CONF:81-7908).

Figure 205: 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)51022222233336(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>

Prognosis Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.113 (open)]

Table 442: Prognosis Observation Contexts

| Contained By: | Contains: |
| --- | --- |
| [Problem Observation (V3)](#E_Problem_Observation_V3) (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 443: 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 |  | [1098-29035](#C_1098-29035) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-29036](#C_1098-29036) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-29037](#C_1098-29037) |  |
| @root | 1..1 | SHALL |  | [1098-29038](#C_1098-29038) | 2.16.840.1.113883.10.20.22.4.113 |
| code | 1..1 | SHALL |  | [1098-29039](#C_1098-29039) |  |
| @code | 1..1 | SHALL |  | [1098-29468](#C_1098-29468) | 75328-5 |
| @codeSystem | 1..1 | SHALL |  | [1098-31349](#C_1098-31349) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1098-31350](#C_1098-31350) |  |
| @code | 1..1 | SHALL |  | [1098-31351](#C_1098-31351) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1098-31123](#C_1098-31123) |  |
| value | 1..1 | SHALL |  | [1098-29469](#C_1098-29469) |  |

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: HL7ActMood 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
   1. 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).
   1. This code SHALL contain exactly one [1..1] @code="75328-5" Prognosis (CONF:1098-29468).
   2. 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).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" (CodeSystem: HL7ActStatus 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 206: 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 207: 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>

Progress Toward Goal Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.110 (open)]

Table 444: Progress Toward Goal Observation Contexts

| Contained By: | Contains: |
| --- | --- |
| [Outcome Observation](#E_OutcomeObservation) (optional) |  |

This template represents a patient's progress toward a goal. It can describe whether a goal has been achieved or not and can also describe movement a patient is making toward the achievement of a goal (e.g., "Goal not achieved - no discernible change", "Goal not achieved - progressing toward goal", "Goal not achieved - declining from goal").

In the Care Planning workflow, the judgment about how well the person is progressing towards the goal is based on the observations made about the status of the patient with respect to interventions performed in the pursuit of achieving that goal.

For example, an observation outcome of a blood oxygen saturation level of 95% is related to the goal of "Maintain Pulse Ox greater than 92" and in this case the Progress Toward Goal Observation template would record that the related goal has been achieved.

Table 445: Progress Toward Goal Observation Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.110) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-31418](#C_1098-31418) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-31419](#C_1098-31419) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-31420](#C_1098-31420) |  |
| @root | 1..1 | SHALL |  | [1098-31421](#C_1098-31421) | 2.16.840.1.113883.10.20.22.4.110 |
| id | 1..\* | SHALL |  | [1098-31422](#C_1098-31422) |  |
| code | 1..1 | SHALL |  | [1098-31423](#C_1098-31423) |  |
| @code | 1..1 | SHALL |  | [1098-31424](#C_1098-31424) | ASSERTION |
| @codeSystem | 1..1 | SHALL |  | [1098-31425](#C_1098-31425) | urn:oid:2.16.840.1.113883.5.4 (HL7ActCode) = 2.16.840.1.113883.5.4 |
| statusCode | 1..1 | SHALL |  | [1098-31609](#C_1098-31609) |  |
| @code | 1..1 | SHALL |  | [1098-31610](#C_1098-31610) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| value | 1..1 | SHALL | CD | [1098-31426](#C_1098-31426) | urn:oid:2.16.840.1.113883.11.20.9.55 (Goal Achievement) |

1. SHALL contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1098-31418).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1098-31419).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-31420) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.110" (CONF:1098-31421).
4. SHALL contain at least one [1..\*] id (CONF:1098-31422).
5. SHALL contain exactly one [1..1] code (CONF:1098-31423).
   1. This code SHALL contain exactly one [1..1] @code="ASSERTION" Assertion (CONF:1098-31424).
   2. This code SHALL contain exactly one [1..1] @codeSystem="2.16.840.1.113883.5.4" (CodeSystem: HL7ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:1098-31425).
6. SHALL contain exactly one [1..1] statusCode (CONF:1098-31609).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-31610).
7. SHALL contain exactly one [1..1] value with @xsi:type="CD", where the code SHALL be selected from ValueSet [Goal Achievement](#Goal_Achievement) urn:oid:2.16.840.1.113883.11.20.9.55 DYNAMIC (CONF:1098-31426).

Table 446: Goal Achievement

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Goal Achievement urn:oid:2.16.840.1.113883.11.20.9.55  (Clinical Focus: The Goal Achievement value set contains concepts that describe a patient's progression (or lack thereof) toward a goal.),(Data Element Scope: Goal attribute value in C-CDA template observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.110),(Inclusion Criteria: The following concepts from SNOMED CT: Self( 390802008 | Goal achieved) and DescendentsAndSelf(390801001 | Goal not achieved).),(Exclusion Criteria: only as noted in inclusion criteria)  This value set was imported on 6/24/2019 with a version of 20190319.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.55/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 390801001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Goal not achieved (finding) |
| 390802008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Goal achieved (finding) |
| 706905005 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Goal not attainable (finding) |
| 706906006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | No progress toward goal (finding) |

Figure 208: Progress Toward Goal Observation Example

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.110" />

<id root="2afcf057-aae4-47cf-bfee-b7498e300424" />

<code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4" />

<value xsi:type="CD" code="390802008" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Goal achieved" />

</observation>

Purpose of Reference Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.6.2.9 (open)]

Table 447: Purpose of Reference Observation Contexts

| Contained By: | Contains: |
| --- | --- |
| [SOP Instance Observation](#E_SOP_Instance_Observation) (optional) |  |

A Purpose of Reference Observation describes the purpose of the DICOM composite object reference. Appropriate codes, such as externally defined DICOM codes, may be used to specify the semantics of the purpose of reference. When this observation is absent, it implies that the reason for the reference is unknown.

Table 448: Purpose of Reference Observation Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.9) | | | | | |
| @classCode | 1..1 | SHALL |  | [81-9264](#C_81-9264) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [81-9265](#C_81-9265) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [81-9266](#C_81-9266) |  |
| @root | 1..1 | SHALL |  | [81-10531](#C_81-10531) | 2.16.840.1.113883.10.20.6.2.9 |
| code | 1..1 | SHALL |  | [81-9267](#C_81-9267) |  |
| @code | 0..1 | SHOULD |  | [81-19208](#C_81-19208) | urn:oid:2.16.840.1.113883.5.4 (HL7ActCode) = ASSERTION |
| value | 0..1 | SHOULD | CD | [81-9273](#C_81-9273) | urn:oid:2.16.840.1.113883.11.20.9.28 (DICOMPurposeOfReference) |

1. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:81-9264).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:81-9265).
3. SHALL contain exactly one [1..1] templateId (CONF:81-9266) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.6.2.9" (CONF:81-10531).
4. SHALL contain exactly one [1..1] code (CONF:81-9267).
   1. This code SHOULD contain zero or one [0..1] @code="ASSERTION" Assertion (CodeSystem: HL7ActCode urn:oid:2.16.840.1.113883.5.4 STATIC) (CONF:81-19208).
   2. For backwards compatibility with the DICOM CMET, the code MAY be drawn from ValueSet 2.16.840.1.113883.11.20.9.28 DICOMPurposeOfReference DYNAMIC (CONF:81-19209).

The value element is a SHOULD to allow backwards compatibility with the DICOM CMET. Note that the use of ASSERTION for the code differs from the DICOM CMET. This is intentional. The DICOM CMET was created before the Term Info guidelines describing the use of the assertion pattern were released. It was determined that this IG should follow the latest Term Info guidelines. Implementers using both this IG and the DICOM CMET should be aware of this difference and apply appropriate transformations.

1. SHOULD contain zero or one [0..1] value with @xsi:type="CD", where the code SHOULD be selected from ValueSet [DICOMPurposeOfReference](#DICOMPurposeOfReference) urn:oid:2.16.840.1.113883.11.20.9.28 DYNAMIC (CONF:81-9273).

Table 449: DICOMPurposeOfReference

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: DICOMPurposeOfReference urn:oid:2.16.840.1.113883.11.20.9.28  Value Set Source: <http://www.hl7.org> | | | |
| Code | Code System | Code System OID | Print Name |
| 121079 | DCM | urn:oid:1.2.840.10008.2.16.4 | Baseline |
| 121080 | DCM | urn:oid:1.2.840.10008.2.16.4 | Best illustration of finding |
| 121112 | DCM | urn:oid:1.2.840.10008.2.16.4 | Source of Measurement |

Figure 209: Purpose of Reference Observation Example

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.6.2.9"/>

<code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4"/>

<value xsi:type="CD" code="121112" codeSystem="1.2.840.10008.2.16.4"

codeSystemName="DCM"

displayName="Source of Measurement"/>

</observation>

Quantity Measurement Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.6.2.14 (open)]

Table 450: Quantity Measurement Observation Contexts

| Contained By: | Contains: |
| --- | --- |
| [Text Observation](#E_Text_Observation) (optional)  [Code Observations](#E_Code_Observations) (optional)  [Diagnostic Imaging Report (V3)](#D_Diagnostic_Imaging_Report_V3) (optional) | [SOP Instance Observation](#E_SOP_Instance_Observation) (optional) |

A Quantity Measurement Observation records quantity measurements based on image data such as linear, area, volume, and numeric measurements. The codes in DIRQuantityMeasurementTypeCodes (ValueSet: 2.16.840.1.113883.11.20.9.29) are from the qualifier hierarchy of SNOMED CT and are not valid for observation/code according to the Term Info guidelines. These codes can be used for backwards compatibility, but going forward, codes from the observable entity hierarchy will be requested and used.

Table 451: Quantity Measurement Observation Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.14) | | | | | |
| @classCode | 1..1 | SHALL |  | [81-9317](#C_81-9317) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [81-9318](#C_81-9318) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [81-9319](#C_81-9319) |  |
| @root | 1..1 | SHALL |  | [81-10532](#C_81-10532) | 2.16.840.1.113883.10.20.6.2.14 |
| code | 1..1 | SHALL |  | [81-9320](#C_81-9320) |  |
| @code | 0..1 | SHOULD |  | [81-19210](#C_81-19210) | urn:oid:2.16.840.1.113883.11.20.9.29 (DIRQuantityMeasurementTypeCodes) |
| effectiveTime | 0..1 | SHOULD |  | [81-9326](#C_81-9326) |  |
| value | 1..1 | SHALL | PQ | [81-9324](#C_81-9324) |  |
| entryRelationship | 0..\* | MAY |  | [81-9327](#C_81-9327) |  |
| @typeCode | 1..1 | SHALL |  | [81-9328](#C_81-9328) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SPRT |
| observation | 1..1 | SHALL |  | [81-15916](#C_81-15916) | [SOP Instance Observation (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.8](#E_SOP_Instance_Observation) |

1. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:81-9317).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:81-9318).
3. SHALL contain exactly one [1..1] templateId (CONF:81-9319) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.6.2.14" (CONF:81-10532).

The value set of the observation/code includes numeric measurement types for linear dimensions, areas, volumes, and other numeric measurements. This value set is extensible and comprises the union of SNOMED codes for observable entities as reproduced in DIRQuantityMeasurementTypeCodes (ValueSet: 2.16.840.1.113883.11.20.9.29) and DICOM Codes in DICOMQuantityMeasurementTypeCodes (ValueSet: 2.16.840.1.113883.11.20.9.30).

1. SHALL contain exactly one [1..1] code (CONF:81-9320).
   1. This code SHOULD contain zero or one [0..1] @code, which SHOULD be selected from ValueSet [DIRQuantityMeasurementTypeCodes](#DIRQuantityMeasurementTypeCodes) urn:oid:2.16.840.1.113883.11.20.9.29 DYNAMIC (CONF:81-19210).
2. SHOULD contain zero or one [0..1] effectiveTime (CONF:81-9326).
3. SHALL contain exactly one [1..1] value with @xsi:type="PQ" (CONF:81-9324).
4. MAY contain zero or more [0..\*] entryRelationship (CONF:81-9327) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SPRT" Has Support (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:81-9328).
   2. SHALL contain exactly one [1..1] [SOP Instance Observation](#E_SOP_Instance_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.8) (CONF:81-15916).

Table 452: DIRQuantityMeasurementTypeCodes

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: DIRQuantityMeasurementTypeCodes urn:oid:2.16.840.1.113883.11.20.9.29  (Clinical Focus: The specific dimension of a structure measured by the associated physical quantity),(Data Element Scope: Contains imaging measurement (observable entity) concepts.),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 6/24/2019 with a version of 20190319.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.29/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 439428006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Short axis length of structure by imaging measurement (observable entity) |
| 439429003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Radius of structure by imaging measurement (observable entity) |
| 439746004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Area of structure by imaging measurement (observable entity) |
| 439747008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Circumference of circular structure by imaging measurement (observable entity) |
| 439748003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Diameter of circular structure by imaging measurement (observable entity) |
| 439749006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Volume of structure by imaging measurement (observable entity) |
| 439932008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Length of structure by imaging measurement (observable entity) |
| 439933003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Long axis length of structure by imaging measurement (observable entity) |
| 439934009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Depth of structure by imaging measurement (observable entity) |
| 439982003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Major axis length of structure by imaging measurement (observable entity) |
| ... | | | |

Figure 210: Quantity Measurement Observation Example

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.6.2.14"/>

<code code="439984002" codeSystem="2.16.840.1.113883.6.96"

codeSystemName="SNM3"

displayName="Diameter of structure">

<originalText>

<reference value="#Diam2"/>

</originalText>

</code>

<statusCode code="completed"/>

<effectiveTime value="200802260805-0800"/>

<value xsi:type="PQ" value="45" unit="mm"

codeSystemVersion="1.5"/>

<!-- entryRelationships to SOP Instance Observations may go here -->

</observation>

Reaction Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09 (open)]

Table 453: Reaction Observation (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Medication Activity (V2)](#Medication_Activity_V2) (optional)  [Procedure Activity Procedure (V2)](#E_Procedure_Activity_Procedure_V2) (optional)  [Procedure Activity Observation (V2)](#E_Procedure_Activity_Observation_V2) (optional)  [Allergy - Intolerance Observation (V2)](#E_Allergy__Intolerance_Observation_V2) (optional)  [Substance or Device Allergy - Intolerance Observation (V2)](#E_Substance_or_Device_Allergy__V2) (optional)  [Immunization Activity (V3)](#E_Immunization_Activity_V3) (optional)  [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional) | [Medication Activity (V2)](#Medication_Activity_V2) (optional)  [Procedure Activity Procedure (V2)](#E_Procedure_Activity_Procedure_V2) (optional)  [Severity Observation (V2)](#E_Severity_Observation_V2) (optional) |

This clinical statement represents the response to an undesired symptom, finding, etc. due to administered or exposed substance. A reaction can be defined described with respect to its severity, and can have been treated by one or more interventions.

Table 454: Reaction Observation (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-7325](#C_1098-7325) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-7326](#C_1098-7326) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-7323](#C_1098-7323) |  |
| @root | 1..1 | SHALL |  | [1098-10523](#C_1098-10523) | 2.16.840.1.113883.10.20.22.4.9 |
| @extension | 1..1 | SHALL |  | [1098-32504](#C_1098-32504) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-7329](#C_1098-7329) |  |
| code | 1..1 | SHALL |  | [1098-16851](#C_1098-16851) |  |
| @code | 1..1 | SHALL |  | [1098-31124](#C_1098-31124) | ASSERTION |
| @codeSystem | 1..1 | SHALL |  | [1098-32169](#C_1098-32169) | urn:oid:2.16.840.1.113883.5.4 (HL7ActCode) = 2.16.840.1.113883.5.4 |
| statusCode | 1..1 | SHALL |  | [1098-7328](#C_1098-7328) |  |
| @code | 1..1 | SHALL |  | [1098-19114](#C_1098-19114) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 0..1 | SHOULD |  | [1098-7332](#C_1098-7332) |  |
| low | 0..1 | SHOULD |  | [1098-7333](#C_1098-7333) |  |
| high | 0..1 | SHOULD |  | [1098-7334](#C_1098-7334) |  |
| value | 1..1 | SHALL | CD | [1098-7335](#C_1098-7335) | urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 (Problem) |
| entryRelationship | 0..\* | MAY |  | [1098-7337](#C_1098-7337) |  |
| @typeCode | 1..1 | SHALL |  | [1098-7338](#C_1098-7338) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| @inversionInd | 1..1 | SHALL |  | [1098-7343](#C_1098-7343) | true |
| procedure | 1..1 | SHALL |  | [1098-15920](#C_1098-15920) | [Procedure Activity Procedure (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09](#E_Procedure_Activity_Procedure_V2) |
| entryRelationship | 0..\* | MAY |  | [1098-7340](#C_1098-7340) |  |
| @typeCode | 1..1 | SHALL |  | [1098-7341](#C_1098-7341) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| @inversionInd | 1..1 | SHALL |  | [1098-7344](#C_1098-7344) | true |
| substanceAdministration | 1..1 | SHALL |  | [1098-15921](#C_1098-15921) | [Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09](#Medication_Activity_V2) |
| entryRelationship | 0..1 | MAY |  | [1098-7580](#C_1098-7580) |  |
| @typeCode | 1..1 | SHALL |  | [1098-7581](#C_1098-7581) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| @inversionInd | 1..1 | SHALL |  | [1098-10375](#C_1098-10375) | true |
| observation | 1..1 | SHALL |  | [1098-15922](#C_1098-15922) | [Severity Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.8:2014-06-09](#E_Severity_Observation_V2) |

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: HL7ActMood 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
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.9" (CONF:1098-10523).
   2. 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).
   1. This code SHALL contain exactly one [1..1] @code="ASSERTION" (CONF:1098-31124).
   2. This code SHALL contain exactly one [1..1] @codeSystem="2.16.840.1.113883.5.4" (CodeSystem: HL7ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:1098-32169).
6. SHALL contain exactly one [1..1] statusCode (CONF:1098-7328).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus 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).
   1. The effectiveTime, if present, SHOULD contain zero or one [0..1] low (CONF:1098-7333).
   2. 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](#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
   1. 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).
   2. 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.

* 1. SHALL contain exactly one [1..1] [Procedure Activity Procedure (V2)](#E_Procedure_Activity_Procedure_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09) (CONF:1098-15920).

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-7340) such that it
   1. 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).
   2. 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.

* 1. SHALL contain exactly one [1..1] [Medication Activity (V2)](#Medication_Activity_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09) (CONF:1098-15921).

1. MAY contain zero or one [0..1] entryRelationship (CONF:1098-7580) such that it
   1. 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).
   2. SHALL contain exactly one [1..1] @inversionInd="true" TRUE (CONF:1098-10375).
   3. SHALL contain exactly one [1..1] [Severity Observation (V2)](#E_Severity_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.8:2014-06-09) (CONF:1098-15922).

Figure 211: 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>

Referenced Frames Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.6.2.10 (open)]

Table 455: Referenced Frames Observation Contexts

| Contained By: | Contains: |
| --- | --- |
| [SOP Instance Observation](#E_SOP_Instance_Observation) (optional) | [Boundary Observation](#E_Boundary_Observation) (required) |

A Referenced Frames Observation is used if the referenced DICOM SOP instance is a multiframe image and the reference does not apply to all frames. The list of integer values for the referenced frames of a DICOM multiframe image SOP instance is contained in a Boundary Observation nested inside this class.

Table 456: Referenced Frames Observation Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.10) | | | | | |
| @classCode | 1..1 | SHALL |  | [81-9276](#C_81-9276) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ROIBND |
| @moodCode | 1..1 | SHALL |  | [81-9277](#C_81-9277) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| code | 1..1 | SHALL |  | [81-19164](#C_81-19164) |  |
| @code | 0..1 | MAY |  | [81-19165](#C_81-19165) | urn:oid:1.2.840.10008.2.16.4 (DCM) = 121190 |
| entryRelationship | 1..1 | SHALL |  | [81-9279](#C_81-9279) |  |
| @typeCode | 1..1 | SHALL |  | [81-9280](#C_81-9280) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| observation | 1..1 | SHALL |  | [81-15923](#C_81-15923) | [Boundary Observation (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.11](#E_Boundary_Observation) |

1. SHALL contain exactly one [1..1] @classCode="ROIBND" Bounded Region of Interest (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:81-9276).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:81-9277).
3. SHALL contain exactly one [1..1] code (CONF:81-19164).
   1. This code MAY contain zero or one [0..1] @code="121190" Referenced Frames (CodeSystem: DCM urn:oid:1.2.840.10008.2.16.4 STATIC) (CONF:81-19165).
4. SHALL contain exactly one [1..1] entryRelationship (CONF:81-9279).
   1. This entryRelationship SHALL contain exactly one [1..1] @typeCode="COMP" Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:81-9280).
   2. This entryRelationship SHALL contain exactly one [1..1] [Boundary Observation](#E_Boundary_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.11) (CONF:81-15923).

Figure 212: Referenced Frames Observation Example

<observation classCode="ROIBND" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.6.2.10"/>

<code code="121190" codeSystem="1.2.840.10008.2.16.4" displayName="Referenced Frames"/>

<entryRelationship typeCode="COMP">

<!-- Boundary Observation -->

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.6.2.11"/>

<code code="113036" codeSystem="1.2.840.10008.2.16.4" displayName="Frames for Display"/>

<value xsi:type="INT" value="1"/>

</observation>

</entryRelationship>

</observation>

Result Observation (V3)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.2:2015-08-01 (open)]

Table 457: Result Observation (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Result Organizer (V3)](#E_Result_Organizer_V3) (required)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional) | [Author Participation](#U_Author_Participation) (optional) |

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 458: Result Observation (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.2:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-7130](#C_1198-7130) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1198-7131](#C_1198-7131) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-7136](#C_1198-7136) |  |
| @root | 1..1 | SHALL |  | [1198-9138](#C_1198-9138) | 2.16.840.1.113883.10.20.22.4.2 |
| @extension | 1..1 | SHALL |  | [1198-32575](#C_1198-32575) | 2015-08-01 |
| id | 1..\* | SHALL |  | [1198-7137](#C_1198-7137) |  |
| code | 1..1 | SHALL |  | [1198-7133](#C_1198-7133) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| statusCode | 1..1 | SHALL |  | [1198-7134](#C_1198-7134) |  |
| @code | 1..1 | SHALL |  | [1198-14849](#C_1198-14849) | urn:oid:2.16.840.1.113883.11.20.9.39 (Result Status) |
| effectiveTime | 1..1 | SHALL |  | [1198-7140](#C_1198-7140) |  |
| value | 1..1 | SHALL |  | [1198-7143](#C_1198-7143) |  |
| interpretationCode | 0..\* | SHOULD |  | [1198-7147](#C_1198-7147) | urn:oid:2.16.840.1.113883.1.11.78 (Observation Interpretation (HL7)) |
| methodCode | 0..1 | MAY | SET<CE> | [1198-7148](#C_1198-7148) |  |
| targetSiteCode | 0..1 | MAY | SET<CD> | [1198-7153](#C_1198-7153) |  |
| author | 0..\* | SHOULD |  | [1198-7149](#C_1198-7149) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| referenceRange | 0..\* | SHOULD |  | [1198-7150](#C_1198-7150) |  |
| observationRange | 1..1 | SHALL |  | [1198-7151](#C_1198-7151) |  |
| code | 0..0 | SHALL NOT |  | [1198-7152](#C_1198-7152) |  |
| value | 1..1 | SHALL |  | [1198-32175](#C_1198-32175) |  |

1. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-7130).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-7131).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-7136) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.2" (CONF:1198-9138).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32575).
4. SHALL contain at least one [1..\*] id (CONF:1198-7137).
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:1198-7133).
   1. 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:1198-19212).
6. SHALL contain exactly one [1..1] statusCode (CONF:1198-7134).
   1. This statusCode SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [Result Status](#Result_Status) urn:oid:2.16.840.1.113883.11.20.9.39 STATIC (CONF:1198-14849).
7. SHALL contain exactly one [1..1] effectiveTime (CONF:1198-7140).  
   Note: Represents the clinically 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. SHALL contain exactly one [1..1] value (CONF:1198-7143).

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

* 1. If Observation/value is a physical quantity (xsi:type="PQ"), the unit of measure SHOULD be selected from ValueSet **UnitsOfMeasureCaseSensitive urn:oid:2.16.840.1.113883.1.11.12839 DYNAMIC** (CONF:1198-31484).
  2. A coded or physical quantity value MAY contain zero or more [0..\*] translations, which can be used to represent the original results as output by the lab (CONF:1198-31866).
  3. If Observation/value is a CD (xsi:type="CD") the value SHOULD be SNOMED-CT (CONF:1198-32610).

1. SHOULD contain zero or more [0..\*] interpretationCode, which SHALL be selected from ValueSet [Observation Interpretation (HL7)](#Observation_Interpretation_HL7) urn:oid:2.16.840.1.113883.1.11.78 DYNAMIC (CONF:1198-7147).
2. MAY contain zero or one [0..1] methodCode (CONF:1198-7148).
3. MAY contain zero or one [0..1] targetSiteCode (CONF:1198-7153).
4. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1198-7149).
5. SHOULD contain zero or more [0..\*] referenceRange (CONF:1198-7150).
   1. The referenceRange, if present, SHALL contain exactly one [1..1] observationRange (CONF:1198-7151).
      1. This observationRange SHALL NOT contain [0..0] code (CONF:1198-7152).
      2. This observationRange SHALL contain exactly one [1..1] value (CONF:1198-32175).

Table 459: Observation Interpretation (HL7)

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Observation Interpretation (HL7) urn:oid:2.16.840.1.113883.1.11.78  (Clinical Focus: Codes specifying a rough qualitative interpretation of the observation, such as "normal", "abnormal", "below normal", "change up", "resistant", "susceptible", etc.),(Data Element Scope: ),(Inclusion Criteria: all reportable codes in the code system ObservationInterpretation),(Exclusion Criteria: Collector codes in the code system)  This value set was imported on 4/24/2019 with a version of 20190104.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.78/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| < | ObservationInterpretation | urn:oid:2.16.840.1.113883.5.83 | Off scale low |
| > | ObservationInterpretation | urn:oid:2.16.840.1.113883.5.83 | Off scale high |
| A | ObservationInterpretation | urn:oid:2.16.840.1.113883.5.83 | Abnormal |
| AA | ObservationInterpretation | urn:oid:2.16.840.1.113883.5.83 | Critical abnormal |
| AC | ObservationInterpretation | urn:oid:2.16.840.1.113883.5.83 | Anti-complementary substances present |
| B | ObservationInterpretation | urn:oid:2.16.840.1.113883.5.83 | Better |
| CAR | ObservationInterpretation | urn:oid:2.16.840.1.113883.5.83 | Carrier |
| Carrier | ObservationInterpretation | urn:oid:2.16.840.1.113883.5.83 | Carrier |
| D | ObservationInterpretation | urn:oid:2.16.840.1.113883.5.83 | Significant change down |
| DET | ObservationInterpretation | urn:oid:2.16.840.1.113883.5.83 | Detected |
| ... | | | |

Figure 213: Result Observation (V3) Example

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.2" extension="2015-08-01" />

<id root="7c0704bb-9c40-41b5-9c7d-26b2d59e234f" />

<code code="20570-8" 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="1.1.1.1.1.1.1.4" />

<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>

<text>Low</text>

<value xsi:type="IVL\_PQ">

<low value="34.9" unit="%" />

<high value="44.5" unit="%" />

</value>

<interpretationCode code="L" codeSystem="2.16.840.1.113883.5.83"/>

</observationRange>

</referenceRange>

</observation>

Result Organizer (V3)

[organizer: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.1:2015-08-01 (open)]

Table 460: Result Organizer (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Results Section (entries optional) (V3)](#S_Results_Section_entries_optional_V3) (optional)  [Results Section (entries required) (V3)](#S_Results_Section_entries_required_V3) (required)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional) | [Author Participation](#U_Author_Participation) (optional)  [Result Observation (V3)](#E_Result_Observation_V3) (required) |

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 461: Result Organizer (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| organizer (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.1:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-7121](#C_1198-7121) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) |
| @moodCode | 1..1 | SHALL |  | [1198-7122](#C_1198-7122) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-7126](#C_1198-7126) |  |
| @root | 1..1 | SHALL |  | [1198-9134](#C_1198-9134) | 2.16.840.1.113883.10.20.22.4.1 |
| @extension | 1..1 | SHALL |  | [1198-32588](#C_1198-32588) | 2015-08-01 |
| id | 1..\* | SHALL |  | [1198-7127](#C_1198-7127) |  |
| code | 1..1 | SHALL |  | [1198-7128](#C_1198-7128) |  |
| statusCode | 1..1 | SHALL |  | [1198-7123](#C_1198-7123) |  |
| @code | 1..1 | SHALL |  | [1198-14848](#C_1198-14848) | urn:oid:2.16.840.1.113883.11.20.9.39 (Result Status) |
| effectiveTime | 0..1 | MAY |  | [1198-31865](#C_1198-31865) |  |
| low | 1..1 | SHALL |  | [1198-32488](#C_1198-32488) |  |
| high | 1..1 | SHALL |  | [1198-32489](#C_1198-32489) |  |
| author | 0..\* | SHOULD |  | [1198-31149](#C_1198-31149) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| component | 1..\* | SHALL |  | [1198-7124](#C_1198-7124) |  |
| observation | 1..1 | SHALL |  | [1198-14850](#C_1198-14850) | [Result Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.2:2015-08-01](#E_Result_Observation_V3) |

1. SHALL contain exactly one [1..1] @classCode (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-7121).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-7122).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-7126) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.1" (CONF:1198-9134).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32588).
4. SHALL contain at least one [1..\*] id (CONF:1198-7127).
5. SHALL contain exactly one [1..1] code (CONF:1198-7128).
   1. 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 (codeSystem 2.16.840.1.113883.6.12) (CONF:1198-19218).
   2. 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:1198-19219).
6. SHALL contain exactly one [1..1] statusCode (CONF:1198-7123).
   1. This statusCode SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [Result Status](#Result_Status) urn:oid:2.16.840.1.113883.11.20.9.39 STATIC (CONF:1198-14848).
7. MAY contain zero or one [0..1] effectiveTime (CONF:1198-31865).  
   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.
   1. The effectiveTime, if present, SHALL contain exactly one [1..1] low (CONF:1198-32488).
   2. The effectiveTime, if present, SHALL contain exactly one [1..1] high (CONF:1198-32489).
8. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1198-31149).
9. SHALL contain at least one [1..\*] component (CONF:1198-7124) such that it
   1. SHALL contain exactly one [1..1] [Result Observation (V3)](#E_Result_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.2:2015-08-01) (CONF:1198-14850).

Figure 214: Result Organizer (V3) Example

<organizer classCode="BATTERY" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.1" extension="2015-08-01" />

<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="2015-08-01" />

. . .

</observation>

</component>

</organizer>

Risk Concern Act (V2)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.136:2015-08-01 (open)]

Table 462: Risk Concern Act (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Health Concerns Section (V2)](#S_Health_Concerns_Section_V2) (optional) | [Pregnancy Observation](#E_Pregnancy_Observation) (optional)  [Caregiver Characteristics](#E_Caregiver_Characteristics) (optional)  [Assessment Scale Observation](#E_Assessment_Scale_Observation) (optional)  [Characteristics of Home Environment](#E_Characteristics_of_Home_Environment) (optional)  [Cultural and Religious Observation](#E_Cultural_and_Religious_Observation) (optional)  [Sensory Status](#E_Sensory_Status) (optional)  [Self-Care Activities (ADL and IADL)](#E_SelfCare_Activities_ADL_and_IADL) (optional)  [Reaction Observation (V2)](#Reaction_Observation_V2) (optional)  [Nutritional Status Observation](#E_Nutritional_Status_Observation) (optional)  [Allergy - Intolerance Observation (V2)](#E_Allergy__Intolerance_Observation_V2) (optional)  [Substance or Device Allergy - Intolerance Observation (V2)](#E_Substance_or_Device_Allergy__V2) (optional)  [Nutrition Assessment](#E_Nutrition_Assessment) (optional)  [Functional Status Observation (V2)](#E_Functional_Status_Observation_V2) (optional)  [Smoking Status - Meaningful Use (V2)](#E_Smoking_Status__Meaningful_Use_V2) (optional)  [Vital Sign Observation (V2)](#E_Vital_Sign_Observation_V2) (optional)  [Priority Preference](#E_Priority_Preference) (optional)  [Tobacco Use (V2)](#Tobacco_Use_V2) (optional)  [Author Participation](#U_Author_Participation) (optional)  [Entry Reference](#E_Entry_Reference) (optional)  [External Document Reference](#E_External_Document_Reference) (optional)  [Result Observation (V3)](#E_Result_Observation_V3) (optional)  [Mental Status Observation (V3)](#E_Mental_Status_Observation_V3) (optional)  [Problem Observation (V3)](#E_Problem_Observation_V3) (optional)  [Social History Observation (V3)](#E_Social_History_Observation_V3) (optional)  [Result Organizer (V3)](#E_Result_Organizer_V3) (optional)  [Encounter Diagnosis (V3)](#E_Encounter_Diagnosis_V3) (optional)  [Family History Organizer (V3)](#E_Family_History_Organizer_V3) (optional)  [Hospital Admission Diagnosis (V3)](#E_Hospital_Admission_Diagnosis_V3) (optional)  [Problem Concern Act (V3)](#E_Problem_Concern_Act_V3) (optional)  [Preoperative Diagnosis (V3)](#E_Preoperative_Diagnosis_V3) (optional)  [Postprocedure Diagnosis (V3)](#E_Postprocedure_Diagnosis_V3) (optional)  [Longitudinal Care Wound Observation (V2)](#E_Longitudinal_Care_Wound_Observation_V2) (optional) |

This template represents a risk concern.

It is a wrapper for a single risk concern which may be derived from a variety of sources within an EHR (such as Problem List, Family History, Social History, Social Worker Note, etc.).

A Risk Concern Act represents a health concern that is a risk. A risk is a clinical or socioeconomic condition that the patient does not currently have, but the probability of developing that condition rises to the level of concern such that an intervention and/or monitoring is needed.

Table 463: Risk Concern Act (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.136:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-32220](#C_1198-32220) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1198-32221](#C_1198-32221) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-32180](#C_1198-32180) |  |
| @root | 1..1 | SHALL |  | [1198-32222](#C_1198-32222) | 2.16.840.1.113883.10.20.22.4.136 |
| @extension | 1..1 | SHALL |  | [1198-32910](#C_1198-32910) | 2015-08-01 |
| id | 1..\* | SHALL |  | [1198-32223](#C_1198-32223) |  |
| code | 1..1 | SHALL |  | [1198-32305](#C_1198-32305) |  |
| @code | 1..1 | SHALL |  | [1198-32306](#C_1198-32306) | 281694009 |
| @codeSystem | 1..1 | SHALL |  | [1198-32307](#C_1198-32307) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.6.96 |
| statusCode | 1..1 | SHALL |  | [1198-32225](#C_1198-32225) |  |
| @code | 1..1 | SHALL |  | [1198-32314](#C_1198-32314) | urn:oid:2.16.840.1.113883.11.20.9.19 (ProblemAct statusCode) |
| effectiveTime | 0..1 | MAY |  | [1198-32226](#C_1198-32226) |  |
| author | 0..\* | SHOULD |  | [1198-32300](#C_1198-32300) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| entryRelationship | 0..\* | MAY |  | [1198-32179](#C_1198-32179) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32227](#C_1198-32227) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32219](#C_1198-32219) | [Problem Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01](#E_Problem_Observation_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-32181](#C_1198-32181) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32228](#C_1198-32228) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32229](#C_1198-32229) | [Allergy - Intolerance Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.7:2014-06-09](#E_Allergy__Intolerance_Observation_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-32182](#C_1198-32182) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32230](#C_1198-32230) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-32231](#C_1198-32231) | [Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122](#E_Entry_Reference) |
| entryRelationship | 0..\* | MAY |  | [1198-32183](#C_1198-32183) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32232](#C_1198-32232) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| act | 1..1 | SHALL |  | [1198-32233](#C_1198-32233) | [Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122](#E_Entry_Reference) |
| entryRelationship | 0..\* | MAY |  | [1198-32184](#C_1198-32184) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32234](#C_1198-32234) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32235](#C_1198-32235) | [Assessment Scale Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69](#E_Assessment_Scale_Observation) |
| entryRelationship | 0..\* | MAY |  | [1198-32185](#C_1198-32185) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32236](#C_1198-32236) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32237](#C_1198-32237) | [Mental Status Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.74:2015-08-01](#E_Mental_Status_Observation_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-32186](#C_1198-32186) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32238](#C_1198-32238) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32239](#C_1198-32239) | [Self-Care Activities (ADL and IADL) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.128](#E_SelfCare_Activities_ADL_and_IADL) |
| entryRelationship | 0..\* | MAY |  | [1198-32188](#C_1198-32188) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32242](#C_1198-32242) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32243](#C_1198-32243) | [Mental Status Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.74:2015-08-01](#E_Mental_Status_Observation_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-32189](#C_1198-32189) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32244](#C_1198-32244) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32245](#C_1198-32245) | [Smoking Status - Meaningful Use (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09](#E_Smoking_Status__Meaningful_Use_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-32190](#C_1198-32190) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32246](#C_1198-32246) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-32247](#C_1198-32247) | [Encounter Diagnosis (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.80:2015-08-01](#E_Encounter_Diagnosis_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-32191](#C_1198-32191) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32248](#C_1198-32248) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| organizer | 1..1 | SHALL |  | [1198-32249](#C_1198-32249) | [Family History Organizer (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.45:2015-08-01](#E_Family_History_Organizer_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-32192](#C_1198-32192) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32250](#C_1198-32250) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32251](#C_1198-32251) | [Functional Status Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.67:2014-06-09](#E_Functional_Status_Observation_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-32193](#C_1198-32193) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32252](#C_1198-32252) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-32253](#C_1198-32253) | [Hospital Admission Diagnosis (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.34:2015-08-01](#E_Hospital_Admission_Diagnosis_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-32195](#C_1198-32195) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32256](#C_1198-32256) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32257](#C_1198-32257) | [Nutrition Assessment (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.138](#E_Nutrition_Assessment) |
| entryRelationship | 0..\* | MAY |  | [1198-32197](#C_1198-32197) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32260](#C_1198-32260) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-32261](#C_1198-32261) | [Postprocedure Diagnosis (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.51:2015-08-01](#E_Postprocedure_Diagnosis_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-32198](#C_1198-32198) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32262](#C_1198-32262) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32263](#C_1198-32263) | [Pregnancy Observation (identifier: urn:oid:2.16.840.1.113883.10.20.15.3.8](#E_Pregnancy_Observation) |
| entryRelationship | 0..\* | MAY |  | [1198-32199](#C_1198-32199) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32264](#C_1198-32264) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-32265](#C_1198-32265) | [Preoperative Diagnosis (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.65:2015-08-01](#E_Preoperative_Diagnosis_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-32200](#C_1198-32200) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32266](#C_1198-32266) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32267](#C_1198-32267) | [Reaction Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09](#Reaction_Observation_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-32201](#C_1198-32201) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32268](#C_1198-32268) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32269](#C_1198-32269) | [Result Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.2:2015-08-01](#E_Result_Observation_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-32202](#C_1198-32202) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32270](#C_1198-32270) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32271](#C_1198-32271) | [Sensory Status (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.127](#E_Sensory_Status) |
| entryRelationship | 0..\* | MAY |  | [1198-32203](#C_1198-32203) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32272](#C_1198-32272) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32273](#C_1198-32273) | [Social History Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2015-08-01](#E_Social_History_Observation_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-32204](#C_1198-32204) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32958](#C_1198-32958) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32275](#C_1198-32275) | [Substance or Device Allergy - Intolerance Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.24.3.90:2014-06-09](#E_Substance_or_Device_Allergy__V2) |
| entryRelationship | 0..\* | MAY |  | [1198-32205](#C_1198-32205) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32276](#C_1198-32276) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32277](#C_1198-32277) | [Tobacco Use (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09](#Tobacco_Use_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-32206](#C_1198-32206) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32278](#C_1198-32278) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32279](#C_1198-32279) | [Vital Sign Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.27:2014-06-09](#E_Vital_Sign_Observation_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-32207](#C_1198-32207) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32280](#C_1198-32280) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32281](#C_1198-32281) | [Longitudinal Care Wound Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.114:2015-08-01](#E_Longitudinal_Care_Wound_Observation_V2) |
| entryRelationship | 0..\* | MAY |  | [1198-32208](#C_1198-32208) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32282](#C_1198-32282) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SPRT |
| observation | 1..1 | SHALL |  | [1198-32283](#C_1198-32283) | [Problem Observation (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01](#E_Problem_Observation_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-32209](#C_1198-32209) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32284](#C_1198-32284) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32285](#C_1198-32285) | [Caregiver Characteristics (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.72](#E_Caregiver_Characteristics) |
| entryRelationship | 0..\* | MAY |  | [1198-32210](#C_1198-32210) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32286](#C_1198-32286) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32287](#C_1198-32287) | [Cultural and Religious Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.111](#E_Cultural_and_Religious_Observation) |
| entryRelationship | 0..\* | MAY |  | [1198-32211](#C_1198-32211) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32288](#C_1198-32288) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32289](#C_1198-32289) | [Characteristics of Home Environment (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.109](#E_Characteristics_of_Home_Environment) |
| entryRelationship | 0..\* | MAY |  | [1198-32212](#C_1198-32212) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32290](#C_1198-32290) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32291](#C_1198-32291) | [Nutritional Status Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.124](#E_Nutritional_Status_Observation) |
| entryRelationship | 0..\* | MAY |  | [1198-32213](#C_1198-32213) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32292](#C_1198-32292) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| organizer | 1..1 | SHALL |  | [1198-32293](#C_1198-32293) | [Result Organizer (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.1:2015-08-01](#E_Result_Organizer_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-32214](#C_1198-32214) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32294](#C_1198-32294) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32295](#C_1198-32295) | [Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143](#E_Priority_Preference) |
| entryRelationship | 0..\* | MAY |  | [1198-32215](#C_1198-32215) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32296](#C_1198-32296) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1198-32297](#C_1198-32297) | [Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143](#E_Priority_Preference) |
| entryRelationship | 0..\* | MAY |  | [1198-32216](#C_1198-32216) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32298](#C_1198-32298) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-32299](#C_1198-32299) | [Problem Concern Act (V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.3:2015-08-01](#E_Problem_Concern_Act_V3) |
| entryRelationship | 0..\* | MAY |  | [1198-32217](#C_1198-32217) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32301](#C_1198-32301) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| act | 1..1 | SHALL |  | [1198-32302](#C_1198-32302) | [Entry Reference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122](#E_Entry_Reference) |
| reference | 0..\* | MAY |  | [1198-32769](#C_1198-32769) |  |
| @typeCode | 1..1 | SHALL |  | [1198-32908](#C_1198-32908) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = REFR |
| externalDocument | 1..1 | SHALL |  | [1198-32909](#C_1198-32909) | [External Document Reference (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.115:2014-06-09](#E_External_Document_Reference) |

1. SHALL contain exactly one [1..1] @classCode="ACT" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1198-32220).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1198-32221).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-32180) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.136" (CONF:1198-32222).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32910).
4. SHALL contain at least one [1..\*] id (CONF:1198-32223).
5. SHALL contain exactly one [1..1] code (CONF:1198-32305).
   1. This code SHALL contain exactly one [1..1] @code="281694009" At risk for (CONF:1198-32306).
   2. 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:1198-32307).
6. SHALL contain exactly one [1..1] statusCode (CONF:1198-32225).
   1. This statusCode SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [ProblemAct statusCode](#ProblemAct_statusCode) urn:oid:2.16.840.1.113883.11.20.9.19 STATIC (CONF:1198-32314).
7. MAY contain zero or one [0..1] effectiveTime (CONF:1198-32226).
8. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1198-32300).
9. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32179) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32227).
   2. SHALL contain exactly one [1..1] [Problem Observation (V3)](#E_Problem_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01) (CONF:1198-32219).
10. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32181) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32228).
    2. SHALL contain exactly one [1..1] [Allergy - Intolerance Observation (V2)](#E_Allergy__Intolerance_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.7:2014-06-09) (CONF:1198-32229).

The following entryRelationship represents the relationship between two Health Concern Acts where there is a general relationship between the source and the target (Health Concern RELATES TO Health Concern). The Entry Reference template is used here because the target Health Concern Act will be defined elsewhere in the Health Concerns Section and thus a reference to that template is all that is required.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32182) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32230).
   2. SHALL contain exactly one [1..1] [Entry Reference](#E_Entry_Reference) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:1198-32231).

The following entryRelationship represents the relationship between two Health Concern Acts where the target is a component of the source (Health Concern HAS COMPONENT Health Concern). The Enry Reference template is used here because the target Health Concern Act will be defined elsewhere in the Health Concerns Section and thus a reference to that template is all that is required.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32183) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" Has component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32232).
   2. SHALL contain exactly one [1..1] [Entry Reference](#E_Entry_Reference) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:1198-32233).
2. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32184) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32234).
   2. SHALL contain exactly one [1..1] [Assessment Scale Observation](#E_Assessment_Scale_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69) (CONF:1198-32235).
3. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32185) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32236).
   2. SHALL contain exactly one [1..1] [Mental Status Observation (V3)](#E_Mental_Status_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.74:2015-08-01) (CONF:1198-32237).
4. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32186) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32238).
   2. SHALL contain exactly one [1..1] [Self-Care Activities (ADL and IADL)](#E_SelfCare_Activities_ADL_and_IADL) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.128) (CONF:1198-32239).
5. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32188) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32242).
   2. SHALL contain exactly one [1..1] [Mental Status Observation (V3)](#E_Mental_Status_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.74:2015-08-01) (CONF:1198-32243).
6. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32189) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32244).
   2. SHALL contain exactly one [1..1] [Smoking Status - Meaningful Use (V2)](#E_Smoking_Status__Meaningful_Use_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09) (CONF:1198-32245).
7. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32190) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32246).
   2. SHALL contain exactly one [1..1] [Encounter Diagnosis (V3)](#E_Encounter_Diagnosis_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.80:2015-08-01) (CONF:1198-32247).
8. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32191) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers To (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32248).
   2. SHALL contain exactly one [1..1] [Family History Organizer (V3)](#E_Family_History_Organizer_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.45:2015-08-01) (CONF:1198-32249).
9. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32192) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32250).
   2. SHALL contain exactly one [1..1] [Functional Status Observation (V2)](#E_Functional_Status_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.67:2014-06-09) (CONF:1198-32251).
10. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32193) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32252).
    2. SHALL contain exactly one [1..1] [Hospital Admission Diagnosis (V3)](#E_Hospital_Admission_Diagnosis_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.34:2015-08-01) (CONF:1198-32253).
11. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32195) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32256).
    2. SHALL contain exactly one [1..1] [Nutrition Assessment](#E_Nutrition_Assessment) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.138) (CONF:1198-32257).
12. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32197) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32260).
    2. SHALL contain exactly one [1..1] [Postprocedure Diagnosis (V3)](#E_Postprocedure_Diagnosis_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.51:2015-08-01) (CONF:1198-32261).
13. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32198) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32262).
    2. SHALL contain exactly one [1..1] [Pregnancy Observation](#E_Pregnancy_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.15.3.8) (CONF:1198-32263).
14. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32199) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32264).
    2. SHALL contain exactly one [1..1] [Preoperative Diagnosis (V3)](#E_Preoperative_Diagnosis_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.65:2015-08-01) (CONF:1198-32265).
15. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32200) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32266).
    2. SHALL contain exactly one [1..1] [Reaction Observation (V2)](#Reaction_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09) (CONF:1198-32267).
16. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32201) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32268).
    2. SHALL contain exactly one [1..1] [Result Observation (V3)](#E_Result_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.2:2015-08-01) (CONF:1198-32269).
17. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32202) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32270).
    2. SHALL contain exactly one [1..1] [Sensory Status](#E_Sensory_Status) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.127) (CONF:1198-32271).
18. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32203) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32272).
    2. SHALL contain exactly one [1..1] [Social History Observation (V3)](#E_Social_History_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2015-08-01) (CONF:1198-32273).
19. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32204) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32958).
    2. SHALL contain exactly one [1..1] [Substance or Device Allergy - Intolerance Observation (V2)](#E_Substance_or_Device_Allergy__V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.24.3.90:2014-06-09) (CONF:1198-32275).
20. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32205) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32276).
    2. SHALL contain exactly one [1..1] [Tobacco Use (V2)](#Tobacco_Use_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09) (CONF:1198-32277).
21. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32206) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32278).
    2. SHALL contain exactly one [1..1] [Vital Sign Observation (V2)](#E_Vital_Sign_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.27:2014-06-09) (CONF:1198-32279).
22. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32207) such that it
    1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32280).
    2. SHALL contain exactly one [1..1] [Longitudinal Care Wound Observation (V2)](#E_Longitudinal_Care_Wound_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.114:2015-08-01) (CONF:1198-32281).

The following entryRelationship represents the relationship Health Concern HAS SUPPORT Observation.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32208) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SPRT" Has support (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32282).
   2. SHALL contain exactly one [1..1] [Problem Observation (V3)](#E_Problem_Observation_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01) (CONF:1198-32283).
2. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32209) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32284).
   2. SHALL contain exactly one [1..1] [Caregiver Characteristics](#E_Caregiver_Characteristics) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.72) (CONF:1198-32285).
3. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32210) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32286).
   2. SHALL contain exactly one [1..1] [Cultural and Religious Observation](#E_Cultural_and_Religious_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.111) (CONF:1198-32287).
4. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32211) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32288).
   2. SHALL contain exactly one [1..1] [Characteristics of Home Environment](#E_Characteristics_of_Home_Environment) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.109) (CONF:1198-32289).
5. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32212) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32290).
   2. SHALL contain exactly one [1..1] [Nutritional Status Observation](#E_Nutritional_Status_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.124) (CONF:1198-32291).
6. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32213) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32292).
   2. SHALL contain exactly one [1..1] [Result Organizer (V3)](#E_Result_Organizer_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.1:2015-08-01) (CONF:1198-32293).

The following entryRelationship represents the priority that the patient puts on the health concern.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32214) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32294).
   2. SHALL contain exactly one [1..1] [Priority Preference](#E_Priority_Preference) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:1198-32295).

The following entryRelationship represents the priority that the provider puts on the health concern.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32215) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32296).
   2. SHALL contain exactly one [1..1] [Priority Preference](#E_Priority_Preference) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:1198-32297).
2. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32216) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32298).
   2. SHALL contain exactly one [1..1] [Problem Concern Act (V3)](#E_Problem_Concern_Act_V3) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.3:2015-08-01) (CONF:1198-32299).

Where a Health Concern needs to reference another entry already described in the CDA document instance, rather than repeating the full content of the entry, the Entry Reference template may be used to reference this entry.

1. MAY contain zero or more [0..\*] entryRelationship (CONF:1198-32217) such that it
   1. SHALL contain exactly one [1..1] @typeCode="REFR" Refers to (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1198-32301).
   2. SHALL contain exactly one [1..1] [Entry Reference](#E_Entry_Reference) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122) (CONF:1198-32302).
2. MAY contain zero or more [0..\*] reference (CONF:1198-32769).
   1. 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:1198-32908).
   2. The reference, if present, SHALL contain exactly one [1..1] [External Document Reference](#E_External_Document_Reference) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.115:2014-06-09) (CONF:1198-32909).

Figure 215: Risk Concern Act Example

<!-- Risk Concern Act -->

<act classCode="ACT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.136" extension="2015-08-01"/>

<id root="cbcbf20a-d011-449f-87d1-a23cc3e5f7cf" />

<code code="X-RISK-CONCERN-ACT" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="At risk for" />

<!-- This Health Risk has a statusCode of active because it is an active risk -->

<statusCode code="active" />

<!-- The effective time is the date that the Health Risk started being followed -

this does not necessarily correlate to the onset date of the contained health issues-->

<effectiveTime value="20130616" />

<!-- Health Risk: Malignant neoplastic disease -->

<entryRelationship typeCode="REFR">

<!-- Problem Observation -->

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2015-08-01" />

<id root="8dfacd73-1682-4cc4-9351-e54ccea83612" />

<code code="80943009" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Risk factor" />

<statusCode code="completed" />

<effectiveTime>

<low value="20130613" />

</effectiveTime>

<value xsi:type="CD" code="409623005" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Malignant neoplastic disease" />

</observation>

</entryRelationship>

...

<!-- This entryRelationship represents the relationship

"Health Risk REFERS TO Health Concern"

-->

<entryRelationship typeCode="REFR">

<!-- Entry Reference Concern Act -->

<act classCode="ACT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.122" />

<!-- This id points to an already defined Health Concern -->

<id root="4eab0e52-dd7d-4285-99eb-72d32ddb195c" />

<code nullFlavor="NP" />

<statusCode code="completed" />

</act>

</entryRelationship>

</act>

Self-Care Activities (ADL and IADL)

[observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.128 (open)]

Table 464: Self-Care Activities (ADL and IADL) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Functional Status Section (V2)](#S_Functional_Status_Section_V2) (optional)  [Functional Status Organizer (V2)](#E_Functional_Status_Organizer_V2) (required)  [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional) | [Author Participation](#U_Author_Participation) (optional) |

This template represents a patient's daily self-care ability. These activities are called Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL). ADLs involve caring for and moving of the body (e.g., dressing, bathing, eating). IADLs support an independent life style (e.g., cooking, managing medications, driving, shopping).

Table 465: Self-Care Activities (ADL and IADL) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.128) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-31389](#C_1098-31389) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-31390](#C_1098-31390) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-28190](#C_1098-28190) |  |
| @root | 1..1 | SHALL |  | [1098-28457](#C_1098-28457) | 2.16.840.1.113883.10.20.22.4.128 |
| code | 1..1 | SHALL |  | [1098-28153](#C_1098-28153) | urn:oid:2.16.840.1.113883.11.20.9.47 (ADL Result Type) |
| statusCode | 1..1 | SHALL |  | [1098-32490](#C_1098-32490) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) |
| @code | 1..1 | SHALL |  | [1098-32491](#C_1098-32491) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1098-32492](#C_1098-32492) |  |
| value | 1..1 | SHALL | CD | [1098-28042](#C_1098-28042) | urn:oid:2.16.840.1.113883.11.20.9.46 (Ability) |
| author | 0..\* | SHOULD |  | [1098-32469](#C_1098-32469) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |

1. SHALL contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1098-31389).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1098-31390).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-28190) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.128" (CONF:1098-28457).

If more detailed ADL and IADL activities need to be recorded select the appropriate code from LOINC.

1. SHALL contain exactly one [1..1] code, which SHOULD be selected from ValueSet [ADL Result Type](#ADL_Result_Type) urn:oid:2.16.840.1.113883.11.20.9.47 DYNAMIC (CONF:1098-28153).
2. SHALL contain exactly one [1..1] statusCode (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-32490).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-32491).
3. SHALL contain exactly one [1..1] effectiveTime (CONF:1098-32492).
4. SHALL contain exactly one [1..1] value with @xsi:type="CD", where the code SHOULD be selected from ValueSet [Ability](#Ability) urn:oid:2.16.840.1.113883.11.20.9.46 DYNAMIC (CONF:1098-28042).
5. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-32469).

Table 466: Ability

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Ability urn:oid:2.16.840.1.113883.11.20.9.46  (Clinical Focus: A value set containing SNOMED-CT codes for level of dependence.),(Data Element Scope: qualifier that describes current level of function for a functional ability),(Inclusion Criteria: Descendants of SCT Interpretation value (qualifier value) [442499005]),(Exclusion Criteria: 1) Direct Children  2) Descendants-and-self: Reference range interpretation value (qualifier value) [ 442705008])  This value set was imported on 6/24/2019 with a version of 20190423.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.46/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 1091000175109 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Requires practice (qualifier value) |
| 371150009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Able (qualifier value) |
| 371151008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Unable (qualifier value) |
| 371152001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Assisted (qualifier value) |
| 371153006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Independent (qualifier value) |
| 371154000 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Dependent (qualifier value) |
| 371155004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Able to and does (qualifier value) |
| 371157007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Able with difficulty (qualifier value) |
| 385640009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Does (qualifier value) |
| 444661000124105 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Does without difficulty (qualifier value) |
| ... | | | |

Table 467: ADL Result Type

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: ADL Result Type urn:oid:2.16.840.1.113883.11.20.9.47  (Clinical Focus: This value set includes Basic ADL and IADL activities.),(Data Element Scope: @Code in Self-Care Activities (ADL and IADL) observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.128 (open)),(Inclusion Criteria: Selected LOINC codes),(Exclusion Criteria: only those selected)  This value set was imported on 6/24/2019 with a version of 20190114.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.47/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 28408-3 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Toileting [QAM] |
| 28409-1 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Dressing [QAM] |
| 28413-3 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Ambulation [QAM] |
| 46008-9 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Bathing [CMS Assessment] |
| 46482-6 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Transferring [OASIS] |
| 46484-2 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Feeding or eating [OASIS] |

Figure 216: Self-Care Activities (ADL and IADL) Example

<observation classCode="OBS" moodCode="EVN">

<!-- Self Care Activities (NEW)-->

<templateId root="2.16.840.1.113883.10.20.22.4.128" />

<id root="c6b5a04b-2bf4-49d1-8336-636a3813df0a" />

<code code="46482-6" displayName="Transferring" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />

<statusCode code="completed" />

<effectiveTime value="200130311" />

<value xsi:type="CD" code="371153006" displayName="Independent" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" />

<author>

...

</author>

</observation>

Sensory Status

[observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.127 (open)]

Table 468: Sensory Status Contexts

| Contained By: | Contains: |
| --- | --- |
| [Functional Status Section (V2)](#S_Functional_Status_Section_V2) (optional)  [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional) | [Assessment Scale Observation](#E_Assessment_Scale_Observation) (optional)  [Author Participation](#U_Author_Participation) (optional) |

This template represents a patient’s sensory or speech ability. It may contain an assessment scale observations related to the sensory or speech ability.

Table 469: Sensory Status Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.127) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-31017](#C_1098-31017) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-31018](#C_1098-31018) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-27959](#C_1098-27959) |  |
| @root | 1..1 | SHALL |  | [1098-27960](#C_1098-27960) | 2.16.840.1.113883.10.20.22.4.127 |
| code | 1..1 | SHALL |  | [1098-27962](#C_1098-27962) | urn:oid:2.16.840.1.113883.11.20.9.50 (Sensory Status Problem Type) |
| statusCode | 1..1 | SHALL |  | [1098-31437](#C_1098-31437) |  |
| @code | 1..1 | SHALL |  | [1098-31438](#C_1098-31438) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1098-31441](#C_1098-31441) |  |
| low | 1..1 | SHALL |  | [1098-32630](#C_1098-32630) |  |
| high | 0..1 | MAY |  | [1098-32631](#C_1098-32631) |  |
| value | 1..1 | SHALL | CD | [1098-27974](#C_1098-27974) | urn:oid:2.16.840.1.113883.11.20.9.44 (Mental and Functional Status Response) |
| author | 0..\* | SHOULD |  | [1098-31439](#C_1098-31439) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| entryRelationship | 0..\* | MAY |  | [1098-27984](#C_1098-27984) |  |
| @typeCode | 1..1 | SHALL |  | [1098-27985](#C_1098-27985) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| observation | 1..1 | SHALL |  | [1098-27986](#C_1098-27986) | [Assessment Scale Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69](#E_Assessment_Scale_Observation) |

1. SHALL contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1098-31017).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1098-31018).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-27959) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.127" (CONF:1098-27960).
4. SHALL contain exactly one [1..1] code, which SHOULD be selected from ValueSet [Sensory Status Problem Type](#Sensory_Status_Problem_Type) urn:oid:2.16.840.1.113883.11.20.9.50 DYNAMIC (CONF:1098-27962).
5. SHALL contain exactly one [1..1] statusCode (CONF:1098-31437).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-31438).
6. SHALL contain exactly one [1..1] effectiveTime (CONF:1098-31441).

The effectiveTime/low (a.k.a. "onset date") asserts when the condition became biologically active.

* 1. This effectiveTime SHALL contain exactly one [1..1] low (CONF:1098-32630).

The effectiveTime/high (a.k.a. "resolution date") asserts when the condition became biologically resolved.

* 1. This effectiveTime MAY contain zero or one [0..1] high (CONF:1098-32631).

1. SHALL contain exactly one [1..1] value with @xsi:type="CD", where the code SHOULD be selected from ValueSet [Mental and Functional Status Response](#Mental_and_Functional_Status_Response) urn:oid:2.16.840.1.113883.11.20.9.44 DYNAMIC (CONF:1098-27974).
2. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31439).
3. MAY contain zero or more [0..\*] entryRelationship (CONF:1098-27984) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" has component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1098-27985).
   2. SHALL contain exactly one [1..1] [Assessment Scale Observation](#E_Assessment_Scale_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.69) (CONF:1098-27986).

Table 470: Sensory Status Problem Type

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Sensory Status Problem Type urn:oid:2.16.840.1.113883.11.20.9.50  (Clinical Focus: A value set of SNOMED-CT observable codes representing observations of sensory functions.),(Data Element Scope: observable),(Inclusion Criteria: Concepts representing the function that can be observed representing sensory functions.),(Exclusion Criteria: only codes selected based on inclusion criteria)  This value set was imported on 6/29/2019 with a version of 20190319.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.50/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 10625003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Adaptation to odor, function (observable entity) |
| 128542002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Speech hearing function (observable entity) |
| 13191003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Transformer action, function (observable entity) |
| 16476001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Bone conduction, function (observable entity) |
| 22382001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Stereognosis, function (observable entity) |
| 247297002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Localization of sound source (observable entity) |
| 247310003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Lateralization of sound (observable entity) |
| 247311004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Light touch, function (observable entity) |
| 247312006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Firm touch, function (observable entity) |
| 247313001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Firm pressure touch, function (observable entity) |
| ... | | | |

Table 471: Mental and Functional Status Response

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Mental and Functional Status Response urn:oid:2.16.840.1.113883.11.20.9.44  (Clinical Focus: SNOMED-CT qualifier codes that are common responses to mental and functional ability queries.),(Data Element Scope: Value code in Sensory Status template [observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.127 (open)] for @Code in Sensory Status Problem Type),(Inclusion Criteria: Limited to specific concepts identified),(Exclusion Criteria: unclear)  This value set was imported on 6/25/2019 with a version of 20190319.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.44/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 11163003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Intact (qualifier value) |
| 1250004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Decreased (qualifier value) |
| 18043004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Thin (qualifier value) |
| 18307000 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Altered (qualifier value) |
| 20572008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Good (qualifier value) |
| 260379002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Impaired (qualifier value) |
| 272520006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Degree findings (qualifier value) |
| 30714006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Resistant (qualifier value) |
| 35105006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Increased (qualifier value) |
| 41277001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Lacking (qualifier value) |

Figure 217: Sensory and Speech Status Example

<entry>

<observation classCode="OBS" moodCode="EVN">

<!-- Sensory and Speech Status(NEW)-->

<templateId root="2.16.840.1.113883.10.20.22.4.127" />

<id root="c6b5a04b-2bf4-49d1-8336-636a3813df0a" />

<code code="47078008" displayName="Hearing" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT" />

<statusCode code="completed" />

<effectiveTime value="200130311" />

<value xsi:type="CD" code="260379002" displayName="Impaired" codeSystemName="SNOMED CT" />

<entryRelationship typeCode="COMP">

<observation classCode="OBS" moodCode="EVN">

<!--Assessment Scale Observation -->

<templateId root="2.16.840.1.113883.10.20.22.4.69" />

<id root="c6b5a04b-2bf4-49d1-8336-636a3813df0b" />

...

</observation>

</entryRelationship>

</observation>

</entry>

Series Act

[act: identifier urn:oid:2.16.840.1.113883.10.20.22.4.63 (open)]

Table 472: Series Act Contexts

| Contained By: | Contains: |
| --- | --- |
| [Study Act](#E_Study_Act) (required) | [SOP Instance Observation](#E_SOP_Instance_Observation) (required) |

A Series Act contains the DICOM series information for referenced DICOM composite objects. The series information defines the attributes that are used to group composite instances into distinct logical sets. Each series is associated with exactly one study. Series Act clinical statements are only instantiated in the DICOM Object Catalog section inside a Study Act, and thus do not require a separate templateId; in other sections, the SOP Instance Observation is included directly.

Table 473: Series Act Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.63) | | | | | |
| @classCode | 1..1 | SHALL |  | [81-9222](#C_81-9222) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [81-9223](#C_81-9223) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [81-10918](#C_81-10918) |  |
| @root | 1..1 | SHALL |  | [81-10919](#C_81-10919) | 2.16.840.1.113883.10.20.22.4.63 |
| id | 1..\* | SHALL |  | [81-9224](#C_81-9224) |  |
| @root | 1..1 | SHALL |  | [81-9225](#C_81-9225) |  |
| @extension | 0..0 | SHALL NOT |  | [81-9226](#C_81-9226) |  |
| code | 1..1 | SHALL |  | [81-19166](#C_81-19166) |  |
| @code | 1..1 | SHALL |  | [81-19167](#C_81-19167) | 113015 |
| @codeSystem | 0..1 | MAY |  | [81-26461](#C_81-26461) | urn:oid:1.2.840.10008.2.16.4 (DCM) = 1.2.840.10008.2.16.4 |
| qualifier | 1..1 | SHALL |  | [81-26462](#C_81-26462) |  |
| name | 1..1 | SHALL |  | [81-26463](#C_81-26463) |  |
| @code | 1..1 | SHALL |  | [81-26464](#C_81-26464) | 121139 |
| @codeSystem | 1..1 | SHALL |  | [81-26465](#C_81-26465) | urn:oid:1.2.840.10008.2.16.4 (DCM) = 1.2.840.10008.2.16.4 |
| value | 1..1 | SHALL |  | [81-26466](#C_81-26466) |  |
| text | 0..1 | MAY |  | [81-9233](#C_81-9233) |  |
| effectiveTime | 0..1 | SHOULD |  | [81-9235](#C_81-9235) |  |
| entryRelationship | 1..\* | SHALL |  | [81-9237](#C_81-9237) |  |
| @typeCode | 1..1 | SHALL |  | [81-9238](#C_81-9238) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| observation | 1..1 | SHALL |  | [81-15927](#C_81-15927) | [SOP Instance Observation (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.8](#E_SOP_Instance_Observation) |

1. SHALL contain exactly one [1..1] @classCode="ACT" Act (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:81-9222).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:81-9223).
3. SHALL contain exactly one [1..1] templateId (CONF:81-10918) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.63" (CONF:81-10919).
4. SHALL contain at least one [1..\*] id (CONF:81-9224).

The @root contains the OID of the study instance UID since DICOM study ids consist only of an OID

* 1. Such ids SHALL contain exactly one [1..1] @root (CONF:81-9225).
  2. Such ids SHALL NOT contain [0..0] @extension (CONF:81-9226).

1. SHALL contain exactly one [1..1] code (CONF:81-19166).
   1. This code SHALL contain exactly one [1..1] @code="113015" (CONF:81-19167).
   2. This code MAY contain zero or one [0..1] @codeSystem="1.2.840.10008.2.16.4" (CodeSystem: DCM urn:oid:1.2.840.10008.2.16.4) (CONF:81-26461).
   3. This code SHALL contain exactly one [1..1] qualifier (CONF:81-26462).
      1. This qualifier SHALL contain exactly one [1..1] name (CONF:81-26463).
         1. This name SHALL contain exactly one [1..1] @code="121139" Modality (CONF:81-26464).
         2. This name SHALL contain exactly one [1..1] @codeSystem="1.2.840.10008.2.16.4" (CodeSystem: DCM urn:oid:1.2.840.10008.2.16.4) (CONF:81-26465).
      2. This qualifier SHALL contain exactly one [1..1] value (CONF:81-26466).

If present, the text element contains the description of the series

1. MAY contain zero or one [0..1] text (CONF:81-9233).

If present, the effectiveTime contains the time the series was started

1. SHOULD contain zero or one [0..1] effectiveTime (CONF:81-9235).
2. SHALL contain at least one [1..\*] entryRelationship (CONF:81-9237) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:81-9238).
   2. SHALL contain exactly one [1..1] [SOP Instance Observation](#E_SOP_Instance_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.8) (CONF:81-15927).

Figure 218: Series Act Example

<act classCode="ACT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.63"/>

<id root="1.2.840.113619.2.62.994044785528.20060823223142485051"/>

<code code="113015" codeSystem="1.2.840.10008.2.16.4"

codeSystemName="DCM" displayName="Series">

<qualifier>

<name code="121139" codeSystem="1.2.840.10008.2.16.4"

codeSystemName="DCM" displayName="Modality"/>

<value code="CR" codeSystem="1.2.840.10008.2.16.4" codeSystemName="DCM"

displayName="Computed Radiography"/>

</qualifier>

</code>

<!-- \*\*\*\* SOP Instance UID \*\*\* -->

<entryRelationship typeCode="COMP">

<observation classCode="DGIMG" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.6.2.8"/>

...

</observation>

</entryRelationship>

</act>

Service Delivery Location

[participantRole: identifier urn:oid:2.16.840.1.113883.10.20.22.4.32 (open)]

Table 474: Service Delivery Location Contexts

| Contained By: | Contains: |
| --- | --- |
| [Procedure Activity Act (V2)](#E_Procedure_Activity_Act_V2) (optional)  [Procedure Activity Procedure (V2)](#E_Procedure_Activity_Procedure_V2) (optional)  [Procedure Activity Observation (V2)](#E_Procedure_Activity_Observation_V2) (optional)  [Planned Encounter (V2)](#E_Planned_Encounter_V2) (optional)  [Encounter Activity (V3)](#E_Encounter_Activity_V3) (optional) |  |

This clinical statement represents the location of a service event where an act, observation or procedure took place.

Table 475: 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 |  | [81-7758](#C_81-7758) | urn:oid:2.16.840.1.113883.5.111 (HL7RoleCode) = SDLOC |
| templateId | 1..1 | SHALL |  | [81-7635](#C_81-7635) |  |
| @root | 1..1 | SHALL |  | [81-10524](#C_81-10524) | 2.16.840.1.113883.10.20.22.4.32 |
| code | 1..1 | SHALL |  | [81-16850](#C_81-16850) | urn:oid:2.16.840.1.113883.1.11.20275 (HealthcareServiceLocation) |
| addr | 0..\* | SHOULD |  | [81-7760](#C_81-7760) |  |
| telecom | 0..\* | SHOULD |  | [81-7761](#C_81-7761) |  |
| playingEntity | 0..1 | MAY |  | [81-7762](#C_81-7762) |  |
| @classCode | 1..1 | SHALL |  | [81-7763](#C_81-7763) | urn:oid:2.16.840.1.113883.5.41 (HL7EntityClass) = PLC |
| name | 0..1 | MAY |  | [81-16037](#C_81-16037) |  |

1. SHALL contain exactly one [1..1] @classCode="SDLOC" (CodeSystem: HL7RoleCode 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
   1. 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](#HealthcareServiceLocation) urn:oid:2.16.840.1.113883.1.11.20275 DYNAMIC (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).
   1. The playingEntity, if present, SHALL contain exactly one [1..1] @classCode="PLC" (CodeSystem: HL7EntityClass urn:oid:2.16.840.1.113883.5.41 STATIC) (CONF:81-7763).
   2. The playingEntity, if present, MAY contain zero or one [0..1] name (CONF:81-16037).

Table 476: HealthcareServiceLocation

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: HealthcareServiceLocation urn:oid:2.16.840.1.113883.1.11.20275  (Clinical Focus: Concepts representing locations and settings where healthcare services are provided. This includes non- (or atypical) patient care locations where emergency services may be provided. The values are derived from the NHSN Healthcare Facility Patient Care Location code system.),(Data Element Scope: Location),(Inclusion Criteria: All codes in code system),(Exclusion Criteria: Codes that do not represent an actual location where health care services can be delivered, IE: Float, or a location aggregation.)  This value set was imported on 6/24/2019 with a version of 20190424.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.20275/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 1005-8 | HSLOC | urn:oid:2.16.840.1.113883.6.259 | Cardiac Catheterization Room/Suite |
| 1007-4 | HSLOC | urn:oid:2.16.840.1.113883.6.259 | Endoscopy Suite |
| 1008-2 | HSLOC | urn:oid:2.16.840.1.113883.6.259 | Radiology |
| 1009-0 | HSLOC | urn:oid:2.16.840.1.113883.6.259 | Pulmonary Function Testing |
| 1010-8 | HSLOC | urn:oid:2.16.840.1.113883.6.259 | General Laboratory |
| 1011-6 | HSLOC | urn:oid:2.16.840.1.113883.6.259 | Clinical Chemistry Laboratory |
| 1012-4 | HSLOC | urn:oid:2.16.840.1.113883.6.259 | Hematology Laboratory |
| 1013-2 | HSLOC | urn:oid:2.16.840.1.113883.6.259 | Histology-Surgical Pathology Laboratory |
| 1014-0 | HSLOC | urn:oid:2.16.840.1.113883.6.259 | Microbiology Laboratory |
| 1015-7 | HSLOC | urn:oid:2.16.840.1.113883.6.259 | Serology Laboratory |
| ... | | | |

Figure 219: 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>

Severity Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.8:2014-06-09 (open)]

Table 477: Severity Observation (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Reaction Observation (V2)](#Reaction_Observation_V2) (optional)  [Allergy - Intolerance Observation (V2)](#E_Allergy__Intolerance_Observation_V2) (optional)  [Substance or Device Allergy - Intolerance Observation (V2)](#E_Substance_or_Device_Allergy__V2) (optional) |  |

This clinical statement represents the gravity of the reaction. The Severity Observation characterizes the Reaction Observation. 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.

Note the severity observation is no longer recommended for use with the Allergy and Intolerance Observation. The Criticality Observation is preferred for characterizing the Allergy and Intolerance.

Table 478: 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 |  | [1098-7345](#C_1098-7345) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-7346](#C_1098-7346) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-7347](#C_1098-7347) |  |
| @root | 1..1 | SHALL |  | [1098-10525](#C_1098-10525) | 2.16.840.1.113883.10.20.22.4.8 |
| @extension | 1..1 | SHALL |  | [1098-32577](#C_1098-32577) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-19168](#C_1098-19168) |  |
| @code | 1..1 | SHALL |  | [1098-19169](#C_1098-19169) | SEV |
| @codeSystem | 1..1 | SHALL |  | [1098-32170](#C_1098-32170) | urn:oid:2.16.840.1.113883.5.4 (HL7ActCode) = 2.16.840.1.113883.5.4 |
| statusCode | 1..1 | SHALL |  | [1098-7352](#C_1098-7352) |  |
| @code | 1..1 | SHALL |  | [1098-19115](#C_1098-19115) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| value | 1..1 | SHALL | CD | [1098-7356](#C_1098-7356) | urn:oid:2.16.840.1.113883.3.88.12.3221.6.8 (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: HL7ActMood 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
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.8" (CONF:1098-10525).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32577).
4. SHALL contain exactly one [1..1] code (CONF:1098-19168).
   1. This code SHALL contain exactly one [1..1] @code="SEV" Severity (CONF:1098-19169).
   2. This code SHALL contain exactly one [1..1] @codeSystem="2.16.840.1.113883.5.4" (CodeSystem: HL7ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:1098-32170).
5. SHALL contain exactly one [1..1] statusCode (CONF:1098-7352).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus 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 [Severity](#Severity) urn:oid:2.16.840.1.113883.3.88.12.3221.6.8 DYNAMIC (CONF:1098-7356).

Table 479: Severity

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Severity urn:oid:2.16.840.1.113883.3.88.12.3221.6.8  (Clinical Focus: This is a description of the level of seriousness.),(Data Element Scope: ),(Inclusion Criteria: Three severities (map fatal to severe, moderate to severe to severe, mild to moderate to moderate)),(Exclusion Criteria: )  This value set was imported on 10/20/2021 with a version of Latest.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.3221.6.8/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 24484000 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Severe (severity modifier) (qualifier value) |
| 255604002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Mild (qualifier value) |
| 6736007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Moderate (severity modifier) (qualifier value) |

Figure 220: 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>

Smoking Status - Meaningful Use (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09 (open)]

Table 480: Smoking Status - Meaningful Use (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional)  [Social History Section (V3)](#S_Social_History_Section_V3) (optional) | [Author Participation](#U_Author_Participation) (optional) |

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.

When 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 481: Smoking Status - Meaningful Use (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-14806](#C_1098-14806) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-14807](#C_1098-14807) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-14815](#C_1098-14815) |  |
| @root | 1..1 | SHALL |  | [1098-14816](#C_1098-14816) | 2.16.840.1.113883.10.20.22.4.78 |
| @extension | 1..1 | SHALL |  | [1098-32573](#C_1098-32573) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-32401](#C_1098-32401) |  |
| code | 1..1 | SHALL |  | [1098-19170](#C_1098-19170) |  |
| @code | 1..1 | SHALL |  | [1098-31039](#C_1098-31039) | 72166-2 |
| @codeSystem | 1..1 | SHALL |  | [1098-32157](#C_1098-32157) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1098-14809](#C_1098-14809) |  |
| @code | 1..1 | SHALL |  | [1098-19116](#C_1098-19116) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1098-31928](#C_1098-31928) |  |
| low | 0..0 | SHALL NOT |  | [1098-32894](#C_1098-32894) |  |
| width | 0..0 | SHALL NOT |  | [1098-32895](#C_1098-32895) |  |
| high | 0..0 | SHALL NOT |  | [1098-32896](#C_1098-32896) |  |
| center | 0..0 | SHALL NOT |  | [1098-32897](#C_1098-32897) |  |
| value | 1..1 | SHALL | CD | [1098-14810](#C_1098-14810) |  |
| @nullFlavor | 0..0 | SHALL NOT |  | [1098-32954](#C_1098-32954) |  |
| @code | 1..1 | SHALL |  | [1098-14817](#C_1098-14817) | urn:oid:2.16.840.1.113883.11.20.9.38 (Smoking Status) |
| author | 0..\* | SHOULD |  | [1098-31148](#C_1098-31148) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |

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: HL7ActMood 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
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.78" (CONF:1098-14816).
   2. 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).
   1. This code SHALL contain exactly one [1..1] @code="72166-2" Tobacco smoking status NHIS (CONF:1098-31039).
   2. 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).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus 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.
   1. This effectiveTime SHALL NOT contain [0..0] low (CONF:1098-32894).
   2. This effectiveTime SHALL NOT contain [0..0] width (CONF:1098-32895).
   3. This effectiveTime SHALL NOT contain [0..0] high (CONF:1098-32896).
   4. 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).
   1. This value SHALL NOT contain [0..0] @nullFlavor (CONF:1098-32954).
   2. This value SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [Smoking Status](#Smoking_Status) urn:oid:2.16.840.1.113883.11.20.9.38 DYNAMIC (CONF:1098-14817).  
      Note: When a patient's current smoking status is unknown, use '266927001' (Unknown if ever smoked) which is included in ValueSet Current Smoking Status (2.16.840.1.113883.11.20.9.38).
9. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31148).

Table 482: Smoking Status

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Smoking Status urn:oid:2.16.840.1.113883.11.20.9.38  (Clinical Focus: Classification of a patient's smoking behavior),(Data Element Scope: This value set is consistent with the Smoking Status codes used by ONC for Meaningful Use),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 6/29/2019 with a version of 20190319.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.38/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 266919005 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Never smoked tobacco (finding) |
| 266927001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Tobacco smoking consumption unknown (finding) |
| 428041000124106 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Occasional tobacco smoker (finding) |
| 428061000124105 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Light tobacco smoker (finding) |
| 428071000124103 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Heavy tobacco smoker (finding) |
| 449868002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Smokes tobacco daily (finding) |
| 77176002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Smoker (finding) |
| 8517006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Ex-smoker (finding) |

Figure 221: 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="1.1.1.1.1.1.1.2" />

</assignedAuthor>

</author>

</observation>

Social History Observation (V3)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2015-08-01 (open)]

Table 483: Social History Observation (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional)  [Social History Section (V3)](#S_Social_History_Section_V3) (optional) | [Author Participation](#U_Author_Participation) (optional) |

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 484: Social History Observation (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-8548](#C_1198-8548) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1198-8549](#C_1198-8549) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-8550](#C_1198-8550) |  |
| @root | 1..1 | SHALL |  | [1198-10526](#C_1198-10526) | 2.16.840.1.113883.10.20.22.4.38 |
| @extension | 1..1 | SHALL |  | [1198-32495](#C_1198-32495) | 2015-08-01 |
| id | 1..\* | SHALL |  | [1198-8551](#C_1198-8551) |  |
| code | 1..1 | SHALL |  | [1198-8558](#C_1198-8558) | urn:oid:2.16.840.1.113883.3.88.12.80.60 (Social History Type) |
| statusCode | 1..1 | SHALL |  | [1198-8553](#C_1198-8553) |  |
| @code | 1..1 | SHALL |  | [1198-19117](#C_1198-19117) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1198-31868](#C_1198-31868) |  |
| value | 0..1 | SHOULD |  | [1198-8559](#C_1198-8559) |  |
| author | 0..\* | SHOULD |  | [1198-31869](#C_1198-31869) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |

1. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-8548).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-8549).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-8550) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.38" (CONF:1198-10526).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32495).
4. SHALL contain at least one [1..\*] id (CONF:1198-8551).
5. SHALL contain exactly one [1..1] code, which SHOULD be selected from ValueSet [Social History Type](#Social_History_Type) urn:oid:2.16.840.1.113883.3.88.12.80.60 DYNAMIC (CONF:1198-8558).
   1. If @codeSystem is not LOINC, then this code SHALL contain at least one [1..\*] translation, which SHOULD be selected from CodeSystem LOINC (urn:oid:2.16.840.1.113883.6.1) (CONF:1198-32951).
6. SHALL contain exactly one [1..1] statusCode (CONF:1198-8553).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1198-19117).
7. SHALL contain exactly one [1..1] effectiveTime (CONF:1198-31868).
8. SHOULD contain zero or one [0..1] value (CONF:1198-8559).

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

* 1. If Observation/value is a physical quantity (xsi:type="PQ"), the unit of measure SHOULD be selected from ValueSet **UnitsOfMeasureCaseSensitive urn:oid:2.16.840.1.113883.1.11.12839 DYNAMIC** (CONF:1198-8555).

1. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1198-31869).

Table 485: Social History Type

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Social History Type urn:oid:2.16.840.1.113883.3.88.12.80.60  (Clinical Focus: Classification of questions bearing on a patient's behavior, achievement, and exogenous health factors),(Data Element Scope: ),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 6/9/2021 with a version of Latest.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.80.60/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 102487004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Environmental risk factor (observable entity) |
| 105421008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Educational achievement (observable entity) |
| 228272008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Health-related behavior (observable entity) |
| 229819007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Tobacco use and exposure (observable entity) |
| 256235009 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Exercise (observable entity) |
| 302160007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Household, family and support network detail (observable entity) |
| 363908000 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Details of drug misuse behavior (observable entity) |
| 364393001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Nutritional observable (observable entity) |
| 364703007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Employment detail (observable entity) |
| 423514004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Community resource details (observable entity) |
| ... | | | |

Figure 222: Social History Observation (V3) Example

<observation classCode="OBS" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.22.4.38"

extension="2015-08-01" />

<id root="37f76c51-6411-4e1d-8a37-957fd49d2cef" />

<code code="160573003" displayName="Alcohol intake"

codeSystem="2.16.840.1.113883.6.96"

codeSystemName="SNOMED CT" >

<translation code="74013-4"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"

displayName="Alcoholic drinks per day"/>

</code>

<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>

SOP Instance Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.6.2.8 (open)]

Table 486: SOP Instance Observation Contexts

| Contained By: | Contains: |
| --- | --- |
| [Series Act](#E_Series_Act) (required)  [Text Observation](#E_Text_Observation) (optional)  [Code Observations](#E_Code_Observations) (optional)  [Quantity Measurement Observation](#E_Quantity_Measurement_Observation) (optional)  [Diagnostic Imaging Report (V3)](#D_Diagnostic_Imaging_Report_V3) (optional) | [Purpose of Reference Observation](#E_Purpose_of_Reference_Observation) (optional)  [Referenced Frames Observation](#E_Referenced_Frames_Observation) (optional) |

A SOP Instance Observation contains the DICOM Service Object Pair (SOP) Instance information for referenced DICOM composite objects. The SOP Instance act class is used to reference both image and non-image DICOM instances. The text attribute contains the DICOM WADO reference.

Table 487: SOP Instance Observation Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.8) | | | | | |
| @classCode | 1..1 | SHALL |  | [81-9240](#C_81-9240) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = DGIMG |
| @moodCode | 1..1 | SHALL |  | [81-9241](#C_81-9241) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| id | 1..\* | SHALL |  | [81-9242](#C_81-9242) |  |
| code | 1..1 | SHALL |  | [81-9244](#C_81-9244) |  |
| @code | 1..1 | SHALL |  | [81-19225](#C_81-19225) |  |
| @codeSystem | 1..1 | SHALL |  | [81-19227](#C_81-19227) | 1.2.840.10008.2.6.1 |
| text | 0..1 | SHOULD |  | [81-9246](#C_81-9246) |  |
| @mediaType | 1..1 | SHALL |  | [81-9247](#C_81-9247) | application/dicom |
| reference | 1..1 | SHALL |  | [81-9248](#C_81-9248) |  |
| @value | 1..1 | SHALL |  | [81-9249](#C_81-9249) |  |
| effectiveTime | 0..1 | SHOULD |  | [81-9250](#C_81-9250) |  |
| @value | 1..1 | SHALL |  | [81-9251](#C_81-9251) |  |
| low | 0..0 | SHALL NOT |  | [81-9252](#C_81-9252) |  |
| high | 0..0 | SHALL NOT |  | [81-9253](#C_81-9253) |  |
| entryRelationship | 0..\* | MAY |  | [81-9254](#C_81-9254) |  |
| @typeCode | 1..1 | SHALL |  | [81-9255](#C_81-9255) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| entryRelationship | 0..\* | MAY |  | [81-9257](#C_81-9257) |  |
| @typeCode | 1..1 | SHALL |  | [81-9258](#C_81-9258) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [81-15935](#C_81-15935) | [Purpose of Reference Observation (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.9](#E_Purpose_of_Reference_Observation) |
| entryRelationship | 0..\* | MAY |  | [81-9260](#C_81-9260) |  |
| @typeCode | 1..1 | SHALL |  | [81-9261](#C_81-9261) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| observation | 1..1 | SHALL |  | [81-15936](#C_81-15936) | [Referenced Frames Observation (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.10](#E_Referenced_Frames_Observation) |

1. SHALL contain exactly one [1..1] @classCode="DGIMG" Diagnostic Image (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:81-9240).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:81-9241).

The @root contains an OID representing the DICOM SOP Instance UID

1. SHALL contain at least one [1..\*] id (CONF:81-9242).
2. SHALL contain exactly one [1..1] code (CONF:81-9244).
   1. This code SHALL contain exactly one [1..1] @code (CONF:81-19225).
      1. @code is an OID for a valid SOP class name UID (CONF:81-19226).
   2. This code SHALL contain exactly one [1..1] @codeSystem="1.2.840.10008.2.6.1" DCMUID (CONF:81-19227).
3. SHOULD contain zero or one [0..1] text (CONF:81-9246).
   1. The text, if present, SHALL contain exactly one [1..1] @mediaType="application/dicom" (CONF:81-9247).
   2. The text, if present, SHALL contain exactly one [1..1] reference (CONF:81-9248).

WADO reference as a URI

* + 1. This reference SHALL contain exactly one [1..1] @value (CONF:81-9249).

1. SHOULD contain zero or one [0..1] effectiveTime (CONF:81-9250).
   1. The effectiveTime, if present, SHALL contain exactly one [1..1] @value (CONF:81-9251).
   2. The effectiveTime, if present, SHALL NOT contain [0..0] low (CONF:81-9252).
   3. The effectiveTime, if present, SHALL NOT contain [0..0] high (CONF:81-9253).
2. MAY contain zero or more [0..\*] entryRelationship (CONF:81-9254) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has Subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:81-9255).
3. MAY contain zero or more [0..\*] entryRelationship (CONF:81-9257) such that it
   1. SHALL contain exactly one [1..1] @typeCode="RSON" Has Reason (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:81-9258).
   2. SHALL contain exactly one [1..1] [Purpose of Reference Observation](#E_Purpose_of_Reference_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.9) (CONF:81-15935).
4. MAY contain zero or more [0..\*] entryRelationship (CONF:81-9260) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" Has Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:81-9261).
   2. SHALL contain exactly one [1..1] [Referenced Frames Observation](#E_Referenced_Frames_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.10) (CONF:81-15936).
   3. This entryRelationship SHALL be present if the referenced DICOM object is a multiframe object and the reference does not apply to all frames (CONF:81-9263).

Figure 223: SOP Instance Observation Example

<observation classCode="DGIMG" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.6.2.8"/>

<id root="1.2.840.113619.2.62.994044785528.20060823.200608232232322.3"/>

<code code="1.2.840.10008.5.1.4.1.1.1"

codeSystem="1.2.840.10008.2.6.1" codeSystemName="DCMUID"

displayName="Computed Radiography Image Storage"></code>

<text mediaType="application/dicom">

<reference value="http://www.example.org/wado?requestType=WADO&amp;studyUID=1.2.840.113619.2.62.994044785528.114289542805&amp;seriesUID=1.2.840.113619.2.62.994044785528.20060823223142485051&amp;objectUID=1.2.840.113619.2.62.994044785528.20060823.200608232232322.3&amp;contentType=application/dicom"/>

<!--reference to image 1 (PA) -->

</text>

<effectiveTime value="200608231235-0800"/>

</observation>

Study Act

[act: identifier urn:oid:2.16.840.1.113883.10.20.6.2.6 (open)]

Table 488: Study Act Contexts

| Contained By: | Contains: |
| --- | --- |
| [DICOM Object Catalog Section - DCM 121181](#S_DICOM_Object_Catalog_Section__DCM_121) (required) | [Series Act](#E_Series_Act) (required) |

A Study Act contains the DICOM study information that defines the characteristics of a referenced medical study performed on a patient. A study is a collection of one or more series of medical images, presentation states, SR documents, overlays, and/or curves that are logically related for the purpose of diagnosing a patient. Each study is associated with exactly one patient. A study may include composite instances that are created by a single modality, multiple modalities, or by multiple devices of the same modality. The study information is modality-independent. Study Act clinical statements are only instantiated in the DICOM Object Catalog section; in other sections, the SOP Instance Observation is included directly.

Table 489: Study Act Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| act (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.6) | | | | | |
| @classCode | 1..1 | SHALL |  | [81-9207](#C_81-9207) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [81-9208](#C_81-9208) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [81-9209](#C_81-9209) |  |
| @root | 1..1 | SHALL |  | [81-10533](#C_81-10533) | 2.16.840.1.113883.10.20.6.2.6 |
| id | 1..\* | SHALL |  | [81-9210](#C_81-9210) |  |
| @root | 1..1 | SHALL |  | [81-9213](#C_81-9213) |  |
| @extension | 0..0 | SHALL NOT |  | [81-9211](#C_81-9211) |  |
| code | 1..1 | SHALL |  | [81-19172](#C_81-19172) |  |
| @code | 1..1 | SHALL |  | [81-19173](#C_81-19173) | 113014 |
| @codeSystem | 1..1 | SHALL |  | [81-26506](#C_81-26506) | urn:oid:1.2.840.10008.2.16.4 (DCM) = 1.2.840.10008.2.16.4 |
| text | 0..1 | MAY |  | [81-9215](#C_81-9215) |  |
| reference | 0..1 | SHOULD |  | [81-15995](#C_81-15995) |  |
| @value | 0..1 | SHOULD |  | [81-15996](#C_81-15996) |  |
| effectiveTime | 0..1 | SHOULD |  | [81-9216](#C_81-9216) |  |
| entryRelationship | 1..\* | SHALL |  | [81-9219](#C_81-9219) |  |
| @typeCode | 1..1 | SHALL |  | [81-9220](#C_81-9220) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP |
| act | 1..1 | SHALL |  | [81-15937](#C_81-15937) | [Series Act (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.63](#E_Series_Act) |

1. SHALL contain exactly one [1..1] @classCode="ACT" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:81-9207).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:81-9208).
3. SHALL contain exactly one [1..1] templateId (CONF:81-9209) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.6.2.6" (CONF:81-10533).
4. SHALL contain at least one [1..\*] id (CONF:81-9210).

The @root contains the OID of the study instance UID since DICOM study ids consist only of an OID

* 1. Such ids SHALL contain exactly one [1..1] @root (CONF:81-9213).
  2. Such ids SHALL NOT contain [0..0] @extension (CONF:81-9211).

1. SHALL contain exactly one [1..1] code (CONF:81-19172).
   1. This code SHALL contain exactly one [1..1] @code="113014" (CONF:81-19173).
   2. This code SHALL contain exactly one [1..1] @codeSystem="1.2.840.10008.2.16.4" (CodeSystem: DCM urn:oid:1.2.840.10008.2.16.4) (CONF:81-26506).

If present, the text element contains the description of the study.

1. MAY contain zero or one [0..1] text (CONF:81-9215).
   1. The text, if present, SHOULD contain zero or one [0..1] reference (CONF:81-15995).
      1. The reference, if present, SHOULD contain zero or one [0..1] @value (CONF:81-15996).
         1. This reference/@value SHALL begin with a '#' and SHALL point to its corresponding narrative (using the approach defined in CDA Release 2, section 4.3.5.1) (CONF:81-15997).

If present, the effectiveTime contains the time the study was started

1. SHOULD contain zero or one [0..1] effectiveTime (CONF:81-9216).
2. SHALL contain at least one [1..\*] entryRelationship (CONF:81-9219) such that it
   1. SHALL contain exactly one [1..1] @typeCode="COMP" Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:81-9220).
   2. SHALL contain exactly one [1..1] [Series Act](#E_Series_Act) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.63) (CONF:81-15937).

Figure 224: Study Act Example

<act classCode="ACT" moodCode="EVN">

<templateId root="2.16.840.1.113883.10.20.6.2.6"/>

<id root="1.2.840.113619.2.62.994044785528.114289542805"/>

<code code="113014" codeSystem="1.2.840.10008.2.16.4" codeSystemName="DCM" displayName="Study"/>

<!-- \*\*\*\* Series \*\*\*\*-->

<entryRelationship typeCode="COMP">

<act classCode="ACT" moodCode="EVN">

. . .

</act>

</entryRelationship>

</act>

Substance Administered Act

[act: identifier urn:oid:2.16.840.1.113883.10.20.22.4.118 (open)]

Table 490: Substance Administered Act Contexts

| Contained By: | Contains: |
| --- | --- |
| [Medication Activity (V2)](#Medication_Activity_V2) (optional)  [Immunization Activity (V3)](#E_Immunization_Activity_V3) (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 491: 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 |  | [1098-31500](#C_1098-31500) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1098-31501](#C_1098-31501) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-31502](#C_1098-31502) |  |
| @root | 1..1 | SHALL |  | [1098-31503](#C_1098-31503) | 2.16.840.1.113883.10.20.22.4.118 |
| id | 1..\* | SHALL |  | [1098-31504](#C_1098-31504) |  |
| code | 1..1 | SHALL |  | [1098-31506](#C_1098-31506) |  |
| @code | 1..1 | SHALL |  | [1098-31507](#C_1098-31507) | 416118004 |
| @codeSystem | 1..1 | SHALL |  | [1098-31508](#C_1098-31508) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.6.96 |
| statusCode | 1..1 | SHALL |  | [1098-31505](#C_1098-31505) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 0..1 | MAY |  | [1098-31509](#C_1098-31509) |  |

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: HL7ActMood 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
   1. 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).
   1. This code SHALL contain exactly one [1..1] @code="416118004" Administration (CONF:1098-31507).
   2. 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: HL7ActStatus 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 225: Substance Administered Act Example

<substanceAdministration classCode="SBADM" moodCode="EVN">

...

<consumable>

...

<code code="43" codeSystem="2.16.840.1.113883.12.292" 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>

Substance or Device Allergy - Intolerance Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.24.3.90:2014-06-09 (open)]

Table 492: Substance or Device Allergy - Intolerance Observation (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional) | [Reaction Observation (V2)](#Reaction_Observation_V2) (optional)  [Severity Observation (V2)](#E_Severity_Observation_V2) (optional)  [Author Participation](#U_Author_Participation) (optional)  [Criticality Observation](#E_Criticality_Observation_) (optional)  [Allergy Status Observation](#E_Allergy_Status_Observation_20190620) (optional) |

This template reflects a discrete observation about a patient's allergy or intolerance to a substance or device. Because it is a discrete observation, it will have a statusCode of "completed". The effectiveTime, also referred to as the 'clinically 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 penicillin allergy that developed five years ago, the effectiveTime is five years ago.

The effectiveTime of the Substance or Device Allergy - Intolerance Observation is the definitive indication of whether or not the underlying allergy/intolerance is resolved. If 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 493: Substance or Device Allergy - Intolerance Observation (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.24.3.90:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-16303](#C_1098-16303) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-16304](#C_1098-16304) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-16305](#C_1098-16305) |  |
| @root | 1..1 | SHALL |  | [1098-16306](#C_1098-16306) | 2.16.840.1.113883.10.20.24.3.90 |
| @extension | 1..1 | SHALL |  | [1098-32527](#C_1098-32527) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-16307](#C_1098-16307) |  |
| code | 1..1 | SHALL |  | [1098-16345](#C_1098-16345) |  |
| @code | 1..1 | SHALL |  | [1098-16346](#C_1098-16346) | ASSERTION |
| @codeSystem | 1..1 | SHALL |  | [1098-32171](#C_1098-32171) | urn:oid:2.16.840.1.113883.5.4 (HL7ActCode) = 2.16.840.1.113883.5.4 |
| statusCode | 1..1 | SHALL |  | [1098-16308](#C_1098-16308) |  |
| @code | 1..1 | SHALL |  | [1098-26354](#C_1098-26354) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1098-16309](#C_1098-16309) |  |
| low | 1..1 | SHALL |  | [1098-31536](#C_1098-31536) |  |
| high | 0..1 | MAY |  | [1098-31537](#C_1098-31537) |  |
| value | 1..1 | SHALL | CD | [1098-16312](#C_1098-16312) |  |
| @code | 1..1 | SHALL | CS | [1098-16317](#C_1098-16317) | urn:oid:2.16.840.1.113883.3.88.12.3221.6.2 (Allergy and Intolerance Type) |
| author | 0..\* | SHOULD |  | [1098-31144](#C_1098-31144) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| participant | 0..\* | SHOULD |  | [1098-16318](#C_1098-16318) |  |
| @typeCode | 1..1 | SHALL |  | [1098-16319](#C_1098-16319) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = CSM |
| participantRole | 1..1 | SHALL |  | [1098-16320](#C_1098-16320) |  |
| @classCode | 1..1 | SHALL |  | [1098-16321](#C_1098-16321) | urn:oid:2.16.840.1.113883.5.110 (HL7RoleClass) = MANU |
| playingEntity | 1..1 | SHALL |  | [1098-16322](#C_1098-16322) |  |
| @classCode | 1..1 | SHALL |  | [1098-16323](#C_1098-16323) | urn:oid:2.16.840.1.113883.5.41 (HL7EntityClass) = MMAT |
| code | 1..1 | SHALL |  | [1098-16324](#C_1098-16324) | urn:oid:2.16.840.1.113762.1.4.1010.1 (Substance Reactant for Intolerance) |
| entryRelationship | 0..1 | MAY |  | [1098-16333](#C_1098-16333) |  |
| @typeCode | 1..1 | SHALL |  | [1098-16335](#C_1098-16335) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| @inversionInd | 1..1 | SHALL |  | [1098-16334](#C_1098-16334) | true |
| observation | 1..1 | SHALL |  | [1098-16336](#C_1098-16336) | [Allergy Status Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.28:2019-06-20](#E_Allergy_Status_Observation_20190620) |
| entryRelationship | 0..\* | SHOULD |  | [1098-16337](#C_1098-16337) |  |
| @typeCode | 1..1 | SHALL |  | [1098-16339](#C_1098-16339) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = MFST |
| @inversionInd | 1..1 | SHALL |  | [1098-16338](#C_1098-16338) | true |
| observation | 1..1 | SHALL |  | [1098-16340](#C_1098-16340) | [Reaction Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09](#Reaction_Observation_V2) |
| entryRelationship | 0..1 | SHOULD NOT |  | [1098-16341](#C_1098-16341) |  |
| @typeCode | 1..1 | SHALL |  | [1098-16342](#C_1098-16342) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| @inversionInd | 1..1 | SHALL |  | [1098-16343](#C_1098-16343) | true |
| observation | 1..1 | SHALL |  | [1098-16344](#C_1098-16344) | [Severity Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.8:2014-06-09](#E_Severity_Observation_V2) |
| entryRelationship | 0..1 | SHOULD |  | [1098-32935](#C_1098-32935) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32936](#C_1098-32936) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| @inversionInd | 1..1 | SHALL |  | [1098-32937](#C_1098-32937) | true |
| observation | 1..1 | SHALL |  | [1098-32938](#C_1098-32938) | [Criticality Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.145](#E_Criticality_Observation_) |

1. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1098-16303).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1098-16304).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-16305) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.24.3.90" (CONF:1098-16306).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32527).
4. SHALL contain at least one [1..\*] id (CONF:1098-16307).
5. SHALL contain exactly one [1..1] code (CONF:1098-16345).
   1. This code SHALL contain exactly one [1..1] @code="ASSERTION" Assertion (CONF:1098-16346).
   2. This code SHALL contain exactly one [1..1] @codeSystem="2.16.840.1.113883.5.4" (CodeSystem: HL7ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:1098-32171).
6. SHALL contain exactly one [1..1] statusCode (CONF:1098-16308).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-26354).
7. SHALL contain exactly one [1..1] effectiveTime (CONF:1098-16309).  
   Note: The effectiveTime/low (a.k.a. "onset date") asserts when the allergy/intolerance became clinically active. The effectiveTime/high (a.k.a. "resolution date") asserts when the allergy/intolerance became clinically resolved. If the allergy/intolerance 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'.
   1. This effectiveTime SHALL contain exactly one [1..1] low (CONF:1098-31536).
   2. This effectiveTime MAY contain zero or one [0..1] high (CONF:1098-31537).
8. SHALL contain exactly one [1..1] value with @xsi:type="CD" (CONF:1098-16312).
   1. This value SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [Allergy and Intolerance Type](#Allergy_and_Intolerance_Type) urn:oid:2.16.840.1.113883.3.88.12.3221.6.2 DYNAMIC (CONF:1098-16317).  
      Note: Many systems will simply assign a fixed value here (e.g., "allergy to substance").
9. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31144).
10. SHOULD contain zero or more [0..\*] participant (CONF:1098-16318) such that it
    1. SHALL contain exactly one [1..1] @typeCode="CSM" Consumable (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 STATIC) (CONF:1098-16319).
    2. SHALL contain exactly one [1..1] participantRole (CONF:1098-16320).
       1. This participantRole SHALL contain exactly one [1..1] @classCode="MANU" Manufactured Product (CodeSystem: HL7RoleClass urn:oid:2.16.840.1.113883.5.110 STATIC) (CONF:1098-16321).
       2. This participantRole SHALL contain exactly one [1..1] playingEntity (CONF:1098-16322).
          1. This playingEntity SHALL contain exactly one [1..1] @classCode="MMAT" Manufactured Material (CodeSystem: HL7EntityClass urn:oid:2.16.840.1.113883.5.41 STATIC) (CONF:1098-16323).
          2. This playingEntity SHALL contain exactly one [1..1] code, which MAY be selected from ValueSet [Substance Reactant for Intolerance](#Substance_Reactant_for_Intolerance) urn:oid:2.16.840.1.113762.1.4.1010.1 DYNAMIC (CONF:1098-16324).
11. MAY contain zero or one [0..1] entryRelationship (CONF:1098-16333) such that it
    1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1098-16335).
    2. SHALL contain exactly one [1..1] @inversionInd="true" True (CONF:1098-16334).
    3. SHALL contain exactly one [1..1] [Allergy Status Observation](#E_Allergy_Status_Observation_20190620) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.28:2019-06-20) (CONF:1098-16336).
12. SHOULD contain zero or more [0..\*] entryRelationship (CONF:1098-16337) such that it
    1. SHALL contain exactly one [1..1] @typeCode="MFST" Is Manifestation of (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1098-16339).
    2. SHALL contain exactly one [1..1] @inversionInd="true" True (CONF:1098-16338).
    3. SHALL contain exactly one [1..1] [Reaction Observation (V2)](#Reaction_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09) (CONF:1098-16340).
13. SHOULD NOT contain zero or one [0..1] entryRelationship (CONF:1098-16341) such that it
    1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has Subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1098-16342).
    2. SHALL contain exactly one [1..1] @inversionInd="true" True (CONF:1098-16343).
    3. SHALL contain exactly one [1..1] [Severity Observation (V2)](#E_Severity_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.8:2014-06-09) (CONF:1098-16344).
14. SHOULD contain zero or one [0..1] entryRelationship (CONF:1098-32935) such that it
    1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has Subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32936).
    2. SHALL contain exactly one [1..1] @inversionInd="true" True (CONF:1098-32937).
    3. SHALL contain exactly one [1..1] [Criticality Observation](#E_Criticality_Observation_) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.145) (CONF:1098-32938).

Table 494: Allergy and Intolerance Type

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Allergy and Intolerance Type urn:oid:2.16.840.1.113883.3.88.12.3221.6.2  (Clinical Focus: The class of substance and intolerance suffered by the patient),(Data Element Scope: Describes any medication allergies, adverse reactions, idiosyncratic reactions, anaphylaxis/anaphylactoid reactions to food items, and metabolic variations or adverse reactions/allergies to other substances (such as latex, iodine, tape adhesives)),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 6/24/2019 with a version of 20190319.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.3221.6.2/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 235719002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Intolerance to food (finding) |
| 414285001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Allergy to food (finding) |
| 416098002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Allergy to drug (finding) |
| 418038007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Propensity to adverse reactions to substance (finding) |
| 418471000 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Propensity to adverse reactions to food (disorder) |
| 419199007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Allergy to substance (finding) |
| 419511003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Propensity to adverse reactions to drug (finding) |
| 420134006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Propensity to adverse reaction (finding) |
| 59037007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Intolerance to drug (finding) |

Table 495: Substance Reactant for Intolerance

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Substance Reactant for Intolerance urn:oid:2.16.840.1.113762.1.4.1010.1  (Clinical Focus: A substance or other type of agent (eg. Sunshine) that may be associated with an intolerance reaction event or a propensity to such an event. These concepts are expected to be at a more general level of abstraction (ingredients versus more specific formulations). This value set is quite general and includes concepts that may never cause an adverse event, particularly the included SNOMED CT concepts. This 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 available code systems in the following priority order: NDFRT, then RXNORM, then UNII, then SNOMEDCT. UNII is not included in the initial version. This overarching grouping value set is intended to support identification of drug classes, individual medication ingredients, foods, general substances and environmental entities.),(Data Element Scope: substance elements),(Inclusion Criteria: Any concept that could at some point cause an allergy or intolerance. Intended to include following value sets: Medication Clinical Drug (RxNorm), Clinical Drug Class (NDF-RT), Substance Other Than Clinical Drug (SNOMED CT). It was originally to also include all UNII codes but this will not be included initially.),(Exclusion Criteria: non-substance)  This value set was imported on 6/29/2019 with a version of 20190620.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1010.1/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 1000082 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | alcaftadine |
| 1000086 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | Lastacaft |
| 1000104 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | incobotulinumtoxinA |
| 1000108 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | Xeomin |
| 1000112 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | medroxyprogesterone acetate |
| 1000146 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | estradiol cypionate |
| 1000492 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | resveratrol |
| 1000577 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | microcrystalline cellulose |
| 1000581 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | Trichlorfon |
| 1000705 | RxNorm | urn:oid:2.16.840.1.113883.6.88 | Benzalkonium / Tolnaftate |
| ... | | | |

Allergy - Intolerance Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.7:2014-06-09 (open)]

Table 496: Allergy - Intolerance Observation (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional)  [Allergy Concern Act (V3)](#E_Allergy_Concern_Act_V3) (required) | [Reaction Observation (V2)](#Reaction_Observation_V2) (optional)  [Severity Observation (V2)](#E_Severity_Observation_V2) (optional)  [Author Participation](#U_Author_Participation) (optional)  [Criticality Observation](#E_Criticality_Observation_) (optional)  [Allergy Status Observation](#E_Allergy_Status_Observation_20190620) (optional) |

This template reflects a discrete observation about a patient's allergy or intolerance. Because it is a discrete observation, it will have a statusCode of "completed". The effectiveTime, also referred to as the "clinically 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 penicillin allergy that developed five years ago, the effectiveTime is five years ago.

The effectiveTime of the Allergy - Intolerance Observation is the definitive indication of whether or not the underlying allergy/intolerance is resolved. If 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".

The agent responsible for an allergy or adverse reaction is not always a manufactured material (for example, food allergies), nor is it necessarily consumed. The following constraints reflect limitations in the base CDA R2 specification, and should be used to represent any type of responsible agent, i.e., use playingEntity classCode = "MMAT" for all agents, manufactured or not.

Table 497: Allergy - Intolerance Observation (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.7:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-7379](#C_1098-7379) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-7380](#C_1098-7380) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| @negationInd | 0..1 | MAY |  | [1098-31526](#C_1098-31526) |  |
| templateId | 1..1 | SHALL |  | [1098-7381](#C_1098-7381) |  |
| @root | 1..1 | SHALL |  | [1098-10488](#C_1098-10488) | 2.16.840.1.113883.10.20.22.4.7 |
| @extension | 1..1 | SHALL |  | [1098-32526](#C_1098-32526) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-7382](#C_1098-7382) |  |
| code | 1..1 | SHALL |  | [1098-15947](#C_1098-15947) |  |
| @code | 1..1 | SHALL |  | [1098-15948](#C_1098-15948) | ASSERTION |
| @codeSystem | 1..1 | SHALL |  | [1098-32153](#C_1098-32153) | urn:oid:2.16.840.1.113883.5.4 (HL7ActCode) = 2.16.840.1.113883.5.4 |
| statusCode | 1..1 | SHALL |  | [1098-19084](#C_1098-19084) |  |
| @code | 1..1 | SHALL |  | [1098-19085](#C_1098-19085) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1098-7387](#C_1098-7387) |  |
| low | 1..1 | SHALL |  | [1098-31538](#C_1098-31538) |  |
| high | 0..1 | MAY |  | [1098-31539](#C_1098-31539) |  |
| value | 1..1 | SHALL | CD | [1098-7390](#C_1098-7390) | urn:oid:2.16.840.1.113883.3.88.12.3221.6.2 (Allergy and Intolerance Type) |
| author | 0..\* | SHOULD |  | [1098-31143](#C_1098-31143) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| participant | 1..1 | SHALL |  | [1098-7402](#C_1098-7402) |  |
| @typeCode | 1..1 | SHALL |  | [1098-7403](#C_1098-7403) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = CSM |
| participantRole | 1..1 | SHALL |  | [1098-7404](#C_1098-7404) |  |
| @classCode | 1..1 | SHALL |  | [1098-7405](#C_1098-7405) | urn:oid:2.16.840.1.113883.5.110 (HL7RoleClass) = MANU |
| playingEntity | 1..1 | SHALL |  | [1098-7406](#C_1098-7406) |  |
| @classCode | 1..1 | SHALL |  | [1098-7407](#C_1098-7407) | urn:oid:2.16.840.1.113883.5.41 (HL7EntityClass) = MMAT |
| code | 1..1 | SHALL |  | [1098-7419](#C_1098-7419) | urn:oid:2.16.840.1.113762.1.4.1010.1 (Substance Reactant for Intolerance) |
| entryRelationship | 0..1 | MAY |  | [1098-32939](#C_1098-32939) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32940](#C_1098-32940) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| @inversionInd | 1..1 | SHALL |  | [1098-32941](#C_1098-32941) | true |
| observation | 1..1 | SHALL |  | [1098-32942](#C_1098-32942) | [Allergy Status Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.28:2019-06-20](#E_Allergy_Status_Observation_20190620) |
| entryRelationship | 0..1 | SHOULD NOT |  | [1098-9961](#C_1098-9961) |  |
| @typeCode | 1..1 | SHALL |  | [1098-9962](#C_1098-9962) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| @inversionInd | 1..1 | SHALL |  | [1098-9964](#C_1098-9964) | true |
| observation | 1..1 | SHALL |  | [1098-15956](#C_1098-15956) | [Severity Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.8:2014-06-09](#E_Severity_Observation_V2) |
| entryRelationship | 0..\* | SHOULD |  | [1098-7447](#C_1098-7447) |  |
| @typeCode | 1..1 | SHALL |  | [1098-7907](#C_1098-7907) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = MFST |
| @inversionInd | 1..1 | SHALL |  | [1098-7449](#C_1098-7449) | true |
| observation | 1..1 | SHALL |  | [1098-15955](#C_1098-15955) | [Reaction Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09](#Reaction_Observation_V2) |
| entryRelationship | 0..1 | SHOULD |  | [1098-32910](#C_1098-32910) |  |
| @typeCode | 1..1 | SHALL |  | [1098-32911](#C_1098-32911) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ |
| @inversionInd | 1..1 | SHALL |  | [1098-32912](#C_1098-32912) | true |
| observation | 1..1 | SHALL |  | [1098-32913](#C_1098-32913) | [Criticality Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.145](#E_Criticality_Observation_) |

1. Conforms to [Substance or Device Allergy - Intolerance Observation (V2)](#E_Substance_or_Device_Allergy__V2) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.24.3.90:2014-06-09).
2. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1098-7379).
3. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1098-7380).
4. MAY contain zero or one [0..1] @negationInd (CONF:1098-31526).  
   Note: Use negationInd="true" to indicate that the allergy was not observed.
5. SHALL contain exactly one [1..1] templateId (CONF:1098-7381) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.7" (CONF:1098-10488).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32526).
6. SHALL contain at least one [1..\*] id (CONF:1098-7382).
7. SHALL contain exactly one [1..1] code (CONF:1098-15947).
   1. This code SHALL contain exactly one [1..1] @code="ASSERTION" Assertion (CONF:1098-15948).
   2. This code SHALL contain exactly one [1..1] @codeSystem="2.16.840.1.113883.5.4" (CodeSystem: HL7ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:1098-32153).
8. SHALL contain exactly one [1..1] statusCode (CONF:1098-19084).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1098-19085).
9. SHALL contain exactly one [1..1] effectiveTime (CONF:1098-7387).  
   Note: If the allergy/intolerance 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'.
   1. This effectiveTime SHALL contain exactly one [1..1] low (CONF:1098-31538).  
      Note: The effectiveTime/low (a.k.a. "onset date") asserts when the allergy/intolerance became clinically active.
   2. This effectiveTime MAY contain zero or one [0..1] high (CONF:1098-31539).  
      Note: The effectiveTime/high (a.k.a. "resolution date") asserts when the allergy/intolerance became clinically resolved.
10. SHALL contain exactly one [1..1] value with @xsi:type="CD", where the code SHALL be selected from ValueSet [Allergy and Intolerance Type](#Allergy_and_Intolerance_Type) urn:oid:2.16.840.1.113883.3.88.12.3221.6.2 DYNAMIC (CONF:1098-7390).  
    Note: The consumable participant points to the precise allergen or substance of intolerance. Because the consumable and the reaction are more clinically relevant than a categorization of the allergy/adverse event type, many systems will simply assign a fixed value here (e.g., "allergy to substance").
11. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31143).
12. SHALL contain exactly one [1..1] participant (CONF:1098-7402) such that it
    1. SHALL contain exactly one [1..1] @typeCode="CSM" Consumable (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 STATIC) (CONF:1098-7403).
    2. SHALL contain exactly one [1..1] participantRole (CONF:1098-7404).
       1. This participantRole SHALL contain exactly one [1..1] @classCode="MANU" Manufactured Product (CodeSystem: HL7RoleClass urn:oid:2.16.840.1.113883.5.110 STATIC) (CONF:1098-7405).
       2. This participantRole SHALL contain exactly one [1..1] playingEntity (CONF:1098-7406).
          1. This playingEntity SHALL contain exactly one [1..1] @classCode="MMAT" Manufactured Material (CodeSystem: HL7EntityClass urn:oid:2.16.840.1.113883.5.41 STATIC) (CONF:1098-7407).
          2. This playingEntity SHALL contain exactly one [1..1] code, which SHALL be selected from ValueSet [Substance Reactant for Intolerance](#Substance_Reactant_for_Intolerance) urn:oid:2.16.840.1.113762.1.4.1010.1 DYNAMIC (CONF:1098-7419).
13. MAY contain zero or one [0..1] entryRelationship (CONF:1098-32939) such that it
    1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32940).
    2. SHALL contain exactly one [1..1] @inversionInd="true" True (CONF:1098-32941).
    3. SHALL contain exactly one [1..1] [Allergy Status Observation](#E_Allergy_Status_Observation_20190620) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.28:2019-06-20) (CONF:1098-32942).
14. SHOULD NOT contain zero or one [0..1] entryRelationship (CONF:1098-9961) such that it
    1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has Subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1098-9962).
    2. SHALL contain exactly one [1..1] @inversionInd="true" True (CONF:1098-9964).
    3. SHALL contain exactly one [1..1] [Severity Observation (V2)](#E_Severity_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.8:2014-06-09) (CONF:1098-15956).
15. SHOULD contain zero or more [0..\*] entryRelationship (CONF:1098-7447) such that it
    1. SHALL contain exactly one [1..1] @typeCode="MFST" Is Manifestation of (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:1098-7907).
    2. SHALL contain exactly one [1..1] @inversionInd="true" True (CONF:1098-7449).
    3. SHALL contain exactly one [1..1] [Reaction Observation (V2)](#Reaction_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09) (CONF:1098-15955).
16. SHOULD contain zero or one [0..1] entryRelationship (CONF:1098-32910) such that it
    1. SHALL contain exactly one [1..1] @typeCode="SUBJ" Has Subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098-32911).
    2. SHALL contain exactly one [1..1] @inversionInd="true" True (CONF:1098-32912).
    3. SHALL contain exactly one [1..1] [Criticality Observation](#E_Criticality_Observation_) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.145) (CONF:1098-32913).

Figure 226: Allergy - Intolerance Observation (V2) Example

<observation classCode="OBS" moodCode="EVN">

<!-- \*\* Allergy observation \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.7" extension="2014-06-09" />

<id root="901db0f8-9355-4794-81cd-fd951ef07917" />

<code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4" />

<!-- Observation statusCode represents the status of the act of observing -->

<statusCode code="completed" />

<effectiveTime>

<!-- The low value reflects the date of onset of the allergy -->

<low nullFlavor="UNK" />

<!-- The high value reflects when the allergy was known to be resolved

(and will generally be absent) -->

</effectiveTime>

<value xsi:type="CD" code="419199007" displayName="Allergy to substance" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" />

<author>

<time value="201010110915-0800" />

<assignedAuthor>

<id extension="222223333" root="1.1.1.1.1.1.1.3" />

</assignedAuthor>

</author>

<participant typeCode="CSM">

<participantRole classCode="MANU">

<playingEntity classCode="MMAT">

<code code="2670" displayName="Codeine" codeSystem="2.16.840.1.113883.6.88" codeSystemName="RxNorm" />

</playingEntity>

</participantRole>

</participant>

<entryRelationship typeCode="MFST" inversionInd="true">

<observation classCode="OBS" moodCode="EVN">

<!-- \*\* Reaction observation \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.9" extension="2014-06-09" />

<id root="38c63dea-1a43-4f84-ab71-1ffd04f6a1dd" />

<code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4" />

<text>

<reference value="#reaction2" />

</text>

<statusCode code="completed" />

<effectiveTime>

<low nullFlavor="UNK" />

</effectiveTime>

<value xsi:type="CD" code="56018004" displayName="Wheezing" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" />

</observation>

</entryRelationship>

<entryRelationship typeCode="SUBJ" inversionInd="true">

<observation classCode="OBS" moodCode="EVN">

<!-- \*\* Severity observation \*\* -->

<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="#allergyseverity2" />

</text>

<statusCode code="completed" />

<value xsi:type="CD" code="255604002" displayName="Mild" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" />

</observation>

</entryRelationship>

</observation>

Text Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.6.2.12 (open)]

Table 498: Text Observation Contexts

| Contained By: | Contains: |
| --- | --- |
| [Diagnostic Imaging Report (V3)](#D_Diagnostic_Imaging_Report_V3) (optional) | [SOP Instance Observation](#E_SOP_Instance_Observation) (optional)  [Quantity Measurement Observation](#E_Quantity_Measurement_Observation) (optional) |

DICOM Template 2000 specifies that Imaging Report Elements of Value Type Text are contained in sections. The Imaging Report Elements are inferred from Basic Diagnostic Imaging Report Observations that consist of image references and measurements (linear, area, volume, and numeric). Text DICOM Imaging Report Elements in this context are mapped to CDA text observations that are section components and are related to the SOP Instance Observations (templateId 2.16.840.1.113883.10.20.6.2.8) or Quantity Measurement Observations (templateId 2.16.840.1.113883.10.20.6.2.14) by the SPRT (Support) act relationship.

A Text Observation is required if the findings in the section text are represented as inferred from SOP Instance Observations.

Table 499: Text Observation Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.12) | | | | | |
| @classCode | 1..1 | SHALL |  | [81-9288](#C_81-9288) | urn:oid:2.16.840.1.113883.5.4 (HL7ActCode) = OBS |
| @moodCode | 1..1 | SHALL |  | [81-9289](#C_81-9289) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [81-9290](#C_81-9290) |  |
| @root | 1..1 | SHALL |  | [81-10534](#C_81-10534) | 2.16.840.1.113883.10.20.6.2.12 |
| code | 1..1 | SHALL |  | [81-9291](#C_81-9291) |  |
| text | 0..1 | MAY |  | [81-9295](#C_81-9295) |  |
| reference | 0..1 | SHOULD |  | [81-15938](#C_81-15938) |  |
| @value | 0..1 | SHOULD |  | [81-15939](#C_81-15939) |  |
| effectiveTime | 0..1 | SHOULD |  | [81-9294](#C_81-9294) |  |
| value | 1..1 | SHALL | ED | [81-9292](#C_81-9292) |  |
| entryRelationship | 0..\* | MAY |  | [81-9298](#C_81-9298) |  |
| @typeCode | 1..1 | SHALL |  | [81-9299](#C_81-9299) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SPRT |
| observation | 1..1 | SHALL |  | [81-15941](#C_81-15941) | [SOP Instance Observation (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.8](#E_SOP_Instance_Observation) |
| entryRelationship | 0..\* | MAY |  | [81-9301](#C_81-9301) |  |
| @typeCode | 1..1 | SHALL |  | [81-9302](#C_81-9302) | urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SPRT |
| observation | 1..1 | SHALL |  | [81-15942](#C_81-15942) | [Quantity Measurement Observation (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.14](#E_Quantity_Measurement_Observation) |

1. SHALL contain exactly one [1..1] @classCode="OBS" Observation (CodeSystem: HL7ActCode urn:oid:2.16.840.1.113883.5.4 STATIC) (CONF:81-9288).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:81-9289).
3. SHALL contain exactly one [1..1] templateId (CONF:81-9290) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.6.2.12" (CONF:81-10534).
4. SHALL contain exactly one [1..1] code (CONF:81-9291).
5. MAY contain zero or one [0..1] text (CONF:81-9295).
   1. The text, if present, SHOULD contain zero or one [0..1] reference (CONF:81-15938).
      1. The reference, if present, SHOULD contain zero or one [0..1] @value (CONF:81-15939).
         1. This reference/@value SHALL begin with a '#' and SHALL point to its corresponding narrative (using the approach defined in CDA Release 2, section 4.3.5.1) (CONF:81-15940).
6. SHOULD contain zero or one [0..1] effectiveTime (CONF:81-9294).
7. SHALL contain exactly one [1..1] value with @xsi:type="ED" (CONF:81-9292).
8. MAY contain zero or more [0..\*] entryRelationship (CONF:81-9298) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SPRT" Has Support (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:81-9299).
   2. SHALL contain exactly one [1..1] [SOP Instance Observation](#E_SOP_Instance_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.8) (CONF:81-15941).
9. MAY contain zero or more [0..\*] entryRelationship (CONF:81-9301) such that it
   1. SHALL contain exactly one [1..1] @typeCode="SPRT" Has Support (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 STATIC) (CONF:81-9302).
   2. SHALL contain exactly one [1..1] [Quantity Measurement Observation](#E_Quantity_Measurement_Observation) (identifier: urn:oid:2.16.840.1.113883.10.20.6.2.14) (CONF:81-15942).

Figure 227: Text Observation Example

<text>

<paragraph>

<caption>Finding</caption>

<content ID="Fndng2">The cardiomediastinum is within normal limits. The trachea is midline. The previously described opacity at the medial right lung base has cleared. There are no new infiltrates. There is a new round density at the left hilus, superiorly (diameter about 45mm). A CT scan is recommended for further evaluation. The pleural spaces are clear. The visualized musculoskeletal structures and the upper abdomen are stable and unremarkable.</content>

</paragraph>

...

</text>

<entry>

<observation classCode="OBS" moodCode="EVN">

<!-- Text Observation -->

<templateId root="2.16.840.1.113883.10.20.6.2.12"/>

<code code="121071" codeSystem="1.2.840.10008.2.16.4"

codeSystemName="DCM" displayName="Finding"/>

<value xsi:type="ED">

<reference value="#Fndng2"/>

</value>

...

<!-- entryRelationships to SOP Instance Observations and Quantity

Measurement Observations may go here -->

</observation>

</entry>

Tobacco Use (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09 (open)]

Table 500: Tobacco Use (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional)  [Social History Section (V3)](#S_Social_History_Section_V3) (optional) | [Author Participation](#U_Author_Participation) (optional) |

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 clinically 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 501: Tobacco Use (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-16558](#C_1098-16558) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-16559](#C_1098-16559) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-16566](#C_1098-16566) |  |
| @root | 1..1 | SHALL |  | [1098-16567](#C_1098-16567) | 2.16.840.1.113883.10.20.22.4.85 |
| @extension | 1..1 | SHALL |  | [1098-32589](#C_1098-32589) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-32400](#C_1098-32400) |  |
| code | 1..1 | SHALL |  | [1098-19174](#C_1098-19174) |  |
| @code | 1..1 | SHALL |  | [1098-19175](#C_1098-19175) | 11367-0 |
| @codeSystem | 1..1 | SHALL |  | [1098-32172](#C_1098-32172) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1098-16561](#C_1098-16561) |  |
| @code | 1..1 | SHALL |  | [1098-19118](#C_1098-19118) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1098-16564](#C_1098-16564) |  |
| low | 1..1 | SHALL |  | [1098-16565](#C_1098-16565) |  |
| high | 0..1 | MAY |  | [1098-31431](#C_1098-31431) |  |
| value | 1..1 | SHALL | CD | [1098-16562](#C_1098-16562) | urn:oid:2.16.840.1.113883.11.20.9.41 (Tobacco Use) |
| author | 0..\* | SHOULD |  | [1098-31152](#C_1098-31152) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |

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: HL7ActMood 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
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.85" (CONF:1098-16567).
   2. 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).
   1. This code SHALL contain exactly one [1..1] @code="11367-0" History of tobacco use (CONF:1098-19175).
   2. 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).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus 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 clinically 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.
   1. This effectiveTime SHALL contain exactly one [1..1] low (CONF:1098-16565).
   2. 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", where the code SHALL be selected from ValueSet [Tobacco Use](#Tobacco_Use) urn:oid:2.16.840.1.113883.11.20.9.41 DYNAMIC (CONF:1098-16562).
9. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31152).

Table 502: Tobacco Use

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Tobacco Use urn:oid:2.16.840.1.113883.11.20.9.41  (Clinical Focus: Detailed classification of a patient's smoking behavior),(Data Element Scope: Condition),(Inclusion Criteria: Contains all values descending from the SNOMED CT 365980008 tobacco use and exposure - finding hierarchy excluding temporal findings such as 'Former Smoker' 'Never Chewed', etc'),(Exclusion Criteria: )  This value set was imported on 6/29/2019 with a version of 20190319.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.41/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 10761391000119102 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Tobacco use in mother complicating childbirth (finding) |
| 110483000 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Tobacco user (finding) |
| 134406006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Smoking reduced (finding) |
| 160603005 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Light cigarette smoker (1-9 cigs/day) (finding) |
| 160604004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Moderate cigarette smoker (10-19 cigs/day) (finding) |
| 160605003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Heavy cigarette smoker (20-39 cigs/day) (finding) |
| 160606002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Very heavy cigarette smoker (40+ cigs/day) (finding) |
| 160612007 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Keeps trying to stop smoking (finding) |
| 160613002 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Admitted tobacco consumption possibly untrue (finding) |
| 160614008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Tobacco consumption unknown (finding) |
| ... | | | |

Figure 228: 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="1.1.1.1.1.1.1.2" />

</assignedAuthor>

</author>

</observation>

Vital Sign Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.27:2014-06-09 (open)]

Table 503: Vital Sign Observation (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Vital Signs Organizer (V3)](#E_Vital_Signs_Organizer_V3) (required)  [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional) | [Author Participation](#U_Author_Participation) (optional) |

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 |
| inhaled oxygen concentration | % |

Table 504: 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 |  | [1098-7297](#C_1098-7297) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-7298](#C_1098-7298) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-7299](#C_1098-7299) |  |
| @root | 1..1 | SHALL |  | [1098-10527](#C_1098-10527) | 2.16.840.1.113883.10.20.22.4.27 |
| @extension | 1..1 | SHALL |  | [1098-32574](#C_1098-32574) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-7300](#C_1098-7300) |  |
| code | 1..1 | SHALL |  | [1098-7301](#C_1098-7301) |  |
| @code | 0..1 | SHOULD |  | [1098-32934](#C_1098-32934) | urn:oid:2.16.840.1.113883.3.88.12.80.62 (Vital Sign Result Type) |
| statusCode | 1..1 | SHALL |  | [1098-7303](#C_1098-7303) |  |
| @code | 1..1 | SHALL |  | [1098-19119](#C_1098-19119) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1098-7304](#C_1098-7304) |  |
| value | 1..1 | SHALL | PQ | [1098-7305](#C_1098-7305) |  |
| @unit | 1..1 | SHALL |  | [1098-31579](#C_1098-31579) | urn:oid:2.16.840.1.113883.1.11.12839 (UnitsOfMeasureCaseSensitive) |
| interpretationCode | 0..1 | MAY |  | [1098-7307](#C_1098-7307) |  |
| @code | 1..1 | SHALL |  | [1098-32886](#C_1098-32886) | urn:oid:2.16.840.1.113883.1.11.78 (Observation Interpretation (HL7)) |
| methodCode | 0..1 | MAY | SET<CE> | [1098-7308](#C_1098-7308) |  |
| targetSiteCode | 0..1 | MAY | SET<CD> | [1098-7309](#C_1098-7309) |  |
| author | 0..\* | SHOULD |  | [1098-7310](#C_1098-7310) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |

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: HL7ActMood 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
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.27" (CONF:1098-10527).
   2. 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 (CONF:1098-7301).
   1. This code SHOULD contain zero or one [0..1] @code, which SHOULD be selected from ValueSet [Vital Sign Result Type](#Vital_Sign_Result_Type) urn:oid:2.16.840.1.113883.3.88.12.80.62 DYNAMIC (CONF:1098-32934).
6. SHALL contain exactly one [1..1] statusCode (CONF:1098-7303).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus 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).

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

* 1. This value SHALL contain exactly one [1..1] @unit, which SHOULD be selected from ValueSet [UnitsOfMeasureCaseSensitive](#UnitsOfMeasureCaseSensitive) urn:oid:2.16.840.1.113883.1.11.12839 DYNAMIC (CONF:1098-31579).

1. MAY contain zero or one [0..1] interpretationCode (CONF:1098-7307).
   1. The interpretationCode, if present, SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet [Observation Interpretation (HL7)](#Observation_Interpretation_HL7) urn:oid:2.16.840.1.113883.1.11.78 DYNAMIC (CONF:1098-32886).
2. MAY contain zero or one [0..1] methodCode (CONF:1098-7308).
3. MAY contain zero or one [0..1] targetSiteCode (CONF:1098-7309).
4. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-7310).

Table 505: Vital Sign Result Type

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Vital Sign Result Type urn:oid:2.16.840.1.113883.3.88.12.80.62  (Clinical Focus: A clinical observation classified as a vital sign, optionally including a method),(Data Element Scope: observation),(Inclusion Criteria: Specific set of concepts selected),(Exclusion Criteria: None needed)  This value set was imported on 6/29/2019 with a version of 20190521.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.80.62/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 2708-6 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Oxygen saturation in Arterial blood |
| 29463-7 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Body weight |
| 3140-1 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Body surface area Derived from formula |
| 39156-5 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Body mass index (BMI) [Ratio] |
| 59408-5 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Oxygen saturation in Arterial blood by Pulse oximetry |
| 8287-5 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Head Occipital-frontal circumference by Tape measure |
| 8302-2 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Body height |
| 8306-3 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Body height --lying |
| 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 | Diastolic blood pressure |
| ... | | | |

Figure 229: 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>

Vital Signs Organizer (V3)

[organizer: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.26:2015-08-01 (open)]

Table 506: Vital Signs Organizer (V3) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Vital Signs Section (entries optional) (V3)](#S_Vital_Signs_Section_entries_optional_) (optional)  [Vital Signs Section (entries required) (V3)](#S_Vital_Signs_Section_entries_required_) (required) | [Vital Sign Observation (V2)](#E_Vital_Sign_Observation_V2) (required)  [Author Participation](#U_Author_Participation) (optional) |

This template provides a mechanism for grouping vital signs (e.g., grouping systolic blood pressure and diastolic blood pressure).

Table 507: Vital Signs Organizer (V3) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| organizer (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.26:2015-08-01) | | | | | |
| @classCode | 1..1 | SHALL |  | [1198-7279](#C_1198-7279) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = CLUSTER |
| @moodCode | 1..1 | SHALL |  | [1198-7280](#C_1198-7280) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1198-7281](#C_1198-7281) |  |
| @root | 1..1 | SHALL |  | [1198-10528](#C_1198-10528) | 2.16.840.1.113883.10.20.22.4.26 |
| @extension | 1..1 | SHALL |  | [1198-32582](#C_1198-32582) | 2015-08-01 |
| id | 1..\* | SHALL |  | [1198-7282](#C_1198-7282) |  |
| code | 1..1 | SHALL |  | [1198-32740](#C_1198-32740) |  |
| @code | 1..1 | SHALL |  | [1198-32741](#C_1198-32741) | 46680005 |
| @codeSystem | 1..1 | SHALL |  | [1198-32742](#C_1198-32742) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.6.96 |
| translation | 1..1 | SHALL |  | [1198-32743](#C_1198-32743) |  |
| @code | 1..1 | SHALL |  | [1198-32744](#C_1198-32744) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 74728-7 |
| @codeSystem | 1..1 | SHALL |  | [1198-32746](#C_1198-32746) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1198-7284](#C_1198-7284) |  |
| @code | 1..1 | SHALL |  | [1198-19120](#C_1198-19120) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1198-7288](#C_1198-7288) |  |
| author | 0..\* | SHOULD |  | [1198-31153](#C_1198-31153) | [Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119](#U_Author_Participation) |
| component | 1..\* | SHALL |  | [1198-7285](#C_1198-7285) |  |
| observation | 1..1 | SHALL |  | [1198-15946](#C_1198-15946) | [Vital Sign Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.27:2014-06-09](#E_Vital_Sign_Observation_V2) |

1. SHALL contain exactly one [1..1] @classCode="CLUSTER" CLUSTER (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1198-7279).
2. SHALL contain exactly one [1..1] @moodCode="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1198-7280).
3. SHALL contain exactly one [1..1] templateId (CONF:1198-7281) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.26" (CONF:1198-10528).
   2. SHALL contain exactly one [1..1] @extension="2015-08-01" (CONF:1198-32582).
4. SHALL contain at least one [1..\*] id (CONF:1198-7282).

Compatibility support for C-CDA R1.1 and C-CDA 2.1: A vitals organizer conformant to both C-CDA 1.1 and C-CDA 2.1 would contain the SNOMED code (46680005) from R1.1 in the root code and a LOINC code in the translation. A vitals organizer conformant to only C-CDA 2.1 would only contain the LOINC code in the root code.

1. SHALL contain exactly one [1..1] code (CONF:1198-32740).
   1. This code SHALL contain exactly one [1..1] @code="46680005" Vital Signs (CONF:1198-32741).
   2. This code SHALL contain exactly one [1..1] @codeSystem="2.16.840.1.113883.6.96" SNOMED CT (CodeSystem: SNOMED CT urn:oid:2.16.840.1.113883.6.96) (CONF:1198-32742).
   3. This code SHALL contain exactly one [1..1] translation (CONF:1198-32743) such that it
      1. SHALL contain exactly one [1..1] @code="74728-7" Vital signs, weight, height, head circumference, oximetry, BMI, and BSA panel - HL7.CCDAr1.1 (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1198-32744).
      2. 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:1198-32746).
2. SHALL contain exactly one [1..1] statusCode (CONF:1198-7284).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1198-19120).
3. SHALL contain exactly one [1..1] effectiveTime (CONF:1198-7288).  
   Note: The effectiveTime may be a timestamp or an interval that spans the effectiveTimes of the contained vital signs observations.
4. SHOULD contain zero or more [0..\*] [Author Participation](#U_Author_Participation) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1198-31153).
5. SHALL contain at least one [1..\*] component (CONF:1198-7285) such that it
   1. SHALL contain exactly one [1..1] [Vital Sign Observation (V2)](#E_Vital_Sign_Observation_V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.27:2014-06-09) (CONF:1198-15946).

Figure 230: Vital Signs Organizer (V3) Example

<organizer classCode="CLUSTER" moodCode="EVN">

<!-- \*\* Vital signs organizer \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.26" extension="2015-08-01" />

<id root="24f6ad18-c512-40fc-82bd-1e131aa9e52b" />

<code code="46680005" displayName="Vital Signs"

codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT">

<translation code="74728-7"

displayName="Vital signs, weight, height, head circumference, oximetry, BMI, and BSA panel "

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC"></translation>

</code>

<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>

Wound Characteristic

[observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.134 (open)]

Table 508: Wound Characteristic Contexts

| Contained By: | Contains: |
| --- | --- |
| [Longitudinal Care Wound Observation (V2)](#E_Longitudinal_Care_Wound_Observation_V2) (optional) |  |

This template represents characteristics of a wound (e.g., integrity of suture line, odor, erythema).

Table 509: Wound Characteristic Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.134) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-29938](#C_1098-29938) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-29939](#C_1098-29939) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-29940](#C_1098-29940) |  |
| @root | 1..1 | SHALL |  | [1098-29941](#C_1098-29941) | 2.16.840.1.113883.10.20.22.4.134 |
| id | 1..\* | SHALL |  | [1098-29942](#C_1098-29942) |  |
| code | 1..1 | SHALL |  | [1098-29943](#C_1098-29943) |  |
| @code | 1..1 | SHALL |  | [1098-31540](#C_1098-31540) | ASSERTION |
| @codeSystem | 1..1 | SHALL |  | [1098-31541](#C_1098-31541) | urn:oid:2.16.840.1.113883.5.4 (HL7ActCode) = 2.16.840.1.113883.5.4 |
| statusCode | 1..1 | SHALL |  | [1098-29944](#C_1098-29944) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1098-29946](#C_1098-29946) |  |
| value | 1..1 | SHALL | CD | [1098-29947](#C_1098-29947) | urn:oid:2.16.840.1.113883.11.20.9.58 (Wound Characteristic) |

1. SHALL contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1098-29938).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1098-29939).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-29940) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.134" (CONF:1098-29941).
4. SHALL contain at least one [1..\*] id (CONF:1098-29942).
5. SHALL contain exactly one [1..1] code (CONF:1098-29943).
   1. This code SHALL contain exactly one [1..1] @code="ASSERTION" assertion (CONF:1098-31540).
   2. This code SHALL contain exactly one [1..1] @codeSystem="2.16.840.1.113883.5.4" (CodeSystem: HL7ActCode urn:oid:2.16.840.1.113883.5.4) (CONF:1098-31541).
6. SHALL contain exactly one [1..1] statusCode="completed" (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1098-29944).
7. SHALL contain exactly one [1..1] effectiveTime (CONF:1098-29946).
8. SHALL contain exactly one [1..1] value with @xsi:type="CD", where the code SHALL be selected from ValueSet [Wound Characteristic](#Wound_Characteristic) urn:oid:2.16.840.1.113883.11.20.9.58 DYNAMIC (CONF:1098-29947).

Table 510: Wound Characteristic

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Wound Characteristic urn:oid:2.16.840.1.113883.11.20.9.58  (Clinical Focus: Concepts representing general characteristics or types of wounds),(Data Element Scope: condition),(Inclusion Criteria: Selected concepts descending primarily from 225552003 'Wound finding' also including Skin Eschar),(Exclusion Criteria: )  This value set was imported on 6/29/2019 with a version of 20190517.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.58/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 122681000119108 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Dehiscence of external surgical incision wound (disorder) |
| 225540005 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Wound inflammation (finding) |
| 225552003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Wound finding (finding) |
| 225553008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Wound dehiscence (finding) |
| 225917003 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Suture line intact (finding) |
| 225944008 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Wound tenderness (finding) |
| 239157004 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Wound edge necrosis (finding) |
| 239159001 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Wound seroma (finding) |
| 239160006 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Wound hematoma (finding) |
| 239161005 | SNOMED CT | urn:oid:2.16.840.1.113883.6.96 | Wound hemorrhage (finding) |
| ... | | | |

Figure 231: Wound Characteristic Example

<entryRelationship typeCode="COMP">

<observation classCode="OBS" moodCode="EVN">

<!-- Wound Characteristic -->

<templateId root="2.16.840.1.113883.10.20.22.4.134" />

<id root="763428a0-eb35-11e2-91e2-0700200c9a66" />

<code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4" />

<statusCode code="completed" />

<effectiveTime value="20013103" />

<value xsi:type="CD" code="447547000" displayName="Offensive wound odor" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT" />

</observation>

</entryRelationship>

Wound Measurement Observation

[observation: identifier urn:oid:2.16.840.1.113883.10.20.22.4.133 (open)]

Table 511: Wound Measurement Observation Contexts

| Contained By: | Contains: |
| --- | --- |
| [Longitudinal Care Wound Observation (V2)](#E_Longitudinal_Care_Wound_Observation_V2) (optional) |  |

This template represents the Wound Measurement Observations of wound width, depth and length.

Table 512: Wound Measurement Observation Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.133) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-29926](#C_1098-29926) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-29927](#C_1098-29927) | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-29928](#C_1098-29928) |  |
| @root | 1..1 | SHALL |  | [1098-29929](#C_1098-29929) | 2.16.840.1.113883.10.20.22.4.133 |
| id | 1..\* | SHALL |  | [1098-29930](#C_1098-29930) |  |
| code | 1..1 | SHALL |  | [1098-29931](#C_1098-29931) | urn:oid:2.16.840.1.113883.1.11.20.2.5 (Wound Measurements) |
| statusCode | 1..1 | SHALL |  | [1098-29933](#C_1098-29933) |  |
| @code | 1..1 | SHALL |  | [1098-29934](#C_1098-29934) | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1098-29935](#C_1098-29935) |  |
| value | 1..1 | SHALL | PQ | [1098-29936](#C_1098-29936) |  |

1. SHALL contain exactly one [1..1] @classCode="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1098-29926).
2. SHALL contain exactly one [1..1] @moodCode="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 STATIC) (CONF:1098-29927).
3. SHALL contain exactly one [1..1] templateId (CONF:1098-29928) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.22.4.133" (CONF:1098-29929).
4. SHALL contain at least one [1..\*] id (CONF:1098-29930).
5. SHALL contain exactly one [1..1] code, which SHALL be selected from ValueSet [Wound Measurements](#Wound_Measurements) urn:oid:2.16.840.1.113883.1.11.20.2.5 DYNAMIC (CONF:1098-29931).
6. SHALL contain exactly one [1..1] statusCode (CONF:1098-29933).
   1. This statusCode SHALL contain exactly one [1..1] @code="completed" Completed (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14 STATIC) (CONF:1098-29934).
7. SHALL contain exactly one [1..1] effectiveTime (CONF:1098-29935).
8. SHALL contain exactly one [1..1] value with @xsi:type="PQ" (CONF:1098-29936).

Table 513: Wound Measurements

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Wound Measurements urn:oid:2.16.840.1.113883.1.11.20.2.5  (Clinical Focus: Concepts that represent the observables for the dimensions of a wound.),(Data Element Scope: observable),(Inclusion Criteria: the selected set),(Exclusion Criteria: only as selected in inclusion criteria)  This value set was imported on 6/29/2019 with a version of 20190114.  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.20.2.5/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| 39125-0 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Width of Wound |
| 39126-8 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Length of Wound |
| 39127-6 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Depth of Wound |
| 72293-4 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Undermining [Length] of Wound |
| 72296-7 | LOINC | urn:oid:2.16.840.1.113883.6.1 | Tunneling [Length] of Wound |

Figure 232: Wound Measurement Observation Example

<entryRelationship typeCode="COMP">

<observation classCode="OBS" moodCode="EVN">

<!-- Wound Measurements Observation . -->

<templateId root="2.16.840.1.113883.10.20.22.4.133" />

<id root="d2b46280-eb34-11e2-91e2-0800200c9a66" />

<code code=" 401238003" codeSystem="2.16.840.1.113883.6.96" displayName="Length of Wound" />

<statusCode code="completed" />

<effectiveTime value="20013103" />

<value xsi:type="PQ" value="2" unit="[in\_i]" />

</observation>

</entryRelationship>

# Participation and Other Templates

The participation and other templates chapter contains templates for CDA participations (e.g., author, performer), and other fielded items (e.g., address, name) that cannot stand on their own without being nested in another template .

Author Participation

[author: identifier urn:oid:2.16.840.1.113883.10.20.22.4.119 (open)]

Table 514: Author Participation Contexts

| Contained By: | Contains: |
| --- | --- |
| [Comment Activity](#E_Comment_Activity) (optional)  [Sensory Status](#E_Sensory_Status) (optional)  [Self-Care Activities (ADL and IADL)](#E_SelfCare_Activities_ADL_and_IADL) (optional)  [Medication Activity (V2)](#Medication_Activity_V2) (optional)  [Procedure Activity Act (V2)](#E_Procedure_Activity_Act_V2) (optional)  [Procedure Activity Procedure (V2)](#E_Procedure_Activity_Procedure_V2) (optional)  [Procedure Activity Observation (V2)](#E_Procedure_Activity_Observation_V2) (optional)  [Goal Observation](#E_Goal_Observation_U) (optional)  [Allergy - Intolerance Observation (V2)](#E_Allergy__Intolerance_Observation_V2) (optional)  [Substance or Device Allergy - Intolerance Observation (V2)](#E_Substance_or_Device_Allergy__V2) (optional)  [Nutrition Assessment](#E_Nutrition_Assessment) (optional)  [Planned Act (V2)](#E_Planned_Act_V2) (optional)  [Planned Encounter (V2)](#E_Planned_Encounter_V2) (optional)  [Planned Procedure (V2)](#E_Planned_Procedure_V2) (optional)  [Planned Observation (V2)](#E_Planned_Observation_V2) (optional)  [Planned Supply (V2)](#E_Planned_Supply_V2) (optional)  [Planned Medication Activity (V2)](#E_Planned_Medication_Activity_V2) (optional)  [Functional Status Observation (V2)](#E_Functional_Status_Observation_V2) (optional)  [Functional Status Organizer (V2)](#E_Functional_Status_Organizer_V2) (optional)  [Handoff Communication Participants](#E_Handoff_Communication_Participants) (required)  [Patient Referral Act](#E_Patient_Referral_Act) (optional)  [Smoking Status - Meaningful Use (V2)](#E_Smoking_Status__Meaningful_Use_V2) (optional)  [Vital Sign Observation (V2)](#E_Vital_Sign_Observation_V2) (optional)  [Priority Preference](#E_Priority_Preference) (optional)  [Tobacco Use (V2)](#Tobacco_Use_V2) (optional)  [Outcome Observation](#E_OutcomeObservation) (optional)  [Planned Coverage](#E_Planned_Coverage) (optional)  [Planned Immunization Activity](#E_Planned_Immunization_Activity) (optional)  [Vital Signs Organizer (V3)](#E_Vital_Signs_Organizer_V3) (optional)  [Immunization Activity (V3)](#E_Immunization_Activity_V3) (optional)  [Result Observation (V3)](#E_Result_Observation_V3) (optional)  [Mental Status Observation (V3)](#E_Mental_Status_Observation_V3) (optional)  [Advance Directive Observation (V3)](#E_Advance_Directive_Observation_V3) (optional)  [Problem Observation (V3)](#E_Problem_Observation_V3) (optional)  [Social History Observation (V3)](#E_Social_History_Observation_V3) (optional)  [Health Concern Act (V2)](#E_Health_Concern_Act_V2) (optional)  [Result Organizer (V3)](#E_Result_Organizer_V3) (optional)  [Advance Directive Organizer (V2)](#E_Advance_Directive_Organizer_V2) (optional)  [Risk Concern Act (V2)](#E_Risk_Concern_Act_V2) (optional)  [Problem Concern Act (V3)](#E_Problem_Concern_Act_V3) (optional)  [Planned Intervention Act (V2)](#E_Planned_Intervention_Act_V2) (optional)  [Longitudinal Care Wound Observation (V2)](#E_Longitudinal_Care_Wound_Observation_V2) (optional)  [Intervention Act (V2)](#E_Intervention_Act_V2) (optional)  [Allergy Concern Act (V3)](#E_Allergy_Concern_Act_V3) (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 515: 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 |  | [1098-32017](#C_1098-32017) |  |
| @root | 1..1 | SHALL |  | [1098-32018](#C_1098-32018) | 2.16.840.1.113883.10.20.22.4.119 |
| time | 1..1 | SHALL |  | [1098-31471](#C_1098-31471) |  |
| assignedAuthor | 1..1 | SHALL |  | [1098-31472](#C_1098-31472) |  |
| id | 1..\* | SHALL |  | [1098-31473](#C_1098-31473) |  |
| code | 0..1 | SHOULD |  | [1098-31671](#C_1098-31671) | urn:oid:2.16.840.1.114222.4.11.1066 (Healthcare Provider Taxonomy) |
| assignedPerson | 0..1 | MAY |  | [1098-31474](#C_1098-31474) |  |
| name | 0..\* | MAY |  | [1098-31475](#C_1098-31475) |  |
| representedOrganization | 0..1 | MAY |  | [1098-31476](#C_1098-31476) |  |
| id | 0..\* | MAY |  | [1098-31478](#C_1098-31478) |  |
| name | 0..\* | MAY |  | [1098-31479](#C_1098-31479) |  |
| telecom | 0..\* | MAY |  | [1098-31480](#C_1098-31480) |  |
| addr | 0..\* | MAY |  | [1098-31481](#C_1098-31481) |  |

1. SHALL contain exactly one [1..1] templateId (CONF:1098-32017) such that it
   1. 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).
   1. 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.
      1. 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).
   2. This assignedAuthor SHOULD contain zero or one [0..1] code, which SHOULD be selected from ValueSet [Healthcare Provider Taxonomy](#Healthcare_Provider_Taxonomy) urn:oid:2.16.840.1.114222.4.11.1066 DYNAMIC (CONF:1098-31671).
      1. 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).
   3. This assignedAuthor MAY contain zero or one [0..1] assignedPerson (CONF:1098-31474).
      1. The assignedPerson, if present, MAY contain zero or more [0..\*] name (CONF:1098-31475).
   4. This assignedAuthor MAY contain zero or one [0..1] representedOrganization (CONF:1098-31476).
      1. The representedOrganization, if present, MAY contain zero or more [0..\*] id (CONF:1098-31478).
      2. The representedOrganization, if present, MAY contain zero or more [0..\*] name (CONF:1098-31479).
      3. The representedOrganization, if present, MAY contain zero or more [0..\*] telecom (CONF:1098-31480).
      4. The representedOrganization, if present, MAY contain zero or more [0..\*] addr (CONF:1098-31481).

Figure 233: 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 234: 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>

Physician of Record Participant (V2)

[encounterParticipant: identifier urn:hl7ii:2.16.840.1.113883.10.20.6.2.2:2014-06-09 (open)]

Table 516: Physician of Record Participant (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Diagnostic Imaging Report (V3)](#D_Diagnostic_Imaging_Report_V3) (optional) | [US Realm Person Name (PN.US.FIELDED)](#U_US_Realm_Person_Name_PNUSFIELDED) (optional) |

This encounterParticipant is the attending physician and is usually different from the Physician Reading Study Performer defined in documentationOf/serviceEvent.

Table 517: Physician of Record Participant (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| encounterParticipant (identifier: urn:hl7ii:2.16.840.1.113883.10.20.6.2.2:2014-06-09) | | | | | |
| @typeCode | 1..1 | SHALL |  | [1098-8881](#C_1098-8881) | urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = ATND |
| templateId | 1..1 | SHALL |  | [1098-16072](#C_1098-16072) |  |
| @root | 1..1 | SHALL |  | [1098-16073](#C_1098-16073) | 2.16.840.1.113883.10.20.6.2.2 |
| @extension | 1..1 | SHALL |  | [1098-32586](#C_1098-32586) | 2014-06-09 |
| assignedEntity | 1..1 | SHALL |  | [1098-8886](#C_1098-8886) |  |
| id | 1..\* | SHALL |  | [1098-8887](#C_1098-8887) |  |
| code | 1..1 | SHALL |  | [1098-8888](#C_1098-8888) |  |
| assignedPerson | 0..1 | SHOULD |  | [1098-30928](#C_1098-30928) |  |
| name | 1..1 | SHALL |  | [1098-30929](#C_1098-30929) | [US Realm Person Name (PN.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1](#U_US_Realm_Person_Name_PNUSFIELDED) |
| representedOrganization | 0..1 | MAY |  | [1098-16074](#C_1098-16074) |  |
| name | 0..1 | SHOULD |  | [1098-16075](#C_1098-16075) |  |

1. SHALL contain exactly one [1..1] @typeCode="ATND" Attender (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 STATIC) (CONF:1098-8881).
2. SHALL contain exactly one [1..1] templateId (CONF:1098-16072) such that it
   1. SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.6.2.2" (CONF:1098-16073).
   2. SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32586).
3. SHALL contain exactly one [1..1] assignedEntity (CONF:1098-8886).
   1. This assignedEntity SHALL contain at least one [1..\*] id (CONF:1098-8887).
      1. SHOULD contain zero or one [0..1] *id* such that \*@root="2.16.840.1.113883.4.6" National Provider Identifier (CONF:1098-31203).
   2. This assignedEntity SHALL contain exactly one [1..1] code (CONF:1098-8888).
      1. SHALL contain a valid DICOM Organizational Role from DICOM CID 7452 (Value Set 1.2.840.10008.6.1.516) (@codeSystem is 1.2.840.10008.2.16.4) or an appropriate national health care provider coding system (e.g., NUCC in the U.S., where @codeSystem is 2.16.840.1.113883.6.101). Footnote: DICOM Part 16 (NEMA PS3.16), page 631 in the 2011 edition. See [URL:ftp://medical.nema.org/medical/dicom/2011/11\_16pu.pdf] (CONF:1098-8889).
   3. This assignedEntity SHOULD contain zero or one [0..1] assignedPerson (CONF:1098-30928).
      1. The assignedPerson, if present, SHALL contain exactly one [1..1] [US Realm Person Name (PN.US.FIELDED)](#U_US_Realm_Person_Name_PNUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1098-30929).
   4. This assignedEntity MAY contain zero or one [0..1] representedOrganization (CONF:1098-16074).
      1. The representedOrganization, if present, SHOULD contain zero or one [0..1] name (CONF:1098-16075).

Figure 235: Physician of Record Participant (V2) Example

<encounterParticipant typeCode="ATND">

<templateId root="2.16.840.1.113883.10.20.6.2.2" extension="2014-06-09" />

<assignedEntity>

<id extension="44444444" root="2.16.840.1.113883.4.6" />

<code code="208D00000X" codeSystem="2.16.840.1.113883.6.101" codeSystemName="NUCC" displayName="General Practice" />

<addr nullFlavor="NI" />

<telecom nullFlavor="NI" />

<assignedPerson>

<name>

<prefix>Dr.</prefix>

<given>Fay</given>

<family>Family</family>

</name>

</assignedPerson>

</assignedEntity>

</encounterParticipant>

Physician Reading Study Performer (V2)

[performer: identifier urn:hl7ii:2.16.840.1.113883.10.20.6.2.1:2014-06-09 (open)]

Table 518: Physician Reading Study Performer (V2) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Diagnostic Imaging Report (V3)](#D_Diagnostic_Imaging_Report_V3) (optional) | [US Realm Date and Time (DT.US.FIELDED)](#U_US_Realm_Date_and_Time_DTUSFIELDED) (optional) |

This participant is the Physician Reading Study Performer defined in documentationOf/serviceEvent. It is usually different from the attending physician. The reading physician interprets the images and evidence of the study (DICOM Definition).

Table 519: Physician Reading Study Performer (V2) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| performer (identifier: urn:hl7ii:2.16.840.1.113883.10.20.6.2.1:2014-06-09) | | | | | |
| @typeCode | 1..1 | SHALL |  | [1098-8424](#C_1098-8424) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = PRF |
| templateId | 1..1 | SHALL |  | [1098-30773](#C_1098-30773) |  |
| @root | 1..1 | SHALL |  | [1098-30774](#C_1098-30774) | 2.16.840.1.113883.10.20.6.2.1 |
| @extension | 1..1 | SHALL |  | [1098-32564](#C_1098-32564) | 2014-06-09 |
| time | 0..1 | MAY |  | [1098-8425](#C_1098-8425) | [US Realm Date and Time (DT.US.FIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3](#U_US_Realm_Date_and_Time_DTUSFIELDED) |
| assignedEntity | 1..1 | SHALL |  | [1098-8426](#C_1098-8426) |  |
| id | 1..\* | SHALL |  | [1098-10033](#C_1098-10033) |  |
| code | 1..1 | SHALL |  | [1098-8427](#C_1098-8427) |  |

1. SHALL contain exactly one [1..1] @typeCode="PRF" Performer (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 STATIC) (CONF:1098-8424).
2. SHALL contain exactly one [1..1] templateId (CONF:1098-30773).
   1. This templateId SHALL contain exactly one [1..1] @root="2.16.840.1.113883.10.20.6.2.1" (CONF:1098-30774).
   2. This templateId SHALL contain exactly one [1..1] @extension="2014-06-09" (CONF:1098-32564).
3. MAY contain zero or one [0..1] [US Realm Date and Time (DT.US.FIELDED)](#U_US_Realm_Date_and_Time_DTUSFIELDED) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3) (CONF:1098-8425).
4. SHALL contain exactly one [1..1] assignedEntity (CONF:1098-8426).
   1. This assignedEntity SHALL contain at least one [1..\*] id (CONF:1098-10033).
   2. This assignedEntity SHALL contain exactly one [1..1] code (CONF:1098-8427).
      1. SHALL contain a valid DICOM personal identification code sequence (@codeSystem is 1.2.840.10008.2.16.4) or an appropriate national health care provider coding system (e.g., NUCC in the U.S., where @codeSystem is 2.16.840.1.113883.6.101) (CONF:1098-8428).
   3. Every assignedEntity element SHALL contain at least one [1..\*] assignedPerson or representedOrganization (CONF:1098-8429).
   4. The id SHOULD include zero or one [0..1] *id* where id/@root="2.16.840.1.113883.4.6" National Provider Identifier (CONF:1098-32135).

Figure 236: Physician Reading Study Performer (V2) Example

<performer typeCode="PRF">

<templateId root="2.16.840.1.113883.10.20.6.2.1" extension="2014-06-09" />

<assignedEntity>

<id extension="111111111" root="2.16.840.1.113883.4.6" />

<code code="2085R0202X" codeSystem="2.16.840.1.113883.6.101" codeSystemName="NUCC" displayName="Diagnostic Radiology" />

<addr nullFlavor="NI" />

<telecom nullFlavor="NI" />

<assignedPerson>

<name>

<given>Christine</given>

<family>Cure</family>

<suffix>MD</suffix>

</name>

</assignedPerson>

</assignedEntity>

</performer>

US Realm Address (AD.US.FIELDED)

[addr: identifier urn:oid:2.16.840.1.113883.10.20.22.5.2 (open)]

Table 520: US Realm Address (AD.US.FIELDED) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Medication Dispense (V2)](#E_Medication_Dispense_V2) (optional)  [Advance Directive Observation (V3)](#E_Advance_Directive_Observation_V3) (optional)  [Policy Activity (V3)](#E_Policy_Activity_V3) (optional)  [US Realm Header (V3)](#D_US_Realm_Header_V3) (optional)  [US Realm Header (V3)](#D_US_Realm_Header_V3) (required) |  |

Reusable address template, for use in US Realm CDA Header.

Table 521: 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 |  | [81-7290](#C_81-7290) | urn:oid:2.16.840.1.113883.1.11.10637 (PostalAddressUse) |
| country | 0..1 | SHOULD |  | [81-7295](#C_81-7295) | urn:oid:2.16.840.1.113883.3.88.12.80.63 (Country) |
| state | 0..1 | SHOULD |  | [81-7293](#C_81-7293) | urn:oid:2.16.840.1.113883.3.88.12.80.1 (StateValueSet) |
| city | 1..1 | SHALL |  | [81-7292](#C_81-7292) |  |
| postalCode | 0..1 | SHOULD |  | [81-7294](#C_81-7294) | urn:oid:2.16.840.1.113883.3.88.12.80.2 (PostalCode) |
| streetAddressLine | 1..4 | SHALL |  | [81-7291](#C_81-7291) |  |

If addr/@nullFlavor is present, the remaining conformance statements *SHALL NOT* be enforced

1. SHOULD contain zero or one [0..1] @use, which SHALL be selected from ValueSet [PostalAddressUse](#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](#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](#StateValueSet) urn:oid:2.16.840.1.113883.3.88.12.80.1 DYNAMIC) (CONF:81-7293).
   1. If the country is US, the state element is required but SHOULD have @nullFlavor if the state is unknown. 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](#PostalCode) urn:oid:2.16.840.1.113883.3.88.12.80.2 DYNAMIC (CONF:81-7294).
   1. If the country is US, the postalCode element is required but SHOULD have @nullFlavor if the postalCode is unknown. 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 at least one and not more than 4 streetAddressLine (CONF:81-7291).
7. SHALL NOT have mixed content except for white space (CONF:81-7296).

Table 522: 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: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.10637/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| BAD | HL7AddressUse | urn:oid:2.16.840.1.113883.5.1119 | bad address |
| CONF | HL7AddressUse | urn:oid:2.16.840.1.113883.5.1119 | confidential |
| DIR | HL7AddressUse | urn:oid:2.16.840.1.113883.5.1119 | direct |
| H | HL7AddressUse | urn:oid:2.16.840.1.113883.5.1119 | home address |
| HP | HL7AddressUse | urn:oid:2.16.840.1.113883.5.1119 | primary home |
| HV | HL7AddressUse | urn:oid:2.16.840.1.113883.5.1119 | vacation home |
| PHYS | HL7AddressUse | urn:oid:2.16.840.1.113883.5.1119 | physical visit address |
| PST | HL7AddressUse | urn:oid:2.16.840.1.113883.5.1119 | postal address |
| PUB | HL7AddressUse | urn:oid:2.16.840.1.113883.5.1119 | public |
| TMP | HL7AddressUse | urn:oid:2.16.840.1.113883.5.1119 | temporary |
| ... | | | |

Table 523: 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: <https://ushik.ahrq.gov/ViewItemDetails?system=mdr&itemKey=86669000> | | | |
| 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 |
| ... | | | |

Table 524: 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: <http://ushik.ahrq.gov/ViewItemDetails?system=mdr&itemKey=86671000> | | | |
| 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 |
| ... | | | |

Figure 237: 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>

US Realm Date and Time (DT.US.FIELDED)

[effectiveTime: identifier urn:oid:2.16.840.1.113883.10.20.22.5.3 (open)]

Table 525: US Realm Date and Time (DT.US.FIELDED) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Physician Reading Study Performer (V2)](#U_Physician_Reading_Study_Performer_V2) (optional)  [Consultation Note (V3)](#D_Consultation_Note_V3) (required)  [History and Physical (V3)](#D_History_and_Physical_V3) (required)  [Progress Note (V3)](#D_Progress_Note_V3) (optional)  [Progress Note (V3)](#D_Progress_Note_V3) (required)  [Procedure Note (V3)](#D_Procedure_Note_V3) (required)  [Operative Note (V3)](#D_Operative_Note_V3) (required)  [Diagnostic Imaging Report (V3)](#D_Diagnostic_Imaging_Report_V3) (optional) |  |

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 (DTM.US.FIELDED), but is used with elements having a datatype of IVL\_TS.

Table 526: US Realm Date and Time (DT.US.FIELDED) Constraints Overview

| XPath | Card. | Verb | Data Type | CONF# | Value |
| --- | --- | --- | --- | --- | --- |
| effectiveTime (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.3) | | | | | |

1. SHALL be precise to the day (CONF:81-10078).
2. SHOULD be precise to the minute (CONF:81-10079).
3. MAY be precise to the second (CONF:81-10080).
4. If more precise than day, SHOULD include time-zone offset (CONF:81-10081).

US Realm Date and Time (DTM.US.FIELDED)

[effectiveTime: identifier urn:oid:2.16.840.1.113883.10.20.22.5.4 (open)]

Table 527: US Realm Date and Time (DTM.US.FIELDED) Contexts

| Contained By: | Contains: |
| --- | --- |
| [US Realm Header (V3)](#D_US_Realm_Header_V3) (optional)  [US Realm Header (V3)](#D_US_Realm_Header_V3) (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 528: US Realm Date and Time (DTM.US.FIELDED) Constraints Overview

| XPath | 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 238: 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>

US Realm Patient Name (PTN.US.FIELDED)

[name: identifier urn:oid:2.16.840.1.113883.10.20.22.5.1 (open)]

Table 529: US Realm Patient Name (PTN.US.FIELDED) Contexts

| Contained By: | Contains: |
| --- | --- |
| [US Realm Header (V3)](#D_US_Realm_Header_V3) (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 530: US Realm Patient Name (PTN.US.FIELDED) 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 |  | [81-7154](#C_81-7154) | urn:oid:2.16.840.1.113883.1.11.15913 (EntityNameUse) |
| family | 1..1 | SHALL |  | [81-7159](#C_81-7159) |  |
| @qualifier | 0..1 | MAY |  | [81-7160](#C_81-7160) | urn:oid:2.16.840.1.113883.11.20.9.26 (EntityPersonNamePartQualifier) |
| given | 1..\* | SHALL |  | [81-7157](#C_81-7157) |  |
| @qualifier | 0..1 | MAY |  | [81-7158](#C_81-7158) | urn:oid:2.16.840.1.113883.11.20.9.26 (EntityPersonNamePartQualifier) |
| prefix | 0..\* | MAY |  | [81-7155](#C_81-7155) |  |
| @qualifier | 0..1 | MAY |  | [81-7156](#C_81-7156) | urn:oid:2.16.840.1.113883.11.20.9.26 (EntityPersonNamePartQualifier) |
| suffix | 0..1 | MAY |  | [81-7161](#C_81-7161) |  |
| @qualifier | 0..1 | MAY |  | [81-7162](#C_81-7162) | urn:oid:2.16.840.1.113883.11.20.9.26 (EntityPersonNamePartQualifier) |

If name/@nullFlavor is present, the remaining conformance statements *SHALL NOT* be enforced

1. MAY contain zero or one [0..1] @use, which SHALL be selected from ValueSet [EntityNameUse](#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).
   1. This family MAY contain zero or one [0..1] @qualifier, which SHALL be selected from ValueSet [EntityPersonNamePartQualifier](#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).
   1. Such givens MAY contain zero or one [0..1] @qualifier, which SHALL be selected from ValueSet [EntityPersonNamePartQualifier](#EntityPersonNamePartQualifier) urn:oid:2.16.840.1.113883.11.20.9.26 STATIC 2011-09-30 (CONF:81-7158).
   2. The second occurrence of given (given[2]) if provided, SHALL include middle name or middle initial (CONF:81-7163).
4. MAY contain zero or more [0..\*] prefix (CONF:81-7155).
   1. The prefix, if present, MAY contain zero or one [0..1] @qualifier, which SHALL be selected from ValueSet [EntityPersonNamePartQualifier](#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).
   1. The suffix, if present, MAY contain zero or one [0..1] @qualifier, which SHALL be selected from ValueSet [EntityPersonNamePartQualifier](#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 531: EntityNameUse

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: EntityNameUse urn:oid:2.16.840.1.113883.1.11.15913  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.15913/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| A | HL7EntityNameUse | urn:oid:2.16.840.1.113883.5.45 | Artist/Stage |
| ABC | HL7EntityNameUse | urn:oid:2.16.840.1.113883.5.45 | Alphabetic |
| ASGN | HL7EntityNameUse | urn:oid:2.16.840.1.113883.5.45 | Assigned |
| C | HL7EntityNameUse | urn:oid:2.16.840.1.113883.5.45 | License |
| I | HL7EntityNameUse | urn:oid:2.16.840.1.113883.5.45 | Indigenous/Tribal |
| IDE | HL7EntityNameUse | urn:oid:2.16.840.1.113883.5.45 | Ideographic |
| L | HL7EntityNameUse | urn:oid:2.16.840.1.113883.5.45 | Legal |
| P | HL7EntityNameUse | urn:oid:2.16.840.1.113883.5.45 | Pseudonym |
| PHON | HL7EntityNameUse | urn:oid:2.16.840.1.113883.5.45 | Phonetic |
| R | HL7EntityNameUse | urn:oid:2.16.840.1.113883.5.45 | Religious |
| ... | | | |

Table 532: EntityPersonNamePartQualifier

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: EntityPersonNamePartQualifier urn:oid:2.16.840.1.113883.11.20.9.26  Value Set Source: <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.26/expansion> | | | |
| Code | Code System | Code System OID | Print Name |
| AC | HL7EntityNamePartQualifier | urn:oid:2.16.840.1.113883.5.43 | academic |
| AD | HL7EntityNamePartQualifier | urn:oid:2.16.840.1.113883.5.43 | adopted |
| BR | HL7EntityNamePartQualifier | urn:oid:2.16.840.1.113883.5.43 | birth |
| CL | HL7EntityNamePartQualifier | urn:oid:2.16.840.1.113883.5.43 | callme |
| IN | HL7EntityNamePartQualifier | urn:oid:2.16.840.1.113883.5.43 | initial |
| NB | HL7EntityNamePartQualifier | urn:oid:2.16.840.1.113883.5.43 | nobility |
| PR | HL7EntityNamePartQualifier | urn:oid:2.16.840.1.113883.5.43 | professional |
| SP | HL7EntityNamePartQualifier | urn:oid:2.16.840.1.113883.5.43 | spouse |
| TITLE | HL7EntityNamePartQualifier | urn:oid:2.16.840.1.113883.5.43 | title |
| VV | HL7EntityNamePartQualifier | urn:oid:2.16.840.1.113883.5.43 | voorvoegsel |

Figure 239: US Realm Patient Name Example

<name use="L">

<prefix qualifier="TITLE">Rep</prefix>

<given>Evelyn</given>

<given qualifier="CL">Eve</given>

<family qualifier="BR">Everywoman</family>

<suffix qualifier="AC">J.D.</suffix>

</name>

US Realm Person Name (PN.US.FIELDED)

[name: identifier urn:oid:2.16.840.1.113883.10.20.22.5.1.1 (open)]

Table 533: US Realm Person Name (PN.US.FIELDED) Contexts

| Contained By: | Contains: |
| --- | --- |
| [Drug Monitoring Act](#E_Drug_Monitoring_Act) (required)  [Physician of Record Participant (V2)](#U_Physician_of_Record_Participant_V2) (optional)  [Advance Directive Observation (V3)](#E_Advance_Directive_Observation_V3) (optional)  [Care Plan (V2)](#D_Care_Plan_V2) (optional)  [Care Plan (V2)](#D_Care_Plan_V2) (required)  [Referral Note (V2)](#D_Referral_Note_V2) (optional)  [Referral Note (V2)](#D_Referral_Note_V2) (required)  [US Realm Header (V3)](#D_US_Realm_Header_V3) (optional)  [Diagnostic Imaging Report (V3)](#D_Diagnostic_Imaging_Report_V3) (optional) |  |

The US Realm Clinical Document Person Name datatype flavor is a set of reusable constraints that can be used for Persons.

Table 534: US Realm Person Name (PN.US.FIELDED) 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 |  | [81-9368](#C_81-9368) |  |

1. SHALL contain exactly one [1..1] name (CONF:81-9368).
   1. The content of name SHALL be either a conformant Patient Name (PTN.US.FIELDED), or a string (CONF:81-9371).
   2. The string SHALL NOT contain name parts (CONF:81-9372).

# Value Sets In This Guide

Table 535: Value Sets

| Name | OID | URL |
| --- | --- | --- |
| [Ability](#Ability) | urn:oid:2.16.840.1.113883.11.20.9.46 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.46/expansion> |
| [ActPriority](#ActPriority) | urn:oid:2.16.840.1.113883.1.11.16866 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.16866/expansion> |
| [ActStatus](#ActStatus) | urn:oid:2.16.840.1.113883.1.11.15933 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.15933/expansion> |
| [ADL Result Type](#ADL_Result_Type) | urn:oid:2.16.840.1.113883.11.20.9.47 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.47/expansion> |
| [AdministrationUnitDoseForm](#AdministrationUnitDoseForm) | urn:oid:2.16.840.1.113762.1.4.1021.30 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1021.30/expansion> |
| [Administrative Gender (HL7 V3)](#Administrative_Gender_HL7_V3) | urn:oid:2.16.840.1.113883.1.11.1 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.1/expansion> |
| [Advance Directive Type Code](#Advance_Directive_Type_Code) | urn:oid:2.16.840.1.113883.1.11.20.2 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.20.2/expansion> |
| [AgePQ\_UCUM](#AgePQ_UCUM) | urn:oid:2.16.840.1.113883.11.20.9.21 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.21/expansion> |
| [Allergy and Intolerance Type](#Allergy_and_Intolerance_Type) | urn:oid:2.16.840.1.113883.3.88.12.3221.6.2 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.3221.6.2/expansion> |
| [Allergy Clinical Status](#Allergy_Clinical_Status) | urn:oid:2.16.840.1.113762.1.4.1099.29 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1099.29/expansion> |
| [Body Site Value Set](#Body_Site_Value_Set) | urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.3221.8.9/expansion> |
| [Care Model](#Care_Model) | urn:oid:2.16.840.1.113883.11.20.9.61 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.61/expansion> |
| [Care Plan Document Type](#Care_Plan_Document_Type) | urn:oid:2.16.840.1.113762.1.4.1099.10 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1099.10/expansion> |
| [Care Team Member Function](#Care_Team_Member_Function) | urn:oid:2.16.840.1.113762.1.4.1099.30 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1099.30/expansion> |
| [Clinical Substance](#Clinical_Substance) | urn:oid:2.16.840.1.113762.1.4.1010.2 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1010.2/expansion> |
| [ConsultDocumentType](#ConsultDocumentType) | urn:oid:2.16.840.1.113883.11.20.9.31 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.31/expansion> |
| [Country](#Country) | urn:oid:2.16.840.1.113883.3.88.12.80.63 | <http://hl7.org/fhir/ValueSet/iso3166-1-2> |
| [Coverage Role Type Value Set](#Coverage_Role_Type_Value_Set) | urn:oid:2.16.840.1.113883.1.11.18877 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.18877/expansion> |
| [Criticality Observation](#Criticality_Observation) | urn:oid:2.16.840.1.113883.1.11.20549 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.20549/expansion> |
| [CVX Vaccines Administered Vaccine Set](#CVX_Vaccines_Administered_Vaccine_Set) | urn:oid:2.16.840.1.113762.1.4.1010.6 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1010.6/expansion> |
| [Detailed Ethnicity](#Detailed_Ethnicity) | urn:oid:2.16.840.1.114222.4.11.877 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.877/expansion> |
| [DICOMPurposeOfReference](#DICOMPurposeOfReference) | urn:oid:2.16.840.1.113883.11.20.9.28 | <http://www.hl7.org> |
| [DIRQuantityMeasurementTypeCodes](#DIRQuantityMeasurementTypeCodes) | urn:oid:2.16.840.1.113883.11.20.9.29 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.29/expansion> |
| [DIRSectionTypeCodes](#DIRSectionTypeCodes) | urn:oid:2.16.840.1.113883.11.20.9.59 | <http://www.loinc.org/> |
| [DischargeSummaryDocumentTypeCode](#DischargeSummaryDocumentTypeCode) | urn:oid:2.16.840.1.113883.11.20.4.1 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.4.1/expansion> |
| [Encounter Planned](#Encounter_Planned) | urn:oid:2.16.840.1.113883.11.20.9.52 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.52/expansion> |
| [EncounterTypeCode](#EncounterTypeCode) | urn:oid:2.16.840.1.113883.3.88.12.80.32 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.80.32/expansion> |
| [EntityNameUse](#EntityNameUse) | urn:oid:2.16.840.1.113883.1.11.15913 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.15913/expansion> |
| [EntityPersonNamePartQualifier](#EntityPersonNamePartQualifier) | urn:oid:2.16.840.1.113883.11.20.9.26 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.26/expansion> |
| [Ethnicity](#Ethnicity) | urn:oid:2.16.840.1.114222.4.11.837 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.837/expansion> |
| [Extended Pregnancy Status](#Extended_Pregnancy_Status) | urn:oid:2.16.840.1.113762.1.4.1099.24 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1099.24/expansion> |
| [Family Member Value](#Family_Member_Value) | urn:oid:2.16.840.1.113883.1.11.19579 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.19579/expansion> |
| [Financially Responsible Party Type Value Set](#Financially_Responsible_Party_Type_Valu) | urn:oid:2.16.840.1.113883.1.11.10416 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.10416/expansion> |
| [Goal Achievement](#Goal_Achievement) | urn:oid:2.16.840.1.113883.11.20.9.55 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.55/expansion> |
| [Health Insurance Type](#Health_Insurance_Type) | urn:oid:2.16.840.1.113883.3.88.12.3221.5.2 | N/A |
| [Healthcare Agent Qualifier](#Healthcare_Agent_Qualifier) | urn:oid:2.16.840.1.113883.11.20.9.51 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.51/expansion> |
| [Healthcare Provider Taxonomy](#Healthcare_Provider_Taxonomy) | urn:oid:2.16.840.1.114222.4.11.1066 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.1066/expansion> |
| [HealthcareServiceLocation](#HealthcareServiceLocation) | urn:oid:2.16.840.1.113883.1.11.20275 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.20275/expansion> |
| [HealthStatus](#HealthStatus) | urn:oid:2.16.840.1.113883.1.11.20.12 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.20.12/expansion> |
| [HL7 BasicConfidentialityKind](#HL7_BasicConfidentialityKind) | urn:oid:2.16.840.1.113883.1.11.16926 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.16926/expansion> |
| [HPDocumentType](#HPDocumentType) | urn:oid:2.16.840.1.113883.1.11.20.22 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.20.22/expansion> |
| [INDRoleclassCodes](#INDRoleclassCodes) | urn:oid:2.16.840.1.113883.11.20.9.33 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.33/expansion> |
| [Language](#Language) | urn:oid:2.16.840.1.113883.1.11.11526 | <http://www.loc.gov/standards/iso639-2/php/code_list.php> |
| [LanguageAbilityMode](#LanguageAbilityMode) | urn:oid:2.16.840.1.113883.1.11.12249 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.12249/expansion> |
| [LanguageAbilityProficiency](#LanguageAbilityProficiency) | urn:oid:2.16.840.1.113883.1.11.12199 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.12199/expansion> |
| [LOINC Imaging Document Codes](#LOINC_Imaging_Document_Codes) | urn:oid:1.3.6.1.4.1.12009.10.2.5 | <https://vsac.nlm.nih.gov/valueset/1.3.6.1.4.1.12009.10.2.5/expansion> |
| [Marital Status](#Marital_Status) | urn:oid:2.16.840.1.113883.1.11.12212 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.12212/expansion> |
| [Medication Clinical Drug](#Medication_Clinical_Drug) | urn:oid:2.16.840.1.113762.1.4.1010.4 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1010.4/expansion> |
| [Medication Fill Status](#Medication_Fill_Status) | urn:oid:2.16.840.1.113883.3.88.12.80.64 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.80.64/expansion> |
| [Medication Route](#Medication_Route) | urn:oid:2.16.840.1.113762.1.4.1099.12 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1099.12/expansion> |
| [Medication Status](#Medication_Status) | urn:oid:2.16.840.1.113762.1.4.1099.11 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1099.11/expansion> |
| [Mental and Functional Status Response](#Mental_and_Functional_Status_Response) | urn:oid:2.16.840.1.113883.11.20.9.44 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.44/expansion> |
| [MoodCodeEvnInt](#MoodCodeEvnInt) | urn:oid:2.16.840.1.113883.11.20.9.18 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.18/expansion> |
| [No Immunization Reason](#No_Immunization_Reason) | urn:oid:2.16.840.1.113883.1.11.19717 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.19717/expansion> |
| [NUBC UB-04 FL17 Patient Status](#NUBC_UB04_FL17_Patient_Status) | urn:oid:2.16.840.1.113883.3.88.12.80.33 | <http://www.nubc.org> |
| [Nutrition Recommendations](#Nutrition_Recommendations) | urn:oid:2.16.840.1.113883.1.11.20.2.9 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.20.2.9/expansion> |
| [Nutritional Status](#Nutritional_Status) | urn:oid:2.16.840.1.113883.1.11.20.2.7 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.20.2.7/expansion> |
| [Observation Interpretation (HL7)](#Observation_Interpretation_HL7) | urn:oid:2.16.840.1.113883.1.11.78 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.78/expansion> |
| [ParticipationFunction](#ParticipationFunction) | urn:oid:2.16.840.1.113883.1.11.10267 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.10267/expansion> |
| [Patient Education](#Patient_Education) | urn:oid:2.16.840.1.113883.11.20.9.34 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.34/expansion> |
| [Patient Referral Act moodCode](#Patient_Referral_Act_moodCode) | urn:oid:2.16.840.1.113883.11.20.9.66 | <http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html> |
| [Payer](#Payer) | urn:oid:2.16.840.1.114222.4.11.3591 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.114222.4.11.3591/expansion> |
| [Personal And Legal Relationship Role Type](#Personal_And_Legal_Relationship_Role_Ty) | urn:oid:2.16.840.1.113883.11.20.12.1 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.12.1/expansion> |
| [Physical Exam Type](#Physical_Exam_Type) | urn:oid:2.16.840.1.113883.11.20.9.65 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.65/expansion> |
| [Planned Intervention moodCode](#Planned_Intervention_moodCode) | urn:oid:2.16.840.1.113883.11.20.9.54 | [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%20) |
| [Planned moodCode (Act/Encounter/Procedure)](#Planned_moodCode_ActEncounterProcedure) | urn:oid:2.16.840.1.113883.11.20.9.23 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.23/expansion> |
| [Planned moodCode (Observation)](#Planned_moodCode_Observation) | urn:oid:2.16.840.1.113883.11.20.9.25 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.25/expansion> |
| [Planned moodCode (SubstanceAdministration/Supply)](#Planned_moodCode_SubstanceAdministratio) | urn:oid:2.16.840.1.113883.11.20.9.24 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.24/expansion> |
| [PostalAddressUse](#PostalAddressUse) | urn:oid:2.16.840.1.113883.1.11.10637 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.10637/expansion> |
| [PostalCode](#PostalCode) | urn:oid:2.16.840.1.113883.3.88.12.80.2 | <http://ushik.ahrq.gov/ViewItemDetails?system=mdr&itemKey=86671000> |
| [Pressure Point](#Pressure_Point_) | urn:oid:2.16.840.1.113883.11.20.9.36 | <https://vsac.nlm.nih.gov> |
| [Pressure Ulcer Stage](#Pressure_Ulcer_Stage) | urn:oid:2.16.840.1.113883.11.20.9.35 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.35/expansion> |
| [Priority Level](#Priority_Level) | urn:oid:2.16.840.1.113883.11.20.9.60 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.60/expansion> |
| [Problem](#Problem) | urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.3221.7.4/expansion> |
| [Problem Status](#Problem_Status) | urn:oid:2.16.840.1.113883.3.88.12.80.68 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.80.68/expansion> |
| [Problem Type (LOINC)](#Problem_Type_LOINC) | urn:oid:2.16.840.1.113762.1.4.1099.28 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1099.28/expansion> |
| [Problem Type (SNOMEDCT)](#Problem_Type_SNOMEDCT) | urn:oid:2.16.840.1.113883.3.88.12.3221.7.2 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.3221.7.2/expansion> |
| [ProblemAct statusCode](#ProblemAct_statusCode) | urn:oid:2.16.840.1.113883.11.20.9.19 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.19/expansion> |
| [ProcedureAct statusCode](#ProcedureAct_statusCode) | urn:oid:2.16.840.1.113883.11.20.9.22 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.22/expansion> |
| [ProcedureNoteDocumentTypeCodes](#ProcedureNoteDocumentTypeCodes) | urn:oid:2.16.840.1.113883.11.20.6.1 | <http://search.loinc.org> |
| [ProgressNoteDocumentTypeCode](#ProgressNoteDocumentTypeCode) | urn:oid:2.16.840.1.113883.11.20.8.1 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.8.1/expansion> |
| [Race Category Excluding Nulls](#Race_Category_Excluding_Nulls) | urn:oid:2.16.840.1.113883.3.2074.1.1.3 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.2074.1.1.3/expansion> |
| [Race Value Set](#Race_Value_Set) | urn:oid:2.16.840.1.113883.1.11.14914 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.14914/expansion> |
| [Referral Types](#Referral_Types) | urn:oid:2.16.840.1.113883.11.20.9.56 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.56/expansion> |
| [ReferralDocumentType](#ReferralDocumentType) | urn:oid:2.16.840.1.113883.1.11.20.2.3 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.20.2.3/expansion> |
| [Religious Affiliation](#Religious_Affiliation) | urn:oid:2.16.840.1.113883.1.11.19185 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.19185/expansion> |
| [Residence and Accommodation Type](#Residence_and_Accommodation_Type) | urn:oid:2.16.840.1.113883.11.20.9.49 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.49/expansion> |
| [Result Status](#Result_Status) | urn:oid:2.16.840.1.113883.11.20.9.39 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.39/expansion> |
| [Sensory Status Problem Type](#Sensory_Status_Problem_Type) | urn:oid:2.16.840.1.113883.11.20.9.50 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.50/expansion> |
| [Severity](#Severity) | urn:oid:2.16.840.1.113883.3.88.12.3221.6.8 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.3221.6.8/expansion> |
| [Smoking Status](#Smoking_Status) | urn:oid:2.16.840.1.113883.11.20.9.38 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.38/expansion> |
| [Social History Type](#Social_History_Type) | urn:oid:2.16.840.1.113883.3.88.12.80.60 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.80.60/expansion> |
| [SPL Drug Route of Administration Terminology](#SPL_Drug_Route_of_Administration_Termin) | urn:oid:2.16.840.1.113883.3.88.12.3221.8.7 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.3221.8.7/expansion> |
| [StateValueSet](#StateValueSet) | urn:oid:2.16.840.1.113883.3.88.12.80.1 | <https://ushik.ahrq.gov/ViewItemDetails?system=mdr&itemKey=86669000> |
| [Substance Reactant for Intolerance](#Substance_Reactant_for_Intolerance) | urn:oid:2.16.840.1.113762.1.4.1010.1 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1010.1/expansion> |
| [SupportedFileFormats](#SupportedFileFormats) | urn:oid:2.16.840.1.113883.11.20.7.1 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.7.1/expansion> |
| [SurgicalOperationNoteDocumentTypeCode](#SurgicalOperationNoteDocumentTypeCode) | urn:oid:2.16.840.1.113883.11.20.1.1 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.1.1/expansion> |
| [TargetSite Qualifiers](#TargetSite_Qualifiers) | urn:oid:2.16.840.1.113883.11.20.9.37 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.37/expansion> |
| [Telecom Use (US Realm Header)](#Telecom_Use_US_Realm_Header) | urn:oid:2.16.840.1.113883.11.20.9.20 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.20/expansion> |
| [Tobacco Use](#Tobacco_Use) | urn:oid:2.16.840.1.113883.11.20.9.41 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.41/expansion> |
| [TransferDocumentType](#TransferDocumentType) | urn:oid:2.16.840.1.113883.1.11.20.2.4 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.20.2.4/expansion> |
| [UnitsOfMeasureCaseSensitive](#UnitsOfMeasureCaseSensitive) | urn:oid:2.16.840.1.113883.1.11.12839 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.12839/expansion> |
| [Vaccine Clinical Drug](#Vaccine_Clinical_Drug) | urn:oid:2.16.840.1.113762.1.4.1010.8 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1010.8/expansion> |
| [Vital Sign Result Type](#Vital_Sign_Result_Type) | urn:oid:2.16.840.1.113883.3.88.12.80.62 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.3.88.12.80.62/expansion> |
| [Wound Characteristic](#Wound_Characteristic) | urn:oid:2.16.840.1.113883.11.20.9.58 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.58/expansion> |
| [Wound Measurements](#Wound_Measurements) | urn:oid:2.16.840.1.113883.1.11.20.2.5 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.20.2.5/expansion> |
| [Wound Type](#Wound_Type) | urn:oid:2.16.840.1.113883.1.11.20.2.6 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.20.2.6/expansion> |
| [x\_ActRelationshipDocument](#x_ActRelationshipDocument) | urn:oid:2.16.840.1.113883.1.11.11610 | N/A |
| [x\_ServiceEventPerformer](#x_ServiceEventPerformer) | urn:oid:2.16.840.1.113883.1.11.19601 | <https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.1.11.19601/expansion> |

# Code Systems in This Guide

Table 536: Code Systems

| Name | OID |
| --- | --- |
| Administrative Gender | urn:oid:2.16.840.1.113883.5.1 |
| CDC Vaccine Code (CVX) | urn:oid:2.16.840.1.113883.12.292 |
| CPT | urn:oid:2.16.840.1.113883.6.12 |
| DCM | urn:oid:1.2.840.10008.2.16.4 |
| 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 |
| HL7ActClass | urn:oid:2.16.840.1.113883.5.6 |
| HL7ActCode | urn:oid:2.16.840.1.113883.5.4 |
| HL7ActMood | urn:oid:2.16.840.1.113883.5.1001 |
| HL7ActPriority | urn:oid:2.16.840.1.113883.5.7 |
| HL7ActReason | urn:oid:2.16.840.1.113883.5.8 |
| HL7ActRelationshipType | urn:oid:2.16.840.1.113883.5.1002 |
| HL7ActStatus | urn:oid:2.16.840.1.113883.5.14 |
| HL7AddressUse | urn:oid:2.16.840.1.113883.5.1119 |
| HL7Confidentiality | urn:oid:2.16.840.1.113883.5.25 |
| HL7EntityClass | urn:oid:2.16.840.1.113883.5.41 |
| HL7EntityNamePartQualifier | urn:oid:2.16.840.1.113883.5.43 |
| HL7EntityNameUse | urn:oid:2.16.840.1.113883.5.45 |
| HL7LanguageAbilityMode | urn:oid:2.16.840.1.113883.5.60 |
| HL7LanguageAbilityProficiency | urn:oid:2.16.840.1.113883.5.61 |
| HL7MaritalStatus | urn:oid:2.16.840.1.113883.5.2 |
| HL7NullFlavor | urn:oid:2.16.840.1.113883.5.1008 |
| HL7ObservationValue | urn:oid:2.16.840.1.113883.5.1063 |
| HL7ParticipationFunction | urn:oid:2.16.840.1.113883.5.88 |
| HL7ParticipationSignature | urn:oid:2.16.840.1.113883.5.89 |
| HL7ParticipationType | urn:oid:2.16.840.1.113883.5.90 |
| HL7ReligiousAffiliation | urn:oid:2.16.840.1.113883.5.1076 |
| HL7RoleClass | urn:oid:2.16.840.1.113883.5.110 |
| HL7RoleCode | urn:oid:2.16.840.1.113883.5.111 |
| HSLOC | urn:oid:2.16.840.1.113883.6.259 |
| ICD-10-CM | urn:oid:2.16.840.1.113883.6.90 |
| Insurance Type Code | urn:oid:2.16.840.1.113883.3.88.12.3221.5.2 |
| ISO 3166 Part 1 Country Codes, 2nd Edition, Alpha-2 | urn:oid:1.0.3166.1.2.2 |
| Language | urn:oid:2.16.840.1.113883.6.121 |
| LOINC | urn:oid:2.16.840.1.113883.6.1 |
| Media Type | urn:oid:2.16.840.1.113883.5.79 |
| NCI Thesaurus (NCIt) | urn:oid:2.16.840.1.113883.3.26.1.1 |
| NDFRT | urn:oid:2.16.840.1.113883.3.26.1.5 |
| NUBC UB-04 Patient Discharge Status code set | urn:oid:2.16.840.1.113883.6.301.5 |
| ObservationInterpretation | urn:oid:2.16.840.1.113883.5.83 |
| Provider Role (HL7) | urn:oid:2.16.840.1.113883.3.88.12.3221.4 |
| Race & Ethnicity - CDC | urn:oid:2.16.840.1.113883.6.238 |
| 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:1.3.6.1.4.1.12009.10.3.1 |
| USPostalCodes | urn:oid:2.16.840.1.113883.6.231 |