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Vol2\_Templates\_and\_Supporting



**HL7 CDA® Release 2 Implementation Guide: Reporting to Public Health Cancer Registries from Ambulatory Healthcare Providers, Release 1;**

**DSTU Release 1.1 - US Realm Draft Standard for Trial Use** April 2015

**Volume 2 — Templates and Supporting Material**

**Sponsored by: Public Health Emergency Response Clinical Quality Information, Structured Documents**

Publication of this draft standard for trial use and comment has been approved by Health Level Seven International (HL7). This draft standard is not an accredited American National Standard. The comment period for use of this draft standard shall end 24 months from the date of publication.

Suggestions for revision should be submitted at <http://www.hl7.org/dstucomments/index.cfm>.

Following this 24 month evaluation period, this draft standard, revised as necessary, will be submitted to a normative ballot in preparation for approval by ANSI as an American National Standard.

Implementations of this draft standard shall be viable throughout the normative ballot process and for up to six months after publication of the relevant normative standard.

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|  |  |
| --- | --- |
| **Terminology** | **Owner/Contact** |
| Current Procedures Terminology (CPT) code set | American Medical Association  <http://www.ama-assn.org/ama/pub/physician-> resources/solutions-managing-your-practice/coding-billing- insurance/cpt/cpt-products-services/licensing.page? |
| SNOMED CT | International Healthcare Terminology Standards Developing Organization (IHTSDO) [http://www.ihtsdo.org/snomed-](http://www.ihtsdo.org/snomed-ct/get-snomed-ct)  [ct/get-snomed-ct](http://www.ihtsdo.org/snomed-ct/get-snomed-ct) or [info@ihtsdo.org](mailto:info@ihtsdo.org) |
| Logical Observation Identifiers Names & Codes (LOINC) | Regenstrief Institute |
| International Classification of Diseases (ICD) codes | World Health Organization (WHO) |

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# D O C U M E N T

## Cancer Event Report Document (V1.1) - Published

[ClinicalDocument: identifier urn:hl7ii:2.16.840.1.113883.10.13.1:2015-01-29 (open)]

***Table 1: Cancer Event Report Document (V1.1) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
|  | [Assessment Section](#_bookmark360)  [Cancer Diagnosis Section (entries required) (V1.1)](#_bookmark372)  [Family History Section (V2)](#_bookmark390)  [Medications Administered Section (V2) - Cancer IG](#_bookmark420)  [Specific Constraints](#_bookmark420)  [Medications Section (entries required) (V2) - Cancer IG](#_bookmark446)  [Specific Constraints](#_bookmark446)  [Payers Section (V2)](#_bookmark456)  [Plan of Treatment Section (V2) - Cancer IG Specific](#_bookmark506)  [Constraints](#_bookmark506)  [Problem Section (entries required) (V2) - Cancer IG](#_bookmark539)  [Specific Constraints](#_bookmark539)  [Procedures Section (entries required) (V2) - Cancer IG](#_bookmark567)  [Specific Constraints](#_bookmark567)  [Results Section (entries required) (V2)](#_bookmark595)  [Social History Section (V2) - Cancer IG Specific](#_bookmark638)  [Constraints (V1.1)](#_bookmark638)  [US Realm Address (AD.US.FIELDED)](#_bookmark2222)  [US Realm Address (AD.US.FIELDED) (V2) - Cancer IG](#_bookmark2237)  [Specific Constraints](#_bookmark2237)  [US Realm Patient Name (PTN.US.FIELDED) - Cancer](#_bookmark2274)  [IG Specific Constraints](#_bookmark2274)  [US Realm Person Name (PN.US.FIELDED)](#_bookmark2286)  [Vital Signs Section (entries required) (V2)](#_bookmark658) |

The Ambulatory Healthcare Provider Cancer Event Report represents a core data set of relevant administrative, demographic, and clinical information about a patient and the patient's cancer diagnosis and treatment that has been recorded in the patient’s electronic health record.

It provides a mechanism for healthcare practitioners to electronically report their cancer cases to the public health central cancer registry using a standardized structure.

Central cancer registries consolidate the information from these Cancer Event Reports with data from other reporting sources. Public health central cancer registry surveillance data are used for describing the occurrence of cancer in a given population, development of comprehensive cancer control programs, healthcare planning and interventions and research.

The Cancer IG specific constraints for the US Realm Header further tighten some conformance verbs, such as birthplace of the patient and document set ID and version number. It also adds new elements including: patient’s social security number; usable period for patient’s address;

patient deceased indicator and deceased time; and physician who referred patient to the reporting healthcare provider.

This document is a **Part 2** of the **"HL7 Implementation Guide for CDA© Release 2: Reporting to Public Health Cancer Registries from Ambulatory Healthcare Providers, Release 1"** Implementation Guide.

The **Part 2** of the Implementation Guide describes the structure and content requirements for the Cancer Event Report such as document identification, header information, sections, entries and codes systems/value sets.

**Document Template ID:** urn:hl7ii:2.16.840.1.113883.10.13.1:2015-01-09

**General Description:** The Cancer Event Report contains a record of a patient’s encounter for diagnosis and/or treatment of cancer.

**Document Code:** 72134-0 (LOINC code for "Cancer Event Report")

**About id, setId, version**

* + 1. CDA requires a ClinicalDocument/id element representing a unique identifier for the document. The id may be represented by either @root or @root plus@extension, so long as the resulting id is globally unique. CDA provides id, setId, versionNumber, and relatedDocument elements to support succession management (document versioning). The id element identifies the CDA document instance (the electronic file). It is independent of the setId and versionNumber elements.
    2. Since Cancer Event Reports are sometimes updated, this IG requires setId and versionNumber to ensure that succession management can be easily performed.
    3. The setId element identifies the set of documents in a version tree and is consistent across all versions; The versionNumber element stores the version number as an integer (the first version is 1, the second is 2, etc.). The vendor software is responsible for generating the necessary values and for ensuring uniqueness.
    4. In a replacement document, the relatedDocument element stores the id of the parent document and the typeCode attribute stores the type of document relationship. CDA supports several document relationship typeCodes. If present in a Cancer Event Report, the value of a document relationship typeCode must be RPLC (replace).

**COMPONENTS OF CANCER EVENT REPORT DOCUMENT:**

The table below list components of Cancer Event Report Document such as the header and all sections.

|  |  |  |
| --- | --- | --- |
| **Conformance** | **Section Name** | **Template Identifier** |
| SHALL [1..1] | Header Section | urn:hl7ii:2.16.840.1.113883.10.13.1:2015-01-29 |
| SHALL [1..1] | Cancer Diagnosis Section (entries required) | urn:hl7ii:2.16.840.1.113883.10.13.2:2015-02-05 |
| SHALL [1..1] | Assessment Section | urn:hl7ii:2.16.840.1.113883.10.20.22.2.8:2014-06- 09 |
| SHALL [1..1] | Family History Section (V2) | urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2014-06- 09 |
| SHALL [1..1] | Medications Administered | urn:hl7ii:2.16.840.1.113883.10.13.12:2014-08-08 |

|  |  |  |
| --- | --- | --- |
| **Conformance** | **Section Name** | **Template Identifier** |
| Section (V2) - Cancer IG Specific Constraints | | |
| SHALL [1..1] | Medications Section (entries required) (V2) - Cancer IG Specific Constraints | urn:hl7ii:2.16.840.1.113883.10.13.13:2014-08-08 |
| SHALL [1..1] | Payers Section (V2) | urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2014-06- 09 |
| SHALL [1..1] | Plan of Treatment Section (V2) - Cancer IG Specific Constraints | urn:hl7ii:2.16.840.1.113883.10.13.9:2014-08-08 |
| SHALL [1..1] | Problem Section (entries required) (V2) - Cancer IG Specific Constraints | urn:hl7ii:2.16.840.1.113883.10.13.21:2014-08-08 |
| SHALL [1..1] | Procedures Section (entries required) (V2) - Cancer IG Specific Constraints | urn:hl7ii:2.16.840.1.113883.10.13.10:2014-08-08 |
| SHALL [1..1] | Results Section (entries required) (V2) | urn:hl7ii:2.16.840.1.113883.10.20.22.2.3.1:2014- 06-09 |
| SHALL [1..1] | Social History Section (V2) - Cancer IG Specific Constraints | urn:hl7ii:2.16.840.1.113883.10.13.11:2015-01-29 |
| SHALL [1..1] | Vital Signs Section (entries required) (V2) | urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1.2:2014- 06-09 |

***Table 2: Cancer Event Report Document (V1.1) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| ClinicalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.13.1:2015-01-29) | | | | | |
| templateId | 1..1 | SHALL |  | [1169-](#_bookmark6)  [33054](#_bookmark6) |  |
| @root | 1..1 | SHALL |  | [1169-](#_bookmark7)  [33055](#_bookmark7) | 2.16.840.1.113883.10.13.1 |
| @extension | 1..1 | SHALL |  | [1169-](#_bookmark8)  [33946](#_bookmark8) | 2015-09-29 |
| id | 1..1 | SHALL |  | [1169-](#_bookmark9)  [33027](#_bookmark9) |  |
| code | 1..1 | SHALL |  | [1169-](#_bookmark10)  [32656](#_bookmark10) |  |
| @nullFlavor | 0..0 | SHALL NOT |  | [1169-](#_bookmark11)  [33042](#_bookmark11) |  |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark12)  [32657](#_bookmark12) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 72134-0 |
| title | 1..1 | SHALL |  | [1169-0](#_bookmark13) |  |
| effectiveTime | 1..1 | SHALL |  | [1169-](#_bookmark14)  [33025](#_bookmark14) |  |
| @nullFlavor | 0..0 | SHALL NOT |  | [1169-](#_bookmark15)  [33026](#_bookmark15) |  |
| setId | 1..1 | SHALL |  | [1169-](#_bookmark16)  [33577](#_bookmark16) |  |
| versionNumber | 1..1 | SHALL |  | [1169-](#_bookmark17)  [33578](#_bookmark17) |  |
| recordTarget | 1..\* | SHALL |  | [1169-](#_bookmark18)  [220](#_bookmark18) |  |
| patientRole | 1..1 | SHALL |  | [1169-](#_bookmark19)  [221](#_bookmark19) |  |
| id | 1..1 | SHALL |  | [1169-](#_bookmark20)  [33542](#_bookmark20) |  |
| @root | 1..1 | SHALL |  | [1169-](#_bookmark21)  [33543](#_bookmark21) | 2.16.840.1.113883.4.1 |
| id | 1..\* | SHALL |  | [1169-](#_bookmark22)  [33544](#_bookmark22) |  |
| addr | 1..\* | SHALL |  | [1169-](#_bookmark23)  [32655](#_bookmark23) | [US Realm Address](#_bookmark2237)  [(AD.US.FIELDED) (V2) - Cancer](#_bookmark2237)  [IG Specific Constraints (identifier:](#_bookmark2237)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark2237)  [3.17:2014-08-08](#_bookmark2237) |
| patient | 1..1 | SHALL |  | [1169-](#_bookmark24)  [222](#_bookmark24) |  |
| name | 1..\* | SHALL |  | [1169-](#_bookmark25)  [33034](#_bookmark25) | [US Realm Patient Name](#_bookmark2274)  [(PTN.US.FIELDED) - Cancer IG](#_bookmark2274)  [Specific Constraints (identifier:](#_bookmark2274) |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | urn:hl7ii:2.16.840.1.113883.10.1 3.18:2014-08-08 |
| @nullFlavor | 0..0 | SHALL NOT |  | [1169-](#_bookmark26)  [33035](#_bookmark26) |  |
| name | 0..1 | SHOUL D |  | [1169-](#_bookmark27)  [33880](#_bookmark27) |  |
| family | 1..1 | SHALL |  | [1169-](#_bookmark28)  [33881](#_bookmark28) |  |
| @qualifier | 1..1 | SHALL |  | [1169-](#_bookmark29)  [33882](#_bookmark29) | urn:oid:2.16.840.1.113883.5.43  (EntityNamePartQualifier) = BR |
| administrativeGenderCode | 1..1 | SHALL |  | [1169-](#_bookmark30)  [33037](#_bookmark30) |  |
| @nullFlavor | 0..0 | SHALL NOT |  | [1169-](#_bookmark31)  [33038](#_bookmark31) |  |
| birthTime | 1..1 | SHALL |  | [1169-](#_bookmark32)  [33039](#_bookmark32) |  |
| @nullFlavor | 0..0 | SHALL NOT |  | [1169-](#_bookmark33)  [33040](#_bookmark33) |  |
| maritalStatusCode | 1..1 | SHALL |  | [1169-](#_bookmark34)  [33243](#_bookmark34) | urn:oid:2.16.840.1.113883.1.11.1  2212 (Marital Status) |
| sdtc:raceCode | 1..\* | SHALL |  | [1169-](#_bookmark35)  [33605](#_bookmark35) | urn:oid:2.16.840.1.113883.1.11.1 4914 (Race) |
| birthplace | 1..1 | SHALL |  | [1169-](#_bookmark36)  [223](#_bookmark36) |  |
| place | 1..1 | SHALL |  | [1169-](#_bookmark37)  [225](#_bookmark37) |  |
| addr | 1..1 | SHALL |  | [1169-](#_bookmark38)  [226](#_bookmark38) |  |
| country | 1..1 | SHALL |  | [1169-](#_bookmark39)  [227](#_bookmark39) |  |
| @nullFlavor | 0..1 | MAY |  | [1169-](#_bookmark40)  [34363](#_bookmark40) |  |
| state | 1..1 | SHALL |  | [1169-](#_bookmark41)  [228](#_bookmark41) |  |
| @nullFlavor | 0..1 | MAY |  | [1169-](#_bookmark42)  [34364](#_bookmark42) |  |
| author | 1..1 | SHALL |  | [1169-](#_bookmark43)  [33229](#_bookmark43) |  |
| assignedAuthor | 1..1 | SHALL |  | [1169-](#_bookmark44)  [33230](#_bookmark44) |  |
| addr | 1..\* | SHALL |  | [1169-](#_bookmark45)  [33231](#_bookmark45) | [US Realm Address](#_bookmark2237)  [(AD.US.FIELDED) (V2) - Cancer](#_bookmark2237)  [IG Specific Constraints (identifier:](#_bookmark2237)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark2237)  [3.17:2014-08-08](#_bookmark2237) |
| assignedPerson | 1..1 | SHALL |  | [1169-](#_bookmark46)  [33233](#_bookmark46) |  |
| author | 1..1 | SHALL |  | [1169-](#_bookmark47) |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | 33686 |  |
| assignedAuthor | 1..1 | SHALL |  | [1169-](#_bookmark48)  [33687](#_bookmark48) |  |
| addr | 1..\* | SHALL |  | [1169-](#_bookmark49)  [33688](#_bookmark49) | [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED) (identifier:](#_bookmark2222)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2222)  [22.5.2](#_bookmark2222) |
| assignedAuthoringDevice | 1..1 | SHALL |  | [1169-](#_bookmark50)  [33690](#_bookmark50) |  |
| manufacturerModelName | 0..1 | SHOUL D |  | [1169-](#_bookmark51)  [33725](#_bookmark51) |  |
| softwareName | 1..1 | SHALL |  | [1169-](#_bookmark52)  [33726](#_bookmark52) |  |
| custodian | 1..1 | SHALL |  | [1169-](#_bookmark53)  [33234](#_bookmark53) |  |
| assignedCustodian | 1..1 | SHALL |  | [1169-](#_bookmark54)  [33235](#_bookmark54) |  |
| representedCustodianOrganization | 1..1 | SHALL |  | [1169-](#_bookmark55)  [33236](#_bookmark55) |  |
| addr | 1..1 | SHALL |  | [1169-](#_bookmark56)  [33237](#_bookmark56) | [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED) (identifier:](#_bookmark2222)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2222)  [22.5.2](#_bookmark2222) |
| documentationOf | 0..\* | SHOUL D |  | [1169-](#_bookmark57)  [33905](#_bookmark57) |  |
| serviceEvent | 1..1 | SHALL |  | [1169-](#_bookmark58)  [33906](#_bookmark58) |  |
| performer | 0..\* | SHOUL D |  | [1169-](#_bookmark59)  [33907](#_bookmark59) |  |
| assignedEntity | 1..1 | SHALL |  | [1169-](#_bookmark60)  [33908](#_bookmark60) |  |
| id | 1..\* | SHALL |  | [1169-](#_bookmark61)  [33909](#_bookmark61) |  |
| @root | 0..1 | SHOUL D |  | [1169-](#_bookmark62)  [33912](#_bookmark62) | 2.16.840.1.113883.4.6 |
| id | 0..\* | SHOUL D |  | [1169-](#_bookmark63)  [33913](#_bookmark63) |  |
| addr | 0..\* | SHOUL D |  | [1169-](#_bookmark64)  [33914](#_bookmark64) | [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED) (identifier:](#_bookmark2222)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2222)  [22.5.2](#_bookmark2222) |
| telecom | 0..\* | SHOUL D |  | [1169-](#_bookmark65)  [33910](#_bookmark65) |  |
| assignedPerson | 0..1 | SHOUL D |  | [1169-](#_bookmark66)  [33911](#_bookmark66) |  |
| name | 0..1 | SHOUL D |  | [1169-](#_bookmark67)  [33916](#_bookmark67) | [US Realm Person Name](#_bookmark2286)  [(PN.US.FIELDED) (identifier:](#_bookmark2286)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2286)  [22.5.1.1](#_bookmark2286) |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| relatedDocument | 0..\* | MAY |  | [1169-](#_bookmark68)  [33602](#_bookmark68) |  |
| @typeCode | 1..1 | SHALL |  | [1169-](#_bookmark69)  [33604](#_bookmark69) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = RPLC |
| componentOf | 1..1 | SHALL |  | [1169-](#_bookmark70)  [210](#_bookmark70) |  |
| encompassingEncounter | 1..1 | SHALL |  | [1169-](#_bookmark71)  [211](#_bookmark71) |  |
| encounterParticipant | 1..1 | SHALL |  | [1169-](#_bookmark72)  [212](#_bookmark72) |  |
| @typeCode | 1..1 | SHALL |  | [1169-](#_bookmark73)  [217](#_bookmark73) | REF |
| assignedEntity | 1..1 | SHALL |  | [1169-](#_bookmark74)  [214](#_bookmark74) |  |
| id | 1..\* | SHALL |  | [1169-](#_bookmark75)  [218](#_bookmark75) |  |
| id | 0..\* | SHOUL D |  | [1169-](#_bookmark76)  [33918](#_bookmark76) |  |
| addr | 0..1 | SHOUL D |  | [1169-](#_bookmark77)  [33919](#_bookmark77) | [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED) (identifier:](#_bookmark2222)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2222)  [22.5.2](#_bookmark2222) |
| telecom | 0..\* | SHOUL D |  | [1169-](#_bookmark78)  [33917](#_bookmark78) |  |
| assignedPerson | 0..1 | SHALL |  | [1169-](#_bookmark79)  [215](#_bookmark79) |  |
| name | 1..1 | SHALL |  | [1169-](#_bookmark80)  [216](#_bookmark80) | [US Realm Person Name](#_bookmark2286)  [(PN.US.FIELDED) (identifier:](#_bookmark2286)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2286)  [22.5.1.1](#_bookmark2286) |
| representedOrganization | 1..1 | SHALL |  | [1169-](#_bookmark81)  [33921](#_bookmark81) |  |
| id | 1..\* | SHALL |  | [1169-](#_bookmark82)  [33922](#_bookmark82) |  |
| @root | 0..1 | SHOUL D |  | [1169-](#_bookmark83)  [34001](#_bookmark83) | 2.16.840.1.113883.4.6 |
| @extension | 0..1 | SHOUL D |  | [1169-](#_bookmark84)  [34002](#_bookmark84) |  |
| id | 0..\* | SHOUL D |  | [1169-](#_bookmark85)  [33924](#_bookmark85) |  |
| name | 1..\* | SHALL |  | [1169-](#_bookmark86)  [33925](#_bookmark86) |  |
| addr | 0..\* | SHOUL D |  | [1169-](#_bookmark87)  [33926](#_bookmark87) | [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED) (identifier:](#_bookmark2222)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2222)  [22.5.2](#_bookmark2222) |
| encounterParticipant | 1..1 | SHALL |  | [1169-](#_bookmark88) |  |

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|  |  |  |  | 34264 |  |
| assignedEntity | 1..1 | SHALL |  | [1169-](#_bookmark89)  [34373](#_bookmark89) |  |
| @nullFlavor | 1..1 | SHALL |  | [1169-](#_bookmark90)  [34375](#_bookmark90) | urn:oid:2.16.840.1.113883.10.20.  5.9.2 (NullValues\_UNK\_NA) |
| id | 1..1 | SHALL |  | [1169-](#_bookmark91)  [34374](#_bookmark91) |  |
| @nullFlavor | 1..1 | SHALL |  | [1169-](#_bookmark92)  [34376](#_bookmark92) | NA |
| location | 1..1 | SHALL |  | [1169-](#_bookmark93)  [33894](#_bookmark93) |  |
| healthCareFacility | 1..1 | SHALL |  | [1169-](#_bookmark94)  [33895](#_bookmark94) |  |
| id | 1..\* | SHALL |  | [1169-](#_bookmark95)  [33896](#_bookmark95) |  |
| @root | 1..1 | SHALL |  | [1169-](#_bookmark96)  [33899](#_bookmark96) | 2.16.840.1.113883.4.6 |
| id | 0..\* | SHOUL D |  | [1169-](#_bookmark97)  [33901](#_bookmark97) |  |
| serviceProviderOrganization | 1..1 | SHALL |  | [1169-](#_bookmark98)  [33897](#_bookmark98) |  |
| name | 0..\* | MAY |  | [1169-](#_bookmark99)  [33984](#_bookmark99) |  |
| telecom | 0..\* | SHOUL D |  | [1169-](#_bookmark100)  [33898](#_bookmark100) |  |
| addr | 1..\* | SHALL |  | [1169-](#_bookmark101)  [33904](#_bookmark101) | [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED) (identifier:](#_bookmark2222)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2222)  [22.5.2](#_bookmark2222) |
| component | 1..1 | SHALL |  | [1169-](#_bookmark102)  [32647](#_bookmark102) |  |
| structuredBody | 1..1 | SHALL |  | [1169-](#_bookmark103)  [32648](#_bookmark103) |  |
| component | 1..1 | SHALL |  | [1169-](#_bookmark104)  [32649](#_bookmark104) |  |
| @nullFlavor | 0..0 | SHALL NOT |  | [1169-](#_bookmark105)  [33043](#_bookmark105) |  |
| section | 1..1 | SHALL |  | [1169-](#_bookmark106)  [32650](#_bookmark106) | [Cancer Diagnosis Section (entries](#_bookmark372)  [required) (V1.1) (identifier:](#_bookmark372)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark372)  [3.2:2015-02-05](#_bookmark372) |
| @nullFlavor | 0..0 | SHALL NOT |  | [1169-](#_bookmark107)  [33044](#_bookmark107) |  |
| component | 1..1 | SHALL |  | [1169-](#_bookmark108)  [33701](#_bookmark108) |  |
| section | 1..1 | SHALL |  | [1169-](#_bookmark109)  [33702](#_bookmark109) | [Assessment Section (identifier:](#_bookmark360)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark360)  [22.2.8](#_bookmark360) |

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| --- | --- | --- | --- | --- | --- |
| component | 1..1 | SHALL |  | [1169-](#_bookmark110)  [32720](#_bookmark110) |  |
| section | 1..1 | SHALL |  | [1169-](#_bookmark111)  [32721](#_bookmark111) | [Family History Section (V2)](#_bookmark390)  [(identifier:](#_bookmark390)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark390)  [0.22.2.15:2014-06-09](#_bookmark390) |
| component | 1..1 | SHALL |  | [1169-](#_bookmark112)  [32674](#_bookmark112) |  |
| section | 1..1 | SHALL |  | [1169-](#_bookmark113)  [32675](#_bookmark113) | [Medications Administered Section](#_bookmark420)  [(V2) - Cancer IG Specific](#_bookmark420)  [Constraints (identifier:](#_bookmark420)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark420)  [3.12:2014-08-08](#_bookmark420) |
| component | 1..1 | SHALL |  | [1169-](#_bookmark114)  [32670](#_bookmark114) |  |
| section | 1..1 | SHALL |  | [1169-](#_bookmark115)  [32671](#_bookmark115) | [Medications Section (entries](#_bookmark446)  [required) (V2) - Cancer IG Specific](#_bookmark446)  [Constraints (identifier:](#_bookmark446)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark446)  [3.13:2014-08-08](#_bookmark446) |
| component | 1..1 | SHALL |  | [1169-](#_bookmark116)  [32668](#_bookmark116) |  |
| section | 1..1 | SHALL |  | [1169-](#_bookmark117)  [32669](#_bookmark117) | [Payers Section (V2) (identifier:](#_bookmark456)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark456)  [0.22.2.18:2014-06-09](#_bookmark456) |
| component | 1..1 | SHALL |  | [1169-](#_bookmark118)  [32660](#_bookmark118) |  |
| section | 1..1 | SHALL |  | [1169-](#_bookmark119)  [32661](#_bookmark119) | [Plan of Treatment Section (V2) -](#_bookmark506)  [Cancer IG Specific Constraints](#_bookmark506)  [(identifier:](#_bookmark506)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark506)  [3.9:2014-08-08](#_bookmark506) |
| component | 1..1 | SHALL |  | [1169-](#_bookmark120)  [32658](#_bookmark120) |  |
| section | 1..1 | SHALL |  | [1169-](#_bookmark121)  [32659](#_bookmark121) | [Problem Section (entries required)](#_bookmark539)  [(V2) - Cancer IG Specific](#_bookmark539)  [Constraints (identifier:](#_bookmark539)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark539)  [3.21:2014-08-08](#_bookmark539) |
| component | 1..1 | SHALL |  | [1169-](#_bookmark122)  [33045](#_bookmark122) |  |
| section | 1..1 | SHALL |  | [1169-](#_bookmark123)  [33046](#_bookmark123) | [Procedures Section (entries](#_bookmark567)  [required) (V2) - Cancer IG Specific](#_bookmark567)  [Constraints (identifier:](#_bookmark567)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark567)  [3.10:2014-08-08](#_bookmark567) |
| component | 1..1 | SHALL |  | [1169-](#_bookmark124)  [33047](#_bookmark124) |  |
| section | 1..1 | SHALL |  | [1169-](#_bookmark125)  [33048](#_bookmark125) | [Results Section (entries required)](#_bookmark595)  [(V2) (identifier:](#_bookmark595)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark595) |

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| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | 0.22.2.3.1:2014-06-09 |
| component | 1..1 | SHALL |  | [1169-](#_bookmark126)  [33049](#_bookmark126) |  |
| section | 1..1 | SHALL |  | [1169-](#_bookmark127)  [33050](#_bookmark127) | [Social History Section (V2) -](#_bookmark638)  [Cancer IG Specific Constraints](#_bookmark638)  [(V1.1) (identifier:](#_bookmark638)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark638)  [3.11:2015-01-29](#_bookmark638) |
| component | 1..1 | SHALL |  | [1169-](#_bookmark128)  [33051](#_bookmark128) |  |
| section | 1..1 | SHALL |  | [1169-](#_bookmark129)  [33052](#_bookmark129) | [Vital Signs Section (entries](#_bookmark658)  [required) (V2) (identifier:](#_bookmark658)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark658)  [0.22.2.4.1:2014-06-09](#_bookmark658) |

1. Conforms to [**US Realm Header (V2)**](#_bookmark141) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2014-06-09).
2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1169-33054) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.1"

(CONF:1169-33055).

b. **SHALL** contain exactly one [1..1] **@extension**="2015-09-29" (CONF:1169-33946).

1. **SHALL** contain exactly one [1..1] **id** (CONF:1169-33027).
   1. This id **SHALL** be a globally unique identifier for the document (CONF:1169-33545).
2. **SHALL** contain exactly one [1..1] **code** (CONF:1169-32656).
   1. This code **SHALL NOT** contain [0..0] **@nullFlavor** (CONF:1169-33042).
   2. This code **SHALL** contain exactly one [1..1] **@code**="72134-0" Cancer event report (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-32657).
3. **SHALL** contain exactly one [1..1] **title** (CONF:1169-0).
4. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1169-33025).
   1. This effectiveTime **SHALL NOT** contain [0..0] **@nullFla****vor** (CONF:1169-33026).
5. **SHALL** contain exactly one [1..1] **setId** (CONF:1169-33577).
6. **SHALL** contain exactly one [1..1] **versionNumber** (CONF:1169-33578).
7. **SHALL** contain at least one [1..\*] **recordTarget** (CONF:1169-220).
   1. Such recordTargets **SHALL** contain exactly one [1..1] **patientRole** (CONF:1169-221).
      1. This patientRole **SHALL** contain exactly one [1..1] **id** (CONF:1169-33542) such that it

Note: This field SHALL be used for Social Security Number (SSN).

1. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.4.1"

(CONF:1169-33543).

Note: This root OID is assigning authority for Social Security Number (SSN).

* + 1. This patientRole **SHALL** contain at least one [1..\*] **id** (CONF:1169-33544). Note: This field SHALL be used for Medical Record Number (MRN).
    2. This patientRole **SHALL** contain at least one [1..\*] [**US Realm Address**](#_bookmark2237) [**(AD.US.FIELDED) (V2) - Cancer IG Specific Constraints**](#_bookmark2237)

(identifier: urn:hl7ii:2.16.840.1.113883.10.13.17:2014-08-08)

(CONF:1169-32655).

Note: SHALL provide ALL addresses for that patient over time. In other words, ALL historical and current addresses where patient has or is residing SHALL be provided. Note: The intent of this requirement is for the EHR system to have the capability to capture addresses over time when reported. Physicians are not expected to obtain an address history during the patient visit/encounter.

* + 1. This patientRole **SHALL** contain exactly one [1..1] **patient** (CONF:1169-222).
       1. This patient **SHALL** contain at least one [1..\*] [**US Realm Patient**](#_bookmark2274) [**Name (PTN.US.FIELDED) - Cancer IG Specific Constraints**](#_bookmark2274)(identifier: urn:hl7ii:2.16.840.1.113883.10.13.18:2014- 08-08) (CONF:1169-33034) such that it
          1. **SHALL NOT** contain [0..0] **@nullFlavor** (CONF:1169-33035).
       2. This patient **SHOULD** contain zero or one [0..1] **name** (CONF:1169- 33880).
          1. The name, if present, **SHALL** contain exactly one [1..1] **family**

(CONF:1169-33881).

This family **SHALL** contain exactly one [1..1]

**@qualifier**="BR" birth (CodeSystem: EntityNamePartQualifier urn:oid:2.16.840.1.113883.5.43) (CONF:1169- 33882).

* + - 1. This patient **SHALL** contain exactly one [1..1]

**administrativeGenderCode** (CONF:1169-33037).

* + - * 1. This administrativeGenderCode **SHALL NOT** contain [0..0]

**@nullFlavor** (CONF:1169-33038).

* + - 1. This patient **SHALL** contain exactly one [1..1] **birthTim****e**

(CONF:1169-33039).

* + - * 1. This birthTime **SHALL NOT** contain [0..0] **@nullFlavor**

(CONF:1169-33040).

* + - * 1. **SHALL** be precise to day (CONF:1169-33041).
      1. This patient **SHALL** contain exactly one [1..1] **maritalStatusCode**, which **SHALL** be selected from ValueSet **[Marital Status](#_bookmark131)** urn:oid:2.16.840.1.113883.1.11.12212 (CONF:1169-33243).
      2. This patient **SHALL** contain at least one [1..\*] **sdtc:raceCode**, which **SHALL** be selected from ValueSet [**Race**](#_bookmark133)urn:oid:2.16.840.1.113883.1.11.14914 (CONF:1169-33605).
      3. This patient **SHALL** contain exactly one [1..1] **birthpla****ce**

(CONF:1169-223).

* + - * 1. This birthplace **SHALL** contain exactly one [1..1] **pla****ce**

(CONF:1169-225).

This place **SHALL** contain exactly one [1..1] **add****r**

(CONF:1169-226).

This addr **SHALL** contain exactly one [1..1] **countr****y**

(CONF:1169-227).

Note: Use nullFlavor when the patients birth country is not known.

This country **MAY** contain zero or one [0..1]

**@nullFlavor** (CONF:1169-34363).

This addr **SHALL** contain exactly one [1..1] **state**

(CONF:1169-228).

Note: Use nullFlavor when the patients birth state is not known.

This state **MAY** contain zero or one [0..1]

**@nullFlavor** (CONF:1169-34364).

* + - 1. This patient **SHOULD** 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:1169-33183).
      2. This patient **SHOULD** 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:1169-33184).
      3. **SHALL** contain exactly one [1..1] **author** (CONF:1169-33229) such that it
         1. **SHALL** contain exactly one [1..1] **assignedAuthor** (CONF:1169-33230).

This assignedAuthor **SHALL** contain at least one [1..\*] [**US Realm Address**](#_bookmark2237) [**(AD.US.FIELDED) (V2) - Cancer IG Specific Constraints**](#_bookmark2237)(identifier: urn:hl7ii:2.16.840.1.113883.10.13.17:2014-08-08) (CONF:1169-33231).

This assignedAuthor **SHALL** contain exactly one [1..1] **assignedPerson**

(CONF:1169-33233).

Note: Author information needs to be provided in 2 separate instances of author participation for both person and device playing the role of author

* + - 1. **SHALL** contain exactly one [1..1] **author** (CONF:1169-33686) such that it
         1. **SHALL** contain exactly one [1..1] **assignedAuthor** (CONF:1169-33687).

This assignedAuthor **SHALL** contain at least one [1..\*] [**US Realm Address**](#_bookmark2222) [**(AD.US.FIELDED)**](#_bookmark2222) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1169-33688).

This assignedAuthor **SHALL** contain exactly one [1..1]

**assignedAuthoringDevice** (CONF:1169-33690).

Note: Author information needs to be provided in 2 separate instances of author participation for both person and device playing the role of author

This assignedAuthoringDevice **SHOULD** contain zero or one [0..1]

**manufacturerModelName** (CONF:1169-33725).

This assignedAuthoringDevice **SHALL** contain exactly one [1..1]

**softwareName** (CONF:1169-33726).

* + - 1. **SHALL** contain exactly one [1..1] **custodian** (CONF:1169-33234).
         1. This custodian **SHALL** contain exactly one [1..1] **assignedCustodi****an** (CONF:1169- 33235).

This assignedCustodian **SHALL** contain exactly one [1..1]

**representedCustodianOrganization** (CONF:1169-33236).

This representedCustodianOrganization **SHALL** contain exactly one [1..1] [**US Realm Address (AD.US.FIELDED)**](#_bookmark2222) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1169-33237).

* + - 1. **SHOULD** contain zero or more [0..\*] **documentationOf** (CONF:1169-33905).
         1. The documentationOf, if present, **SHALL** contain exactly one [1..1] **serviceEven****t**

(CONF:1169-33906).

This serviceEvent **SHOULD** contain zero or more [0..\*] **performer**

(CONF:1169-33907) such that it

**SHALL** contain exactly one [1..1] **assignedEntity** (CONF:1169- 33908).

1. This assignedEntity **SHALL** contain at least one [1..\*] **id**

(CONF:1169-33909) such that it

* 1. **SHOULD** contain zero or one [0..1]

**@root**="2.16.840.1.113883.4.6" National Provider Identifier (CONF:1169-33912).

1. This assignedEntity **SHOULD** contain zero or more [0..\*] **id**

(CONF:1169-33913).

Note: This id is to be used to provide the Cancer Registry approved local identifier.

1. This assignedEntity **SHOULD** contain zero or more [0..\*] [**US**](#_bookmark2222) [**Realm Address (AD.US.FIELDED)**](#_bookmark2222) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1169- 33914).
2. This assignedEntity **SHOULD** contain zero or more [0..\*]

**telecom** (CONF:1169-33910).

1. This assignedEntity **SHOULD** contain zero or one [0..1]

**assignedPerson** (CONF:1169-33911).

* 1. The assignedPerson, if present, **SHOULD** contain zero or one [0..1] [**US Realm Person Name (PN.US.FIELDED)**](#_bookmark2286)(identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1169-33916).
     + 1. **MAY** contain zero or more [0..\*] **relatedDocumen****t** (CONF:1169-33602) such that it
          1. **SHALL** contain exactly one [1..1] **@typeCode**="RPLC" replace (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1169- 33604).
          2. If versionNumber/@value is greater than 1, a relatedDocument element **SHALL** be present where the value of @typeCode **SHALL** be RPLC (replace) and the value of parentDocument/id **SHALL** be populated with the ClinicalDocument/id of the document being replaced. In all cases (regardless of the version number), values of APND and XFRM **SHALL NOT** be used for relatedDocument/@typeCode (CONF:1169- 33603).
       2. **SHALL** contain exactly one [1..1] **compone****ntOf** (CONF:1169-210).
          1. This componentOf **SHALL** contain exactly one [1..1] **encompassingEncounter**

(CONF:1169-211).

The encompassingEncounter SHALL Contain Either:

This encompassingEncounter **SHALL** contain exactly one [1..1]

**encounterParticipant** (CONF:1169-212) such that it

Note: This element records the provider that referred the patient to the reporting facility. This element SHALL be provided in the header of the CDA document in the event the patient was referred to this ambulatory healthcare provider.

**SHALL** contain exactly one [1..1] **@typeCode**="REF" (CONF:1169-217).

**SHALL** contain exactly one [1..1] **assignedEntity** (CONF:1169-214).

1. This assignedEntity **SHALL** contain at least one [1..\*] **id**

(CONF:1169-218) such that it

* 1. If assignedEntity/id is a provider then this id, **SHALL**

include one 1..1] id where id/@root

="2.16.840.1.113883.4.6" National Provider Identifier (CONF:1169-219).

1. This assignedEntity **SHOULD** contain zero or more [0..\*] **id**

(CONF:1169-33918).

Note: This id is to be used to provide the Cancer Registry approved local identifier.

1. This assignedEntity **SHOULD** contain zero or one [0..1] [**US**](#_bookmark2222) [**Realm Address (AD.US.FIELDED)**](#_bookmark2222) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1169- 33919).
2. This assignedEntity **SHOULD** contain zero or more [0..\*]

**telecom** (CONF:1169-33917).

1. This assignedEntity **SHALL** contain zero or one [0..1]

**assignedPerson** (CONF:1169-215).

* 1. The assignedPerson, if present, **SHALL** contain exactly one [1..1] [**US Realm Person Name (PN.US.FIELDED)**](#_bookmark2286)(identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1169-216).

1. This assignedEntity **SHALL** contain exactly one [1..1]

**representedOrganization** (CONF:1169-33921).

* 1. This representedOrganization **SHALL** contain at least one [1..\*] **id** (CONF:1169-33922) such that it
     1. **SHOULD** contain zero or one [0..1]

**@root**="2.16.840.1.113883.4.6" National Provider Identifier (CONF:1169-34001).

* + 1. **SHOULD** contain zero or one [0..1] **@extension**

(CONF:1169-34002).

* 1. This representedOrganization **SHOULD** contain zero or more [0..\*] **id** (CONF:1169-33924).

Note: This id is to be used to provide the Cancer

Registry approved local identifier. This id is to be used to provide the Cancer Registry approved local identifier.

* 1. This representedOrganization **SHALL** contain at least one [1..\*] **name** (CONF:1169-33925).
  2. This representedOrganization **SHOULD** contain zero or more [0..\*] [**US Realm Address (AD.US.FIELDED)**](#_bookmark2222)(identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1169-33926).

Or encompassingEncounter SHALL Contain:

1. This encompassingEncounter **SHALL** contain exactly one [1..1]

**encounterParticipant** (CONF:1169-34264) such that it

Note: This element records the provider that referred the patient to the reporting facility. This element SHALL be provided in the header of the CDA document in the event the patient was referred to this ambulatory healthcare provider.

* 1. **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:1169- 34373).
     1. This assignedEntity **SHALL** contain exactly one [1..1]

**@nullFlavor**, which **SHALL** be selected from ValueSet [**NullValues\_UNK\_NA**](#_bookmark135)urn:oid:2.16.840.1.113883.10.20.5.9.2 **DYNAMI****C** (CONF:1169-34375).

* + 1. This assignedEntity **SHALL** contain exactly one [1..1] **id**

(CONF:1169-34374).

* + - 1. This id **SHALL** contain exactly one [1..1]

**@nullFlavor**="NA" Not applicable (CONF:1169- 34376).

1. This encompassingEncounter **SHALL** contain exactly one [1..1] **location**

(CONF:1169-33894).

* 1. This location **SHALL** contain exactly one [1..1] **healthCareFacilit****y**

(CONF:1169-33895) such that it

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1169-33896) such that it
       1. **SHALL** contain exactly one [1..1]

**@root**="2.16.840.1.113883.4.6" National Provider Identifier (CONF:1169-33899).

* + 1. **SHOULD** contain zero or more [0..\*] **id** (CONF:1169-33901). Note: This id is to be used to provide the Cancer Registry approved local identifier for the healthcare facility
    2. **SHALL** contain exactly one [1..1]  **serviceProviderOrganization** (CONF:1169-33897) such that it

Note: Used to provide contact info0rmation for the reporting facility identified in the healthCareFacility above.

* + - 1. **MAY** contain zero or more [0..\*] **name** (CONF:1169- 33984).
      2. **SHOULD** contain zero or more [0..\*] **telecom**

(CONF:1169-33898).

* + - 1. **SHALL** contain at least one [1..\*] [**US Realm Address**](#_bookmark2222) [**(AD.US.FIELDED)**](#_bookmark2222) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1169-33904).
      2. **SHALL** contain exactly one [1..1] **component** (CONF:1169-32647).
         1. This component **SHALL** contain exactly one [1..1] **structuredBody** (CONF:1169- 32648).

This structuredBody **SHALL** contain exactly one [1..1] **component**

(CONF:1169-32649) such that it

**SHALL NOT** contain [0..0] **@nullFlavor** (CONF:1169-33043).

**SHALL** contain exactly one [1..1] [**Cancer Diagnosis Section**](#_bookmark372) [**(entries required) (V1.1)**](#_bookmark372) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.2:2015-02-05) (CONF:1169-32650).

1. This section **SHALL NOT** contain [0..0] **@nullFlavo****r**

(CONF:1169-33044).

This structuredBody **SHALL** contain exactly one [1..1] **component**

(CONF:1169-33701) such that it

**SHALL** contain exactly one [1..1] [**Assessment Section**](#_bookmark360)(identifier: urn:oid:2.16.840.1.113883.10.20.22.2.8) (CONF:1169-33702).

This structuredBody **SHALL** contain exactly one [1..1] **component**

(CONF:1169-32720) such that it

**SHALL** contain exactly one [1..1] [**Family History Section (V2)**](#_bookmark390)(identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2014-06-09) (CONF:1169-32721).

This structuredBody **SHALL** contain exactly one [1..1] **component**

(CONF:1169-32674) such that it

**SHALL** contain exactly one [1..1] [**Medications Administered**](#_bookmark420) [**Section (V2) - Cancer IG Specific Constraints**](#_bookmark420)(identifier: urn:hl7ii:2.16.840.1.113883.10.13.12:2014- 08-08) (CONF:1169-32675).

This structuredBody **SHALL** contain exactly one [1..1] **component**

(CONF:1169-32670) such that it

**SHALL** contain exactly one [1..1] [**Medications Section (entries**](#_bookmark446) [**required) (V2) - Cancer IG Specific Constraints**](#_bookmark446)

(identifier: urn:hl7ii:2.16.840.1.113883.10.13.13:2014- 08-08) (CONF:1169-32671).

This structuredBody **SHALL** contain exactly one [1..1] **component**

(CONF:1169-32668) such that it

**SHALL** contain exactly one [1..1] [**Payers Section (V2)**](#_bookmark456)(identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2014-06-09) (CONF:1169-32669).

This structuredBody **SHALL** contain exactly one [1..1] **component**

(CONF:1169-32660) such that it

**SHALL** contain exactly one [1..1] [**Plan of Treatment Section (V2)**](#_bookmark506)

[**- Cancer IG Specific Constraints**](#_bookmark506) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.9:2014-08-08) (CONF:1169-32661).

This structuredBody **SHALL** contain exactly one [1..1] **component**

(CONF:1169-32658) such that it

**SHALL** contain exactly one [1..1] [**Problem Section (entries**](#_bookmark539) [**required) (V2) - Cancer IG Specific Constraints**](#_bookmark539)(identifier: urn:hl7ii:2.16.840.1.113883.10.13.21:2014- 08-08) (CONF:1169-32659).

This structuredBody **SHALL** contain exactly one [1..1] **component**

(CONF:1169-33045) such that it

**SHALL** contain exactly one [1..1] [**Procedures Section (entries**](#_bookmark567) [**required) (V2) - Cancer IG Specific Constraints**](#_bookmark567)(identifier: urn:hl7ii:2.16.840.1.113883.10.13.10:2014- 08-08) (CONF:1169-33046).

This structuredBody **SHALL** contain exactly one [1..1] **component**

(CONF:1169-33047) such that it

**SHALL** contain exactly one [1..1] [**Results Section (entries**](#_bookmark595) [**required) (V2)**](#_bookmark595) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3.1:2014-06-09) (CONF:1169-33048).

This structuredBody **SHALL** contain exactly one [1..1] **component**

(CONF:1169-33049) such that it

**SHALL** contain exactly one [1..1] [**Social History Section (V2) -**](#_bookmark638) [**Cancer IG Specific Constraints (V1.1)**](#_bookmark638) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.11:2015-01-29) (CONF:1169-33050).

This structuredBody **SHALL** contain exactly one [1..1] **component**

(CONF:1169-33051) such that it

**SHALL** contain exactly one [1..1] [**Vital Signs Section (entries**](#_bookmark658) [**required) (V2)**](#_bookmark658) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2014-06-09) (CONF:1169-33052).

This structuredBody **SHALL NOT** contain 0..0] any other component sections than those identified above (CONF:1169-33978).

***Table*** ***3: Marital Status***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Marital Status urn:oid:2.16.840.1.113883.1.11.12212 Marital Status is the domestic partnership status of a person.  Value Set Source: [**http://www.hl7.org**](http://www.hl7.org/) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| A | MaritalStatus | urn:oid:2.16.840.1.11388 3.5.2 | Annulled |
| D | MaritalStatus | urn:oid:2.16.840.1.11388 3.5.2 | Divorced |
| T | MaritalStatus | urn:oid:2.16.840.1.11388 3.5.2 | Domestic partner |
| I | MaritalStatus | urn:oid:2.16.840.1.11388 3.5.2 | Interlocutory |
| L | MaritalStatus | urn:oid:2.16.840.1.11388 3.5.2 | Legally Separated |
| M | MaritalStatus | urn:oid:2.16.840.1.11388 3.5.2 | Married |
| S | MaritalStatus | urn:oid:2.16.840.1.11388 3.5.2 | Never Married |
| P | MaritalStatus | urn:oid:2.16.840.1.11388 3.5.2 | Polygamous |
| W | MaritalStatus | urn:oid:2.16.840.1.11388 3.5.2 | Widowed |

***Tabl******e 4: Race***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Race urn:oid:2.16.840.1.113883.1.11.14914  Concepts in the race value set include the 5 minimum categories for race specified by OMB along with a more detailed set of race categories used by the Bureau of Census.  Value Set Source: [**http://phinvads.cdc.gov/vads/ViewCodeSystemConcept.action?oid=2.16.840.1.113883.6.**](http://phinvads.cdc.gov/vads/ViewCodeSystemConcept.action?oid=2.16.840.1.113883.6.238&amp;code=1000-9)[**238&code=1000-9**](http://phinvads.cdc.gov/vads/ViewCodeSystemConcept.action?oid=2.16.840.1.113883.6.238&amp;code=1000-9) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 1002-5 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.11388 3.6.238 | American Indian or Alaska Native |
| 2028-9 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.11388 3.6.238 | Asian |
| 2054-5 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.11388 3.6.238 | Black or African American |
| 2076-8 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.11388 3.6.238 | Native Hawaiian or Other Pacific Islander |
| 2106-3 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.11388 3.6.238 | White |
| 1006-6 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.11388 3.6.238 | Abenaki |
| 1579-2 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.11388 3.6.238 | Absentee Shawnee |
| 1490-2 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.11388 3.6.238 | Acoma |
| 2126-1 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.11388 3.6.238 | Afghanistani |
| 1740-0 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.11388 3.6.238 | Ahtna |
| ... | | | |

***Table*** ***5: NullValues\_UNK\_NA***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: NullValues\_UNK\_NA urn:oid:2.16.840.1.113883.10.20.5.9.2 Null values of unknown and not applicable. | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| UNK | HL7NullFlavor | urn:oid:2.16.840.1.11388 3.5.1008 | Unknown |
| NA | HL7NullFlavor | urn:oid:2.16.840.1.11388 3.5.1008 | Not applicable |

***Figure 1: Provider Referred From Example***

<componentOf>

<encompassingEncounter>

<effectiveTime value="20140722" />

<responsibleParty> … </responsibleParty>

<encounterParticipant typeCode="REF">

<assignedEntity>

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

<id root="2.16.840.1.113883.19.5" extension="1234" />

<addr use="WP">

<streetAddressLine>1003 Healthcare Drive </streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>99999</postalCode>

<country>US</country>

</addr>

<telecom value="tel:(555)555-1003" use="WP" />

<telecom [value="email:harold.hippocrates@HL7.com"](mailto:harold.hippocrates@HL7.com) use="WP" />

<assignedPerson>

<name>

<first>Harold</first>

<last>Hippocrates</last>

<suffix>MD</suffix>

</name>

</assignedPerson>

<representedOrganization classCode="ORG" determinerCode="INSTANCE">

<id root="2.16.840.1.113883.4.6" extension="666666666666"></id>

<id root="2.16.840.1.113883.19.5" extension="4321" />

<name>Level Seven Healthcare, Inc.</name>

<addr use="WP">

<streetAddressLine>4444 Healthcare Drive </streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>99999</postalCode>

<country>US</country>

</addr>

</representedOrganization>

</assignedEntity>

</encounterParticipant>

<location>

<healthCareFacility>

<id root="2.16.840.1.113883.4.6" extension="1111111111111"></id>

<id root="2.16.840.1.113883.19.5" extension="4321234" />

<serviceProviderOrganization>

<name>Level Seven Healthcare, Inc.</name>

<telecom value="tel:(555)555-1003" use="WP" />

<addr use="WP">

<streetAddressLine>4444 Healthcare Drive </streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>99999</postalCode>

<country>US</country>

</addr>

</serviceProviderOrganization>

</healthCareFacility>

</location>

</encompassingEncounter>

</componentOf>

***Figure 2: Birthplace Example***

<recordTarget>

<patientRole>

<patient>

<birthplace>

<place>

<addr>

<state>OR</state>

<country>US</country>

</addr>

</place>

</birthplace>

</patient>

</patientRole>

</recordTarget>

***Figure 3: Unknown Birthplace Example***

<recordTarget>

<patientRole>

<patient>

<birthplace>

<place>

<addr>

<state nullFlavor="UNK"/>

<country nullFlavor="UNK"/>

</addr>

</place>

</birthplace>

</patient>

</patientRole>

</recordTarget>

***Figure 4: Unknown Provider Referred From Example***

<componentOf>

<encompassingEncounter>

<effectiveTime value="20140722" />

<responsibleParty> … </responsibleParty>

<encounterParticipant typeCode="REF">

<assignedEntity @nullFlavor="UNK">

<id @nullFlavor="NA"/>

</assignedEntity>

</encounterParticipant>

</encompassingEncounter>

</componentOf>

## US Realm Header (V2) - Published

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

***Table 6: US Realm Header (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
|  | [US Realm Address (AD.US.FIELDED)](#_bookmark2222)  [US Realm Date and Time (DTM.US.FIELDED)](#_bookmark2252)  [US Realm Person Name (PN.US.FIELDED)](#_bookmark2286) |

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 7: US Realm Header (V2) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| ClinicalDocument (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2014-06-09) | | | | | |
| realmCode | 1..1 | SHALL |  | [1098-](#_bookmark145)  [16791](#_bookmark145) | US |
| typeId | 1..1 | SHALL |  | [1098-](#_bookmark147)  [5361](#_bookmark147) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark148)  [5250](#_bookmark148) | 2.16.840.1.113883.1.3 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark149)  [5251](#_bookmark149) | POCD\_HD000040 |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark150)  [5252](#_bookmark150) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark151)  [10036](#_bookmark151) | 2.16.840.1.113883.10.20.22.1.1 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark152)  [32503](#_bookmark152) | 2014-06-09 |
| id | 1..1 | SHALL |  | [1098-](#_bookmark153)  [5363](#_bookmark153) |  |
| code | 1..1 | SHALL |  | [1098-](#_bookmark154)  [5253](#_bookmark154) |  |
| title | 1..1 | SHALL |  | [1098-](#_bookmark155)  [5254](#_bookmark155) |  |
| effectiveTime | 1..1 | SHALL |  | [1098-](#_bookmark156)  [5256](#_bookmark156) | [US Realm Date and Time](#_bookmark2252)  [(DTM.US.FIELDED) (identifier:](#_bookmark2252)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2252)  [22.5.4](#_bookmark2252) |
| confidentialityCode | 1..1 | SHALL |  | [1098-](#_bookmark157)  [5259](#_bookmark157) | urn:oid:2.16.840.1.113883.1.11.1 6926 (HL7  BasicConfidentialityKind) |
| languageCode | 1..1 | SHALL |  | [1098-](#_bookmark158)  [5372](#_bookmark158) | urn:oid:2.16.840.1.113883.1.11.1  1526 (Language) |
| setId | 0..1 | MAY |  | [1098-](#_bookmark159)  [5261](#_bookmark159) |  |
| versionNumber | 0..1 | MAY |  | [1098-](#_bookmark160)  [5264](#_bookmark160) |  |
| recordTarget | 1..\* | SHALL |  | [1098-](#_bookmark161)  [5266](#_bookmark161) |  |
| patientRole | 1..1 | SHALL |  | [1098-](#_bookmark162)  [5267](#_bookmark162) |  |
| id | 1..\* | SHALL |  | [1098-](#_bookmark163)  [5268](#_bookmark163) |  |
| addr | 1..\* | SHALL |  | [1098-](#_bookmark164)  [5271](#_bookmark164) | [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED) (identifier:](#_bookmark2222)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2222)  [22.5.2](#_bookmark2222) |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| telecom | 1..\* | SHALL |  | [1098-](#_bookmark165)  [5280](#_bookmark165) |  |
| @use | 0..1 | SHOUL D |  | [1098-](#_bookmark166)  [5375](#_bookmark166) | urn:oid:2.16.840.1.113883.11.20.  9.20 (Telecom Use (US Realm Header)) |
| patient | 1..1 | SHALL |  | [1098-](#_bookmark167)  [5283](#_bookmark167) |  |
| name | 1..\* | SHALL |  | [1098-](#_bookmark168)  [5284](#_bookmark168) | [US Realm Person Name](#_bookmark2286)  [(PN.US.FIELDED) (identifier:](#_bookmark2286)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2286)  [22.5.1.1](#_bookmark2286) |
| administrativeGenderCode | 1..1 | SHALL |  | [1098-](#_bookmark169)  [6394](#_bookmark169) | urn:oid:2.16.840.1.113883.1.11.1  (Administrative Gender (HL7 V3)) |
| birthTime | 1..1 | SHALL |  | [1098-](#_bookmark170)  [5298](#_bookmark170) |  |
| maritalStatusCode | 0..1 | SHOUL D |  | [1098-](#_bookmark171)  [5303](#_bookmark171) | urn:oid:2.16.840.1.113883.1.11.1  2212 (Marital Status) |
| religiousAffiliationCode | 0..1 | MAY |  | [1098-](#_bookmark172)  [5317](#_bookmark172) | urn:oid:2.16.840.1.113883.1.11.1  9185 (Religious Affiliation) |
| raceCode | 1..1 | SHALL |  | [1098-](#_bookmark173)  [5322](#_bookmark173) | urn:oid:2.16.840.1.113883.3.207  4.1.1.3 (Race Category Excluding Nulls) |
| sdtc:raceCode | 0..\* | MAY |  | [1098-](#_bookmark174)  [7263](#_bookmark174) | urn:oid:2.16.840.1.113883.1.11.1 4914 (Race) |
| ethnicGroupCode | 1..1 | SHALL |  | [1098-](#_bookmark175)  [5323](#_bookmark175) | urn:oid:2.16.840.1.114222.4.11.8  37 (Ethnicity) |
| guardian | 0..\* | MAY |  | [1098-](#_bookmark176)  [5325](#_bookmark176) |  |
| code | 0..1 | SHOUL D |  | [1098-](#_bookmark177)  [5326](#_bookmark177) | urn:oid:2.16.840.1.113883.11.20.  12.1 (Personal And Legal Relationship Role Type) |
| addr | 0..\* | SHOUL D |  | [1098-](#_bookmark178)  [5359](#_bookmark178) | [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED) (identifier:](#_bookmark2222)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2222)  [22.5.2](#_bookmark2222) |
| telecom | 0..\* | SHOUL D |  | [1098-](#_bookmark179)  [5382](#_bookmark179) |  |
| @use | 0..1 | SHOUL D |  | [1098-](#_bookmark180)  [7993](#_bookmark180) | urn:oid:2.16.840.1.113883.11.20.  9.20 (Telecom Use (US Realm Header)) |
| guardianPerson | 1..1 | SHALL |  | [1098-](#_bookmark181)  [5385](#_bookmark181) |  |
| name | 1..\* | SHALL |  | [1098-](#_bookmark182)  [5386](#_bookmark182) | [US Realm Person Name](#_bookmark2286)  [(PN.US.FIELDED) (identifier:](#_bookmark2286)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2286)  [22.5.1.1](#_bookmark2286) |
| birthplace | 0..1 | MAY |  | [1098-](#_bookmark183)  [5395](#_bookmark183) |  |
| place | 1..1 | SHALL |  | [1098-](#_bookmark184) |  |

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|  |  |  |  | 5396 |  |
| addr | 1..1 | SHALL |  | [1098-](#_bookmark185)  [5397](#_bookmark185) |  |
| country | 0..1 | SHOUL D |  | [1098-](#_bookmark186)  [5404](#_bookmark186) | urn:oid:2.16.840.1.113883.3.88.1  2.80.63 (Country) |
| postalCode | 0..1 | MAY |  | [1098-](#_bookmark187)  [5403](#_bookmark187) | urn:oid:2.16.840.1.113883.3.88.1  2.80.2 (PostalCode) |
| languageCommunication | 1..\* | SHALL |  | [1098-](#_bookmark188)  [5406](#_bookmark188) |  |
| languageCode | 1..1 | SHALL |  | [1098-](#_bookmark189)  [5407](#_bookmark189) | urn:oid:2.16.840.1.113883.11.20.  9.64 (PatientLanguage) |
| modeCode | 0..1 | MAY |  | [1098-](#_bookmark190)  [5409](#_bookmark190) | urn:oid:2.16.840.1.113883.1.11.1  2249 (LanguageAbilityMode) |
| proficiencyLevelCode | 0..1 | SHOUL D |  | [1098-](#_bookmark191)  [9965](#_bookmark191) | urn:oid:2.16.840.1.113883.1.11.1  2199 (LanguageAbilityProficiency) |
| preferenceInd | 0..1 | SHOUL D |  | [1098-](#_bookmark192)  [5414](#_bookmark192) |  |
| providerOrganization | 0..1 | MAY |  | [1098-](#_bookmark193)  [5416](#_bookmark193) |  |
| id | 1..\* | SHALL |  | [1098-](#_bookmark194)  [5417](#_bookmark194) |  |
| @root | 0..1 | SHOUL D |  | [1098-](#_bookmark195)  [16820](#_bookmark195) | 2.16.840.1.113883.4.6 |
| name | 1..\* | SHALL |  | [1098-](#_bookmark196)  [5419](#_bookmark196) |  |
| telecom | 1..\* | SHALL |  | [1098-](#_bookmark197)  [5420](#_bookmark197) |  |
| @use | 0..1 | SHOUL D |  | [1098-](#_bookmark198)  [7994](#_bookmark198) | urn:oid:2.16.840.1.113883.11.20.  9.20 (Telecom Use (US Realm Header)) |
| addr | 1..\* | SHALL |  | [1098-](#_bookmark199)  [5422](#_bookmark199) | [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED) (identifier:](#_bookmark2222)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2222)  [22.5.2](#_bookmark2222) |
| author | 1..\* | SHALL |  | [1098-](#_bookmark201)  [5444](#_bookmark201) |  |
| time | 1..1 | SHALL |  | [1098-](#_bookmark202)  [5445](#_bookmark202) | [US Realm Date and Time](#_bookmark2252)  [(DTM.US.FIELDED) (identifier:](#_bookmark2252)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2252)  [22.5.4](#_bookmark2252) |
| assignedAuthor | 1..1 | SHALL |  | [1098-](#_bookmark203)  [5448](#_bookmark203) |  |
| id | 1..\* | SHALL |  | [1098-](#_bookmark204)  [5449](#_bookmark204) |  |
| id | 0..1 | SHOUL D |  | [1098-](#_bookmark205)  [32882](#_bookmark205) |  |
| @nullFlavor | 0..1 | MAY |  | [1098-](#_bookmark206)  [32883](#_bookmark206) | urn:oid:2.16.840.1.113883.5.100  8 (HL7NullFlavor) = UNK |

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| @root | 1..1 | SHALL |  | [1098-](#_bookmark207)  [32884](#_bookmark207) | 2.16.840.1.113883.4.6 |
| @extension | 0..1 | SHOUL D |  | [1098-](#_bookmark208)  [32885](#_bookmark208) |  |
| code | 0..1 | SHOUL D |  | [1098-](#_bookmark209)  [16787](#_bookmark209) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark210)  [16788](#_bookmark210) | urn:oid:2.16.840.1.114222.4.11.1  066 (Healthcare Provider Taxonomy (HIPAA)) |
| addr | 1..\* | SHALL |  | [1098-](#_bookmark211)  [5452](#_bookmark211) | [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED) (identifier:](#_bookmark2222)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2222)  [22.5.2](#_bookmark2222) |
| telecom | 1..\* | SHALL |  | [1098-](#_bookmark212)  [5428](#_bookmark212) |  |
| @use | 0..1 | SHOUL D |  | [1098-](#_bookmark213)  [7995](#_bookmark213) | urn:oid:2.16.840.1.113883.11.20.  9.20 (Telecom Use (US Realm Header)) |
| assignedPerson | 0..1 | SHOUL D |  | [1098-](#_bookmark214)  [5430](#_bookmark214) |  |
| name | 1..\* | SHALL |  | [1098-](#_bookmark215)  [16789](#_bookmark215) | [US Realm Person Name](#_bookmark2286)  [(PN.US.FIELDED) (identifier:](#_bookmark2286)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2286)  [22.5.1.1](#_bookmark2286) |
| assignedAuthoringDevice | 0..1 | SHOUL D |  | [1098-](#_bookmark216)  [16783](#_bookmark216) |  |
| manufacturerModelName | 1..1 | SHALL |  | [1098-](#_bookmark217)  [16784](#_bookmark217) |  |
| softwareName | 1..1 | SHALL |  | [1098-](#_bookmark218)  [16785](#_bookmark218) |  |
| dataEnterer | 0..1 | MAY |  | [1098-](#_bookmark220)  [5441](#_bookmark220) |  |
| assignedEntity | 1..1 | SHALL |  | [1098-](#_bookmark221)  [5442](#_bookmark221) |  |
| id | 1..\* | SHALL |  | [1098-](#_bookmark222)  [5443](#_bookmark222) |  |
| @root | 0..1 | SHOUL D |  | [1098-](#_bookmark223)  [16821](#_bookmark223) | 2.16.840.1.113883.4.6 |
| code | 0..1 | MAY |  | [1098-](#_bookmark224)  [32173](#_bookmark224) | urn:oid:2.16.840.1.114222.4.11.1  066 (Healthcare Provider Taxonomy (HIPAA)) |
| addr | 1..\* | SHALL |  | [1098-](#_bookmark225)  [5460](#_bookmark225) | [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED) (identifier:](#_bookmark2222)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2222)  [22.5.2](#_bookmark2222) |
| telecom | 1..\* | SHALL |  | [1098-](#_bookmark226)  [5466](#_bookmark226) |  |
| @use | 0..1 | SHOUL D |  | [1098-](#_bookmark227)  [7996](#_bookmark227) | urn:oid:2.16.840.1.113883.11.20.  9.20 (Telecom Use (US Realm |

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| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | Header)) |
| assignedPerson | 1..1 | SHALL |  | [1098-](#_bookmark228)  [5469](#_bookmark228) |  |
| name | 1..\* | SHALL |  | [1098-](#_bookmark229)  [5470](#_bookmark229) | [US Realm Person Name](#_bookmark2286)  [(PN.US.FIELDED) (identifier:](#_bookmark2286)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2286)  [22.5.1.1](#_bookmark2286) |
| informant | 0..\* | MAY |  | [1098-](#_bookmark231)  [8001](#_bookmark231) |  |
| assignedEntity | 1..1 | SHALL |  | [1098-](#_bookmark232)  [8002](#_bookmark232) |  |
| id | 1..\* | SHALL |  | [1098-](#_bookmark233)  [9945](#_bookmark233) |  |
| code | 0..1 | MAY |  | [1098-](#_bookmark234)  [32174](#_bookmark234) | urn:oid:2.16.840.1.114222.4.11.1  066 (Healthcare Provider Taxonomy (HIPAA)) |
| addr | 1..\* | SHALL |  | [1098-](#_bookmark235)  [8220](#_bookmark235) | [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED) (identifier:](#_bookmark2222)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2222)  [22.5.2](#_bookmark2222) |
| assignedPerson | 1..1 | SHALL |  | [1098-](#_bookmark236)  [8221](#_bookmark236) |  |
| name | 1..\* | SHALL |  | [1098-](#_bookmark237)  [8222](#_bookmark237) | [US Realm Person Name](#_bookmark2286)  [(PN.US.FIELDED) (identifier:](#_bookmark2286)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2286)  [22.5.1.1](#_bookmark2286) |
| informant | 0..\* | MAY |  | [1098-](#_bookmark239)  [31355](#_bookmark239) |  |
| relatedEntity | 1..1 | SHALL |  | [1098-](#_bookmark240)  [31356](#_bookmark240) |  |
| custodian | 1..1 | SHALL |  | [1098-](#_bookmark242)  [5519](#_bookmark242) |  |
| assignedCustodian | 1..1 | SHALL |  | [1098-](#_bookmark243)  [5520](#_bookmark243) |  |
| representedCustodianOrganization | 1..1 | SHALL |  | [1098-](#_bookmark244)  [5521](#_bookmark244) |  |
| id | 1..\* | SHALL |  | [1098-](#_bookmark245)  [5522](#_bookmark245) |  |
| @root | 0..1 | SHOUL D |  | [1098-](#_bookmark246)  [16822](#_bookmark246) | 2.16.840.1.113883.4.6 |
| name | 1..1 | SHALL |  | [1098-](#_bookmark247)  [5524](#_bookmark247) |  |
| telecom | 1..1 | SHALL |  | [1098-](#_bookmark248)  [5525](#_bookmark248) |  |
| @use | 0..1 | SHOUL D |  | [1098-](#_bookmark249)  [7998](#_bookmark249) | urn:oid:2.16.840.1.113883.11.20.  9.20 (Telecom Use (US Realm Header)) |
| addr | 1..1 | SHALL |  | [1098-](#_bookmark250)  [5559](#_bookmark250) | [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED) (identifier:](#_bookmark2222) |

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|  |  |  |  |  | urn:oid:2.16.840.1.113883.10.20. 22.5.2 |
| informationRecipient | 0..\* | MAY |  | [1098-](#_bookmark252)  [5565](#_bookmark252) |  |
| intendedRecipient | 1..1 | SHALL |  | [1098-](#_bookmark253)  [5566](#_bookmark253) |  |
| id | 0..\* | MAY |  | [1098-](#_bookmark254)  [32399](#_bookmark254) |  |
| informationRecipient | 0..1 | MAY |  | [1098-](#_bookmark255)  [5567](#_bookmark255) |  |
| name | 1..\* | SHALL |  | [1098-](#_bookmark256)  [5568](#_bookmark256) | [US Realm Person Name](#_bookmark2286)  [(PN.US.FIELDED) (identifier:](#_bookmark2286)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2286)  [22.5.1.1](#_bookmark2286) |
| receivedOrganization | 0..1 | MAY |  | [1098-](#_bookmark257)  [5577](#_bookmark257) |  |
| name | 1..1 | SHALL |  | [1098-](#_bookmark258)  [5578](#_bookmark258) |  |
| legalAuthenticator | 0..1 | SHOUL D |  | [1098-](#_bookmark260)  [5579](#_bookmark260) |  |
| time | 1..1 | SHALL |  | [1098-](#_bookmark261)  [5580](#_bookmark261) | [US Realm Date and Time](#_bookmark2252)  [(DTM.US.FIELDED) (identifier:](#_bookmark2252)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2252)  [22.5.4](#_bookmark2252) |
| signatureCode | 1..1 | SHALL |  | [1098-](#_bookmark262)  [5583](#_bookmark262) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark263)  [5584](#_bookmark263) | urn:oid:2.16.840.1.113883.5.89  (Participationsignature) = S |
| sdtc:signatureText | 0..1 | MAY |  | [1098-](#_bookmark264)  [30810](#_bookmark264) |  |
| assignedEntity | 1..1 | SHALL |  | [1098-](#_bookmark266)  [5585](#_bookmark266) |  |
| id | 1..\* | SHALL |  | [1098-](#_bookmark267)  [5586](#_bookmark267) |  |
| @root | 0..1 | MAY |  | [1098-](#_bookmark268)  [16823](#_bookmark268) | 2.16.840.1.113883.4.6 |
| code | 0..1 | MAY |  | [1098-](#_bookmark269)  [17000](#_bookmark269) | urn:oid:2.16.840.1.114222.4.11.1  066 (Healthcare Provider Taxonomy (HIPAA)) |
| addr | 1..\* | SHALL |  | [1098-](#_bookmark270)  [5589](#_bookmark270) | [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED) (identifier:](#_bookmark2222)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2222)  [22.5.2](#_bookmark2222) |
| telecom | 1..\* | SHALL |  | [1098-](#_bookmark271)  [5595](#_bookmark271) |  |
| @use | 0..1 | SHOUL D |  | [1098-](#_bookmark272)  [7999](#_bookmark272) | urn:oid:2.16.840.1.113883.11.20.  9.20 (Telecom Use (US Realm Header)) |
| assignedPerson | 1..1 | SHALL |  | [1098-](#_bookmark273) |  |

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|  |  |  |  | 5597 |  |
| name | 1..\* | SHALL |  | [1098-](#_bookmark274)  [5598](#_bookmark274) | [US Realm Person Name](#_bookmark2286)  [(PN.US.FIELDED) (identifier:](#_bookmark2286)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2286)  [22.5.1.1](#_bookmark2286) |
| authenticator | 0..\* | MAY |  | [1098-](#_bookmark276)  [5607](#_bookmark276) |  |
| time | 1..1 | SHALL |  | [1098-](#_bookmark277)  [5608](#_bookmark277) | [US Realm Date and Time](#_bookmark2252)  [(DTM.US.FIELDED) (identifier:](#_bookmark2252)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2252)  [22.5.4](#_bookmark2252) |
| signatureCode | 1..1 | SHALL |  | [1098-](#_bookmark278)  [5610](#_bookmark278) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark279)  [5611](#_bookmark279) | urn:oid:2.16.840.1.113883.5.89  (Participationsignature) = S |
| sdtc:signatureText | 0..1 | MAY |  | [1098-](#_bookmark280)  [30811](#_bookmark280) |  |
| assignedEntity | 1..1 | SHALL |  | [1098-](#_bookmark281)  [5612](#_bookmark281) |  |
| id | 1..\* | SHALL |  | [1098-](#_bookmark282)  [5613](#_bookmark282) |  |
| @root | 0..1 | SHOUL D |  | [1098-](#_bookmark283)  [16824](#_bookmark283) | 2.16.840.1.113883.4.6 |
| code | 0..1 | MAY |  | [1098-](#_bookmark284)  [16825](#_bookmark284) |  |
| @code | 0..1 | MAY |  | [1098-](#_bookmark285)  [16826](#_bookmark285) | urn:oid:2.16.840.1.114222.4.11.1  066 (Healthcare Provider Taxonomy (HIPAA)) |
| addr | 1..\* | SHALL |  | [1098-](#_bookmark286)  [5616](#_bookmark286) | [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED) (identifier:](#_bookmark2222)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2222)  [22.5.2](#_bookmark2222) |
| telecom | 1..\* | SHALL |  | [1098-](#_bookmark287)  [5622](#_bookmark287) |  |
| @use | 0..1 | SHOUL D |  | [1098-](#_bookmark288)  [8000](#_bookmark288) | urn:oid:2.16.840.1.113883.11.20.  9.20 (Telecom Use (US Realm Header)) |
| assignedPerson | 1..1 | SHALL |  | [1098-](#_bookmark289)  [5624](#_bookmark289) |  |
| name | 1..\* | SHALL |  | [1098-](#_bookmark290)  [5625](#_bookmark290) | [US Realm Person Name](#_bookmark2286)  [(PN.US.FIELDED) (identifier:](#_bookmark2286)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2286)  [22.5.1.1](#_bookmark2286) |
| participant | 0..\* | MAY |  | [1098-](#_bookmark292)  [10003](#_bookmark292) |  |
| time | 0..1 | MAY |  | [1098-](#_bookmark293)  [10004](#_bookmark293) |  |
| inFulfillmentOf | 0..\* | MAY |  | [1098-](#_bookmark295)  [9952](#_bookmark295) |  |

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| --- | --- | --- | --- | --- | --- |
| order | 1..1 | SHALL |  | [1098-](#_bookmark296)  [9953](#_bookmark296) |  |
| id | 1..\* | SHALL |  | [1098-](#_bookmark297)  [9954](#_bookmark297) |  |
| documentationOf | 0..\* | MAY |  | [1098-](#_bookmark299)  [14835](#_bookmark299) |  |
| serviceEvent | 1..1 | SHALL |  | [1098-](#_bookmark300)  [14836](#_bookmark300) |  |
| effectiveTime | 1..1 | SHALL |  | [1098-](#_bookmark301)  [14837](#_bookmark301) |  |
| low | 1..1 | SHALL |  | [1098-](#_bookmark302)  [14838](#_bookmark302) |  |
| performer | 0..\* | SHOUL D |  | [1098-](#_bookmark303)  [14839](#_bookmark303) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark304)  [14840](#_bookmark304) | urn:oid:2.16.840.1.113883.1.11.1  9601 (x\_ServiceEventPerformer) |
| functionCode | 0..1 | MAY |  | [1098-](#_bookmark305)  [16818](#_bookmark305) |  |
| @code | 0..1 | SHOUL D |  | [1098-](#_bookmark306)  [32889](#_bookmark306) | urn:oid:2.16.840.1.113883.1.11.1  0267 (ParticipationFunction) |
| assignedEntity | 1..1 | SHALL |  | [1098-](#_bookmark307)  [14841](#_bookmark307) |  |
| id | 1..\* | SHALL |  | [1098-](#_bookmark308)  [14846](#_bookmark308) |  |
| @root | 0..1 | SHOUL D |  | [1098-](#_bookmark309)  [14847](#_bookmark309) | 2.16.840.1.113883.4.6 |
| code | 0..1 | SHOUL D |  | [1098-](#_bookmark310)  [14842](#_bookmark310) | urn:oid:2.16.840.1.114222.4.11.1  066 (Healthcare Provider Taxonomy (HIPAA)) |
| authorization | 0..\* | MAY |  | [1098-](#_bookmark313)  [16792](#_bookmark313) |  |
| consent | 1..1 | SHALL |  | [1098-](#_bookmark314)  [16793](#_bookmark314) |  |
| id | 0..\* | MAY |  | [1098-](#_bookmark315)  [16794](#_bookmark315) |  |
| code | 0..1 | MAY |  | [1098-](#_bookmark316)  [16795](#_bookmark316) |  |
| statusCode | 1..1 | SHALL |  | [1098-](#_bookmark317)  [16797](#_bookmark317) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark318)  [16798](#_bookmark318) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = completed |
| componentOf | 0..1 | MAY |  | [1098-](#_bookmark320)  [9955](#_bookmark320) |  |
| encompassingEncounter | 1..1 | SHALL |  | [1098-](#_bookmark321)  [9956](#_bookmark321) |  |
| id | 1..\* | SHALL |  | [1098-](#_bookmark322)  [9959](#_bookmark322) |  |

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| --- | --- | --- | --- | --- | --- |
| effectiveTime | 1..1 | SHALL |  | [1098-](#_bookmark323)  [9958](#_bookmark323) |  |

* + 1. Properties

### realmCode

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

***Figure 5: US Realm Header (V2) Example***

<ClinicalDocument>

<realmCode code="US" />

<typeId extension="POCD\_HD000040" root="2.16.840.1.113883.1.3" />

<!-- CCD template -->

<templateId root="2.16.840.1.113883.10.20.22.1.1" extension="2014-06-09" />

<!-- Globally unique identifier for the document -->

<id extension="TT988" root="2.16.840.1.113883.19.5.99999.1" />

<code code="72134-0" displayName=" Cancer event report " codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />

<!-- Title of the document -->

<title>Cancer Event Report</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>

* + - * 1. **SHALL** contain exactly one [1..1] **typeId** (CONF:1098-5361).

This typeId **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.1.3"

(CONF:1098-5250).

This typeId **SHALL** contain exactly one [1..1] **@extension**="POCD\_HD000040"

(CONF:1098-5251).

* + - * 1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-5252) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.1.1"

(CONF:1098-10036).

1. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32503).
   * + - 1. **SHALL** contain exactly one [1..1] **id** (CONF:1098-5363).

This id **SHALL** be a globally unique identifier for the document (CONF:1098-9991).

* + - * 1. **SHALL** contain exactly one [1..1] **code** (CONF:1098-5253).

This code **SHALL** specify the particular kind of document (e.g., History and Physical, Discharge Summary, Progress Note) (CONF:1098-9992).

* + - * 1. **SHALL** contain exactly one [1..1] **title** (CONF:1098-5254).

Note: The title can either be a locally defined name or the displayName corresponding to clinicalDocument/code

* + - * 1. **SHALL** contain exactly one [1..1] [**US Realm Date and Time** **(DTM.US.FIELDED)**](#_bookmark2252)

(identifier: urn:oid:2.16.840.1.113883.10.20.22.5.4) (CONF:1098-5256).

* + - * 1. **SHALL** contain exactly one [1..1] **confidentialityCode**, which **SHOULD** be selected from ValueSet [**HL7** **BasicConfidentialityKind**](#_bookmark325) urn:oid:2.16.840.1.113883.1.11.16926 **STATIC** 2010-04-21 (CONF:1098-5259).
        2. **SHALL** contain exactly one [1..1] **languageCode**, which **SHALL** be selected from ValueSet

[**Language**](#_bookmark327) urn:oid:2.16.840.1.113883.1.11.11526 **DYNAMI****C** (CONF:1098-5372).

* + - * 1. **MAY** contain zero or one [0..1] **setId** (CONF:1098-5261).

If setId is present versionNumber **SHALL** be present (CONF:1098-6380).

* + - * 1. **MAY** contain zero or one [0..1] **versionNumber** (CONF:1098-5264).

If versionNumber is present setId **SHALL** be present (CONF:1098-6387).

### 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:1098-5266).
   1. Such recordTargets **SHALL** contain exactly one [1..1] **patientRole** (CONF:1098- 5267).
      1. This patientRole **SHALL** contain at least one [1..\*] **id** (CONF:1098-5268).
      2. This patientRole **SHALL** contain at least one [1..\*] [**US Realm Address**](#_bookmark2222) [**(AD.US.FIELDED)**](#_bookmark2222) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1098-5271).
      3. This patientRole **SHALL** contain at least one [1..\*] **telecom** (CONF:1098- 5280).
         1. Such telecoms **SHOULD** contain zero or one [0..1] **@use**, which **SHALL** be selected from ValueSet [**Telecom Use (US Realm** **Header)**](#_bookmark329)urn:oid:2.16.840.1.113883.11.20.9.20 **DYNAMIC** (CONF:1098- 5375).
      4. This patientRole **SHALL** contain exactly one [1..1] **patient** (CONF:1098- 5283).
         1. This patient **SHALL** contain at least one [1..\*] [**US Realm Person Name**](#_bookmark2286) [**(PN.US.FIELDED)**](#_bookmark2286) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1098- 5284).
         2. This patient **SHALL** contain exactly one [1..1] **administrativeGenderCode**, which **SHALL** be selected from ValueSet [**Administrative Gender (HL7 V3)**](#_bookmark331)urn:oid:2.16.840.1.113883.1.11.1 **DYNAMI****C** (CONF:1098-6394).
         3. This patient **SHALL** contain exactly one [1..1] **birthTim****e**

(CONF:1098-5298).

* + - * 1. **SHALL** be precise to year (CONF:1098-5299).
        2. **SHOULD** be precise to day (CONF:1098-5300). For cases where information about newborn's time of birth needs to be captured.
        3. **MAY** be precise to the minute (CONF:1098-32418).
      1. This patient **SHOULD** contain zero or one [0..1] **maritalStatusCode**, which **SHALL** be selected from ValueSet [**Marital** **Status**](#_bookmark131)urn:oid:2.16.840.1.113883.1.11.12212 **DYNAMIC** (CONF:1098- 5303).
      2. This patient **MAY** contain zero or one [0..1] **religiousAffiliationCode**, which **SHALL** be selected from ValueSet [**Religious Affiliation**](#_bookmark333)urn:oid:2.16.840.1.113883.1.11.19185 **DYNAMI****C** (CONF:1098- 5317).
      3. This patient **SHALL** contain exactly one [1..1] **raceCode**, which **SHALL** be selected from ValueSet [**Race Category Excluding** **Nulls**](#_bookmark335)urn:oid:2.16.840.1.113883.3.2074.1.1.3 **DYNAMIC** (CONF:1098- 5322).
      4. This patient **MAY** contain zero or more [0..\*] **sdtc:raceCode**, which **SHALL** be selected from ValueSet [**Race**](#_bookmark133)urn:oid:2.16.840.1.113883.1.11.14914 **DYNAMI****C** (CONF:1098- 7263).

Note: The sdtc:raceCode is only used to record additional values when the patient has indicated multiple races or additional race detail beyond the five categories required for Meaningful Use Stage 2. The prefix sdtc: SHALL be bound to the namespace “urn:hl7- org:sdtc”. The use of the namespace provides a necessary extension to CDA R2 for the use of the additional raceCode elements.

* + - * 1. If sdtc:raceCode is present, then the patient **SHALL** contain [1..1] raceCode (CONF:1098-31347).
      1. This patient **SHALL** contain exactly one [1..1] **ethnicGroupCode**, which **SHALL** be selected from ValueSet **[Ethnicity](#_bookmark337)** urn:oid:2.16.840.1.114222.4.11.837 **DYNAMIC** (CONF:1098- 5323).
      2. This patient **MAY** contain zero or more [0..\*] **guardian** (CONF:1098- 5325).
         1. The guardian, if present, **SHOULD** contain zero or one [0..1] **code**, which **SHALL** be selected from ValueSet [**Personal And**](#_bookmark339) [**Legal Relationship Role Type**](#_bookmark339)urn:oid:2.16.840.1.113883.11.20.12.1 **DYNAMI****C** (CONF:1098-5326).
         2. The guardian, if present, **SHOULD** contain zero or more [0..\*] [**US**](#_bookmark2222) [**Realm Address (AD.US.FIELDED)**](#_bookmark2222) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1098- 5359).
         3. The guardian, if present, **SHOULD** contain zero or more [0..\*]

**telecom** (CONF:1098-5382).

The telecom, if present, **SHOULD** contain zero or one [0..1] **@use**, which **SHALL** be selected from ValueSet [**Telecom Use (US Realm Header)**](#_bookmark329)urn:oid:2.16.840.1.113883.11.20.9.20 **DYNAMI****C** (CONF:1098-7993).

* + - * 1. The guardian, if present, **SHALL** contain exactly one [1..1]

**guardianPerson** (CONF:1098-5385).

This guardianPerson **SHALL** contain at least one [1..\*] [**US Realm Person Name (PN.US.FIELDED)**](#_bookmark2286)(identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1098-5386).

* + - 1. This patient **MAY** contain zero or one [0..1] **birthplac****e** (CONF:1098- 5395).
         1. The birthplace, if present, **SHALL** contain exactly one [1..1]

**place** (CONF:1098-5396).

This place **SHALL** contain exactly one [1..1] **addr**

(CONF:1098-5397).

This addr **SHOULD** contain zero or one [0..1] **country**, which **SHALL** be selected from ValueSet [**Country**](#_bookmark341)urn:oid:2.16.840.1.113883.3.88.12.80.63 **DYNAMIC** (CONF:1098-5404).

This addr **MAY** contain zero or one [0..1] **postalCode**, which **SHALL** be selected from ValueSet [**PostalCode**](#_bookmark343)urn:oid:2.16.840.1.113883.3.88.12.80.2 **DYNAMIC** (CONF:1098-5403).

If country is US, this addr **SHOULD** contain zero to one [0..1] state, which **SHALL** be selected from ValueSet StateValueSet 2.16.840.1.113883.3.88.12.80.1 **DYNAMIC** (CONF:1098-5402).

* + - 1. This patient **SHALL** contain at least one [1..\*]

**languageCommunication** (CONF:1098-5406).

* + - * 1. Such languageCommunications **SHALL** contain exactly one [1..1] **languageCode**, which **SHALL** be selected from ValueSet [**PatientLanguage**](#_bookmark345)urn:oid:2.16.840.1.113883.11.20.9.64 **DYNAMI****C** (CONF:1098-5407).
        2. Such languageCommunications **MAY** contain zero or one [0..1] **modeCode**, which **SHALL** be selected from ValueSet [**LanguageAbilityMode**](#_bookmark347)urn:oid:2.16.840.1.113883.1.11.12249 **DYNAMI****C** (CONF:1098-5409).
        3. Such languageCommunications **SHOULD** contain zero or one [0..1] **proficiencyLevelCode**, which **SHALL** be selected from ValueSet [**LanguageAbilityProficiency**](#_bookmark349)urn:oid:2.16.840.1.113883.1.11.12199 **DYNAMI****C** (CONF:1098-9965).
        4. Such languageCommunications **SHOULD** contain zero or one [0..1] **preferenceInd** (CONF:1098-5414).
    1. This patientRole **MAY** contain zero or one [0..1] **providerOrganizati****on**

(CONF:1098-5416).

* + - 1. The providerOrganization, if present, **SHALL** contain at least one [1..\*]

**id** (CONF:1098-5417).

* + - * 1. Such ids **SHOULD** contain zero or one [0..1]

**@root**="2.16.840.1.113883.4.6" National Provider Identifier (CONF:1098-16820).

* + - 1. The providerOrganization, if present, **SHALL** contain at least one [1..\*]

**name** (CONF:1098-5419).

* + - 1. The providerOrganization, if present, **SHALL** contain at least one [1..\*]

**telecom** (CONF:1098-5420).

* + - * 1. Such telecoms **SHOULD** contain zero or one [0..1] **@use**, which **SHALL** be selected from ValueSet [**Telecom Use (US Realm**](#_bookmark329) **[Header)](#_bookmark329)** urn:oid:2.16.840.1.113883.11.20.9.20 **DYNAMIC** (CONF:1098-7994).
      1. The providerOrganization, if present, **SHALL** contain at least one [1..\*] [**US Realm Address (AD.US.FIELDED)**](#_bookmark2222) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1098-5422).

***Figure 6: 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>Evelyn</given>

<given qualifier="IN">E</given>

<family qualifier="SP">Everyman</family>

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

</name>

<name use="P">

<!-- The "P" is Other/Pseudonym/Alias -->

<given>Jane</given>

<family>Doe</family>

</name>

<name>

<given>Evelyn</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"/>

<raceCode code="2106-3" displayName="White" codeSystem="2.16.840.1.113883.6.238"

codeSystemName="Race &amp; 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 &amp; Ethnicity - CDC"/>

<ethnicGroupCode code="2186-5" displayName="Not Hispanic or Latino" codeSystem="2.16.840.1.113883.6.238"

codeSystemName="Race &amp; 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>

<state>OR</state>

<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>

### 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:1098-5444).
   1. Such authors **SHALL** contain exactly one [1..1] [**US Realm Date and Time**](#_bookmark2252) [**(DTM.US.FIELDED)**](#_bookmark2252) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.4) (CONF:1098-5445).
   2. Such authors **SHALL** contain exactly one [1..1] **assignedAutho****r** (CONF:1098-5448).
      1. This assignedAuthor **SHALL** contain at least one [1..\*] **id** (CONF:1098-5449).

If this assignedAuthor is an assignedPerson

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

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

* + - 1. **MAY** contain zero or one [0..1] **@nullFlavor**="UNK" Unknown (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:1098-32883).

2. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.4.6"

National Provider Identifier (CONF:1098-32884).

3. **SHOULD** contain zero or one [0..1] **@extension** (CONF:1098-32885). Only if this assignedAuthor is an assignedPerson should the assignedAuthor contain a code.

* + 1. This assignedAuthor **SHOULD** contain zero or one [0..1] **code** (CONF:1098- 16787).
       1. The code, if present, **SHALL** contain exactly one [1..1] **@code**, which **SHOULD** be selected from ValueSet [**Healthcare Provider** **Taxonomy**](#_bookmark351) [**(HIPAA)**](#_bookmark351) urn:oid:2.16.840.1.114222.4.11.1066 **DYNAMIC** (CONF:1098-16788).
    2. This assignedAuthor **SHALL** contain at least one [1..\*] [**US Realm Address**](#_bookmark2222) [**(AD.US.FIELDED)**](#_bookmark2222) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1098-5452).
    3. This assignedAuthor **SHALL** contain at least one [1..\*] **telecom** (CONF:1098- 5428).
       1. Such telecoms **SHOULD** contain zero or one [0..1] **@use**, which **SHALL** be selected from ValueSet [**Telecom Use (US Realm** **Header)**](#_bookmark329)urn:oid:2.16.840.1.113883.11.20.9.20 **DYNAMIC** (CONF:1098- 7995).
    4. This assignedAuthor **SHOULD** contain zero or one [0..1] **assignedPerson**

(CONF:1098-5430).

* + - 1. The assignedPerson, if present, **SHALL** contain at least one [1..\*] [**US**](#_bookmark2286) [**Realm Person Name (PN.US.FIELDED)**](#_bookmark2286) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1098- 16789).
    1. This assignedAuthor **SHOULD** contain zero or one [0..1]

**assignedAuthoringDevice** (CONF:1098-16783).

* + - 1. The assignedAuthoringDevice, if present, **SHALL** contain exactly one [1..1] **manufacturerModelName** (CONF:1098-16784).
      2. The assignedAuthoringDevice, if present, **SHALL** contain exactly one [1..1] **softwareName** (CONF:1098-16785).
    1. There **SHALL** be exactly one assignedAuthor/assignedPerson or exactly one assignedAuthor/assignedAuthoringDevice (CONF:1098-16790).

***Figure 7: 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>

### 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:1098-5441).
   1. The dataEnterer, if present, **SHALL** contain exactly one [1..1] **assignedEnt****ity**

(CONF:1098-5442).

* + 1. This assignedEntity **SHALL** contain at least one [1..\*] **id** (CONF:1098-5443).
       1. Such ids **SHOULD** contain zero or one [0..1]

**@root**="2.16.840.1.113883.4.6" National Provider Identifier (CONF:1098-16821).

* + 1. This assignedEntity **MAY** contain zero or one [0..1] **code**, which **SHOULD** be selected from ValueSet [**Healthcare Provider** **Taxonomy (HIPAA)**](#_bookmark351)urn:oid:2.16.840.1.114222.4.11.1066 **DYNAMIC** (CONF:1098-32173).
    2. This assignedEntity **SHALL** contain at least one [1..\*] [**US Realm Address**](#_bookmark2222) [**(AD.US.FIELDED)**](#_bookmark2222) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1098-5460).
    3. This assignedEntity **SHALL** contain at least one [1..\*] **telecom** (CONF:1098- 5466).
       1. Such telecoms **SHOULD** contain zero or one [0..1] **@use**, which **SHALL** be selected from ValueSet [**Telecom Use (US Realm** **Header)**](#_bookmark329)urn:oid:2.16.840.1.113883.11.20.9.20 **DYNAMIC** (CONF:1098- 7996).
    4. This assignedEntity **SHALL** contain exactly one [1..1] **assignedPerson**

(CONF:1098-5469).

* + - 1. This assignedPerson **SHALL** contain at least one [1..\*] [**US Realm**](#_bookmark2286) [**Person Name (PN.US.FIELDED)**](#_bookmark2286) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1098- 5470).

***Figure 8: 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>

### 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:1098-8001) such that it
   1. **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:1098-8002).
      1. This assignedEntity **SHALL** contain at least one [1..\*] **id** (CONF:1098-9945).
         1. If assignedEntity/id is a provider then this id, **SHOULD** include zero or one [0..1] id where id/@root ="2.16.840.1.113883.4.6" National Provider Identifier (CONF:1098-9946).
      2. This assignedEntity **MAY** contain zero or one [0..1] **code**, which **SHOULD** be selected from ValueSet [**Healthcare Provider** **Taxonomy (HIPAA)**](#_bookmark351)urn:oid:2.16.840.1.114222.4.11.1066 **DYNAMIC** (CONF:1098-32174).
      3. This assignedEntity **SHALL** contain at least one [1..\*] [**US Realm Address**](#_bookmark2222) [**(AD.US.FIELDED)**](#_bookmark2222) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1098-8220).
      4. This assignedEntity **SHALL** contain exactly one [1..1] **assignedPerson**

(CONF:1098-8221).

* + - 1. This assignedPerson **SHALL** contain at least one [1..\*] [**US Realm**](#_bookmark2286) [**Person Name (PN.US.FIELDED)**](#_bookmark2286) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1098- 8222).

***Figure 9: 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>

### 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:1098-31355) such that it
   1. **SHALL** contain exactly one [1..1] **relatedEntity** (CONF:1098-31356).

***Figure 10: 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>

### 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:1098-5519).
   1. This custodian **SHALL** contain exactly one [1..1] **assignedCustodi****an** (CONF:1098- 5520).
      1. This assignedCustodian **SHALL** contain exactly one [1..1]

**representedCustodianOrganization** (CONF:1098-5521).

* + - 1. This representedCustodianOrganization **SHALL** contain at least one [1..\*] **id** (CONF:1098-5522).
         1. Such ids **SHOULD** contain zero or one [0..1]

**@root**="2.16.840.1.113883.4.6" National Provider Identifier (CONF:1098-16822).

* + - 1. This representedCustodianOrganization **SHALL** contain exactly one [1..1] **name** (CONF:1098-5524).
      2. This representedCustodianOrganization **SHALL** contain exactly one [1..1] **telecom** (CONF:1098-5525).
         1. This telecom **SHOULD** contain zero or one [0..1] **@use**, which **SHALL** be selected from ValueSet [**Telecom Use (US Realm**](#_bookmark329) **[Header)](#_bookmark329)** urn:oid:2.16.840.1.113883.11.20.9.20 **DYNAMIC** (CONF:1098-7998).
      3. This representedCustodianOrganization **SHALL** contain exactly one [1..1] [**US Realm Address (AD.US.FIELDED)**](#_bookmark2222) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1098-5559).

***Figure 11: 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>

### 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..\*] **informationRec****ipient** (CONF:1098-5565).
   1. The informationRecipient, if present, **SHALL** contain exactly one [1..1]

**intendedRecipient** (CONF:1098-5566).

* + 1. This intendedRecipient **MAY** contain zero or more [0..\*] **id** (CONF:1098- 32399).
    2. This intendedRecipient **MAY** contain zero or one [0..1]

**informationRecipient** (CONF:1098-5567).

* + - 1. The informationRecipient, if present, **SHALL** contain at least one [1..\*] [**US Realm Person Name (PN.US.FIELDED)**](#_bookmark2286) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1098- 5568).
    1. This intendedRecipient **MAY** contain zero or one [0..1]

**receivedOrganization** (CONF:1098-5577).

* + - 1. The receivedOrganization, if present, **SHALL** contain exactly one [1..1]

**name** (CONF:1098-5578).

***Figure 12: 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>

### 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:1098-5579).
   1. The legalAuthenticator, if present, **SHALL** contain exactly one [1..1] [**US Realm Date**](#_bookmark2252) [**and Time (DTM.US.FIELDED)**](#_bookmark2252) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.4) (CONF:1098-5580).
   2. The legalAuthenticator, if present, **SHALL** contain exactly one [1..1] **signatureCod****e**

(CONF:1098-5583).

* + 1. This signatureCode **SHALL** contain exactly one [1..1] **@code**="S" (CodeSystem: Participationsignature urn:oid:2.16.840.1.113883.5.89 **STAT****IC**) (CONF:1098-5584).

### 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 of 2013.

* 1. The legalAuthenticator, if present, **MAY** contain zero or one [0..1]

**sdtc:signatureText** (CONF:1098-30810).

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

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

***Figure 13: Digital signature Example***

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

6edjzMMIjdMDSsWdIJdksIJR3373jeu83MNYD83jmMdomSJUEdmde9j44zmMir

... MNYD83jmMdomSJUEdmde9j44zmMir6edjzMMIjdMDSsWdIJdksIJR3373jeu83 4zmMir6edjzMMIjdMDSsWdIJdksIJR3373jeu83==</sdtc:signatureText>

* 1. The legalAuthenticator, if present, **SHALL** contain exactly one [1..1] **assignedEnti****ty**

(CONF:1098-5585).

* + 1. This assignedEntity **SHALL** contain at least one [1..\*] **id** (CONF:1098-5586).
       1. Such ids **MAY** contain zero or one [0..1]

**@root**="2.16.840.1.113883.4.6" National Provider Identifier (CONF:1098-16823).

* + 1. This assignedEntity **MAY** contain zero or one [0..1] **code**, which **SHOULD** be selected from ValueSet [**Healthcare Provider** **Taxonomy (HIPAA)**](#_bookmark351)urn:oid:2.16.840.1.114222.4.11.1066 **DYNAMIC** (CONF:1098-17000).
    2. This assignedEntity **SHALL** contain at least one [1..\*] [**US Realm Address**](#_bookmark2222) [**(AD.US.FIELDED)**](#_bookmark2222) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1098-5589).
    3. This assignedEntity **SHALL** contain at least one [1..\*] **telecom** (CONF:1098- 5595).
       1. Such telecoms **SHOULD** contain zero or one [0..1] **@use**, which **SHALL** be selected from ValueSet [**Telecom Use (US Realm** **Header)**](#_bookmark329)urn:oid:2.16.840.1.113883.11.20.9.20 **DYNAMIC** (CONF:1098- 7999).
    4. This assignedEntity **SHALL** contain exactly one [1..1] **assignedPerson**

(CONF:1098-5597).

* + - 1. This assignedPerson **SHALL** contain at least one [1..\*] [**US Realm**](#_bookmark2286) [**Person Name (PN.US.FIELDED)**](#_bookmark2286) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1098- 5598).

***Figure 14: 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>

### 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:1098-5607) such that it
   1. **SHALL** contain exactly one [1..1] [**US Realm Date and Time** **(DTM.US.FIELDED)**](#_bookmark2252)

(identifier: urn:oid:2.16.840.1.113883.10.20.22.5.4) (CONF:1098-5608).

* 1. **SHALL** contain exactly one [1..1] **signatureCode** (CONF:1098-5610).
     1. This signatureCode **SHALL** contain exactly one [1..1] **@code**="S" (CodeSystem: Participationsignature urn:oid:2.16.840.1.113883.5.89 **STATI****C**) (CONF:1098-5611).

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

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

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

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.

* 1. **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:1098-5612).
     1. This assignedEntity **SHALL** contain at least one [1..\*] **id** (CONF:1098-5613).
        1. Such ids **SHOULD** contain zero or one [0..1]

**@root**="2.16.840.1.113883.4.6" National Provider Identifier (CONF:1098-16824).

* + 1. This assignedEntity **MAY** contain zero or one [0..1] **code** (CONF:1098-16825).
       1. The code, if present, **MAY** contain zero or one [0..1] **@code**, which **SHOULD** be selected from ValueSet [**Healthcare Provider** **Taxonomy**](#_bookmark351) [**(HIPAA)**](#_bookmark351) urn:oid:2.16.840.1.114222.4.11.1066 **STATIC** (CONF:1098-16826).
    2. This assignedEntity **SHALL** contain at least one [1..\*] [**US Realm Address**](#_bookmark2222) [**(AD.US.FIELDED)**](#_bookmark2222) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1098-5616).
    3. This assignedEntity **SHALL** contain at least one [1..\*] **telecom** (CONF:1098- 5622).
       1. Such telecoms **SHOULD** contain zero or one [0..1] **@use**, which **SHALL** be selected from ValueSet [**Telecom Use (US Realm** **Header)**](#_bookmark329)urn:oid:2.16.840.1.113883.11.20.9.20 **DYNAMIC** (CONF:1098- 8000).
    4. This assignedEntity **SHALL** contain exactly one [1..1] **assignedPerson**

(CONF:1098-5624).

* + - 1. This assignedPerson **SHALL** contain at least one [1..\*] [**US Realm**](#_bookmark2286) [**Person Name (PN.US.FIELDED)**](#_bookmark2286) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1098- 5625).

***Figure 15: 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>

### 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..\*] **partic****ipant** (CONF:1098-10003) such that it
   1. **MAY** contain zero or one [0..1] **time** (CONF:1098-10004).
   2. **SHALL** contain associatedEntity/associatedPerson **AND/OR**

associatedEntity/scopingOrganization (CONF:1098-10006).

* 1. When participant/@typeCode is **IND**, associatedEntity/@classCode **SHOULD** be selected from ValueSet 2.16.840.1.113883.11.20.9.33 INDRoleclassCodes **STATIC 2011-09-30** (CONF:1098-10007).

***Figure 16: 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>

### 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..\*] **inFulfillmentO****f** (CONF:1098-9952).
   1. The inFulfillmentOf, if present, **SHALL** contain exactly one [1..1] **order** (CONF:1098- 9953).
      1. This order **SHALL** contain at least one [1..\*] **id** (CONF:1098-9954).

***Figure 17: inFulfillmentOf Example***

<inFulfillmentOf typeCode="FLFS">

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

<id root="2.16.840.1.113883.6.96" extension="1298989898" />

<code code="388975008" displayName="Weight Reduction Consultation" codeSystem="2.16.840.1.113883.6.96" codeSystemName="CPT4" />

</order>

</inFulfillmentOf>

### documentationOf

1. **MAY** contain zero or more [0..\*] **documentationO****f** (CONF:1098-14835).

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

* 1. The documentationOf, if present, **SHALL** contain exactly one [1..1] **serviceEven****t**

(CONF:1098-14836).

* + 1. This serviceEvent **SHALL** contain exactly one [1..1] **effectiveTime**

(CONF:1098-14837).

* + - 1. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:1098- 14838).

### 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:1098-14839).

* + - 1. The performer, if present, **SHALL** contain exactly one [1..1]

**@typeCode**, which **SHALL** be selected from ValueSet [**x\_ServiceEventPerformer**](#_bookmark355)urn:oid:2.16.840.1.113883.1.11.19601 **STATIC** 2014-09-01 (CONF:1098-14840).

* + - 1. The performer, if present, **MAY** contain zero or one [0..1]

**functionCode** (CONF:1098-16818).

* + - * 1. The functionCode, if present, **SHOULD** contain zero or one [0..1]

**@code**, which **SHOULD** be selected from ValueSet [**ParticipationFunction**](#_bookmark357)urn:oid:2.16.840.1.113883.1.11.10267 **STATIC** 2014-09-

01 (CONF:1098-32889).

* + - 1. The performer, if present, **SHALL** contain exactly one [1..1]

**assignedEntity** (CONF:1098-14841).

* + - * 1. This assignedEntity **SHALL** contain at least one [1..\*] **id**

(CONF:1098-14846).

Such ids **SHOULD** contain zero or one [0..1]

**@root**="2.16.840.1.113883.4.6" National Provider Identifier (CONF:1098-14847).

* + - * 1. This assignedEntity **SHOULD** contain zero or one [0..1] **code**, which **SHOULD** be selected from ValueSet [**Healthcare**](#_bookmark351) [**Provider Taxonomy (HIPAA)**](#_bookmark351)urn:oid:2.16.840.1.114222.4.11.1066 **DYNAMI****C** (CONF:1098-14842).

***Figure 18: 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 19: 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>

### 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:1098-16792) such that it
   1. **SHALL** contain exactly one [1..1] **consent** (CONF:1098-16793).
      1. This consent **MAY** contain zero or more [0..\*] **id** (CONF:1098-16794).
      2. This consent **MAY** contain zero or one [0..1] **code** (CONF:1098-16795).

Note: The type of consent (e.g., a consent to perform the related serviceEvent) is conveyed in consent/code.

* + 1. This consent **SHALL** contain exactly one [1..1] **statusCod****e** (CONF:1098- 16797).
       1. This statusCode **SHALL** contain exactly one [1..1]

**@code**="completed" Completed (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1098-16798).

***Figure 20: 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>

### 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:1098-9955).
   1. The componentOf, if present, **SHALL** contain exactly one [1..1]

**encompassingEncounter** (CONF:1098-9956).

* + 1. This encompassingEncounter **SHALL** contain at least one [1..\*] **id**

(CONF:1098-9959).

* + 1. This encompassingEncounter **SHALL** contain exactly one [1..1]

**effectiveTime** (CONF:1098-9958).

***Tabl******e 8: HL7 BasicConfidentialityKind***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: HL7 BasicConfidentialityKind urn:oid:2.16.840.1.113883.1.11.16926 A value set of HL7 Code indication the level of confidentiality an act.  Value Set Source: [**http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary\_tables/in**](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html)[**frastructure/vocabulary/vocabulary.html**](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| N | ConfidentialityCode | urn:oid:2.16.840.1.11388 3.5.25 | normal |
| R | ConfidentialityCode | urn:oid:2.16.840.1.11388 3.5.25 | restricted |
| V | ConfidentialityCode | urn:oid:2.16.840.1.11388 3.5.25 | very restricted |

***Table*** ***9: Language***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Language urn:oid:2.16.840.1.113883.1.11.11526  A value set of codes defined by Internet RFC 4646 (replacing RFC 3066). Please see ISO 639 language code set maintained by Library of Congress for enumeration of language codes.  Value Set Source: [**http://www.loc.gov/standards/iso639-2/php/code\_list.php**](http://www.loc.gov/standards/iso639-2/php/code_list.php) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| aa | Language | urn:oid:2.16.840.1.11388 3.6.121 | Afar |
| ab | Language | urn:oid:2.16.840.1.11388 3.6.121 | Abkhazian |
| ace | Language | urn:oid:2.16.840.1.11388 3.6.121 | Achinese |
| ach | Language | urn:oid:2.16.840.1.11388 3.6.121 | Acoli |
| ada | Language | urn:oid:2.16.840.1.11388 3.6.121 | Adangme |
| ady | Language | urn:oid:2.16.840.1.11388 3.6.121 | Adyghe; Adygei |
| ae | Language | urn:oid:2.16.840.1.11388 3.6.121 | Avestan |
| af | Language | urn:oid:2.16.840.1.11388 3.6.121 | Afrikaans |
| afa | Language | urn:oid:2.16.840.1.11388 3.6.121 | Afro-Asiatic (Other) |
| afh | Language | urn:oid:2.16.840.1.11388 3.6.121 | Afrihili |
| ... | | | |

***Table*** ***10: Telecom Use (US Realm Header)***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Telecom Use (US Realm Header) urn:oid:2.16.840.1.113883.11.20.9.20 Value Set Source: [**http://www.hl7.org**](http://www.hl7.org/) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| HP | AddressUse | urn:oid:2.16.840.1.11388 3.5.1119 | Primary home |
| HV | AddressUse | urn:oid:2.16.840.1.11388 3.5.1119 | Vacation home |
| WP | AddressUse | urn:oid:2.16.840.1.11388 3.5.1119 | Work place |
| MC | AddressUse | urn:oid:2.16.840.1.11388 3.5.1119 | Mobile contact |

***Table*** ***11: Administrative Gender (HL7 V3)***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Administrative Gender (HL7 V3) urn:oid:2.16.840.1.113883.1.11.1  Administrative Gender based upon HL7 V3 vocabulary. This value set contains only male, female and undifferentiated concepts.  Value Set Source: [**http://www.hl7.org**](http://www.hl7.org/) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| F | AdministrativeGender | urn:oid:2.16.840.1.11388 3.5.1 | Female |
| M | AdministrativeGender | urn:oid:2.16.840.1.11388 3.5.1 | Male |
| UN | AdministrativeGender | urn:oid:2.16.840.1.11388 3.5.1 | Undifferentiated |

***Table*** ***12: Religious Affiliation***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Religious Affiliation urn:oid:2.16.840.1.113883.1.11.19185 A value set of codes that reflect spiritual faith affiliation.  Value Set Source: [**http://www.hl7.org/v3ballotarchive\_temp\_16B8D83E-1C23-BA17-**](http://www.hl7.org/v3ballotarchive_temp_16B8D83E-1C23-BA17-0CBFC625BE7BA72F/v3ballot/html/infrastructure/vocabulary/vocabulary.html#voc-sets) [**0CBFC625BE7BA72F/v3ballot/html/infrastructure/vocabulary/vocabulary.html#voc-sets**](http://www.hl7.org/v3ballotarchive_temp_16B8D83E-1C23-BA17-0CBFC625BE7BA72F/v3ballot/html/infrastructure/vocabulary/vocabulary.html#voc-sets) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 1001 | ReligiousAffiliation | urn:oid:2.16.840.1.11388 3.5.1076 | Adventist |
| 1002 | ReligiousAffiliation | urn:oid:2.16.840.1.11388 3.5.1076 | African Religions |
| 1003 | ReligiousAffiliation | urn:oid:2.16.840.1.11388 3.5.1076 | Afro-Caribbean Religions |
| 1004 | ReligiousAffiliation | urn:oid:2.16.840.1.11388 3.5.1076 | Agnosticism |
| 1005 | ReligiousAffiliation | urn:oid:2.16.840.1.11388 3.5.1076 | Anglican |
| 1006 | ReligiousAffiliation | urn:oid:2.16.840.1.11388 3.5.1076 | Animism |
| 1007 | ReligiousAffiliation | urn:oid:2.16.840.1.11388 3.5.1076 | Atheism |
| 1008 | ReligiousAffiliation | urn:oid:2.16.840.1.11388 3.5.1076 | Babi & Baha'I faiths |
| 1009 | ReligiousAffiliation | urn:oid:2.16.840.1.11388 3.5.1076 | Baptist |
| 1010 | ReligiousAffiliation | urn:oid:2.16.840.1.11388 3.5.1076 | Bon |
| ... | | | |

***Tabl******e 13: Race Category Excluding Nulls***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Race Category Excluding Nulls urn:oid:2.16.840.1.113883.3.2074.1.1.3 | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 1002-5 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.11388 3.6.238 | American Indian or Alaska Native |
| 2028-9 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.11388 3.6.238 | Asian |
| 2054-5 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.11388 3.6.238 | Black or African American |
| 2076-8 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.11388 3.6.238 | Native Hawaiian or Other Pacific Islander |
| 2106-3 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.11388 3.6.238 | White |

***Table*** ***14: Ethnicity***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Ethnicity urn:oid:2.16.840.1.114222.4.11.837  Code System: Race & Ethnicity - CDC 2.16.840.1.113883.6.238  Value Set Source: [**http://phinvads.cdc.gov/vads/ViewValueSet.action?id=35D34BBC-617F-**](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=35D34BBC-617F-DD11-B38D-00188B398520) [**DD11-B38D-00188B398520**](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=35D34BBC-617F-DD11-B38D-00188B398520) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 2135-2 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.11388 3.6.238 | Hispanic or Latino |
| 2186-5 | Race & Ethnicity - CDC | urn:oid:2.16.840.1.11388 3.6.238 | Not Hispanic or Latino |

***Table*** ***15: Personal And Legal Relationship Role Type***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Personal And Legal Relationship Role Type urn:oid:2.16.840.1.113883.11.20.12.1  A personal or legal relationship records the role of a person in relation to another person, or a person to himself or herself. This value set is to be used when recording relationships based on personal or family ties or through legal assignment of responsibility.  Value Set Source: [**http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary\_tables/in**](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html) [**frastructure/vocabulary/vocabulary.html**](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| SELF | RoleCode | urn:oid:2.16.840.1.11388 3.5.111 | self |
| MTH | RoleCode | urn:oid:2.16.840.1.11388 3.5.111 | mother |
| FTH | RoleCode | urn:oid:2.16.840.1.11388 3.5.111 | father |
| DAU | RoleCode | urn:oid:2.16.840.1.11388 3.5.111 | natural daughter |
| SON | RoleCode | urn:oid:2.16.840.1.11388 3.5.111 | natural son |
| DAUINLAW | RoleCode | urn:oid:2.16.840.1.11388 3.5.111 | daughter in-law |
| SONINLAW | RoleCode | urn:oid:2.16.840.1.11388 3.5.111 | son in-law |
| GUARD | RoleCode | urn:oid:2.16.840.1.11388 3.5.111 | guardian |
| HPOWATT | RoleCode | urn:oid:2.16.840.1.11388 3.5.111 | healthcare power of attorney |
| ... | | | |

***Table*** ***16: Country***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Country urn:oid:2.16.840.1.113883.3.88.12.80.63  This identifies the codes for the representation of names of countries, territories and areas of geographical interest.  Value Set Source: [**http://www.iso.org/iso/country\_codes/iso\_3166\_code\_lists.htm**](http://www.iso.org/iso/country_codes/iso_3166_code_lists.htm) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| AW | Country | urn:oid:2.16.840.1.11388 3.3.88.12.80.63 | Aruba |
| IL | Country | urn:oid:2.16.840.1.11388 3.3.88.12.80.63 | Israel |
| ... | | | |

***Table*** ***17: 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**](http://ushik.ahrq.gov/ViewItemDetails?system=mdr&amp;itemKey=86671000) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 19009 | USPostalCodes | urn:oid:2.16.840.1.11388 3.6.231 | Bryn Athyn |
| 92869-1736 | USPostalCodes | urn:oid:2.16.840.1.11388 3.6.231 | Orange, CA |
| 32830-8413 | USPostalCodes | urn:oid:2.16.840.1.11388 3.6.231 | Lake Buena Vista, FL |
| ... | | | |

***Tabl******e 18: PatientLanguage***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: PatientLanguage urn:oid:2.16.840.1.113883.11.20.9.64  This value set contains codes for the representation of language names as defined by the Library of Congress, the ISO 639-2 registration authority. This value set contains a subset of the ISO 639-2 alpha-3 code set, limited to those that have a corresponding ISO 639-1 alpha-2 code as required for representing a patient's language under Meaningful Use Stage 2.  Value Set Source: [**http://www.loc.gov/standards/iso639-2/php/code\_list.php**](http://www.loc.gov/standards/iso639-2/php/code_list.php) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| aar | Language | urn:oid:2.16.840.1.11388 3.6.121 | Afar |
| abk | Language | urn:oid:2.16.840.1.11388 3.6.121 | Abkhazian |
| afr | Language | urn:oid:2.16.840.1.11388 3.6.121 | Afrikaans |
| aka | Language | urn:oid:2.16.840.1.11388 3.6.121 | Akan |
| sqi | Language | urn:oid:2.16.840.1.11388 3.6.121 | Albanian |
| amh | Language | urn:oid:2.16.840.1.11388 3.6.121 | Amharic |
| ara | Language | urn:oid:2.16.840.1.11388 3.6.121 | Arabic |
| arg | Language | urn:oid:2.16.840.1.11388 3.6.121 | Aragonese |
| hye | Language | urn:oid:2.16.840.1.11388 3.6.121 | Armenian |
| asm | Language | urn:oid:2.16.840.1.11388 3.6.121 | Assamese |
| ... | | | |

***Table*** ***19: LanguageAbilityMode***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: LanguageAbilityMode urn:oid:2.16.840.1.113883.1.11.12249  This identifies the language ability of the individual. A value representing the method of expression of the language.  Value Set Source: [**http://www.hl7.org**](http://www.hl7.org/) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| ESGN | LanguageAbilityMode | urn:oid:2.16.840.1.11388 3.5.60 | Expressed signed |
| ESP | LanguageAbilityMode | urn:oid:2.16.840.1.11388 3.5.60 | Expressed spoken |
| EWR | LanguageAbilityMode | urn:oid:2.16.840.1.11388 3.5.60 | Expressed written |
| RSGN | LanguageAbilityMode | urn:oid:2.16.840.1.11388 3.5.60 | Received signed |
| RSP | LanguageAbilityMode | urn:oid:2.16.840.1.11388 3.5.60 | Received spoken |
| RWR | LanguageAbilityMode | urn:oid:2.16.840.1.11388 3.5.60 | Received written |

***Tabl******e 20: LanguageAbilityProficiency***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: LanguageAbilityProficiency urn:oid:2.16.840.1.113883.1.11.12199 Value Set Source: [**http://www.hl7.org**](http://www.hl7.org/) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| E | LanguageAbilityProficienc y | urn:oid:2.16.840.1.11388 3.5.61 | Excellent |
| F | LanguageAbilityProficienc y | urn:oid:2.16.840.1.11388 3.5.61 | Fair |
| G | LanguageAbilityProficienc y | urn:oid:2.16.840.1.11388 3.5.61 | Good |
| P | LanguageAbilityProficienc y | urn:oid:2.16.840.1.11388 3.5.61 | Poor |

***Tabl******e 21: Healthcare Provider Taxonomy (HIPAA)***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Healthcare Provider Taxonomy (HIPAA) urn:oid:2.16.840.1.114222.4.11.1066  The Health Care Provider Taxonomy value set is a collection of unique alphanumeric codes, ten characters in length. The code set is structured into three distinct Levels including Provider Type, Classification, and Area of Specialization. The Health Care Provider Taxonomy code set allows a single provider (individual, group, or institution) to identify their specialty category. Providers may have one or more than one value associated to them. When determining what value or values to associate with a provider, the user needs to review the requirements of the trading partner with which the value(s) are being used.  Value Set Source:  [**http://www.nucc.org/index.php?option=com\_content&view=article&id=14&Itemid=125**](http://www.nucc.org/index.php?option=com_content&amp;view=article&amp;id=14&amp;Itemid=125) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 171100000X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.11388 3.6.101 | Acupuncturist |
| 363LA2100X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.11388 3.6.101 | Nurse Practitioner - Acute Care |
| 364SA2100X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.11388 3.6.101 | Clinical Nurse Specialist - Acute Care |
| 101YA0400X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.11388 3.6.101 | Counselor - Addiction (Substance Use Disorder) |
| 103TA0400X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.11388 3.6.101 | Psychologist - Addiction (Substance Use Disorder) |
| 163WA0400X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.11388 3.6.101 | Registered Nurse - Addiction (Substance Use Disorder) |
| 207LA0401X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.11388 3.6.101 | Anesthesiology - Addiction Medicine |
| 207QA0401X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.11388 3.6.101 | Family Medicine - Addiction Medicine |
| 207RA0401X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.11388 3.6.101 | Internal Medicine - Addiction Medicine |
| 2084A0401X | Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.11388 3.6.101 | Psychiatry & Neurology - Addiction Medicine |
| ... | | | |

***Table*** ***22: INDRoleclassCodes***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: INDRoleclassCodes urn:oid:2.16.840.1.113883.11.20.9.33 Value Set Source: [**http://www.hl7.org**](http://www.hl7.org/) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| PRS | RoleClass | urn:oid:2.16.840.1.11388 3.5.110 | personal relationship |
| NOK | RoleClass | urn:oid:2.16.840.1.11388 3.5.110 | next of kin |
| CAREGIVER | RoleClass | urn:oid:2.16.840.1.11388 3.5.110 | caregiver |
| AGNT | RoleClass | urn:oid:2.16.840.1.11388 3.5.110 | agent |
| GUAR | RoleClass | urn:oid:2.16.840.1.11388 3.5.110 | guarantor |
| ECON | RoleClass | urn:oid:2.16.840.1.11388 3.5.110 | emergency contact |

***Table*** ***23: x\_ServiceEventPerformer***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: x\_ServiceEventPerformer urn:oid:2.16.840.1.113883.1.11.19601 Value Set Source: [**http://www.hl7.org**](http://www.hl7.org/) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| PRF | HL7ParticipationType | urn:oid:2.16.840.1.11388 3.5.90 | performer |
| SPRF | HL7ParticipationType | urn:oid:2.16.840.1.11388 3.5.90 | secondary performer |
| PPRF | HL7ParticipationType | urn:oid:2.16.840.1.11388 3.5.90 | primary performer |

***Table*** ***24: ParticipationFunction***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: ParticipationFunction urn:oid:2.16.840.1.113883.1.11.10267  This HL7-defined value set can be used to specify the exact function an actor had in a service in all necessary detail.  Value Set Source: [**http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary\_tables/in**](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm)[**frastructure/vocabulary/vocabulary.htm**](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| SNRS | participationFunction | urn:oid:2.16.840.1.11388 3.5.88 | Scrub nurse |
| SASST | participationFunction | urn:oid:2.16.840.1.11388 3.5.88 | Second assistant surgeon |
| ... | | | |

# S E C T I O N

## Assessment Section - Published

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

***Table 25: Assessment Section Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Cancer Event Report Document (V1.1)](#_bookmark3) (required) |  |

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 26: 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-](#_bookmark363)  [7711](#_bookmark363) |  |
| @root | 1..1 | SHALL |  | [81-](#_bookmark364)  [10382](#_bookmark364) | 2.16.840.1.113883.10.20.22.2.8 |
| code | 1..1 | SHALL |  | [81-](#_bookmark365)  [14757](#_bookmark365) |  |
| @code | 1..1 | SHALL |  | [81-](#_bookmark366)  [14758](#_bookmark366) | 51848-0 |
| @codeSystem | 1..1 | SHALL |  | [81-](#_bookmark367)  [26472](#_bookmark367) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [81-](#_bookmark368)  [16774](#_bookmark368) |  |
| text | 1..1 | SHALL |  | [81-](#_bookmark369)  [7713](#_bookmark369) |  |

* + 1. **SHALL** contain exactly one [1..1] **templateId** (CONF:81-7711) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.2.8"

(CONF:81-10382).

* + 1. **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).

* + 1. **SHALL** contain exactly one [1..1] **title** (CONF:81-16774).
    2. **SHALL** contain exactly one [1..1] **text** (CONF:81-7713).

***Figure 21: 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>

## Cancer Diagnosis Section (entries required) (V1.1) - Published

[section: identifier urn:hl7ii:2.16.840.1.113883.10.13.2:2015-02-05 (open)]

***Table 27: Cancer Diagnosis Section (entries required) (V1.1) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Cancer Event Report Document (V1.1)](#_bookmark3) (required) | [Cancer Diagnosis Concern Act (V1.1)](#_bookmark675)  [Health Status Observation (V2)](#_bookmark950) |

Note: This template is modeled based on C-CDA R2 "Problem Section (entries required) (V2)" template.

**This is the key section for the Ambulatory Healthcare Provider Cancer Event Report and, therefore, SHALL NOT be null. (In other words, the Cancer Diagnosis Section SHALL be provided and NO nullFlavor is allowed).**

The Cancer Diagnosis Section is the most critical section in the Cancer Event Report. The information in this section includes: the date the cancer was first diagnosed; the anatomic location of the cancer; laterality (which of a paired organ contains the cancer; the histologic type (e.g., carcinoma, melanoma, leukemia); and the stage of the cancer at diagnosis. These data elements are necessary for public health central cancer registries to describe the occurrence of cancer in a given population and for research.

***Table 28: Cancer Diagnosis Section (entries required) (V1.1) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.13.2:2015-02-05) | | | | | |
| templateId | 1..1 | SHALL |  | [1169-](#_bookmark375)  [254](#_bookmark375) |  |
| @root | 1..1 | SHALL |  | [1169-](#_bookmark376)  [258](#_bookmark376) | 2.16.840.1.113883.10.13.2 |
| @extension | 1..1 | SHALL |  | [1169-](#_bookmark377)  [33947](#_bookmark377) | 2015-02-05 |
| code | 1..1 | SHALL |  | [1169-](#_bookmark378)  [255](#_bookmark378) |  |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark379)  [259](#_bookmark379) | 72135-7 |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark380)  [260](#_bookmark380) | 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1169-](#_bookmark381)  [261](#_bookmark381) |  |
| text | 1..1 | SHALL |  | [1169-](#_bookmark382)  [262](#_bookmark382) |  |
| entry | 1..\* | SHALL |  | [1169-](#_bookmark383)  [253](#_bookmark383) |  |
| @nullFlavor | 0..0 | SHALL NOT |  | [1169-](#_bookmark384)  [33244](#_bookmark384) |  |
| act | 1..1 | SHALL |  | [1169-](#_bookmark385)  [257](#_bookmark385) | [Cancer Diagnosis Concern Act](#_bookmark675)  [(V1.1) (identifier:](#_bookmark675)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark675)  [3.3:2015-02-05](#_bookmark675) |
| entry | 0..1 | MAY |  | [1169-](#_bookmark386)  [256](#_bookmark386) |  |
| observation | 1..1 | SHALL |  | [1169-](#_bookmark387)  [263](#_bookmark387) | [Health Status Observation (V2)](#_bookmark950)  [(identifier:](#_bookmark950)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark950)  [0.22.4.5:2014-06-09](#_bookmark950) |

* + 1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1169-254) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.2"

(CONF:1169-258).

* 1. **SHALL** contain exactly one [1..1] **@extension**="2015-02-05" (CONF:1169-33947).
     1. **SHALL** contain exactly one [1..1] **code** (CONF:1169-255).
        1. This code **SHALL** contain exactly one [1..1] **@code**="72135-7" Cancer diagnosis (CONF:1169-259).
        2. This code **SHALL** contain exactly one [1..1]

**@codeSystem**="2.16.840.1.113883.6.1" (CONF:1169-260).

* + 1. **SHALL** contain exactly one [1..1] **title** (CONF:1169-261).
    2. **SHALL** contain exactly one [1..1] **text** (CONF:1169-262).
    3. **SHALL** contain at least one [1..\*] **entry** (CONF:1169-253) such that it
       1. **SHALL NOT** contain [0..0] **@nullFlavor** (CONF:1169-33244).
       2. **SHALL** contain exactly one [1..1] [**Cancer Diagnosis Concern Act** **(V1.1)**](#_bookmark675)(identifier: urn:hl7ii:2.16.840.1.113883.10.13.3:2015-02-05) (CONF:1169-257).
    4. **MAY** contain zero or one [0..1] **entry** (CONF:1169-256) such that it
       1. **SHALL** contain exactly one [1..1] [**Health Status Observation (V2)**](#_bookmark950)(identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.5:2014-06-09) (CONF:1169-263).

***Figure 22: Cancer Diagnosis Section example***

<section>

<templateId root="2.16.840.1.113883.10.13.2" extension="2015-02-05"/>

<code code="72135-7" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Cancer diagnosis"/>

<title>Cancer Diagnosis</title>

<text>

<content ID="Diagnosis\_1">Malignant neoplasm of breast</content>

<table>

<thead>

<tr>

<th>Diagnosis Date</th>

<th>Primary Site</th>

<th>Laterality</th>

<th>Histology</th>

<th>Behavior</th>

<th>Diagnostic Confirmation</th>

<th>Grade</th>

<th>Stage</th>

</tr>

</thead>

<tbody>

<tr>

<td>4/2/2012</td>

<td ID="PrimarySite\_1">Breast</td>

<td ID="Laterality\_1">Right</td>

<td ID="Histology\_1">Adenocarcinoma, NOS</td>

<td ID="Behavior\_1">Malignant, Primary</td>

<td ID="Confirmation\_1">Positive Histology</td>

<td ID="Grade\_1">2</td>

<td ID="StageGroup\_1">IIB</td>

</tr>

</tbody>

</table>

</text>

<entry typeCode="DRIV">

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

<!-- \*\* Cancer Diagnosis concern act \*\* -->

<templateId root="2.16.840.1.113883.10.13.3" extension="2015-02-05"/>

<id root="ec8a6ff8-ed4b-4f7e-82c3-e98e58b45de7"/>

<code code="CONC" codeSystem="2.16.840.1.113883.5.6" codeSystemName="HL7ActClass" 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="20140730132515"/>

</effectiveTime>

<entryRelationship typeCode="SUBJ">

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

<templateId root="2.16.840.1.113883.10.13.4" extension="2015-02-05"/>

<id root="5e0584ad-b4b0-421f-85f9-2c2c83c510cc"/>

<code code="29308-4" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Diagnosis"/>

<text>

<reference value="#Diagnosis\_1"/>

</text>

<statusCode code="completed"/>

<effectiveTime>

<low value="20120702"/>

<high nullFlavor="NA"/>

</effectiveTime>

<value xsi:type="CD" code="8140" codeSystem="2.16.840.1.113883.6.43.1" codeSystemName="ICD-O-3" displayName="Adenocarcinoma, NOS">

<originalText>

<reference value="#Histology\_1"/>

</originalText>

<qualifier>

<name code="31206-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Behavior ICD-O-3 Cancer"/>

<value xsi:type="CD" code="3" codeSystem="2.16.840.1.113883.3.520.3.14" codeSystemName="NAACCR Behavior Code" displayName="Malignant, Primary" sdtc:valueSet="2.16.840.1.113883.3.520.4.14">

<originalText>

<reference value="#Behavior\_1"/>

</originalText>

</value>

</qualifier>

<qualifier>

<name code="21858-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Grade Cancer"/>

<value code="II" codeSystem="2.16.840.1.113883.3.520.3.15" codeSystemName="NAACCR Grade" displayName="Grade II" sdtc:valueSet="2.16.840.1.113883.3.520.4.15">

<originalText>

<reference value="#Grade\_1"/>

</originalText>

</value>

</qualifier>

<qualifier>

<name code="21861-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Dx confirmed by Cancer"/>

<value xsi:type="CD" code="1" codeSystem="2.16.840.1.113883.3.520.3.3" codeSystemName="NAACCR Diagnostic Confirmation" displayName="Positive Histology" sdtc:valueSet="2.16.840.1.113883.3.520.4.3">

<originalText>

<reference value="#Confirmation\_1"/>

</originalText>

</value>

</qualifier>

</value>

<targetSiteCode code="181131000" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Entire breast" sdtc:valueSet="2.16.840.1.113883.3.88.12.3221.8.9">

<originalText>

<reference value="#PrimarySite\_1"/>

</originalText>

<qualifier>

<name code="20228-3" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Anatomic part Laterality "/>

<value code="24028007" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT" displayName="Right (qualifier value)" sdtc:valueSet="2.16.840.1.113883.3.520.4.22">

<originalText>

<reference value="#Laterality\_1"/>

</originalText>

</value>

</qualifier>

</targetSiteCode>

<entryRelationship typeCode="SUBJ" inversionInd="true">

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

<templateId root="2.16.840.1.113883.10.13.5" extension="2015-

02-05"/>

<id root="91473759-6678-48a2-a0d5-084c5ded5afc"/>

<code code="75620-5" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="TNM clinical staging before treatment panel Cancer"/>

<statusCode code="completed"/>

<effectiveTime>

<low value="20140801112102"/>

</effectiveTime>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.35"

extension="2015-02-05"/>

<code code="21908-9" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="Stage group.clinical"/>

<statusCode code="completed"/>

<value xsi:type="CD" code="IIB" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" sdtc:valueSet="2.16.840.1.113883.3.520.4.9">

<originalText>

<reference value="#ClinicalStageGroup\_1"/>

</originalText>

<qualifier>

<name code="21909-7" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Descriptor.clinical Cancer Narrative"/>

<value code="0" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" displayName="None" sdtc:valueSet="2.16.840.1.113883.3.520.4.10">

value="#ClinicalNarrative\_1"/>

extension="2015-02-05"/>

<originalText>

<reference

</originalText>

</value>

</qualifier>

</value>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.36"

<code code="21905-5"

codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Primary tumor.clinical [Class] Cancer"/>

<value xsi:type="CD" code="T2" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" displayName="Tumor &gt;

20 mm but &lt;= to 50 mm in greatest dimension" sdtc:valueSet="2.16.840.1.113883.3.520.4.6">

value="#ClinicalPrimaryTumor\_1"/>

extension="2015-02-05"/>

<originalText>

<reference

</originalText>

</value>

</observation>

</entryRelationship>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.37"

<code code="21906-3"

codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Regional lymph nodes.clinical [Class] Cancer"/>

<value xsi:type="CD" code="N1" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" displayName="Metastases to movable ipsilateral level I, II axillary lymph node(s)" sdtc:valueSet="2.16.840.1.113883.3.520.4.7">

extension="2015-02-05"/>

<originalText>

<reference value="#ClinicalNode\_1"/>

</originalText>

</value>

</observation>

</entryRelationship>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.38"

<code code="21907-1"

codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Distant metastases.clinical [Class] Cancer"/>

<value xsi:type="CD" code="M0" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" displayName="No clinical or radiographic evidence of distant metastases" sdtc:valueSet="2.16.840.1.113883.3.520.4.8">

value="#ClinicalMetasases\_1"/>

extension="2015-02-05"/>

<originalText>

<reference

</originalText>

</value>

</observation>

</entryRelationship>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.39"

<code code="21910-5"

codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Stager.clinical Cancer "/>

<value xsi:type="CD" code="3" codeSystem="2.16.840.1.113883.3.520.3.4" codeSystemName="NAACCR TNM Clinical Staged By " displayName="Pathologist and managing physician" sdtc:valueSet="2.16.840.1.113883.3.520.4.4">

value="#ClinicalStagedBy\_1"/>

<originalText>

<reference

</originalText>

</value>

</observation>

</entryRelationship>

</observation>

02-06"/>

</entryRelationship>

</observation>

</entryRelationship>

<entryRelationship typeCode="SUBJ" inversionInd="true">

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

<templateId root="2.16.840.1.113883.10.13.7" extension="2015-

<id root="6d064a91-fdae-4acf-9eb8-e1695cf301c9"/>

<code code="75621-3" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="TNM pathologic staging after surgery panel"/>

<statusCode code="completed"/>

<effectiveTime>

<low value="20140801112253"/>

</effectiveTime>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.40"

extension="2015-02-05"/>

<code code="21902-2" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="Stage group.pathology Cancer"/>

<statusCode code="completed"/>

<value xsi:type="CD" code="IIB" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" sdtc:valueSet="2.16.840.1.113883.3.520.4.20">

<originalText>

<reference value="#PathologicStageGroup\_1"/>

</originalText>

<qualifier>

<name code="21903-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Descriptor.pathology Cancer Narrative "/>

<value code="0" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" sdtc:valueSet="2.16.840.1.113883.3.520.4.21"/>

</qualifier>

</value>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.41"

extension="2015-02-05"/>

<code code="21899-0"

codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Primary tumor.pathology Cancer"/>

<value xsi:type="CD" code="T2" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" displayName="Tumor &gt;

20 mm but &lt;= to 50 mm in greatest dimension" sdtc:valueSet="2.16.840.1.113883.3.520.4.17"/>

</observation>

</entryRelationship>

extension="2015-02-05"/>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.42"

<code code="21900-6"

codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Regional lymph nodes.pathology [Class] Cancer"/>

<value xsi:type="CD" code="N1" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" displayName="Micrometastases; or metastases in 1 to 3 axillary lymph nodes; and/or in internal mammary nodes with metastases detected by sentinel lymph node biopsy but not clinically detected." sdtc:valueSet="2.16.840.1.113883.3.520.4.18"/>

</observation>

</entryRelationship>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.43"

extension="2015-02-05"/>

<code code="21901-4"

codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Distant metastases.pathology [Class] Cancer"/>

<value xsi:type="CD" code="MX" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" sdtc:valueSet="2.16.840.1.113883.3.520.4.19"/>

</observation>

</entryRelationship>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.44"

extension="2015-02-05"/>

<code code="21904-8"

codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Stager.pathology Cancer"/>

<value xsi:type="CD" code="3" codeSystem="2.16.840.1.113883.3.520.3.17" codeSystemName="NAACCR TNM Pathologic Staged By" displayName="Pathologist and managing physician" sdtc:valueSet="2.16.840.1.113883.3.520.4.27"/>

</observation>

</entryRelationship>

</observation>

</entryRelationship>

</observation>

</entryRelationship>

<entryRelationship typeCode="REFR">

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

<id root="ab1791b0-5c71-11db-b0de-0800200c9a66"/>

<code code="64572001" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Condition"/>

</observation>

</entryRelationship>

</observation>

</entryRelationship>

</act>

</entry>

</section>

## Family History Section (V2) - Published

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2014-06-09 (open)]

***Table 29: Family History Section (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Cancer Event Report Document (V1.1)](#_bookmark3) (required) | [Family History Organizer (V2)](#_bookmark924) |

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 30: Family History Section (V2) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2014-06-09) | | | | | |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark393)  [7932](#_bookmark393) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark394)  [10388](#_bookmark394) | 2.16.840.1.113883.10.20.22.2.15 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark395)  [32607](#_bookmark395) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-](#_bookmark396)  [15469](#_bookmark396) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark397)  [15470](#_bookmark397) | 10157-6 |
| @codeSystem | 1..1 | SHALL |  | [1098-](#_bookmark398)  [32481](#_bookmark398) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-](#_bookmark399)  [7934](#_bookmark399) |  |
| text | 1..1 | SHALL |  | [1098-](#_bookmark400)  [7935](#_bookmark400) |  |
| entry | 0..\* | MAY |  | [1098-](#_bookmark401)  [32430](#_bookmark401) |  |
| organizer | 1..1 | SHALL |  | [1098-](#_bookmark402)  [32431](#_bookmark402) | [Family History Organizer (V2)](#_bookmark924)  [(identifier:](#_bookmark924)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark924)  [0.22.4.45:2014-06-09](#_bookmark924) |

* + 1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7932) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.2.15"

(CONF:1098-10388).

* + - 1. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32607).
    1. **SHALL** contain exactly one [1..1] **code** (CONF:1098-15469).
       1. This code **SHALL** contain exactly one [1..1] **@code**="10157-6" Family History (CONF:1098-15470).
       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:1098-32481).

* + 1. **SHALL** contain exactly one [1..1] **title** (CONF:1098-7934).
    2. **SHALL** contain exactly one [1..1] **text** (CONF:1098-7935).
    3. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-32430) such that it
       1. **SHALL** contain exactly one [1..1] [**Family History Organizer** **(V2)**](#_bookmark924) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.45:2014-06-09) (CONF:1098- 32431).

***Figure 23: Family History Section (V2) Example***

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.15" extension="2014-06-09" />

<!-- 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>

## Medications Administered Section (V2) - Published

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.38:2014-06-09 (open)]

***Table 31: Medications Administered Section (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
|  | [Medication Activity (V2)](#_bookmark996) |

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 32: 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-](#_bookmark408)  [8152](#_bookmark408) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark409)  [10405](#_bookmark409) | 2.16.840.1.113883.10.20.22.2.38 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark410)  [32525](#_bookmark410) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-](#_bookmark411)  [15383](#_bookmark411) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark412)  [15384](#_bookmark412) | 29549-3 |
| @codeSystem | 1..1 | SHALL |  | [1098-](#_bookmark413)  [30829](#_bookmark413) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-](#_bookmark414)  [8154](#_bookmark414) |  |
| text | 1..1 | SHALL |  | [1098-](#_bookmark415)  [8155](#_bookmark415) |  |
| entry | 0..\* | MAY |  | [1098-](#_bookmark416)  [8156](#_bookmark416) |  |
| substanceAdministration | 1..1 | SHALL |  | [1098-](#_bookmark417)  [15499](#_bookmark417) | [Medication Activity (V2)](#_bookmark996)  [(identifier:](#_bookmark996)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark996)  [0.22.4.16:2014-06-09](#_bookmark996) |

* + 1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-8152) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.2.38"

(CONF:1098-10405).

* + - 1. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32525).
    1. **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).

* + 1. **SHALL** contain exactly one [1..1] **title** (CONF:1098-8154).
    2. **SHALL** contain exactly one [1..1] **text** (CONF:1098-8155).
    3. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-8156).
       1. The entry, if present, **SHALL** contain exactly one [1..1] [**Medication Activity (V2)**](#_bookmark996)(identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09) (CONF:1098-15499).

***Figure 24: 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 Administered Section (V2) - Cancer IG Specific Constraints - Published

[section: identifier urn:hl7ii:2.16.840.1.113883.10.13.12:2014-08-08 (open)]

***Table 33: Medications Administered Section (V2) - Cancer IG Specific Constraints Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Cancer Event Report Document (V1.1)](#_bookmark3) (required) | [Medication Activity (V2) - Cancer IG Specific](#_bookmark1072)  [Constraints](#_bookmark1072) |

This template defines Cancer Event Report-specific constraints to the C-CDA R2.0 template "Medications Administered Section (V2)".

The Medication Administered Section captures medications given to the patient during the encounter, including cancer directed systemic therapies such as chemotherapy, hormone therapy, and immunotherapy. This information is used to evaluate cancer treatments and outcomes and access to care.

***Table 34: Medications Administered Section (V2) - Cancer IG Specific Constraints Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.13.12:2014-08-08) | | | | | |
| templateId | 1..1 | SHALL |  | [1126-](#_bookmark423)  [33062](#_bookmark423) |  |
| @root | 1..1 | SHALL |  | [1126-](#_bookmark424)  [33063](#_bookmark424) | 2.16.840.1.113883.10.13.12 |
| @extension | 1..1 | SHALL |  | [1126-](#_bookmark425)  [33948](#_bookmark425) | 2014-08-08 |
| entry | 1..\* | SHALL |  | [1126-](#_bookmark426)  [32662](#_bookmark426) |  |
| substanceAdministration | 1..1 | SHALL |  | [1126-](#_bookmark427)  [32663](#_bookmark427) | [Medication Activity (V2) - Cancer](#_bookmark1072)  [IG Specific Constraints (identifier:](#_bookmark1072)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark1072)  [3.14:2014-08-08](#_bookmark1072) |

* + 1. Conforms to [**Medications Administered Section (V2)**](#_bookmark405) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.38:2014-06-09).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1126-33062) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.12"

(CONF:1126-33063).

* + - 1. **SHALL** contain exactly one [1..1] **@extension**="2014-08-08" (CONF:1126-33948).
    1. **SHALL** contain at least one [1..\*] **entry** (CONF:1126-32662).
       1. Such entries **SHALL** contain exactly one [1..1] [**Medication Activity (V2) -**](#_bookmark1072) [**Cancer IG Specific Constraints**](#_bookmark1072) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.14:2014-08-08) (CONF:1126-32663).

***Figure 25: Medications Administered Section (V2) - Cancer IG Specific example***

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.38" extension="2014-06-09" />

<templateId root="2.16.840.1.113883.10.13.12" extension="2014-08-08" />

<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>Start Date</th>

<th>Stop Date</th>

<th>Dose</th>

</tr>

</thead>

<tbody>

<tr>

<td ID="MedicationAdminName\_1">"Doxorubicin </td>

<td>7/29/2012</td>

<td>None</td>

<td ID="MedicationAdminDose\_1">2mg/mL</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" />

<templateId root="2.16.840.1.113883.10.13.14" extension="2014-08-08" />

<id root="6c844c75-aa34-411c-b7bd-5e4a9f206e29" />

<!-- \*\* Medication Activity (V2) - Cancer IG Specific Constraints \*\* -->

...

</substanceAdministration>

</entry>

</section>

## Medications Section (entries required) (V2) - Published

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.1.1:2014-06-09 (open)]

***Table 35: Medications Section (entries required) (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
|  | [Medication Activity (V2)](#_bookmark996) |

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 36: 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-](#_bookmark433)  [32845](#_bookmark433) | urn:oid:2.16.840.1.113883.5.100  8 (HL7NullFlavor) = NI |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark434)  [7568](#_bookmark434) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark435)  [10433](#_bookmark435) | 2.16.840.1.113883.10.20.22.2.1.  1 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark436)  [32499](#_bookmark436) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-](#_bookmark437)  [15387](#_bookmark437) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark438)  [15388](#_bookmark438) | 10160-0 |
| @codeSystem | 1..1 | SHALL |  | [1098-](#_bookmark439)  [30825](#_bookmark439) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-](#_bookmark440)  [7570](#_bookmark440) |  |
| text | 1..1 | SHALL |  | [1098-](#_bookmark441)  [7571](#_bookmark441) |  |
| entry | 1..\* | SHALL |  | [1098-](#_bookmark442)  [7572](#_bookmark442) |  |
| substanceAdministration | 1..1 | SHALL |  | [1098-](#_bookmark443)  [10077](#_bookmark443) | [Medication Activity (V2)](#_bookmark996)  [(identifier:](#_bookmark996)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark996)  [0.22.4.16:2014-06-09](#_bookmark996) |

* + 1. Conforms to Medications Section (entries optional) (V2) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1:2014-06-09).
    2. **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).

* + 1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7568) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.2.1.1"

(CONF:1098-10433).

* + - 1. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32499).
    1. **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).

* + 1. **SHALL** contain exactly one [1..1] **title** (CONF:1098-7570).
    2. **SHALL** contain exactly one [1..1] **text** (CONF:1098-7571). If section/@nullFlavor is not present:
    3. **SHALL** contain at least one [1..\*] **entry** (CONF:1098-7572) such that it
       1. **SHALL** contain exactly one [1..1] [**Medication Activity (V2)**](#_bookmark996) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09) (CONF:1098- 10077).

***Figure 26: 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>

## Medications Section (entries required) (V2) - Cancer IG Specific Constraints - Published

[section: identifier urn:hl7ii:2.16.840.1.113883.10.13.13:2014-08-08 (open)]

***Table 37: Medications Section (entries required) (V2) - Cancer IG Specific Constraints Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Cancer Event Report Document (V1.1)](#_bookmark3) (required) | [Medication Activity (V2) - Cancer IG Specific](#_bookmark1072)  [Constraints](#_bookmark1072) |

This template defines Cancer Event Report-specific constraints to the C-CDA R2 template "Medications Section (V2)".

The Medications Section captures medications taken by a patient, including those used for cancer directed systemic therapy such as chemotherapy, hormone therapy, and immunotherapy. This information is used to evaluate cancer treatments and outcomes and access to care.

***Table 38: Medications Section (entries required) (V2) - Cancer IG Specific Constraints Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.13.13:2014-08-08) | | | | | |
| templateId | 1..1 | SHALL |  | [1126-](#_bookmark449)  [33064](#_bookmark449) |  |
| @root | 1..1 | SHALL |  | [1126-](#_bookmark450)  [33065](#_bookmark450) | 2.16.840.1.113883.10.13.13 |
| @extension | 1..1 | SHALL |  | [1126-](#_bookmark451)  [33949](#_bookmark451) | 2014-08-08 |
| entry | 1..\* | SHALL |  | [1126-](#_bookmark452)  [32666](#_bookmark452) |  |
| substanceAdministration | 1..1 | SHALL |  | [1126-](#_bookmark453)  [32667](#_bookmark453) | [Medication Activity (V2) - Cancer](#_bookmark1072)  [IG Specific Constraints (identifier:](#_bookmark1072)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark1072)  [3.14:2014-08-08](#_bookmark1072) |

* + 1. Conforms to [**Medications Section (entries required) (V2)**](#_bookmark430) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.1.1:2014-06-09).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1126-33064) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.13"

(CONF:1126-33065).

* + - 1. **SHALL** contain exactly one [1..1] **@extension**="2014-08-08" (CONF:1126-33949).
    1. **SHALL** contain at least one [1..\*] **entry** (CONF:1126-32666).
       1. Such entries **SHALL** contain exactly one [1..1] [**Medication Activity (V2) -**](#_bookmark1072) [**Cancer IG Specific Constraints**](#_bookmark1072) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.14:2014-08-08) (CONF:1126-32667).

***Figure 27: Medications Section (entries required) (V2) - Cancer IG Specific Constraints 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" />

<!-- Medications Section (entries required) (V2) - Cancer IG Specific Constraints -->

<templateId root="2.16.840.1.113883.10.13.13" extension="2014-08-08" />

<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" />

<!--Medication Activity (V2) - Cancer IG Specific Constraints -->

<templateId root="2.16.840.1.113883.10.13.14" extension="2014-08-08" />

...

</substanceAdministration>

</entry>

</section>

## Payers Section (V2) - Published

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

***Table 39: Payers Section (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Cancer Event Report Document (V1.1)](#_bookmark3) (required) | [Coverage Activity (V2)](#_bookmark813) |

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 40: Payers Section (V2) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2014-06-09) | | | | | |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark459)  [7924](#_bookmark459) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark460)  [10434](#_bookmark460) | 2.16.840.1.113883.10.20.22.2.18 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark461)  [32597](#_bookmark461) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-](#_bookmark462)  [15395](#_bookmark462) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark463)  [15396](#_bookmark463) | 48768-6 |
| @codeSystem | 1..1 | SHALL |  | [1098-](#_bookmark464)  [32149](#_bookmark464) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-](#_bookmark465)  [7926](#_bookmark465) |  |
| text | 1..1 | SHALL |  | [1098-](#_bookmark466)  [7927](#_bookmark466) |  |
| entry | 0..\* | SHOUL D |  | [1098-](#_bookmark467)  [7959](#_bookmark467) |  |
| act | 1..1 | SHALL |  | [1098-](#_bookmark468)  [15501](#_bookmark468) | [Coverage Activity (V2) (identifier:](#_bookmark813)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark813)  [0.22.4.60:2014-06-09](#_bookmark813) |

* + 1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7924) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.2.18"

(CONF:1098-10434).

* + - 1. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32597).
    1. **SHALL** contain exactly one [1..1] **code** (CONF:1098-15395).
       1. This code **SHALL** contain exactly one [1..1] **@code**="48768-6" Payers (CONF:1098- 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:1098-32149).

* + 1. **SHALL** contain exactly one [1..1] **title** (CONF:1098-7926).
    2. **SHALL** contain exactly one [1..1] **text** (CONF:1098-7927).
    3. **SHOULD** contain zero or more [0..\*] **ent****ry** (CONF:1098-7959) such that it
       1. **SHALL** contain exactly one [1..1] [**Coverage Activity (V2)**](#_bookmark813) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.60:2014-06-09) (CONF:1098- 15501).

***Figure 28: Payers Section (V2) Example***

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.18" extension="2014-06-09" />

<!-- \*\*\*\*\*\*\*\* Payers section template \*\*\*\*\*\*\*\* -->

<code code="48768-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Payers" />

<title>Insurance Providers</title>

<text>

. . .

</text>

<entry typeCode="DRIV">

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

<templateId root="2.16.840.1.113883.10.20.22.4.60" extension="2014-06-09" />

<!-- \*\*\*\* Coverage entry template \*\*\*\* -->

...

</act>

</entry>

</section>

## Plan of Treatment Section (V2) - Published

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09 (open)]

***Table 41: Plan of Treatment Section (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
|  | [Planned Encounter (V2)](#_bookmark1131)  [Planned Medication Activity (V2)](#_bookmark1187)  [Planned Procedure (V2)](#_bookmark1228) |

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.

This section may also contain information about ongoing care of the patient, clinical reminders, patient’s values, beliefs, preferences, care expectations, and overarching care goals.

Clinical reminders are placed here to provide prompts for disease prevention and management, patient safety, and healthcare quality improvements, including widely accepted performance measures.

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.

The plan may also indicate that patient education will be provided.

***Table 42: 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-](#_bookmark474)  [7723](#_bookmark474) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark475)  [10435](#_bookmark475) | 2.16.840.1.113883.10.20.22.2.10 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark476)  [32501](#_bookmark476) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-](#_bookmark477)  [14749](#_bookmark477) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark478)  [14750](#_bookmark478) | 18776-5 |
| @codeSystem | 1..1 | SHALL |  | [1098-](#_bookmark479)  [30813](#_bookmark479) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-](#_bookmark480)  [16986](#_bookmark480) |  |
| text | 1..1 | SHALL |  | [1098-](#_bookmark481)  [7725](#_bookmark481) |  |
| entry | 0..\* | MAY |  | [1098-](#_bookmark482)  [7726](#_bookmark482) |  |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark483)  [14751](#_bookmark483) | Planned Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2 0.22.4.44:2014-06-09 |
| entry | 0..\* | MAY |  | [1098-](#_bookmark484)  [8805](#_bookmark484) |  |
| encounter | 1..1 | SHALL |  | [1098-](#_bookmark485)  [30472](#_bookmark485) | [Planned Encounter (V2)](#_bookmark1131)  [(identifier:](#_bookmark1131)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark1131)  [0.22.4.40:2014-06-09](#_bookmark1131) |
| entry | 0..\* | MAY |  | [1098-](#_bookmark486)  [8807](#_bookmark486) |  |
| act | 1..1 | SHALL |  | [1098-](#_bookmark487)  [30473](#_bookmark487) | Planned Act (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2 0.22.4.39:2014-06-09 |
| entry | 0..\* | MAY |  | [1098-](#_bookmark488)  [8809](#_bookmark488) |  |
| procedure | 1..1 | SHALL |  | [1098-](#_bookmark489)  [30474](#_bookmark489) | [Planned Procedure (V2)](#_bookmark1228)  [(identifier:](#_bookmark1228)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark1228)  [0.22.4.41:2014-06-09](#_bookmark1228) |
| entry | 0..\* | MAY |  | [1098-](#_bookmark490)  [8811](#_bookmark490) |  |
| substanceAdministration | 1..1 | SHALL |  | [1098-](#_bookmark491)  [30475](#_bookmark491) | [Planned Medication Activity (V2)](#_bookmark1187)  [(identifier:](#_bookmark1187)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark1187) |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | 0.22.4.42:2014-06-09 |
| entry | 0..\* | MAY |  | [1098-](#_bookmark492)  [8813](#_bookmark492) |  |
| supply | 1..1 | SHALL |  | [1098-](#_bookmark493)  [30476](#_bookmark493) | Planned Supply (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2 0.22.4.43:2014-06-09 |
| entry | 0..\* | MAY |  | [1098-](#_bookmark494)  [14695](#_bookmark494) |  |
| act | 1..1 | SHALL |  | [1098-](#_bookmark495)  [31397](#_bookmark495) | Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2 0.22.4.20:2014-06-09 |
| entry | 0..\* | MAY |  | [1098-](#_bookmark496)  [29621](#_bookmark496) |  |
| act | 1..1 | SHALL |  | [1098-](#_bookmark497)  [30868](#_bookmark497) | Handoff Communication Participants (identifier: urn:oid:2.16.840.1.113883.10.20. 22.4.141 |
| entry | 0..\* | MAY |  | [1098-](#_bookmark498)  [31841](#_bookmark498) |  |
| act | 1..1 | SHALL |  | [1098-](#_bookmark499)  [31864](#_bookmark499) | Nutrition Recommendation (identifier: urn:oid:2.16.840.1.113883.10.20. 22.4.130 |
| entry | 0..\* | MAY |  | [1098-](#_bookmark500)  [32353](#_bookmark500) |  |
| substanceAdministration | 1..1 | SHALL |  | [1098-](#_bookmark501)  [32354](#_bookmark501) | Planned Immunization Activity (identifier: urn:oid:2.16.840.1.113883.10.20. 22.4.120 |
| entry | 0..\* | MAY |  | [1098-](#_bookmark502)  [32887](#_bookmark502) |  |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark503)  [32888](#_bookmark503) | Goal Observation (identifier: urn:oid:2.16.840.1.113883.10.20. 22.4.121 |

* + 1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7723) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.2.10"

(CONF:1098-10435).

* + - 1. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32501).
    1. **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).

* + 1. **SHALL** contain exactly one [1..1] **title** (CONF:1098-16986).
    2. **SHALL** contain exactly one [1..1] **text** (CONF:1098-7725).
    3. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-7726) such that it
       1. **SHALL** contain exactly one [1..1] Planned Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.44:2014-06-09) (CONF:1098- 14751).
    4. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-8805) such that it
       1. **SHALL** contain exactly one [1..1] [**Planned Encounter (V2)**](#_bookmark1131) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.40:2014-06-09) (CONF:1098- 30472).
    5. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-8807) such that it
       1. **SHALL** contain exactly one [1..1] Planned Act (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.39:2014-06-09) (CONF:1098- 30473).
    6. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-8809) such that it
       1. **SHALL** contain exactly one [1..1] [**Planned Procedure (V2)**](#_bookmark1228) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2014-06-09) (CONF:1098- 30474).
    7. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-8811) such that it
       1. **SHALL** contain exactly one [1..1] [**Planned Medication Activity (V2)**](#_bookmark1187)(identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09) (CONF:1098-30475).
    8. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-8813) such that it
       1. **SHALL** contain exactly one [1..1] Planned Supply (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.43:2014-06-09) (CONF:1098- 30476).
    9. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-14695) such that it
       1. **SHALL** contain exactly one [1..1] Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:1098- 31397).
    10. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-29621) such that it
        1. **SHALL** contain exactly one [1..1] Handoff Communication Participants (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.141) (CONF:1098- 30868).
    11. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-31841) such that it
        1. **SHALL** contain exactly one [1..1] Nutrition Recommendation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.130) (CONF:1098-31864).
    12. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-32353) such that it
        1. **SHALL** contain exactly one [1..1] Planned Immunization Activity (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.120) (CONF:1098-32354).
    13. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-32887) such that it
        1. **SHALL** contain exactly one [1..1] Goal Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.121) (CONF:1098-32888).

***Figure 29: 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>

## Plan of Treatment Section (V2) - Cancer IG Specific Constraints -

***Published***

[section: identifier urn:hl7ii:2.16.840.1.113883.10.13.9:2014-08-08 (open)]

***Table 43: Plan of Treatment Section (V2) - Cancer IG Specific Constraints Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Cancer Event Report Document (V1.1)](#_bookmark3) (required) | [Planned Encounter (V2) - Cancer IG Specific](#_bookmark1162)  [Constraints](#_bookmark1162)  [Planned Medication Activity (V2)](#_bookmark1187)  [Planned Procedure (V2)](#_bookmark1228) |

This template defines Cancer Event Report-specific constraints to the C-CDA R2 template "Plan of Treatment Section (V2)". Conformance has been changed to “SHALL” for Planned Encounter (V2) - Cancer IG Specific Constraints, Planned Medication Activity (V2), and Planned Procedure (V2).

***Table 44: Plan of Treatment Section (V2) - Cancer IG Specific Constraints Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.13.9:2014-08-08) | | | | | |
| templateId | 1..1 | SHALL |  | [1126-](#_bookmark509)  [33056](#_bookmark509) |  |
| @root | 1..1 | SHALL |  | [1126-](#_bookmark510)  [33057](#_bookmark510) | 2.16.840.1.113883.10.13.9 |
| @extension | 1..1 | SHALL |  | [1126-](#_bookmark511)  [33950](#_bookmark511) | 2014-08-08 |
| entry | 1..\* | SHALL |  | [1126-](#_bookmark512)  [32678](#_bookmark512) |  |
| encounter | 1..1 | SHALL |  | [1126-](#_bookmark513)  [32679](#_bookmark513) | [Planned Encounter (V2) - Cancer](#_bookmark1162)  [IG Specific Constraints (identifier:](#_bookmark1162)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark1162)  [3.20:2014-08-08](#_bookmark1162) |
| entry | 1..\* | SHALL |  | [1126-](#_bookmark514)  [33020](#_bookmark514) |  |
| substanceAdministration | 1..1 | SHALL |  | [1126-](#_bookmark515)  [33021](#_bookmark515) | [Planned Medication Activity (V2)](#_bookmark1187)  [(identifier:](#_bookmark1187)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark1187)  [0.22.4.42:2014-06-09](#_bookmark1187) |
| entry | 1..\* | SHALL |  | [1126-](#_bookmark516)  [33022](#_bookmark516) |  |
| procedure | 1..1 | SHALL |  | [1126-](#_bookmark517)  [33023](#_bookmark517) | [Planned Procedure (V2)](#_bookmark1228)  [(identifier:](#_bookmark1228)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark1228)  [0.22.4.41:2014-06-09](#_bookmark1228) |

* + 1. Conforms to [**Plan of Treatment Section (V2)**](#_bookmark471) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1126-33056) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.9"

(CONF:1126-33057).

* + - 1. **SHALL** contain exactly one [1..1] **@extension**="2014-08-08" (CONF:1126-33950).
    1. **SHALL** contain at least one [1..\*] **entry** (CONF:1126-32678) such that it
       1. **SHALL** contain exactly one [1..1] [**Planned Encounter (V2) - Cancer IG**](#_bookmark1162) [**Specific Constraints**](#_bookmark1162) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.20:2014-08-08) (CONF:1126-32679).
    2. **SHALL** contain at least one [1..\*] **entry** (CONF:1126-33020) such that it
       1. **SHALL** contain exactly one [1..1] [**Planned Medication Activity (V2)**](#_bookmark1187)(identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09) (CONF:1126-33021).
    3. **SHALL** contain at least one [1..\*] **entry** (CONF:1126-33022) such that it
       1. **SHALL** contain exactly one [1..1] [**Planned Procedure (V2)**](#_bookmark1228) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2014-06-09) (CONF:1126- 33023).

***Figure 30: Plan of Treatment Section (V2) - Cancer IG Specific Constraints example***

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.10" extension="2014-06-09" />

<!-- \*\*\*\* Plan of Treatment section V2 template \*\*\*\* -->

<templateId root="2.16.840.1.113883.10.13.9" extension="2014-08-08" />

<!-- Plan of Treatment Section (V2) - Cancer IG Specific Constraints -->

<code code="18776-5" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Treatment plan" />

<title>TREATMENT PLAN</title>

<text> ... </text>

<entry>

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

<!-- Planned Encounter (V2) - Cancer IG Specific Constraints -->

<templateId root="2.16.840.1.113883.10.20.22.4.40" extension="2014-06-09" />

<templateId root="2.16.840.1.113883.10.13.20" extension="2014-08-08" /> ...

</encounter>

</entry>

<entry>

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

<templateId root="2.16.840.1.113883.10.20.22.4.42" extension="2014-06- 09"></templateId>

<!-- Planned Medication Activity (V2)--> ...

</substanceAdministration>

</entry>

<entry>

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

<templateId root="2.16.840.1.113883.10.20.22.4.41.2" />

<!-- \*\*Planned Procedure V2 template \*\* --> ...

</procedure>

</entry>

</section>

## Problem Section (entries required) (V2) - Published

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.5.1:2014-06-09 (open)]

***Table 45: Problem Section (entries required) (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
|  | [Health Status Observation (V2)](#_bookmark950)  [Problem Concern Act (V2)](#_bookmark1371) |

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 46: Problem Section (entries required) (V2) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.5.1:2014-06-09) | | | | | |
| @nullFlavor | 0..1 | MAY |  | [1098-](#_bookmark523)  [32864](#_bookmark523) | urn:oid:2.16.840.1.113883.5.100  8 (HL7NullFlavor) = NI |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark524)  [9179](#_bookmark524) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark525)  [10441](#_bookmark525) | 2.16.840.1.113883.10.20.22.2.5.  1 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark526)  [32510](#_bookmark526) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-](#_bookmark527)  [15409](#_bookmark527) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark528)  [15410](#_bookmark528) | 11450-4 |
| @codeSystem | 1..1 | SHALL |  | [1098-](#_bookmark529)  [31142](#_bookmark529) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-](#_bookmark530)  [9181](#_bookmark530) |  |
| text | 1..1 | SHALL |  | [1098-](#_bookmark531)  [9182](#_bookmark531) |  |
| entry | 1..\* | SHALL |  | [1098-](#_bookmark532)  [9183](#_bookmark532) |  |
| act | 1..1 | SHALL |  | [1098-](#_bookmark533)  [15506](#_bookmark533) | [Problem Concern Act (V2)](#_bookmark1371)  [(identifier:](#_bookmark1371)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark1371)  [0.22.4.3:2014-06-09](#_bookmark1371) |
| entry | 0..1 | MAY |  | [1098-](#_bookmark534)  [30479](#_bookmark534) |  |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark535)  [30480](#_bookmark535) | [Health Status Observation (V2)](#_bookmark950)  [(identifier:](#_bookmark950)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark950)  [0.22.4.5:2014-06-09](#_bookmark950) |

* + 1. Conforms to Problem Section (entries optional) (V2) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.5:2014-06-09).
    2. **MAY** contain zero or one [0..1] **@nullFlavor**="NI" No information (CodeSystem:

HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:1098-32864).

* + 1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-9179) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.2.5.1"

(CONF:1098-10441).

* + - 1. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32510).
    1. **SHALL** contain exactly one [1..1] **code** (CONF:1098-15409).
       1. This code **SHALL** contain exactly one [1..1] **@code**="11450-4" Problem List (CONF:1098-15410).
       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:1098-31142).

* + 1. **SHALL** contain exactly one [1..1] **title** (CONF:1098-9181).
    2. **SHALL** contain exactly one [1..1] **text** (CONF:1098-9182). If section/@nullFlavor is not present:
    3. **SHALL** contain at least one [1..\*] **entry** (CONF:1098-9183) such that it
       1. **SHALL** contain exactly one [1..1] [**Problem Concern Act (V2)**](#_bookmark1371) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.3:2014-06-09) (CONF:1098- 15506).
    4. **MAY** contain zero or one [0..1] **entry** (CONF:1098-30479) such that it
       1. **SHALL** contain exactly one [1..1] [**Health Status Observation (V2)**](#_bookmark950)(identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.5:2014-06-09) (CONF:1098-30480).

***Figure 31: Problem Section (entries required) (V2) Example***

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.5.1"

extension="2014-06-09" />

<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">

<templateId root="2.16.840.1.113883.10.20.22.4.3" extension="2014-06-09" />

<!-- Problem Concern Act template -->

...

</act>

</entry>

</section>

***Figure 32: No Known Problems Section Example***

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.5"

extension="2014-06-09" />

<!-- Problem Section with Coded Entries Optional -->

<templateId root="2.16.840.1.113883.10.20.22.2.5.1"

extension="2014-06-09" />

<!-- Problem Section with Coded Entries Required -->

<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">

<!-- Problem Concern Act -->

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

<templateId root="2.16.840.1.113883.10.20.22.4.3.2" />

<id root="36e3e930-7b14-11db-9fe1-0800200c9a66" />

<!-- C-CDA R1.1 supports 48765-2 or CONC. C-CDA R2 only supports 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>

<templateId root="2.16.840.1.113883.10.20.22.4.119" />

<time value="20130607160506" />

<assignedAuthor>

<id extension="66666" root="2.16.840.1.113883.4.6" />

<code code="207RC0000X" codeSystem="2.16.840.1.113883.6.101"

codeSystemName="NUCC" displayName="Cardiovascular Disease" />

<addr>

<streetAddressLine>6666 StreetName St.</streetAddressLine>

<city>Silver Spring</city>

<state>MD</state>

<postalCode>20901</postalCode>

<country>US</country>

</addr>

<telecom value="tel:+1(301)666-6666" use="WP" />

<assignedPerson>

<name>

<given>Heartly</given>

<family>Sixer</family>

<suffix>MD</suffix>

</name>

</assignedPerson>

</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. -->

<!-- problem observation template -->

<templateId root="2.16.840.1.113883.10.20.22.4.4.2" />

<id root="4adc1021-7b14-11db-9fe1-0800200c9a67" />

<code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4" />

<text>

<reference value="#problems1" />

</text>

<statusCode code="completed" />

<effectiveTime>

<low value="20130607160506" />

</effectiveTime>

<!-- The time when this was biologically relevant, i.e., true for the patient. --

>

<!-- As a minimum time interval over which this is true, populate the effectiveTime/low with the current time. -->

<!-- It would be equally valid to have a longer range of time over which this statement was represented as being true. -->

<!-- As a maximum, you would never indicate an effectiveTime/high that was greater than the current point in time. -->

<!-- This idea assumes that the value element could come from the Problem value set, or-->

<!-- when negationInd was true, is could also come from the ProblemType value set (and code would be ASSERTION). -->

<value xsi:type="CD" code="55607006" displayName="Problem" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT">

<originalText>

<reference value="#problemType1" />

</originalText>

</value>

</observation>

</entryRelationship>

</act>

</entry>

</section>

## Problem Section (entries required) (V2) - Cancer IG Specific Constraints - Published

[section: identifier urn:hl7ii:2.16.840.1.113883.10.13.21:2014-08-08 (closed)]

***Table 47: Problem Section (entries required) (V2) - Cancer IG Specific Constraints Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Cancer Event Report Document (V1.1)](#_bookmark3) (required) | [Problem Concern Act (V2) - Cancer IG Specific](#_bookmark1397)  [Constraints](#_bookmark1397) |

This template defines Cancer Event Report-specific constraints to the C-CDA R2.0 Problem Section (entries required) (V2). This template defines Cancer Report-specific constraints to C- CDA R2.0 Problem Section (entries required) (V2). It requires a Problem Concern Act (V2) - Cancer IG Specific Constraints template to be used.

The Problem Section captures the patient’s pre-existing and/or concurrent medical conditions, which influence treatment decisions and patient outcomes. Consideration of comorbid conditions is important when evaluating patient survival and other outcomes.

***Table 48: Problem Section (entries required) (V2) - Cancer IG Specific Constraints Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.13.21:2014-08-08) | | | | | |
| templateId | 1..1 | SHALL |  | [1126-](#_bookmark542)  [33250](#_bookmark542) |  |
| @root | 1..1 | SHALL |  | [1126-](#_bookmark543)  [33251](#_bookmark543) | 2.16.840.1.113883.10.13.21 |
| @extension | 1..1 | SHALL |  | [1126-](#_bookmark544)  [33951](#_bookmark544) | 2014-08-08 |
| entry | 1..\* | SHALL |  | [1126-](#_bookmark545)  [33252](#_bookmark545) |  |
| act | 1..1 | SHALL |  | [1126-](#_bookmark546)  [33253](#_bookmark546) | [Problem Concern Act (V2) -](#_bookmark1397)  [Cancer IG Specific Constraints](#_bookmark1397)  [(identifier:](#_bookmark1397)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark1397)  [3.22:2014-08-08](#_bookmark1397) |

* + 1. Conforms to [**Problem Section (entries required) (V2)**](#_bookmark520) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.5.1:2014-06-09).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1126-33250) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.21"

(CONF:1126-33251).

* + - 1. **SHALL** contain exactly one [1..1] **@extension**="2014-08-08" (CONF:1126-33951).
    1. **SHALL** contain at least one [1..\*] **entry** (CONF:1126-33252).
       1. Such entries **SHALL** contain exactly one [1..1] [**Problem Concern Act (V2) -**](#_bookmark1397) [**Cancer IG Specific Constraints**](#_bookmark1397) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.22:2014-08-08) (CONF:1126-33253).

***Figure 33: Problem Section (entries required) (V2) - Cancer IG Specific Constraints example***

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.5" extension="2014-06-09" />

<templateId root="2.16.840.1.113883.10.20.22.2.5.1" extension="2014-06-09"/>

<templateId root="2.16.840.1.113883.10.13.21" extension="2014-08-08" />

<code code="11450-4" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="PROBLEM LIST" />

<title>PROBLEMS</title>

<text> ... </text>

<entry typeCode="DRIV">

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

<!-- \*\* Problem concern act \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.3" extension="2014-06-09" />

<!-- Problem Concern Act (V2) - Cancer IG Specific Constraints -->

<templateId root="2.16.840.1.113883.10.13.22" extension="2014-08-08" /> ...

</act>

</entry>

</section>

## Procedures Section (entries required) (V2) - Published

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.7.1:2014-06-09 (open)]

***Table 49: Procedures Section (entries required) (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
|  | [Procedure Activity Procedure (V2)](#_bookmark1481) |

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 act is for procedures that alter the physical condition of a patient (e.g., splenectomy). Observation act is for procedures that result in new information about a patient but do not cause physical alteration (e.g., EEG). Act is for all other types of procedures (e.g., dressing change).

***Table 50: 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-](#_bookmark552)  [32876](#_bookmark552) | urn:oid:2.16.840.1.113883.5.100  8 (HL7NullFlavor) = NI |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark553)  [7891](#_bookmark553) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark554)  [10447](#_bookmark554) | 2.16.840.1.113883.10.20.22.2.7.  1 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark555)  [32533](#_bookmark555) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-](#_bookmark556)  [15425](#_bookmark556) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark557)  [15426](#_bookmark557) | 47519-4 |
| @codeSystem | 1..1 | SHALL |  | [1098-](#_bookmark558)  [31138](#_bookmark558) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-](#_bookmark559)  [7893](#_bookmark559) |  |
| text | 1..1 | SHALL |  | [1098-](#_bookmark560)  [7894](#_bookmark560) |  |
| entry | 1..\* | SHALL |  | [1098-](#_bookmark561)  [7895](#_bookmark561) |  |
| act | 0..1 | MAY |  | [1098-](#_bookmark562)  [32877](#_bookmark562) | Procedure Activity Act (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2 0.22.4.12:2014-06-09 |
| observation | 0..1 | MAY |  | [1098-](#_bookmark563)  [32878](#_bookmark563) | Procedure Activity Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2 0.22.4.13:2014-06-09 |
| procedure | 0..1 | MAY |  | [1098-](#_bookmark564)  [15512](#_bookmark564) | [Procedure Activity Procedure (V2)](#_bookmark1481)  [(identifier:](#_bookmark1481)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark1481)  [0.22.4.14:2014-06-09](#_bookmark1481) |

* + 1. Conforms to 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).

* + 1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7891) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.2.7.1"

(CONF:1098-10447).

* + - 1. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32533).
    1. **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).

* + 1. **SHALL** contain exactly one [1..1] **title** (CONF:1098-7893).
    2. **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) (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) (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)**](#_bookmark1481)(identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09) (CONF:1098-15512).

***Figure 34: 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>

## Procedures Section (entries required) (V2) - Cancer IG Specific Constraints - Published

[section: identifier urn:hl7ii:2.16.840.1.113883.10.13.10:2014-08-08 (open)]

***Table 51: Procedures Section (entries required) (V2) - Cancer IG Specific Constraints Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Cancer Event Report Document (V1.1)](#_bookmark3) (required) | [Procedure Activity Procedure (V2) - Cancer IG Specific](#_bookmark1547)  [Constraints](#_bookmark1547)  [Radiation Oncology Section](#_bookmark579) |

This template defines Cancer Event Report-specific constraints to the C-CDA R2 template "Procedures Section (entries required) (V2)". It requires a Procedure Activity Procedure (V2) - Cancer IG Specific Constraints template to be used. It also contains a new Radiation Oncology Section.

The Procedures Section contains information about interventional, surgical, diagnostic, or therapeutic procedures or treatments. This information is used to evaluate cancer treatment and outcomes and access to care.

***Table 52: Procedures Section (entries required) (V2) - Cancer IG Specific Constraints Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.13.10:2014-08-08) | | | | | |
| templateId | 1..1 | SHALL |  | [1126-](#_bookmark570)  [33058](#_bookmark570) |  |
| @root | 1..1 | SHALL |  | [1126-](#_bookmark571)  [33059](#_bookmark571) | 2.16.840.1.113883.10.13.10 |
| @extension | 1..1 | SHALL |  | [1126-](#_bookmark572)  [33952](#_bookmark572) | 2014-08-08 |
| entry | 1..\* | SHALL |  | [1126-](#_bookmark573)  [32676](#_bookmark573) |  |
| procedure | 1..1 | SHALL |  | [1126-](#_bookmark574)  [32677](#_bookmark574) | [Procedure Activity Procedure (V2)](#_bookmark1547)  [- Cancer IG Specific Constraints](#_bookmark1547)  [(identifier:](#_bookmark1547)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark1547)  [3.15:2014-08-08](#_bookmark1547) |
| component | 1..1 | SHALL |  | [1126-](#_bookmark575)  [33579](#_bookmark575) |  |
| section | 1..1 | SHALL |  | [1126-](#_bookmark576)  [33580](#_bookmark576) | [Radiation Oncology Section](#_bookmark579)  [(identifier:](#_bookmark579)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark579)  [3.24:2014-08-08](#_bookmark579) |

* + 1. Conforms to [**Procedures Section (entries required) (V2)**](#_bookmark549) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.7.1:2014-06-09).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1126-33058) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.10"

(CONF:1126-33059).

b. **SHALL** contain exactly one [1..1] **@extension**="2014-08-08" (CONF:1126-33952).

* + 1. **SHALL** contain at least one [1..\*] **entry** (CONF:1126-32676).
       1. Such entries **SHALL** contain exactly one [1..1] [**Procedure Activity Procedure**](#_bookmark1547) [**(V2) - Cancer IG Specific Constraints**](#_bookmark1547) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.15:2014-08-08) (CONF:1126-32677).
    2. **SHALL** contain exactly one [1..1] **component** (CONF:1126-33579).
       1. This component **SHALL** contain exactly one [1..1] [**Radiation Oncology** **Section**](#_bookmark579)(identifier: urn:hl7ii:2.16.840.1.113883.10.13.24:2014-08-08) (CONF:1126-33580).

***Figure 35: Procedures Section (entries required) (V2) - Cancer IG Specific Constraints example***

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.7" extension="2014-06-09" />

<templateId root="2.16.840.1.113883.10.20.22.2.7.1" extension="2014-06-09" />

<!-- Procedures section template -->

<templateId root="2.16.840.1.113883.10.13.10" extension="2014-08-08" />

<!-- Procedures Section (entries required) (V2) - Cancer IG Specific Constraints 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 V2-->

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

<!-- Procedure Activity Procedure (V2) - Cancer IG Specific Constraints-->

<templateId root="2.16.840.1.113883.10.13.15" extension="2014-08-08" /> ...

</procedure>

</entry>

...

<component>

<section>

<templateId root="2.16.840.1.113883.10.13.24" extension="2014-08-08" />

<!-- Radiation Oncology Section -->

<code code="34832-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="urn:hl7ii:2.16.840.1.113883.10.13.10:2014-08-08" />

<title>RADIATION ONCOLOGY</title>

<text> ... </text>

<entry>

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

<templateId root="2.16.840.1.113883.10.13.29" extension="2014-08-08" />

<!-- Radiation Regional Treatment Modality Organizer Constraints -->

<code code="21964-2" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Modality Radiation treatment" />

<statusCode code="completed" />

<component typeCode="COMP">

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

<!-- Radiation Regional Treatment Modality Procedure

Constraints --> 08-08" />

<templateId root="2.16.840.1.113883.10.13.25" extension="2014-

<id root="4a7eed3b-d1d4-4f67-80fa-4972c563606c" />

<code code="77404" codeSystem="2.16.840.1.113883.6.12"

codeSystemName="CPT-4" displayName="Radiation treatment delivery, single treatment area, single port or parallel opposed ports, simple blocks or no blocks; 11-19 MeV" /> ...

</procedure>

</component>

</organizer>

</entry>

<entry>

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

<!-- Radiation Boost Modality Organizer Constraints -->

<templateId root="2.16.840.1.113883.10.13.30" extension="2014-08-08" />

<code code="42128-9" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Boost radiation treatment modality Radiation treatment"

/>

<statusCode code="active" />

<component typeCode="COMP">

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

<!-- Radiation Boost Modality Procedure Constraints -->

<templateId root="2.16.840.1.113883.10.13.26" extension="2014-

08-08" />

<id root="87cb6d8e-b33f-4b8b-a19e-443db01bde15" />

<code code="77404" codeSystem="2.16.840.1.113883.6.12" codeSystemName="CPT-4" displayName="Radiation treatment delivery, single treatment area, single port or parallel opposed ports, simple blocks or no blocks; 11-19 MeV" /> ...

</procedure>

</component>

...

</organizer>

</entry>

</section>

</component>

</section>

## Radiation Oncology Section - Published

[section: identifier urn:hl7ii:2.16.840.1.113883.10.13.24:2014-08-08 (open)]

***Table 53: Radiation Oncology Section Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Procedures Section (entries required) (V2) - Cancer IG](#_bookmark567) [Specific Constraints](#_bookmark567) (required) | [Radiation Boost Modality Organizer](#_bookmark1590)  [Radiation Regional Treatment Modality Organizer](#_bookmark1676) |

The Radiation Oncology Section contains a narrative description of the radiation treatment performed by a Radiation Oncologist. Information should include: beginning and ending dates of radiation treatment, Treatment Volume, Number of Treatment Volume, Regional Modality, Regional Dose (cGY), Boost Modality, Boost Dose (cGY), and treatment notes.

The Radiation Oncology Section also includes entries to record the radiation procedure and radiation dose.

Radiation treatment is frequently delivered in two or more phases that can be summarized as regional and boost treatments. To evaluate patterns of radiation oncology care, it is necessary to know which radiation resources were employed in the delivery of therapy. For outcomes analysis, the modalities used for each of these phases can be very important.

***Table 54: Radiation Oncology Section Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.13.24:2014-08-08) | | | | | |
| templateId | 1..1 | SHALL |  | [1126-](#_bookmark582)  [32641](#_bookmark582) |  |
| @root | 1..1 | SHALL |  | [1126-](#_bookmark583)  [32642](#_bookmark583) | 2.16.840.1.113883.10.13.24 |
| @extension | 1..1 | SHALL |  | [1126-](#_bookmark584)  [33953](#_bookmark584) | 2014-08-08 |
| code | 1..1 | SHALL |  | [1126-](#_bookmark585)  [32643](#_bookmark585) |  |
| @code | 1..1 | SHALL |  | [1126-](#_bookmark586)  [32644](#_bookmark586) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 34832-6 |
| title | 1..1 | SHALL |  | [1126-](#_bookmark587)  [32645](#_bookmark587) |  |
| text | 1..1 | SHALL |  | [1126-](#_bookmark588)  [32646](#_bookmark588) |  |
| entry | 1..1 | SHALL |  | [1126-](#_bookmark589)  [33395](#_bookmark589) |  |
| organizer | 1..1 | SHALL |  | [1126-](#_bookmark590)  [33653](#_bookmark590) | [Radiation Regional Treatment](#_bookmark1676)  [Modality Organizer (identifier:](#_bookmark1676)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark1676)  [3.29:2014-08-08](#_bookmark1676) |
| entry | 1..1 | SHALL |  | [1126-](#_bookmark591)  [33652](#_bookmark591) |  |
| organizer | 1..1 | SHALL |  | [1126-](#_bookmark592)  [33654](#_bookmark592) | [Radiation Boost Modality](#_bookmark1590)  [Organizer (identifier:](#_bookmark1590)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark1590)  [3.30:2014-08-08](#_bookmark1590) |

* + 1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1126-32641).
       1. This templateId **SHALL** contain exactly one [1..1]

**@root**="2.16.840.1.113883.10.13.24" (CONF:1126-32642).

* + - 1. This templateId **SHALL** contain exactly one [1..1] **@extension**="2014-08-08"

(CONF:1126-33953).

* + 1. **SHALL** contain exactly one [1..1] **code** (CONF:1126-32643).
       1. This code **SHALL** contain exactly one [1..1] **@code**="34832-6" Radiation Oncology Note (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-32644).
    2. **SHALL** contain exactly one [1..1] **title** (CONF:1126-32645).
    3. **SHALL** contain exactly one [1..1] **text** (CONF:1126-32646).
    4. **SHALL** contain exactly one [1..1] **entry** (CONF:1126-33395) such that it
       1. **SHALL** contain exactly one [1..1] [**Radiation Regional Treatment Modality**](#_bookmark1676) **[Organizer](#_bookmark1676)** (identifier: urn:hl7ii:2.16.840.1.113883.10.13.29:2014-08- 08) (CONF:1126-33653).
    5. **SHALL** contain exactly one [1..1] **entry** (CONF:1126-33652) such that it
       1. **SHALL** contain exactly one [1..1] [**Radiation Boost Modality Organizer**](#_bookmark1590)(identifier: urn:hl7ii:2.16.840.1.113883.10.13.30:2014-08-08) (CONF:1126-33654).

***Figure 36: Radiation Oncology Section example***

<section>

<templateId root="2.16.840.1.113883.10.13.24" extension="2014-08-08" />

<!-- Radiation Oncology Section -->

<code code="34832-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Radiation Oncology Evaluation And Management Note" />

<title>RADIATION ONCOLOGY</title>

<text> ... </text>

<entry>

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

<templateId root="2.16.840.1.113883.10.13.29" extension="2014-08-08" />

<!-- Radiation Regional Treatment Modality Organizer Constraints -->

<code code="21964-2" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Modality Radiation treatment" />

<statusCode code="completed" />

<component typeCode="COMP">

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

<!-- Radiation Regional Treatment Modality Procedure Constraints -->

<templateId root="2.16.840.1.113883.10.13.25" extension="2014-08-08" />

<id root="4a7eed3b-d1d4-4f67-80fa-4972c563606c" />

<code code="77404" codeSystem="2.16.840.1.113883.6.12" codeSystemName="CPT-4" displayName="Radiation treatment delivery, single treatment area, single port or parallel opposed ports, simple blocks or no blocks; 11-19 MeV" /> ...

</procedure>

...

</component>

</organizer>

</entry>

<entry>

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

<!-- Radiation Boost Modality Organizer Constraints -->

<templateId root="2.16.840.1.113883.10.13.30" extension="2014-08-08" />

<code code="42128-9" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Boost radiation treatment modality Radiation treatment" />

<statusCode code="active" />

<component typeCode="COMP">

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

<!-- Radiation Boost Modality Procedure Constraints -->

<templateId root="2.16.840.1.113883.10.13.26" extension="2014-08-08" />

<id root="87cb6d8e-b33f-4b8b-a19e-443db01bde15" />

<code code="77404" codeSystem="2.16.840.1.113883.6.12" codeSystemName="CPT-4" displayName="Radiation treatment delivery, single treatment area, single port or parallel opposed ports, simple blocks or no blocks; 11-19 MeV" /> ...

</procedure>

</component>

...

</organizer>

</entry>

</section>

## Results Section (entries required) (V2) - Published

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.3.1:2014-06-09 (open)]

***Table 55: Results Section (entries required) (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Cancer Event Report Document (V1.1)](#_bookmark3) (required) | [Result Organizer (V2)](#_bookmark1815) |

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 56: Results Section (entries required) (V2) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3.1:2014-06-09) | | | | | |
| @nullFlavor | 0..1 | MAY |  | [1098-](#_bookmark598)  [32875](#_bookmark598) | urn:oid:2.16.840.1.113883.5.100  8 (HL7NullFlavor) = NI |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark599)  [7108](#_bookmark599) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark600)  [9137](#_bookmark600) | 2.16.840.1.113883.10.20.22.2.3.  1 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark601)  [32592](#_bookmark601) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-](#_bookmark602)  [15433](#_bookmark602) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark603)  [15434](#_bookmark603) | 30954-2 |
| @codeSystem | 1..1 | SHALL |  | [1098-](#_bookmark604)  [31040](#_bookmark604) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-](#_bookmark605)  [8892](#_bookmark605) |  |
| text | 1..1 | SHALL |  | [1098-](#_bookmark606)  [7111](#_bookmark606) |  |
| entry | 1..\* | SHALL |  | [1098-](#_bookmark607)  [7112](#_bookmark607) |  |
| organizer | 1..1 | SHALL |  | [1098-](#_bookmark608)  [15516](#_bookmark608) | [Result Organizer (V2) (identifier:](#_bookmark1815)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark1815)  [0.22.4.1:2014-06-09](#_bookmark1815) |

* + 1. Conforms to Results Section (entries optional) (V2) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.3:2014-06-09).
    2. **MAY** contain zero or one [0..1] **@nullFlavor**="NI" No information (CodeSystem:

HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:1098-32875).

* + 1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7108) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.2.3.1"

(CONF:1098-9137).

* + - 1. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32592).
    1. **SHALL** contain exactly one [1..1] **code** (CONF:1098-15433).
       1. This code **SHALL** contain exactly one [1..1] **@code**="30954-2" Relevant diagnostic tests and/or laboratory data (CONF:1098-15434).
       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:1098-31040).

* + 1. **SHALL** contain exactly one [1..1] **title** (CONF:1098-8892).
    2. **SHALL** contain exactly one [1..1] **text** (CONF:1098-7111). If section/@nullFlavor is not present:
    3. **SHALL** contain at least one [1..\*] **entry** (CONF:1098-7112) such that it
       1. **SHALL** contain exactly one [1..1] [**Result Organizer (V2)**](#_bookmark1815) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.1:2014-06-09) (CONF:1098- 15516).

***Figure 37: Results Section (entries required) (V2) Example***

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.3.1" extension="2014-06-09" />

<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>

## Social History Section (V2) - Published

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

***Table 57: Social History Section (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
|  | [Smoking Status - Meaningful Use (V2)](#_bookmark1851)  [Social History Observation (V2)](#_bookmark1873)  [Tobacco Use (V2)](#_bookmark2083) |

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 58: Social History Section (V2) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2014-06-09) | | | | | |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark614)  [7936](#_bookmark614) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark615)  [10449](#_bookmark615) | 2.16.840.1.113883.10.20.22.2.17 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark616)  [32494](#_bookmark616) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-](#_bookmark617)  [14819](#_bookmark617) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark618)  [14820](#_bookmark618) | 29762-2 |
| @codeSystem | 1..1 | SHALL |  | [1098-](#_bookmark619)  [30814](#_bookmark619) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-](#_bookmark620)  [7938](#_bookmark620) |  |
| text | 1..1 | SHALL |  | [1098-](#_bookmark621)  [7939](#_bookmark621) |  |
| entry | 0..\* | MAY |  | [1098-](#_bookmark622)  [7953](#_bookmark622) |  |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark623)  [14821](#_bookmark623) | [Social History Observation (V2)](#_bookmark1873)  [(identifier:](#_bookmark1873)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark1873)  [0.22.4.38:2014-06-09](#_bookmark1873) |
| entry | 0..\* | MAY |  | [1098-](#_bookmark624)  [9132](#_bookmark624) |  |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark625)  [14822](#_bookmark625) | Pregnancy Observation (identifier: urn:oid:2.16.840.1.113883.10.20. 15.3.8 |
| entry | 0..\* | SHOUL D |  | [1098-](#_bookmark626)  [14823](#_bookmark626) |  |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark627)  [14824](#_bookmark627) | [Smoking Status - Meaningful Use](#_bookmark1851)  [(V2) (identifier:](#_bookmark1851)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark1851)  [0.22.4.78:2014-06-09](#_bookmark1851) |
| entry | 0..\* | MAY |  | [1098-](#_bookmark628)  [16816](#_bookmark628) |  |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark629)  [16817](#_bookmark629) | [Tobacco Use (V2) (identifier:](#_bookmark2083)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark2083)  [0.22.4.85:2014-06-09](#_bookmark2083) |
| entry | 0..\* | MAY |  | [1098-](#_bookmark630)  [28361](#_bookmark630) |  |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark631)  [28362](#_bookmark631) | Caregiver Characteristics (identifier: urn:oid:2.16.840.1.113883.10.20. 22.4.72 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| entry | 0..\* | MAY |  | [1098-](#_bookmark632)  [28366](#_bookmark632) |  |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark633)  [28367](#_bookmark633) | Cultural and Religious Observation (identifier: urn:oid:2.16.840.1.113883.10.20. 22.4.111 |
| entry | 0..\* | MAY |  | [1098-](#_bookmark634)  [28825](#_bookmark634) |  |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark635)  [28826](#_bookmark635) | Characteristics of Home Environment (identifier: urn:oid:2.16.840.1.113883.10.20. 22.4.109 |

* + 1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7936) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.2.17"

(CONF:1098-10449).

* + - 1. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32494).
    1. **SHALL** contain exactly one [1..1] **code** (CONF:1098-14819).
       1. This code **SHALL** contain exactly one [1..1] **@code**="29762-2" Social History (CONF:1098-14820).
       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:1098-30814).

* + 1. **SHALL** contain exactly one [1..1] **title** (CONF:1098-7938).
    2. **SHALL** contain exactly one [1..1] **text** (CONF:1098-7939).
    3. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-7953) such that it
       1. **SHALL** contain exactly one [1..1] [**Social History Observation (V2)**](#_bookmark1873)(identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2014-06-09) (CONF:1098-14821).
    4. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-9132) such that it
       1. **SHALL** contain exactly one [1..1] Pregnancy Observation (identifier: urn:oid:2.16.840.1.113883.10.20.15.3.8) (CONF:1098-14822).
    5. **SHOULD** contain zero or more [0..\*] **entry** (CONF:1098-14823) such that it
       1. **SHALL** contain exactly one [1..1] [**Smoking Status - Meaningful Use (V2)**](#_bookmark1851)(identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09) (CONF:1098-14824).
    6. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-16816) such that it
       1. **SHALL** contain exactly one [1..1] [**Tobacco Use (V2)**](#_bookmark2083) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09) (CONF:1098- 16817).
    7. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-28361) such that it
       1. **SHALL** contain exactly one [1..1] Caregiver Characteristics (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.72) (CONF:1098-28362).
    8. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-28366) such that it
       1. **SHALL** contain exactly one [1..1] Cultural and Religious Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.111) (CONF:1098-28367).
    9. **MAY** contain zero or more [0..\*] **entry** (CONF:1098-28825) such that it
       1. **SHALL** contain exactly one [1..1] Characteristics of Home Environment (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.109) (CONF:1098- 28826).

***Figure 38: Social History Section (V2) Example***

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.17"

extension="2014-06-09" />

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

displayName="Social History" />

<title>SOCIAL HISTORY</title>

<text>

. . .

</text>

<entry>

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

<!-- Social History Observation (V2)-->

<templateId root="2.16.840.1.113883.10.20.22.4.38"

extension="2014-06-09" />

...

</observation>

</entry>

<entry>

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

<!-- Smoking Status - Meaningful Use (V2) -->

<templateId root="2.16.840.1.113883.10.20.22.4.78"

extension="2014-06-09" />

...

</observation>

</entry>

<entry>

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

<!-- Caregiver Characteristics -->

<templateId root="2.16.840.1.113883.10.20.22.4.72" />

...

</observation>

</entry>

<entry>

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

<!-- \*\*Cultural and Religious Observation\*\*-->

<templateId root="2.16.840.1.113883.10.20.22.4.111" />

...

</observation>

</entry>

<entry>

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

<!-- \*\* Characteristics of Home Environment\*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.109" />

...

</observation>

</entry>

</section>

## Social History Section (V2) - Cancer IG Specific Constraints (V1.1) -

***Published***

[section: identifier urn:hl7ii:2.16.840.1.113883.10.13.11:2015-01-29 (open)]

***Table 59: Social History Section (V2) - Cancer IG Specific Constraints (V1.1) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Cancer Event Report Document (V1.1)](#_bookmark3) (required) | [Employment History Observation Organizer (V1.1)](#_bookmark878)  [Social History Observation (V2)](#_bookmark1873) |

This template defines Cancer Event Report-specific constraints to the C-CDA R2 template "Social History Section (V2)". The "Employment History Observation Organizer" template has been added to document patient's employment details such as industry and occupation.

***Table 60: Social History Section (V2) - Cancer IG Specific Constraints (V1.1) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.13.11:2015-01-29) | | | | | |
| templateId | 1..1 | SHALL |  | [1169-](#_bookmark641)  [33060](#_bookmark641) |  |
| @root | 1..1 | SHALL |  | [1169-](#_bookmark642)  [33061](#_bookmark642) | 2.16.840.1.113883.10.13.11 |
| @extension | 1..1 | SHALL |  | [1169-](#_bookmark643)  [33954](#_bookmark643) | 2015-01-29 |
| entry | 1..\* | SHALL |  | [1169-](#_bookmark644)  [32699](#_bookmark644) |  |
| organizer | 1..1 | SHALL |  | [1169-](#_bookmark645)  [32700](#_bookmark645) | [Employment History Observation](#_bookmark878)  [Organizer (V1.1) (identifier:](#_bookmark878)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark878)  [3.16:2015-01-29](#_bookmark878) |
| entry | 0..0 | SHALL NOT |  | [1169-](#_bookmark646)  [33884](#_bookmark646) |  |
| observation | 1..1 | SHALL |  | [1169-](#_bookmark647)  [33889](#_bookmark647) | [Social History Observation (V2)](#_bookmark1873)  [(identifier:](#_bookmark1873)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark1873)  [0.22.4.38:2014-06-09](#_bookmark1873) |
| entry | 0..0 | SHALL NOT |  | [1169-](#_bookmark648)  [33885](#_bookmark648) |  |
| observation | 1..1 | SHALL |  | [1169-](#_bookmark649)  [33890](#_bookmark649) | Characteristics of Home Environment (identifier: urn:oid:2.16.840.1.113883.10.20. 22.4.109 |
| entry | 0..0 | SHALL NOT |  | [1169-](#_bookmark650)  [33886](#_bookmark650) |  |
| observation | 1..1 | SHALL |  | [1169-](#_bookmark651)  [33891](#_bookmark651) | Cultural and Religious Observation (identifier: urn:oid:2.16.840.1.113883.10.20. 22.4.111 |
| entry | 0..0 | SHALL NOT |  | [1169-](#_bookmark652)  [33887](#_bookmark652) |  |
| observation | 1..1 | SHALL |  | [1169-](#_bookmark653)  [33892](#_bookmark653) | Caregiver Characteristics (identifier: urn:oid:2.16.840.1.113883.10.20. 22.4.72 |
| entry | 0..0 | SHALL NOT |  | [1169-](#_bookmark654)  [33888](#_bookmark654) |  |
| observation | 1..1 | SHALL |  | [1169-](#_bookmark655)  [33893](#_bookmark655) | Pregnancy Observation (identifier: urn:oid:2.16.840.1.113883.10.20. 15.3.8 |

* + 1. Conforms to [**Social History Section (V2)**](#_bookmark611) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2014-06-09).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1169-33060) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.11"

(CONF:1169-33061).

* + - 1. **SHALL** contain exactly one [1..1] **@extension**="2015-01-29" (CONF:1169-33954).
    1. **SHALL** contain at least one [1..\*] **entry** (CONF:1169-32699) such that it
       1. **SHALL** contain exactly one [1..1] [**Employment History Observation Organizer**](#_bookmark878) [**(V1.1)**](#_bookmark878) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.16:2015-01-29) (CONF:1169-32700).
    2. **SHALL NOT** contain [0..0] **entry** (CONF:1169-33884) such that it
       1. **SHALL** contain exactly one [1..1] [**Social History Observation (V2)**](#_bookmark1873)(identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2014-06-09) (CONF:1169-33889).
    3. **SHALL NOT** contain [0..0] **entry** (CONF:1169-33885) such that it
       1. **SHALL** contain exactly one [1..1] Characteristics of Home Environment (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.109) (CONF:1169- 33890).
    4. **SHALL NOT** contain [0..0] **entry** (CONF:1169-33886) such that it
       1. **SHALL** contain exactly one [1..1] Cultural and Religious Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.111) (CONF:1169-33891).
    5. **SHALL NOT** contain [0..0] **entry** (CONF:1169-33887) such that it
       1. **SHALL** contain exactly one [1..1] Caregiver Characteristics (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.72) (CONF:1169-33892).
    6. **SHALL NOT** contain [0..0] **entry** (CONF:1169-33888) such that it
       1. **SHALL** contain exactly one [1..1] Pregnancy Observation (identifier: urn:oid:2.16.840.1.113883.10.20.15.3.8) (CONF:1169-33893).

***Figure 39: Social History Section (V2) - Cancer IG Specific Constraints (V1.1) example***

<section>

<templateId root="2.16.840.1.113883.10.20.22.2.17" extension="2014-06-09" />

<!-- Social History Section -->

<templateId root="2.16.840.1.113883.10.13.11" extension="2014-08-08" />

<!-- Social History Section (V2) - Cancer IG Specific Constraints -->

<code code="29762-2" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Social History" />

<title>SOCIAL HISTORY</title>

<text> . . . </text>

<entry>

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

<templateId root="2.16.840.1.113883.10.13.16" extension="2015-01-29" />

<!-- Employment history observation organizer --> ...

</organizer>

</entry>

<entry>

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

<!-- \*\* Tobacco use \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.85" extension="2014-06-09" />

...

</observation>

</entry>

</section>

## Vital Signs Section (entries required) (V2) - Published

[section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2014-06-09 (open)]

***Table 61: Vital Signs Section (entries required) (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Cancer Event Report Document (V1.1)](#_bookmark3) (required) | [Vital Signs Organizer (V2)](#_bookmark2181) |

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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2014-06-09) | | | | | |
| @nullFlavor | 0..1 | MAY |  | [1098-](#_bookmark661)  [32874](#_bookmark661) | urn:oid:2.16.840.1.113883.5.100  8 (HL7NullFlavor) = NI |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark662)  [7273](#_bookmark662) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark663)  [10452](#_bookmark663) | 2.16.840.1.113883.10.20.22.2.4.  1 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark664)  [32585](#_bookmark664) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-](#_bookmark665)  [15962](#_bookmark665) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark666)  [15963](#_bookmark666) | 8716-3 |
| @codeSystem | 1..1 | SHALL |  | [1098-](#_bookmark667)  [30903](#_bookmark667) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| title | 1..1 | SHALL |  | [1098-](#_bookmark668)  [9967](#_bookmark668) |  |
| text | 1..1 | SHALL |  | [1098-](#_bookmark669)  [7275](#_bookmark669) |  |
| entry | 1..\* | SHALL |  | [1098-](#_bookmark670)  [7276](#_bookmark670) |  |
| organizer | 1..1 | SHALL |  | [1098-](#_bookmark671)  [15964](#_bookmark671) | [Vital Signs Organizer (V2)](#_bookmark2181)  [(identifier:](#_bookmark2181)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark2181)  [0.22.4.26:2014-06-09](#_bookmark2181) |

* + 1. Conforms to Vital Signs Section (entries optional) (V2) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4:2014-06-09).
    2. **MAY** contain zero or one [0..1] **@nullFlavor**="NI" No information (CodeSystem:

HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:1098-32874).

* + 1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7273) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.2.4.1"

(CONF:1098-10452).

* + - 1. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32585).
    1. **SHALL** contain exactly one [1..1] **code** (CONF:1098-15962).
       1. This code **SHALL** contain exactly one [1..1] **@code**="8716-3" Vital Signs (CONF:1098- 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:1098-30903).

* + 1. **SHALL** contain exactly one [1..1] **title** (CONF:1098-9967).
    2. **SHALL** contain exactly one [1..1] **text** (CONF:1098-7275).

If section/@nullFlavor is not present:

* + 1. **SHALL** contain at least one [1..\*] **entry** (CONF:1098-7276) such that it
       1. **SHALL** contain exactly one [1..1] [**Vital Signs Organizer (V2)**](#_bookmark2181) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.26:2014-06-09) (CONF:1098- 15964).

***Figure 40: Vital Signs Section (entries required) (V2) Example***

<component>

<section>

<!-- \*\* Vital Signs section with entries required \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.2.4.1"

extension="2014-06-09" />

<code code="8716-3" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="VITAL SIGNS" />

<title>VITAL SIGNS</title>

<text>

. . .

</text>

<entry typeCode="DRIV">

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

<!-- \*\* Vital signs organizer \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.26"

extension="2014-06-09" />

. . .

</organizer>

</entry>

</section>

</component>

# E N T R Y

## Cancer Diagnosis Concern Act (V1.1) - Published

[act: identifier urn:hl7ii:2.16.840.1.113883.10.13.3:2015-02-05 (open)]

***Table 63: Cancer Diagnosis Concern Act (V1.1) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Cancer Diagnosis Section (entries required) (V1.1)](#_bookmark372) (required) | [Cancer Diagnosis Observation (V1.1)](#_bookmark700) |

Note: This template is modeled based on C-CDA R2 "Problem Concern Act (Condition) (V2)" template.

This template reflects an ongoing concern on behalf of the provider that placed the concern on a patient’s problem list. In the context of "Cancer Diagnosis Section", the health concern is: Tumor/Cancer.

Problem Concern Act documents a provider’s concern about patient’s condition (e.g. cancer diagnosis), whereas Problem Observation (contained within Problem Concern Act) documents details about the cancer (e.g. cancer diagnosis date.)

statusCode (of Problem Concern Act) indicates a status of concern and shall be "active" for as long as cancer is a health concern for the provider. statusCode can be "completed" if cancer is no longer a health concern to the provider. statusCode is NOT used to indicate whether patient’s cancer is present or absent; it is used to indicate whether patient’s cancer is a concern to the provider.

For example, if a 58- year old patient has had a localized melanoma that was resected at the age of 48, and if patient has been in remission (cancer-free) for 10 years, that patient’s cancer may still be an “active” concern to the provider due to the possibility that cancer may return.

The effectiveTime/low of the Problem Concern Act (Condition) 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 cancer condition). <effectiveTime> in Problem Concern Act is NOT used to indicate Cancer Diagnosis Date! Cancer Diagnosis Date is specified in <effectiveTime><low> element within "Cancer Diagnosis Observation" template (nested within entryRelationship in this "Cancer Diangosis Concern Act" template.

A Cancer Diagnosis Concern Act (Condition) can contain one or more entryRelationships, where each entryRelationship contains only one Cancer Diagnosis Observation; each Cancer Diagnosis Observation is an observation of ONE tumor. For example, if a patient has ONE tumor, then the document contains one entryRelationship with one Cancer Diagnosis Observation. If a patient has TWO tumors, then the document contains two entryRelationships, each describing ONE tumor.

***Table 64: Cancer Diagnosis Concern Act (V1.1) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.13.3:2015-02-05) | | | | | |
| @classCode | 1..1 | SHALL |  | [1169-](#_bookmark678)  [32427](#_bookmark678) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1169-](#_bookmark679)  [32428](#_bookmark679) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1169-](#_bookmark680)  [32421](#_bookmark680) |  |
| @root | 1..1 | SHALL |  | [1169-](#_bookmark681)  [32429](#_bookmark681) | 2.16.840.1.113883.10.13.3 |
| @extension | 1..1 | SHALL |  | [1169-](#_bookmark682)  [33955](#_bookmark682) | 2015-02-05 |
| id | 1..\* | SHALL |  | [1169-](#_bookmark683)  [32430](#_bookmark683) |  |
| code | 1..1 | SHALL |  | [1169-](#_bookmark684)  [32422](#_bookmark684) |  |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark685)  [32431](#_bookmark685) | CONC |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark686)  [32432](#_bookmark686) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = 2.16.840.1.113883.5.6 |
| statusCode | 1..1 | SHALL |  | [1169-](#_bookmark687)  [32423](#_bookmark687) |  |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark688)  [32433](#_bookmark688) | urn:oid:2.16.840.1.113883.11.20.  9.19 (ProblemAct statusCode) |
| effectiveTime | 1..1 | SHALL |  | [1169-](#_bookmark689)  [32424](#_bookmark689) |  |
| low | 1..1 | SHALL |  | [1169-](#_bookmark690)  [32434](#_bookmark690) |  |
| high | 0..1 | SHALL |  | [1169-](#_bookmark691)  [32435](#_bookmark691) |  |
| @nullFlavor | 0..1 | MAY |  | [1169-](#_bookmark692)  [32472](#_bookmark692) |  |
| entryRelationship | 1..\* | SHALL |  | [1169-](#_bookmark693)  [32420](#_bookmark693) |  |
| @typeCode | 1..1 | SHALL |  | [1169-](#_bookmark694)  [32436](#_bookmark694) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = SUBJ |
| observation | 1..1 | SHALL |  | [1169-](#_bookmark695)  [32426](#_bookmark695) | [Cancer Diagnosis Observation](#_bookmark700)  [(V1.1) (identifier:](#_bookmark700)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark700)  [3.4:2015-02-05](#_bookmark700) |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="ACT" Act (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATI****C**) (CONF:1169-32427).
    2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1169-32428).
    3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1169-32421) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.3"

(CONF:1169-32429).

* + - 1. **SHALL** contain exactly one [1..1] **@extension**="2015-02-05" (CONF:1169-33955).
    1. **SHALL** contain at least one [1..\*] **id** (CONF:1169-32430).
    2. **SHALL** contain exactly one [1..1] **code** (CONF:1169-32422).
       1. This code **SHALL** contain exactly one [1..1] **@code**="CONC" Concern (CONF:1169- 32431).
       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:1169-32432).

* + 1. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1169-32423).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [**ProblemAct statusCode**](#_bookmark697)urn:oid:2.16.840.1.113883.11.20.9.19 **STAT****IC** (CONF:1169-32433).
    2. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1169-32424).
       1. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:1169-32434).

Note: The effectiveTime/low asserts when the concern became active. This equates to the time the concern was authored in the patient's chart.

* + - 1. This effectiveTime **SHALL** contain zero or one [0..1] **high** (CONF:1169-32435).

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). This element SHALL be present when statusCode="completed" and SHALL not be present otherwise.

* + - * 1. The high, if present, **MAY** contain zero or one [0..1] **@nullFlavor**

(CONF:1169-32472).

* + 1. **SHALL** contain at least one [1..\*] **entryRelations****hip** (CONF:1169-32420) 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 **STATI****C**) (CONF:1169-32436).
       2. **SHALL** contain exactly one [1..1] [**Cancer Diagnosis Observation** **(V1.1)**](#_bookmark700)(identifier: urn:hl7ii:2.16.840.1.113883.10.13.4:2015-02-05) (CONF:1169-32426).

***Table*** ***65: 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: [**http://www.hl7.org**](http://www.hl7.org/) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| completed | ActStatus | urn:oid:2.16.840.1.11388 3.5.14 | Completed |
| aborted | ActStatus | urn:oid:2.16.840.1.11388 3.5.14 | Aborted |
| active | ActStatus | urn:oid:2.16.840.1.11388 3.5.14 | Active |
| suspended | ActStatus | urn:oid:2.16.840.1.11388 3.5.14 | Suspended |

***Figure 41: Cancer Diagnosis Concern Act example***

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

<!-- \*\* Cancer Diagnosis concern act \*\* -->

<templateId root="2.16.840.1.113883.10.13.3" extension="2015-02-05" />

<id root="ec8a6ff8-ed4b-4f7e-82c3-e98e58b45de7" />

<code code="CONC" codeSystem="2.16.840.1.113883.5.6" codeSystemName="HL7ActClass" 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="20140730132515" />

</effectiveTime>

<entryRelationship typeCode="SUBJ">

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

...

</observation>

</entryRelationship>

</act>

## Cancer Diagnosis Observation (V1.1) - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.13.4:2015-02-05 (open)]

***Table 66: Cancer Diagnosis Observation (V1.1) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Cancer Diagnosis Concern Act (V1.1)](#_bookmark675) (required) | [No Known TNM Clinical Stage Observation (V1.1)](#_bookmark1101)  [No Known TNM Pathologic Stage Observation (V1.1)](#_bookmark1116)  [TNM Clinical Stage Observation (V1.1)](#_bookmark1987)  [TNM Pathologic Stage Observation (V1.1)](#_bookmark2060) |

NOTE: This template is modeled based on C-CDA R2 "Problem Observation (V2)" template.

This template reflects a discrete observation about a patient's cancer. Because it is a discrete observation, it will have a statusCode of "completed".

The <effectiveTime> indicates time of cancer diagnosis. <effectiveTime><low> is used to indicate Cancer Diagnosis Date; <effectiveTime><high> is used to indicate Cancer Resolution Date (when patient is considered to be cancer-free). If<low> value is not known, then a nullFlavor of "UNK" SHALL be specified for <low> element.

A key component of a cancer diagnosis is Morphology. This “records the type of cell that has become neoplastic and its biologic activity; in other words, it records the kind of tumor that has developed and how it behaves. There are three parts to a complete morphology code: cell type (histology), behavior, and grade” World Health Organization International Classification of Diseases for Oncology, 3rd Edition]. The Implementation guide provides a separate element for each.

* Histologic Type: the type of cell that has become neoplastic
* Behavior: the malignant potential of the tumor, ranging from /0 benign to /3 malignant (invasive).
* Grade: the degree of differentiation

NOTE: Because the TNM staging observations have very detailed constraints that preclude nullFlavor to be used when the staging is not available, this IG provides two templates to record Clinical TNM Stage and two templates for Pathologic TNM Stage. For each staging method (Clinical and Pathologic), one of the two templates SHALL be used.

The first template for Clinical and Pathologic TNM is to record TNM stage when the stage values are known, including situations when, after staging workup, the stage group and/or TNM component(s) are found to be unknown (e.g., Stage Group= 9, and/or TX, and/or NX).

The second template is used when the cancer has not yet been staged, the TNM stage is not available or when no TNM Staging system exists for the cancer. Examples include:

* A cancer is first diagnosed and has not yet had a full work-up to evaluate the extent of the cancer’s progression
* The stage has been determined elsewhere
* Cancers with no TNM staging system (e.g., leukemia, brain tumor)

This template allows the fact that no staging is available to be communicated without having to provide nullFlavors for each stage data element in the other template. It is accomplished by allowing the act to be negated via the negationInd.

***Table 67: Cancer Diagnosis Observation (V1.1) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.13.4:2015-02-05) | | | | | |
| @classCode | 1..1 | SHALL |  | [1169-](#_bookmark703)  [32452](#_bookmark703) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1169-](#_bookmark704)  [32453](#_bookmark704) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1169-](#_bookmark705)  [32441](#_bookmark705) |  |
| @root | 1..1 | SHALL |  | [1169-](#_bookmark706)  [32455](#_bookmark706) | 2.16.840.1.113883.10.13.4 |
| @extension | 1..1 | SHALL |  | [1169-](#_bookmark707)  [33956](#_bookmark707) | 2015-02-05 |
| id | 1..\* | SHALL |  | [1169-](#_bookmark708)  [32456](#_bookmark708) |  |
| code | 1..1 | SHALL |  | [1169-](#_bookmark709)  [32457](#_bookmark709) |  |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark710)  [33309](#_bookmark710) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 29308-4 |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark711)  [33310](#_bookmark711) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| text | 0..1 | SHOUL D |  | [1169-](#_bookmark712)  [32442](#_bookmark712) |  |
| reference | 0..1 | SHOUL D |  | [1169-](#_bookmark713)  [32443](#_bookmark713) |  |
| @value | 1..1 | SHALL |  | [1169-](#_bookmark714)  [32444](#_bookmark714) |  |
| statusCode | 1..1 | SHALL |  | [1169-](#_bookmark715)  [32445](#_bookmark715) |  |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark716)  [32459](#_bookmark716) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1169-](#_bookmark717)  [32446](#_bookmark717) |  |
| @nullFlavor | 0..0 | SHALL NOT |  | [1169-](#_bookmark718)  [33245](#_bookmark718) |  |
| low | 1..1 | SHALL |  | [1169-](#_bookmark719)  [32460](#_bookmark719) |  |
| @nullFlavor | 0..0 | SHALL NOT |  | [1169-](#_bookmark720)  [33246](#_bookmark720) |  |
| high | 0..1 | MAY |  | [1169-](#_bookmark721)  [32461](#_bookmark721) |  |
| value | 1..1 | SHALL | CD | [1169-](#_bookmark722)  [32447](#_bookmark722) |  |
| @nullFlavor | 0..1 | MAY |  | [1169-](#_bookmark723)  [34370](#_bookmark723) |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark724)  [32464](#_bookmark724) |  |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark725)  [32634](#_bookmark725) |  |
| @displayName | 1..1 | SHALL |  | [1169-](#_bookmark726)  [32618](#_bookmark726) |  |
| @sdtc:valueSet | 0..1 | MAY |  | [1169-](#_bookmark727)  [34003](#_bookmark727) |  |
| originalText | 1..1 | SHALL |  | [1169-](#_bookmark728)  [32537](#_bookmark728) |  |
| reference | 1..1 | SHALL |  | [1169-](#_bookmark729)  [32538](#_bookmark729) |  |
| @value | 1..1 | SHALL |  | [1169-](#_bookmark730)  [32539](#_bookmark730) |  |
| qualifier | 1..1 | SHALL |  | [1169-](#_bookmark731)  [32463](#_bookmark731) |  |
| name | 1..1 | SHALL |  | [1169-](#_bookmark732)  [32474](#_bookmark732) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark733)  [34041](#_bookmark733) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 31206-6 |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark734)  [34042](#_bookmark734) | 2.16.840.1.113883.6.1 |
| value | 1..1 | SHALL |  | [1169-](#_bookmark735)  [32475](#_bookmark735) |  |
| @code | 0..1 | SHOUL D |  | [1169-](#_bookmark736)  [32476](#_bookmark736) | urn:oid:2.16.840.1.113883.3.520.  4.14 (NAACCR Behavior Code) |
| @codeSystem | 0..1 | SHOUL D |  | [1169-](#_bookmark737)  [32632](#_bookmark737) | urn:oid:2.16.840.1.113883.3.520.  3.14 (NAACCR Behavior Code) = 2.16.840.1.113883.3.520.3.14 |
| @displayName | 0..1 | SHOUL D |  | [1169-](#_bookmark738)  [32615](#_bookmark738) | urn:oid:2.16.840.1.113883.3.520.  4.14 (NAACCR Behavior Code) |
| @sdtc:valueSet | 0..1 | SHOUL D |  | [1169-](#_bookmark739)  [33703](#_bookmark739) | urn:oid:2.16.840.1.113883.3.520.  3.14 (NAACCR Behavior Code) = 2.16.840.1.113883.3.520.4.14 |
| originalText | 0..1 | SHOUL D |  | [1169-](#_bookmark740)  [32477](#_bookmark740) |  |
| reference | 0..1 | SHOUL D |  | [1169-](#_bookmark741)  [32478](#_bookmark741) |  |
| @value | 0..1 | SHOUL D |  | [1169-](#_bookmark742)  [32479](#_bookmark742) |  |
| qualifier | 1..1 | SHALL |  | [1169-](#_bookmark743)  [33606](#_bookmark743) |  |
| name | 1..1 | SHALL |  | [1169-](#_bookmark744)  [33607](#_bookmark744) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark745)  [34045](#_bookmark745) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 21858-6 |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark746)  [34046](#_bookmark746) | 2.16.840.1.113883.6.1 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| value | 1..1 | SHALL |  | [1169-](#_bookmark747)  [33608](#_bookmark747) |  |
| @code | 0..1 | SHOUL D |  | [1169-](#_bookmark748)  [33610](#_bookmark748) | urn:oid:2.16.840.1.113883.3.520.  4.15 (NAACCR Grade) |
| @codeSystem | 0..1 | SHOUL D |  | [1169-](#_bookmark749)  [33609](#_bookmark749) | urn:oid:2.16.840.1.113883.3.520.  3.15 (NAACCR Grade) = 2.16.840.1.113883.3.520.3.15 |
| @displayName | 0..1 | SHOUL D |  | [1169-](#_bookmark750)  [33611](#_bookmark750) | urn:oid:2.16.840.1.113883.3.520.  4.15 (NAACCR Grade) |
| @sdtc:valueSet | 0..1 | SHOUL D |  | [1169-](#_bookmark751)  [33704](#_bookmark751) | urn:oid:2.16.840.1.113883.3.520.  3.15 (NAACCR Grade) = 2.16.840.1.113883.3.520.4.15 |
| originalText | 0..1 | SHOUL D |  | [1169-](#_bookmark752)  [33612](#_bookmark752) |  |
| reference | 0..1 | SHOUL D |  | [1169-](#_bookmark753)  [33613](#_bookmark753) |  |
| @value | 0..1 | SHOUL D |  | [1169-](#_bookmark754)  [33614](#_bookmark754) |  |
| qualifier | 1..1 | SHALL |  | [1169-](#_bookmark755)  [32490](#_bookmark755) |  |
| name | 1..1 | SHALL |  | [1169-](#_bookmark756)  [32481](#_bookmark756) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 21861-0 |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark757)  [34043](#_bookmark757) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 21861-0 |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark758)  [34044](#_bookmark758) | 2.16.840.1.113883.6.1 |
| value | 1..1 | SHALL |  | [1169-](#_bookmark759)  [32482](#_bookmark759) |  |
| @code | 0..1 | SHOUL D |  | [1169-](#_bookmark760)  [32483](#_bookmark760) | urn:oid:2.16.840.1.113883.3.520.  4.3 (NAACCR Diagnostic Confirmation) |
| @codeSystem | 0..1 | SHOUL D |  | [1169-](#_bookmark761)  [32633](#_bookmark761) | urn:oid:2.16.840.1.113883.3.520.  3.3 (NAACCR Diagnostic Confirmation) = 2.16.840.1.113883.3.520.3.3 |
| @displayName | 0..1 | SHOUL D |  | [1169-](#_bookmark762)  [32620](#_bookmark762) | urn:oid:2.16.840.1.113883.3.520.  4.3 (NAACCR Diagnostic Confirmation) |
| @sdtc:valueSet | 0..1 | SHOUL D |  | [1169-](#_bookmark763)  [33705](#_bookmark763) | urn:oid:2.16.840.1.113883.3.520.  3.3 (NAACCR Diagnostic Confirmation) = 2.16.840.1.113883.3.520.4.3 |
| originalText | 0..1 | SHOUL D |  | [1169-](#_bookmark764)  [32484](#_bookmark764) |  |
| reference | 0..1 | SHOUL D |  | [1169-](#_bookmark765)  [32485](#_bookmark765) |  |
| @value | 0..1 | SHOUL D |  | [1169-](#_bookmark766)  [32486](#_bookmark766) |  |

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| --- | --- | --- | --- | --- | --- |
| targetSiteCode | 1..1 | SHALL |  | [1169-](#_bookmark767)  [32487](#_bookmark767) |  |
| @nullFlavor | 0..0 | SHALL NOT |  | [1169-](#_bookmark768)  [33247](#_bookmark768) |  |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark769)  [32488](#_bookmark769) |  |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark770)  [33182](#_bookmark770) |  |
| @displayName | 0..1 | SHOUL D |  | [1169-](#_bookmark771)  [32638](#_bookmark771) |  |
| @sdtc:valueSet | 0..1 | SHOUL D |  | [1169-](#_bookmark772)  [33706](#_bookmark772) |  |
| qualifier | 1..1 | SHALL |  | [1169-](#_bookmark773)  [33008](#_bookmark773) |  |
| name | 1..1 | SHALL |  | [1169-](#_bookmark774)  [33009](#_bookmark774) |  |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark775)  [33011](#_bookmark775) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 20228-3 |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark776)  [33013](#_bookmark776) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| @codeSystemName | 1..1 | SHALL |  | [1169-](#_bookmark777)  [33014](#_bookmark777) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = LOINC |
| value | 1..1 | SHALL |  | [1169-](#_bookmark778)  [33010](#_bookmark778) |  |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark779)  [33012](#_bookmark779) | urn:oid:2.16.840.1.113883.3.520.  4.22 (Laterality) |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark780)  [33015](#_bookmark780) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.6.96 |
| @displayName | 1..1 | SHALL |  | [1169-](#_bookmark781)  [33185](#_bookmark781) | urn:oid:2.16.840.1.113883.3.520.  4.22 (Laterality) |
| @sdtc:valueSet | 1..1 | SHALL |  | [1169-](#_bookmark782)  [33708](#_bookmark782) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.3.520.4.22 |
| originalText | 0..1 | SHOUL D |  | [1169-](#_bookmark783)  [33017](#_bookmark783) |  |
| reference | 0..1 | SHOUL D |  | [1169-](#_bookmark784)  [33018](#_bookmark784) |  |
| @value | 0..1 | SHOUL D |  | [1169-](#_bookmark785)  [33019](#_bookmark785) |  |
| entryRelationship | 1..1 | SHALL |  | [1169-](#_bookmark786)  [32440](#_bookmark786) |  |
| @nullFlavor | 0..0 | SHALL NOT |  | [1169-](#_bookmark787)  [33186](#_bookmark787) |  |
| @typeCode | 1..1 | SHALL |  | [1169-](#_bookmark788)  [32465](#_bookmark788) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = SUBJ |
| @inversionInd | 1..1 | SHALL | [1169-](#_bookmark789) true | | |

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| --- | --- | --- | --- | --- | --- |
|  |  |  |  | 32466 |  |
| observation | 1..1 | SHALL |  | [1169-](#_bookmark790)  [32451](#_bookmark790) | [TNM Clinical Stage Observation](#_bookmark1987)  [(V1.1) (identifier:](#_bookmark1987)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark1987)  [3.5:2015-02-05](#_bookmark1987) |
| observation | 1..1 | SHALL |  | [1169-](#_bookmark791)  [34365](#_bookmark791) | [No Known TNM Clinical Stage](#_bookmark1101)  [Observation (V1.1) (identifier:](#_bookmark1101)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark1101)  [3.31:2015-04-02](#_bookmark1101) |
| entryRelationship | 1..1 | SHALL |  | [1169-](#_bookmark792)  [33177](#_bookmark792) |  |
| @nullFlavor | 0..0 | SHALL NOT |  | [1169-](#_bookmark793)  [33187](#_bookmark793) |  |
| @typeCode | 1..1 | SHALL |  | [1169-](#_bookmark794)  [33178](#_bookmark794) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = SUBJ |
| @inversionInd | 1..1 | SHALL |  | [1169-](#_bookmark795)  [33179](#_bookmark795) | true |
| observation | 1..1 | SHALL |  | [1169-](#_bookmark796)  [33180](#_bookmark796) | [TNM Pathologic Stage](#_bookmark2060)  [Observation (V1.1) (identifier:](#_bookmark2060)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark2060)  [3.7:2015-02-06](#_bookmark2060) |
| observation | 1..1 | SHALL |  | [1169-](#_bookmark797)  [34366](#_bookmark797) | [No Known TNM Pathologic Stage](#_bookmark1116)  [Observation (V1.1) (identifier:](#_bookmark1116)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark1116)  [3.32:2015-04-02](#_bookmark1116) |
| entryRelationship | 1..\* | SHALL |  | [1169-](#_bookmark798)  [33192](#_bookmark798) |  |
| @typeCode | 1..1 | SHALL |  | [1169-](#_bookmark799)  [33194](#_bookmark799) | REFR |
| observation | 1..1 | SHALL |  | [1169-](#_bookmark800)  [33193](#_bookmark800) |  |
| id | 1..1 | SHALL |  | [1169-](#_bookmark801)  [33195](#_bookmark801) |  |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATI****C**) (CONF:1169-32452).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1169-32453).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1169-32441) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.4"

(CONF:1169-32455).

b. **SHALL** contain exactly one [1..1] **@extension**="2015-02-05" (CONF:1169-33956).

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1169-32456).
    2. **SHALL** contain exactly one [1..1] **code** (CONF:1169-32457).
       1. This code **SHALL** contain exactly one [1..1] **@code**="29308-4" Diagnosis (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-33309).
       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:1169-33310).

* + 1. **SHOULD** contain zero or one [0..1] **text** (CONF:1169-32442).
       1. The text, if present, **SHOULD** contain zero or one [0..1] **reference** (CONF:1169- 32443).
          1. The reference, if present, **SHALL** contain exactly one [1..1] **@value**

(CONF:1169-32444).

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:1169-32458).

* + 1. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1169-32445).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1169- 32459).
    2. **SHALL** contain exactly one [1..1] **ef****fectiveTime** (CONF:1169-32446).

Note: Records the date of initial diagnosis by a recognized medical practitioner for the cancer being reported.

* + - 1. This effectiveTime **SHALL NOT** contain [0..0] **@nullFlavor** (CONF:1169-33245).
      2. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:1169-32460). Note: The effectiveTime/low (a.k.a. "onset date") indicates Cancer Diagnosis Date.
         1. This low **SHALL NOT** contain [0..0] **@nullFlavor** (CONF:1169-33246).
      3. This effectiveTime **MAY** contain zero or one [0..1] **high** (CONF:1169-32461).

Note: The effectiveTime/high (a.k.a. "resolution date") indicates Cancer Resolution Date. If the problem (cancer) is known to be resolved, but the date of resolution is not known, then the high element SHALL be present, and the nullFlavor attribute SHALL be set to 'UNK'. Therefore, the existence of an high element within a problem (cancer) indicates that the problem has been resolved (patient is cancer-free).

* + 1. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD" (CONF:1169-32447). Note: The value records the histologic type (or cell type) of a malignant tumor (e.g.,

carcinoma, melanoma, sarcoma, lymphoma, leukemia). Histologic tumor type SHOULD be encoded and selected from one of the following coding systems: ICD-O-3, ICD-9-CM Appendix A, ICD-10-CM, SNOMED CT. If the code for histologic tumor type cannot be found in one of the aforementioned coding systems then the string value of the histologic tumor type must be provided. In summary: - If tumor histologic type is coded, then the value for the code SHALL be provided in @code field. In this case, the values for

@displayName and @codeSystem associated with @code value SHALL be provided.- If tumor histologic type is NOT coded, then the value for the code SHALL be provided in

<originalText> field. In this case @code attribute (as well as @displayName and

@codeSystem) with be empty.

* + - 1. This value **MAY** contain zero or one [0..1] **@nullFlavor** (CONF:1169-34370). Note: Use @nullFlavor="NA" when a coded value is not available.

If value/@nullFlavor is not present then

* + - 1. This value **SHALL** contain exactly one [1..1] **@code** (CONF:1169-32464).

Note: This @code attribute is used to document histologic type of tumor. If the

histologic type isn’t known, the value of “8000” (with @displayName="Neoplasm") should be used when using code systems ICD-O-3, ICD-9-CM, ICD-10-CM and "86049000" (with @displayName="Neoplasm, malignant (primary)") when using SNOMED CT code system.

* + - * 1. The @code for histologic type of tumor, if present, **SHALL** be selected from: (a) ICD-O-3 (CodeSystem: 2.16.840.1.113883.6.43.1) or

1. Morphologic Abnormality of Neoplasms Value Set (ValueSet: 2.16.840.1.114222.4.11.7256) or
2. ICD-9-CM Appendix A-Morphology of Neoplasms (CodeSystem: 2.16.840.1.114222.4.11.6038) or

(d) ICD-10-CM (CodeSystem: 2.16.840.1.113883.6.90) (CONF:1169-32473).

If value/@nullFlavor not present then

* + - 1. This value **SHALL** contain exactly one [1..1] **@codeSyst****em** (CONF:1169-32634).
         1. The @codeSystem associated with the code for histologic type of tumor **SHALL**

be selected from:

(a) ICD-O-3 (CodeSystem: 2.16.840.1.113883.6.43.1) or (b) SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) or

(c) ICD-9-CM Appendix A-Morphology of Neoplasms (CodeSystem: 2.16.840.1.114222.4.11.6038) or

(d) ICD-10-CM (CodeSystem: 2.16.840.1.113883.6.90) (CONF:1169-32635).

If value/@nullFlavor not present then

* + - 1. This value **SHALL** contain exactly one [1..1] **@displayNam****e** (CONF:1169-32618).
         1. The @codeDisplayName associated with the code for histologic type of tumor

**SHALL** be selected from:

(a) ICD-O-3 (CodeSystem: 2.16.840.1.113883.6.43.1) or

1. Morphologic Abnormality of Neoplasms Value Set (ValueSet: 2.16.840.1.114222.4.11.7256) or
2. ICD-9-CM Appendix A-Morphology of Neoplasms (CodeSystem: 2.16.840.1.114222.4.11.6038) or

(d) ICD-10-CM (CodeSystem: 2.16.840.1.113883.6.90) (CONF:1169-32619).

If value/@nullFlavor not present then

* + - 1. This value **MAY** contain zero or one [0..1] **@sdtc:valueSet** (CONF:1169-34003).

If value/@coder not present then

* + - 1. This value **SHALL** contain exactly one [1..1] **originalTex****t** (CONF:1169-32537). Note: This <originalText> element is used to document string value of histologic type of tumor in both cases: when histologic type of tumor is coded or is not coded.For example:(1) If histologic tumor type is coded, then the code value SHALL be provided in @code attribute (along with @displayName and @codeSystem values associated with the @code value). In addition, string value (typically the string that the user uses in his own information system) should be provided in <originalText> field. Note that if the user uses the same string value for histologic tumor type in his own system as the string value (=displayName) from the coding system, then the string values for <originalText> and @displayName will be equivalent in Cancer Report.(2)

If histologic tumor type is NOT coded, then the string value SHALL be provided in

<originalText>.

* + - * 1. This originalText **SHALL** contain exactly one [1..1] **reference** (CONF:1169- 32538).

Note: 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).

This reference **SHALL** contain exactly one [1..1] **@val****ue** (CONF:1169- 32539).

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:1169-32613).

* + - 1. This value **SHALL** contain exactly one [1..1] **qualifi****er** (CONF:1169-32463) such that it

Note: This qualifier provides Behavior information, indicating whether the tumor has a benign, uncertain, in situ, malignant or metastatic behavior.

* + - * 1. **SHALL** contain exactly one [1..1] **name** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-32474).

This name **SHALL** contain exactly one [1..1] **@code**="31206-6" Behavior ICD-O-3 Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34041).

This name **SHALL** contain exactly one [1..1]

**@codeSystem**="2.16.840.1.113883.6.1" CodeSystem: LOINC 2.16.840.1.113883.6.1 (CONF:1169-34042).

* + - * 1. **SHALL** contain exactly one [1..1] **value** (CONF:1169-32475).

Note: - If coded, the code value describing the behavior of the tumor/cancerSHALL be provided in @code (associated @displayName and

@codeSystem SHALL also be provided along with the @code).- If uncoded, the string value describing the behavior of the tumor/cancer SHALL be provided within <originalText> element.

This value **SHOULD** contain zero or one [0..1] **@code**, which **SHALL** be selected from ValueSet [**NAACCR Behavior Code**](#_bookmark803)urn:oid:2.16.840.1.113883.3.520.4.14 **DYNAMI****C** (CONF:1169- 32476).

This value **SHOULD** contain zero or one [0..1]

**@codeSystem**="2.16.840.1.113883.3.520.3.14" (CodeSystem: NAACCR Behavior Code urn:oid:2.16.840.1.113883.3.520.3.14 **STATIC**) (CONF:1169- 32632).

This value **SHOULD** contain zero or one [0..1] **@displayName**, which **SHALL** be selected from ValueSet [**NAACCR Behavior** **Code**](#_bookmark803)urn:oid:2.16.840.1.113883.3.520.4.14 **DYNAMIC** (CONF:1169- 32615).

This value **SHOULD** contain zero or one [0..1]

**@sdtc:valueSet**="2.16.840.1.113883.3.520.4.14" (CodeSystem:

NAACCR Behavior Code

urn:oid:2.16.840.1.113883.3.520.3.14 **STATIC**) (CONF:1169- 33703).

This value **SHOULD** contain zero or one [0..1] **originalTe****xt**

(CONF:1169-32477).

The originalText, if present, **SHOULD** contain zero or one [0..1]

**reference** (CONF:1169-32478).

Note: 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).

The reference, if present, **SHOULD** contain zero or one [0..1] **@value** (CONF:1169-32479).

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:1169-32614).

* + - 1. This value **SHALL** contain exactly one [1..1] **qualifi****er** (CONF:1169-33606) such that it

Note: This qualifier is used to indicate the Grade (or degree of differentiation) of tumor.

* + - * 1. **SHALL** contain exactly one [1..1] **name** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-33607).

This name **SHALL** contain exactly one [1..1] **@code**="21858-6" Grade Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34045).

This name **SHALL** contain exactly one [1..1]

**@codeSystem**="2.16.840.1.113883.6.1" CodeSystem: LOINC 2.16.840.1.113883.6.1 (CONF:1169-34046).

* + - * 1. **SHALL** contain exactly one [1..1] **value** (CONF:1169-33608).

Note: - If coded, the code value describing the grade of the tumor/cancer SHALL be provided in @code (associated @displayName and @codeSystem SHALL also be provided along with the @code).- If uncoded, the string value describing the grade of the tumor/cancer SHALL be provided within

<originalText> element.

This value **SHOULD** contain zero or one [0..1] **@code**, which **SHALL** be selected from ValueSet [**NAACCR Grade**](#_bookmark807)urn:oid:2.16.840.1.113883.3.520.4.15 (CONF:1169-33610).

This value **SHOULD** contain zero or one [0..1]

**@codeSystem**="2.16.840.1.113883.3.520.3.15" (CodeSystem: NAACCR Grade urn:oid:2.16.840.1.113883.3.520.3.15 **STATIC**) (CONF:1169-33609).

This value **SHOULD** contain zero or one [0..1] **@displayName**, which **SHALL** be selected from ValueSet [**NAACCR** **Grade**](#_bookmark807)urn:oid:2.16.840.1.113883.3.520.4.15 (CONF:1169-33611).

This value **SHOULD** contain zero or one [0..1]

**@sdtc:valueSet**="2.16.840.1.113883.3.520.4.15" (CodeSystem:

NAACCR Grade urn:oid:2.16.840.1.113883.3.520.3.15 **STATIC**) (CONF:1169-33704).

This value **SHOULD** contain zero or one [0..1] **originalTe****xt**

(CONF:1169-33612).

The originalText, if present, **SHOULD** contain zero or one [0..1]

**reference** (CONF:1169-33613).

The reference, if present, **SHOULD** contain zero or one [0..1] **@value** (CONF:1169-33614).

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:1169-33615).

* + - 1. This value **SHALL** contain exactly one [1..1] **qualifi****er** (CONF:1169-32490) such that it

Note: This qualifier provides Diagnostic Confirmation information, indicating the best method used to confirm the presence of the cancer being reported, such that

* + - * 1. **SHALL** contain exactly one [1..1] **name**="21861-0" Dx confirmed by Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169- 32481).

This name **SHALL** contain exactly one [1..1] **@code**="21861-0" Dx confirmed by Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34043).

This name **SHALL** contain exactly one [1..1]

**@codeSystem**="2.16.840.1.113883.6.1" CodeSystem: LOINC 2.16.840.1.113883.6.1 (CONF:1169-34044).

* + - * 1. **SHALL** contain exactly one [1..1] **value** (CONF:1169-32482).

Note: - If coded, the code value describing the best method of diagnosis of the tumor/cancer SHALL be provided in @code (associated @displayName and @codeSystem SHALL also be provided along with the @code).- If uncoded, the string value describing the best method of diagnosis of the tumor/cancer SHALL be provided within <originalText> element.

This value **SHOULD** contain zero or one [0..1] **@code**, which **SHALL** be selected from ValueSet [**NAACCR Diagnostic** **Confirmation**](#_bookmark805)urn:oid:2.16.840.1.113883.3.520.4.3 **DYNAMIC** (CONF:1169- 32483).

This value **SHOULD** contain zero or one [0..1]

**@codeSystem**="2.16.840.1.113883.3.520.3.3 " (CodeSystem: NAACCR Diagnostic Confirmation urn:oid:2.16.840.1.113883.3.520.3.3 **STATIC**) (CONF:1169- 32633).

This value **SHOULD** contain zero or one [0..1] **@displayName**, which **SHALL** be selected from ValueSet [**NAACCR Diagnostic**](#_bookmark805) [**Confirmation**](#_bookmark805) urn:oid:2.16.840.1.113883.3.520.4.3 **DYNAMI****C** (CONF:1169-32620).

This value **SHOULD** contain zero or one [0..1]

**@sdtc:valueSet**="2.16.840.1.113883.3.520.4.3" (CodeSystem:

NAACCR Diagnostic Confirmation urn:oid:2.16.840.1.113883.3.520.3.3 **STATIC**) (CONF:1169- 33705).

This value **SHOULD** contain zero or one [0..1] **originalTe****xt**

(CONF:1169-32484).

The originalText, if present, **SHOULD** contain zero or one [0..1]

**reference** (CONF:1169-32485).

Note: 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).

The reference, if present, **SHOULD** contain zero or one [0..1] **@value** (CONF:1169-32486).

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:1169-33181).

* + 1. **SHALL** contain exactly one [1..1] **targetSiteCode** (CONF:1169-32487).

Note: targetSiteCode indicates the anatomic location where the primary tumor originated (referred to as primary site).

* + - 1. This targetSiteCode **SHALL NOT** contain [0..0] **@nullFlavor** (CONF:1169-33247).
      2. This targetSiteCode **SHALL** contain exactly one [1..1] **@code** (CONF:1169-32488).
         1. The value for @code attribute **SHALL** be selected from:

(a) ICD-9-CM Volume 1 & 2 (CodeSystem: 2.16.840.1.113883.6.103) or (b) ICD-10-CM (CodeSystem: 2.16.840.1.113883.6.90) or

(c) Value Set: "Body Site" (ValueSet: 2.16.840.1.113883.3.88.12.3221.8.9) -

SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) or

(d) ICD-O-3 (CodeSystem: 2.16.840.1.113883.6.43.1) (CONF:1169-32489).

* + - 1. This targetSiteCode **SHALL** contain exactly one [1..1] **@codeSystem** (CONF:1169- 33182).
         1. The value for @codeSystem attribute **SHALL** be selected from:

(a) ICD-9-CM Volume 1 & 2 (CodeSystem: 2.16.840.1.113883.6.103) or (b) ICD-10-CM (CodeSystem: 2.16.840.1.113883.6.90) or

(c) SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) or

(d) ICD-O-3 (CodeSystem: 2.16.840.1.113883.6.43.1) (CONF:1169-33620).

* + - 1. This targetSiteCode **SHOULD** contain zero or one [0..1] **@displayName** (CONF:1169- 32638).
         1. The value for @displayName associated with @code **SHALL** be selected from: (a) ICD-9-CM Volume 1 & 2 (CodeSystem: 2.16.840.1.113883.6.103) or

(b) ICD-10-CM (CodeSystem: 2.16.840.1.113883.6.90) or

(c) Value Set: "Body Site" (ValueSet: 2.16.840.1.113883.3.88.12.3221.8.9) -

SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) or

(d) ICD-O-3 (CodeSystem: 2.16.840.1.113883.6.43.1) (CONF:1169-32639).

* + - 1. This targetSiteCode **SHOULD** contain zero or one [0..1] **@sdtc:valueSet** (CONF:1169- 33706).
         1. If the @code is selected from the Value Set "Body Site", then the value for

@valueSet **SHALL** be "2.16.840.1.113883.3.88.12.3221.8.9" (CONF:1169- 33707).

* + - 1. This targetSiteCode **SHALL** contain exactly one [1..1] **qualifier** (CONF:1169- 33008).
         1. This qualifier **SHALL** contain exactly one [1..1] **nam****e** (CONF:1169-33009).

This name **SHALL** contain exactly one [1..1] **@code**="20228-3" Anatomic part Laterality (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-33011).

This name **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:1169-33013).

This name **SHALL** contain exactly one [1..1]

**@codeSystemName**="LOINC" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-33014).

* + - * 1. This qualifier **SHALL** contain exactly one [1..1] **val****ue** (CONF:1169-33010). Note: This qualifier provides Laterality, the side of a paired organ, or the side of the body on which the reportable tumor originated.

This value **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [**Laterality**](#_bookmark809)urn:oid:2.16.840.1.113883.3.520.4.22 (CONF:1169-33012).

This value **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:1169-33015).

This value **SHALL** contain exactly one [1..1] **@displayName**, which **SHALL** be selected from ValueSet [**Late****rality**](#_bookmark809)urn:oid:2.16.840.1.113883.3.520.4.22 (CONF:1169-33185).

This value **SHALL** contain exactly one [1..1]

**@sdtc:valueSet**="2.16.840.1.113883.3.520.4.22" (CodeSystem: SNOMED CT urn:oid:2.16.840.1.113883.6.96 **STATIC**) (CONF:1169-33708).

This value **SHOULD** contain zero or one [0..1] **originalTe****xt**

(CONF:1169-33017).

The originalText, if present, **SHOULD** contain zero or one [0..1]

**reference** (CONF:1169-33018).

The reference, if present, **SHOULD** contain zero or one [0..1] **@value** (CONF:1169-33019).

* + 1. **SHALL** contain exactly one [1..1] **entryRelationship** (CONF:1169-32440) such that it
       1. **SHALL NOT** contain [0..0] **@nullFlavor** (CONF:1169-33186).
       2. **SHALL** contain exactly one [1..1] **@typeCode**="SUBJ" Has subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 **STATI****C**) (CONF:1169-32465).
       3. **SHALL** contain exactly one [1..1] **@inversionInd**="true" True (CONF:1169-32466). This entryRelationship SHALL contain either
       4. **SHALL** contain exactly one [1..1] [**TNM Clinical Stage Observation** **(V1.1)**](#_bookmark1987)(identifier: urn:hl7ii:2.16.840.1.113883.10.13.5:2015-02-05) (CONF:1169-32451).

Or

* + - 1. **SHALL** contain exactly one [1..1] [**No Known TNM Clinical Stage Observation**](#_bookmark1101) [**(V1.1)**](#_bookmark1101) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.31:2015-04-02) (CONF:1169-34365).
    1. **SHALL** contain exactly one [1..1] **entryRelationship** (CONF:1169-33177) such that it
       1. **SHALL NOT** contain [0..0] **@nullFlavor** (CONF:1169-33187).
       2. **SHALL** contain exactly one [1..1] **@typeCode**="SUBJ" Has subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1169- 33178).
       3. **SHALL** contain exactly one [1..1] **@inversionInd**="true" True (CONF:1169-33179).

This entryRelationship SHALL contain either

* + - 1. **SHALL** contain exactly one [1..1] [**TNM Pathologic Stage Observation** **(V1.1)**](#_bookmark2060)(identifier: urn:hl7ii:2.16.840.1.113883.10.13.7:2015-02-06) (CONF:1169-33180).

OR

* + - 1. **SHALL** contain exactly one [1..1] [**No Known TNM Pathologic Stage Observation**](#_bookmark1116) [**(V1.1)**](#_bookmark1116) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.32:2015-04-02) (CONF:1169-34366).
    1. **SHALL** contain at least one [1..\*] **entryRelations****hip** (CONF:1169-33192) such that it
       1. **SHALL** contain exactly one [1..1] **@typeCode**="REFR" Reference (CONF:1169-33194).
       2. **SHALL** contain exactly one [1..1] **observation** (CONF:1169-33193).
          1. This observation **SHALL** contain exactly one [1..1] **id** (CONF:1169-33195). Note: This "id" is used to link cancer diagnosis observation to the problem observation "id".

***Table*** ***68: NAACCR Behavior Code***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: NAACCR Behavior Code urn:oid:2.16.840.1.113883.3.520.4.14 Indication whether the tumor is benign, in situ, malignant or metastatic  Value Set Source: [**http://phinvads.cdc.gov/vads/ViewValueSet.action?id=533DA165-1730-**](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=533DA165-1730-E211-8ECF-001A4BE7FA90) [**E211-8ECF-001A4BE7FA90**](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=533DA165-1730-E211-8ECF-001A4BE7FA90) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 0 | NAACCR Behavior Code | urn:oid:2.16.840.1.11388 3.3.520.3.14 | Benign |
| 1 | NAACCR Behavior Code | urn:oid:2.16.840.1.11388 3.3.520.3.14 | Uncertain whether benign or malignant |
| 2 | NAACCR Behavior Code | urn:oid:2.16.840.1.11388 3.3.520.3.14 | In situ; non-invasive |
| 3 | NAACCR Behavior Code | urn:oid:2.16.840.1.11388 3.3.520.3.14 | Malignant, primary |
| 6 | NAACCR Behavior Code | urn:oid:2.16.840.1.11388 3.3.520.3.14 | Malignant, metastatic |
| 9 | NAACCR Behavior Code | urn:oid:2.16.840.1.11388 3.3.520.3.14 | Malignant, uncertain whether primary or metastatic |

***Tabl******e 69: NAACCR Diagnostic Confirmation***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: NAACCR Diagnostic Confirmation urn:oid:2.16.840.1.113883.3.520.4.3  Describes whether the cancer/tumor was microscopically confirmed or alternatively, the method of diagnosis.  Value Set Source: [**http://phinvads.cdc.gov/vads/ViewValueSet.action?id=F57C484F-DA04-**](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=F57C484F-DA04-E011-9273-00188B39829B) [**E011-9273-00188B39829B**](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=F57C484F-DA04-E011-9273-00188B39829B) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 1 | NAACCR Diagnostic Confirmation | urn:oid:2.16.840.1.11388 3.3.520.3.3 | Positive Histology |
| 2 | NAACCR Diagnostic Confirmation | urn:oid:2.16.840.1.11388 3.3.520.3.3 | Positive cytology, no positive histology |
| 3 | NAACCR Diagnostic Confirmation | urn:oid:2.16.840.1.11388 3.3.520.3.3 | Positive histology Plus positive immunophenotyping and/or positive genetic studies |
| ... | | | |

***Tabl******e 70: NAACCR Grade***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: NAACCR Grade urn:oid:2.16.840.1.113883.3.520.4.15  Code for the grade or degree of differentiation of the reportable tumor.  Value Set Source: [**http://phinvads.cdc.gov/vads/ViewValueSet.action?id=ED08D650-DD04-**](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=ED08D650-DD04-E011-9273-00188B39829B) [**E011-9273-00188B39829B**](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=ED08D650-DD04-E011-9273-00188B39829B) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 1 | NAACCR Grade | urn:oid:2.16.840.1.11388 3.3.520.3.15 | Grade I |
| 2 | NAACCR Grade | urn:oid:2.16.840.1.11388 3.3.520.3.15 | Grade II |
| 3 | NAACCR Grade | urn:oid:2.16.840.1.11388 3.3.520.3.15 | Gade III |
| 4 | NAACCR Grade | urn:oid:2.16.840.1.11388 3.3.520.3.15 | Grade IV |
| 5 | NAACCR Grade | urn:oid:2.16.840.1.11388 3.3.520.3.15 | T-cell |
| 6 | NAACCR Grade | urn:oid:2.16.840.1.11388 3.3.520.3.15 | B-cell |
| 7 | NAACCR Grade | urn:oid:2.16.840.1.11388 3.3.520.3.15 | Null cell |
| 8 | NAACCR Grade | urn:oid:2.16.840.1.11388 3.3.520.3.15 | NK (natural killer) cell |

***Table*** ***71: Laterality***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Laterality urn:oid:2.16.840.1.113883.3.520.4.22  Code for the side of a paired organ, or the side of the body on which the reportable tumor originated. Value Set Source:  [**http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.22**](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.22) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 24028007 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Right (qualifier value) |
| 7771000 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Left (qualifier value) |
| 66459002 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Unilateral (qualifier value) |
| 51440002 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Right and left (qualifier value) |
| 399488007 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Midline (qualifier value) |
| 261665006 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Unknown (qualifier value) |

***Table 72: Morphologic Abnormality of Neoplasms***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Morphologic Abnormality of Neoplasms 2.16.840.1.114222.4.11.7256  Contains codes descending from the following SNOMED CT® concepts: Malignant neoplasm of primary, secondary, or uncertain origin (morphologic abnormality) [367651003], Nervous system tumor morphology (morphologic abnormality) [253061008], Intratubular malignant germ cells (morphologic abnormality) [128902002], In situ melanocytic morphology (morphologic abnormality) [253035009], In situ neoplasm (morphologic abnormality) [127569003], Carcinoma in situ - category (morphologic abnormality) [399919001], Squamous intraepithelial neoplasia - category (morphologic abnormality) [399962000], In situ adenomatous neoplasm - category (morphologic abnormality) [399983006].  Also includes following SNOMED CT codes and any descendants of such codes: Chronic myeloproliferative disorder (morphologic abnormality) [115248004], Cavernous lymphangioma (morphologic abnormality) [89056007], Paraganglioma (morphologic abnormality) [803009], Craniopharyngioma (morphologic abnormality) [40009002], Craniopharyngioma, adamantinomatous (morphologic abnormality) [128781004], Craniopharyngioma, papillary (morphologic abnormality) [128782006], Pineocytoma (morphologic abnormality) [89096009], Pleomorphic adenoma (morphologic abnormality) [8360001], Intratubular malignant germ cells (morphologic abnormality) [128902002].  Value Set Source: <http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7256> | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 10069009 | SNOMED CT | 2.16.840.1.113883.6.96 | Giant cell tumor of bone, malignant |
| 10146008 | SNOMED CT | 2.16.840.1.113883.6.96 | Chief cell adenocarcinoma |
| 10288008 | SNOMED CT | 2.16.840.1.113883.6.96 | Squamous cell carcinoma, spindle cell |
| 103682005 | SNOMED CT | 2.16.840.1.113883.6.96 | Subcutaneous panniculitic T-cell lymphoma |
| 103685007 | SNOMED CT | 2.16.840.1.113883.6.96 | Hepatosplenic gamma- delta cell lymphoma |
| … | | | |

***Figure 42: Cancer Diagnosis Observation example***

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

<templateId root="2.16.840.1.113883.10.13.4" extension="2015-02-05"/>

<id root="5e0584ad-b4b0-421f-85f9-2c2c83c510cc"/>

<code code="29308-4" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Diagnosis"/>

<text>

<reference value="#Diagnosis\_1"/>

</text>

<statusCode code="completed"/>

<effectiveTime>

<low value="20120702"/>

<high nullFlavor="NA"/>

</effectiveTime>

<value xsi:type="CD" code="8140" codeSystem="2.16.840.1.113883.6.43.1" codeSystemName="ICD-O-3" displayName="Adenocarcinoma, NOS">

<originalText>

<reference value="#Histology\_1"/>

</originalText>

<qualifier>

<name code="31206-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Behavior ICD-O-3 Cancer"/>

<value xsi:type="CD" code="3" codeSystem="2.16.840.1.113883.3.520.3.14" codeSystemName="NAACCR Behavior Code" displayName="Malignant, Primary" sdtc:valueSet="2.16.840.1.113883.3.520.4.14">

<originalText>

<reference value="#Behavior\_1"/>

</originalText>

</value>

</qualifier>

<qualifier>

<name code="21858-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Grade Cancer"/>

<value code="II" codeSystem="2.16.840.1.113883.3.520.3.15" codeSystemName="NAACCR Grade" displayName="Grade II" sdtc:valueSet="2.16.840.1.113883.3.520.4.15">

<originalText>

<reference value="#Grade\_1"/>

</originalText>

</value>

</qualifier>

<qualifier>

<name code="21861-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Dx confirmed by Cancer"/>

<value xsi:type="CD" code="1" codeSystem="2.16.840.1.113883.3.520.3.3" codeSystemName="NAACCR Diagnostic Confirmation" displayName="Positive Histology" sdtc:valueSet="2.16.840.1.113883.3.520.4.3">

<originalText>

<reference value="#Confirmation\_1"/>

</originalText>

</value>

</qualifier>

</value>

<targetSiteCode code="181131000" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Entire breast" sdtc:valueSet="2.16.840.1.113883.3.88.12.3221.8.9">

<originalText>

<reference value="#PrimarySite\_1"/>

</originalText>

<qualifier>

<name code="20228-3" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Anatomic part Laterality "/>

<value code="24028007" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED-CT" displayName="Right (qualifier value)" sdtc:valueSet="2.16.840.1.113883.3.520.4.22">

<originalText>

<reference value="#Laterality\_1"/>

</originalText>

</value>

</qualifier>

</targetSiteCode>

<entryRelationship typeCode="SUBJ" inversionInd="true">

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

<templateId root="2.16.840.1.113883.10.13.5" extension="2015-02-05"/>

<id root="91473759-6678-48a2-a0d5-084c5ded5afc"/>

<code code="75620-5" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="TNM clinical staging before treatment panel Cancer"/>

<statusCode code="completed"/>

<effectiveTime>

<low value="20140801112102"/>

</effectiveTime>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.35" extension="2015-02-05"/>

<code code="21908-9" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Stage group.clinical"/>

<statusCode code="completed"/>

<value xsi:type="CD" code="IIB" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" sdtc:valueSet="2.16.840.1.113883.3.520.4.9">

<originalText>

<reference value="#ClinicalStageGroup\_1"/>

</originalText>

<qualifier>

<name code="21909-7" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Descriptor.clinical Cancer Narrative"/>

<value code="0" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" displayName="None" sdtc:valueSet="2.16.840.1.113883.3.520.4.10">

<originalText>

<reference value="#ClinicalNarrative\_1"/>

</originalText>

</value>

</qualifier>

</value>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.36" extension="2015-

02-05"/>

<code code="21905-5" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="Primary tumor.clinical [Class] Cancer"/>

<value xsi:type="CD" code="T2" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" displayName="Tumor &gt;

20 mm but &lt;= to 50 mm in greatest dimension" sdtc:valueSet="2.16.840.1.113883.3.520.4.6">

<originalText>

<reference value="#ClinicalPrimaryTumor\_1"/>

</originalText>

</value>

</observation>

</entryRelationship>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.37" extension="2015-

02-05"/>

<code code="21906-3" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="Regional lymph nodes.clinical [Class] Cancer"/>

<value xsi:type="CD" code="N1" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" displayName="Metastases to movable ipsilateral level I, II axillary lymph node(s)" sdtc:valueSet="2.16.840.1.113883.3.520.4.7">

<originalText>

<reference value="#ClinicalNode\_1"/>

</originalText>

</value>

</observation>

</entryRelationship>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.38" extension="2015-

02-05"/>

<code code="21907-1" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="Distant metastases.clinical [Class] Cancer"/>

<value xsi:type="CD" code="M0" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" displayName="No clinical or radiographic evidence of distant metastases" sdtc:valueSet="2.16.840.1.113883.3.520.4.8">

<originalText>

<reference value="#ClinicalMetasases\_1"/>

</originalText>

</value>

</observation>

</entryRelationship>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.39" extension="2015-

02-05"/>

<code code="21910-5" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="Stager.clinical Cancer "/>

<value xsi:type="CD" code="3" codeSystem="2.16.840.1.113883.3.520.3.4" codeSystemName="NAACCR TNM Clinical Staged By " displayName="Pathologist and managing physician" sdtc:valueSet="2.16.840.1.113883.3.520.4.4">

<originalText>

<reference value="#ClinicalStagedBy\_1"/>

</originalText>

</value>

</observation>

</entryRelationship>

</observation>

</entryRelationship>

</observation>

</entryRelationship>

<entryRelationship typeCode="SUBJ" inversionInd="true">

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

<templateId root="2.16.840.1.113883.10.13.7" extension="2015-02-06"/>

<id root="6d064a91-fdae-4acf-9eb8-e1695cf301c9"/>

<code code="75621-3" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="TNM pathologic staging after surgery panel"/>

<statusCode code="completed"/>

<effectiveTime>

<low value="20140801112253"/>

</effectiveTime>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.40" extension="2015-02-05"/>

<code code="21902-2" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Stage group.pathology Cancer"/>

<statusCode code="completed"/>

<value xsi:type="CD" code="IIB" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" sdtc:valueSet="2.16.840.1.113883.3.520.4.20">

<originalText>

<reference value="#PathologicStageGroup\_1"/>

</originalText>

<qualifier>

<name code="21903-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Descriptor.pathology Cancer Narrative "/>

<value code="0" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" sdtc:valueSet="2.16.840.1.113883.3.520.4.21"/>

</qualifier>

</value>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.41" extension="2015-

02-05"/>

<code code="21899-0" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="Primary tumor.pathology Cancer"/>

<value xsi:type="CD" code="T2" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" displayName="Tumor &gt;

20 mm but &lt;= to 50 mm in greatest dimension" sdtc:valueSet="2.16.840.1.113883.3.520.4.17"/>

</observation>

</entryRelationship>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.42" extension="2015-

02-05"/>

<code code="21900-6" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="Regional lymph nodes.pathology [Class] Cancer"/>

<value xsi:type="CD" code="N1" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" displayName="Micrometastases; or metastases in 1 to 3 axillary lymph nodes; and/or in internal mammary nodes with metastases detected by sentinel lymph node biopsy but not clinically detected." sdtc:valueSet="2.16.840.1.113883.3.520.4.18"/>

</observation>

</entryRelationship>

<entryRelationship typeCode="COMP">

02-05"/>

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

<templateId root="2.16.840.1.113883.10.13.43" extension="2015-

<code code="21901-4" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="Distant metastases.pathology [Class] Cancer"/>

<value xsi:type="CD" code="MX" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" sdtc:valueSet="2.16.840.1.113883.3.520.4.19"/>

</observation>

</entryRelationship>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.44" extension="2015-

02-05"/>

<code code="21904-8" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="Stager.pathology Cancer"/>

<value xsi:type="CD" code="3" codeSystem="2.16.840.1.113883.3.520.3.17" codeSystemName="NAACCR TNM Pathologic Staged By" displayName="Pathologist and managing physician" sdtc:valueSet="2.16.840.1.113883.3.520.4.27"/>

</observation>

</entryRelationship>

</observation>

</entryRelationship>

</observation>

</entryRelationship>

<entryRelationship typeCode="REFR">

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

<id root="ab1791b0-5c71-11db-b0de-0800200c9a66"/>

<code code="64572001" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Condition"/>

</observation>

</entryRelationship>

</observation>

## Coverage Activity (V2) - Published

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

***Table 73: Coverage Activity (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Payers Section (V2)](#_bookmark456) (optional) | [Policy Activity (V2)](#_bookmark1260) |

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 74: Coverage Activity (V2) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.60:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-](#_bookmark816)  [8872](#_bookmark816) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1098-](#_bookmark817)  [8873](#_bookmark817) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark818)  [8897](#_bookmark818) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark819)  [10492](#_bookmark819) | 2.16.840.1.113883.10.20.22.4.60 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark820)  [32596](#_bookmark820) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-](#_bookmark821)  [8874](#_bookmark821) |  |
| code | 1..1 | SHALL |  | [1098-](#_bookmark822)  [8876](#_bookmark822) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark823)  [19160](#_bookmark823) | 48768-6 |
| @codeSystem | 1..1 | SHALL |  | [1098-](#_bookmark824)  [32156](#_bookmark824) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1098-](#_bookmark825)  [8875](#_bookmark825) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark826)  [19094](#_bookmark826) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = completed |
| entryRelationship | 1..\* | SHALL |  | [1098-](#_bookmark827)  [8878](#_bookmark827) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark828)  [8879](#_bookmark828) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = COMP |
| sequenceNumber | 0..1 | MAY |  | [1098-](#_bookmark829)  [17174](#_bookmark829) |  |
| @value | 1..1 | SHALL |  | [1098-](#_bookmark830)  [17175](#_bookmark830) |  |
| act | 1..1 | SHALL |  | [1098-](#_bookmark831)  [15528](#_bookmark831) | [Policy Activity (V2) (identifier:](#_bookmark1260)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark1260)  [0.22.4.61:2014-06-09](#_bookmark1260) |

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

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.60"

(CONF:1098-10492).

b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32596).

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1098-8874).
    2. **SHALL** contain exactly one [1..1] **code** (CONF:1098-8876).
       1. This code **SHALL** contain exactly one [1..1] **@code**="48768-6" Payment sources (CONF:1098-19160).
       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:1098-32156).

* + 1. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-8875).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098- 19094).
    2. **SHALL** contain at least one [1..\*] **entryRelations****hip** (CONF:1098-8878) 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 **STATI****C**) (CONF:1098-8879).
       2. **MAY** contain zero or one [0..1] **sequenceNumber** (CONF:1098-17174).
          1. The sequenceNumber, if present, **SHALL** contain exactly one [1..1] **@value**

(CONF:1098-17175).

* + - 1. **SHALL** contain exactly one [1..1] [**Policy Activity (V2)**](#_bookmark1260) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.61:2014-06-09) (CONF:1098- 15528).

***Figure 43: Coverage Activity (V2) Example***

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

<templateId root="2.16.840.1.113883.10.20.22.4.60" extension="2014-06-09" />

<id root="1fe2cdd0-7aad-11db-9fe1-0800200c9a66" />

<code code="48768-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Payment sources" />

<statusCode code="completed" />

<entryRelationship typeCode="COMP">

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

<sequenceNumber value="2" />

<templateId root="2.16.840.1.113883.10.20.22.4.61" extension="2014-06-09" />

. . .

</act>

</entryRelationship>

</act>

## Distant Metastases Clinical - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.13.38:2015-02-05 (open)]

***Table 75: Distant Metastases Clinical Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [TNM Clinical Stage Group](#_bookmark1937) (required) |  |

This template records the results of evaluating whether the cancer has metastasized or distantly spread in the body, usually through the vascular and/or lymphatic channels.

***Table 76: Distant Metastases Clinical Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.13.38:2015-02-05) | | | | | |
| @classCode | 1..1 | SHALL |  | [1169-](#_bookmark837)  [34115](#_bookmark837) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1169-](#_bookmark838)  [34116](#_bookmark838) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1169-](#_bookmark839)  [34251](#_bookmark839) |  |
| @root | 1..1 | SHALL |  | [1169-](#_bookmark840)  [34252](#_bookmark840) | 2.16.840.1.113883.10.13.38 |
| @extension | 1..1 | SHALL |  | [1169-](#_bookmark841)  [34253](#_bookmark841) | 2015-02-05 |
| code | 1..1 | SHALL |  | [1169-](#_bookmark842)  [34117](#_bookmark842) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark843)  [34118](#_bookmark843) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 21907-1 |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark844)  [34119](#_bookmark844) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| value | 1..1 | SHALL | CD | [1169-](#_bookmark845)  [34120](#_bookmark845) |  |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark846)  [34121](#_bookmark846) | urn:oid:2.16.840.1.113883.3.520.  4.8 (TNM Clinical Metastasis) |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark847)  [34122](#_bookmark847) | urn:oid:2.16.840.1.113883.15.6  (TNM 7. Edition) = 2.16.840.1.113883.15.6 |
| @sdtc:valueSet | 1..1 | SHALL |  | [1169-](#_bookmark848)  [34123](#_bookmark848) | urn:oid:2.16.840.1.113883.15.6  (TNM 7. Edition) = 2.16.840.1.113883.3.520.4.8 |
| originalText | 0..1 | SHOUL D |  | [1169-](#_bookmark849)  [34124](#_bookmark849) |  |
| reference | 0..1 | SHOUL D |  | [1169-](#_bookmark850)  [34125](#_bookmark850) |  |
| @value | 0..1 | SHOUL D |  | [1169-](#_bookmark851)  [34126](#_bookmark851) |  |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1169-34115).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1169-34116).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1169-34251) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.38"

(CONF:1169-34252).

b. **SHALL** contain exactly one [1..1] **@extension**="2015-02-05" (CONF:1169-34253).

* + 1. **SHALL** contain exactly one [1..1] **code** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34117).
       1. This code **SHALL** contain exactly one [1..1] **@code**="21907-1" Distant metastases.clinical [Class] Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34118).
       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:1169-34119).

* + 1. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD" (CONF:1169-34120).
       1. This value **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [**TNM Clinical Metastasis**](#_bookmark853) urn:oid:2.16.840.1.113883.3.520.4.8 (CONF:1169-34121).
       2. This value **SHALL** contain exactly one [1..1]

**@codeSystem**="2.16.840.1.113883.15.6" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1169-34122).

* + - 1. This value **SHALL** contain exactly one [1..1]

**@sdtc:valueSet**="2.16.840.1.113883.3.520.4.8" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1169-34123).

* + - 1. This value **SHOULD** contain zero or one [0..1] **originalTe****xt** (CONF:1169-34124).
         1. The originalText, if present, **SHOULD** contain zero or one [0..1] **reference**

(CONF:1169-34125).

The reference, if present, **SHOULD** contain zero or one [0..1] **@value**

(CONF:1169-34126).

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:1169-34127).

***Table*** ***77: TNM Clinical Metastasis***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: TNM Clinical Metastasis urn:oid:2.16.840.1.113883.3.520.4.8  Detailed site-specific codes for the clinical tumor (M) as defined by AJCC and recorded by the physician.  Note: The AJCC Staging Manual TNM system is proprietary and its definitions cannot be included in other documents without permission.  Value Set Source:  [**http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.8**](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.8) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| MX | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | Site specific descriptions prevent listing of text equivalents. |
| M1C | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| M1B | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| M1A | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| M1 | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| M0 | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| Not applicable (no AJCC staging scheme) | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| M0+ | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| M0I+ | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| M1d | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| ... | | | |

***Figure 44: Distant Metastases Clinical example***

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

<templateId root="2.16.840.1.113883.10.13.38" extension="2015-02-05" />

<code code="21907-1" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Distant metastases.clinical [Class] Cancer" />

<value xsi:type="CD" code="M0" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM

7. Edition" displayName="No clinical or radiographic evidence of distant metastases" sdtc:valueSet="2.16.840.1.113883.3.520.4.8">

<originalText>

<reference value="#ClinicalMetasases\_1" />

</originalText>

</value>

</observation>

## Distant Metastases Pathologic - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.13.43:2015-02-05 (open)]

***Table 78: Distant Metastases Pathologic Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [TNM Pathologic Stage Group](#_bookmark2010) (required) |  |

This template records the results of evaluating whether the cancer has metastasized or distantly spread in the body, usually through the vascular and/or lymphatic channels.

***Table 79: Distant Metastases Pathologic Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.13.43:2015-02-05) | | | | | |
| @classCode | 1..1 | SHALL |  | [1169-](#_bookmark859)  [34219](#_bookmark859) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1169-](#_bookmark860)  [34220](#_bookmark860) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1169-](#_bookmark861)  [34218](#_bookmark861) |  |
| @root | 1..1 | SHALL |  | [1169-](#_bookmark862)  [34221](#_bookmark862) | 2.16.840.1.113883.10.13.43 |
| @extension | 1..1 | SHALL |  | [1169-](#_bookmark863)  [34222](#_bookmark863) | 2015-02-05 |
| code | 1..1 | SHALL |  | [1169-](#_bookmark864)  [34223](#_bookmark864) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark865)  [34224](#_bookmark865) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 21901-4 |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark866)  [34225](#_bookmark866) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| value | 1..1 | SHALL | CD | [1169-](#_bookmark867)  [34226](#_bookmark867) |  |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark868)  [34227](#_bookmark868) | urn:oid:2.16.840.1.113883.3.520.  4.19 (TNM Pathologic Metastasis) |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark869)  [34228](#_bookmark869) | urn:oid:2.16.840.1.113883.15.6  (TNM 7. Edition) = 2.16.840.1.113883.15.6 |
| @sdtc:valueSet | 1..1 | SHALL |  | [1169-](#_bookmark870)  [34229](#_bookmark870) | urn:oid:2.16.840.1.113883.15.6  (TNM 7. Edition) = 2.16.840.1.113883.3.520.4.19 |
| originalText | 0..1 | SHOUL D |  | [1169-](#_bookmark871)  [34230](#_bookmark871) |  |
| reference | 0..1 | SHOUL D |  | [1169-](#_bookmark872)  [34231](#_bookmark872) |  |
| @value | 0..1 | SHOUL D |  | [1169-](#_bookmark873)  [34232](#_bookmark873) |  |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1169-34219).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1169-34220).
    2. **SHALL** contain exactly one [1..1] **templa****teId** (CONF:1169-34218) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.43"

(CONF:1169-34221).

**SHALL** contain exactly one [1..1] **@extension**="2015-02-05" (CONF:1169-34222).

* + 1. **SHALL** contain exactly one [1..1] **code** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34223).
       1. This code **SHALL** contain exactly one [1..1] **@code**="21901-4" Distant metastases.pathology [Class] Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34224).
       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:1169-34225).

* + 1. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD" (CONF:1169-34226).
       1. This value **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [**TNM Pathologic Metastasis**](#_bookmark875)urn:oid:2.16.840.1.113883.3.520.4.19 (CONF:1169-34227).
       2. This value **SHALL** contain exactly one [1..1]

**@codeSystem**="2.16.840.1.113883.15.6" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1169-34228).

* + - 1. This value **SHALL** contain exactly one [1..1]

**@sdtc:valueSet**="2.16.840.1.113883.3.520.4.19" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1169-34229).

* + - 1. This value **SHOULD** contain zero or one [0..1] **originalTe****xt** (CONF:1169-34230).
         1. The originalText, if present, **SHOULD** contain zero or one [0..1] **reference**

(CONF:1169-34231).

The reference, if present, **SHOULD** contain zero or one [0..1] **@value**

(CONF:1169-34232).

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:1169-34233).

***Table*** ***80: TNM Pathologic Metastasis***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: TNM Pathologic Metastasis urn:oid:2.16.840.1.113883.3.520.4.19  Detailed site-specific codes for the pathologic metastasis (M) as defined by AJCC and recorded by the physician.  Note: The AJCC Staging Manual TNM system is proprietary and its definitions cannot be included in other documents without permission.  Value Set Source:  [**http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.19**](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.19) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| M0 | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | Site specific descriptions prevent listing of text equivalents. |
| M1 | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| M1a | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| M1b | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| M1c | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| M1d | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| M1e | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| M1m | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| M1m1 | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| MX | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |

***Figure 45: Distant Metastases Pathologic example***

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

<templateId root="2.16.840.1.113883.10.13.43" extension="2015-02-05" />

<code code="21901-4" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Distant metastases.pathology [Class] Cancer" />

<value xsi:type="CD" code="MX" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" sdtc:valueSet="2.16.840.1.113883.3.520.4.19" />

</observation>

## Employment History Observation Organizer (V1.1) - Published

[organizer: identifier urn:hl7ii:2.16.840.1.113883.10.13.16:2015-01-29 (open)]

***Table 81: Employment History Observation Organizer (V1.1) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Social History Section (V2) - Cancer IG Specific](#_bookmark638)  [Constraints (V1.1)](#_bookmark638) (required) | [Usual Industry History](#_bookmark2107)  [Usual Occupation History](#_bookmark2132) |

***Table 82: Employment History Observation Organizer (V1.1) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| organizer (identifier: urn:hl7ii:2.16.840.1.113883.10.13.16:2015-01-29) | | | | | |
| @nullFlavor | 0..1 | MAY |  | [1169-](#_bookmark881)  [34250](#_bookmark881) |  |
| @classCode | 1..1 | SHALL |  | [1169-](#_bookmark882)  [32701](#_bookmark882) | CLUSTER |
| @moodCode | 1..1 | SHALL |  | [1169-](#_bookmark883)  [32702](#_bookmark883) | EVN |
| templateId | 1..1 | SHALL |  | [1169-](#_bookmark884)  [33070](#_bookmark884) |  |
| @root | 1..1 | SHALL |  | [1169-](#_bookmark885)  [33071](#_bookmark885) | 2.16.840.1.113883.10.13.16 |
| @extension | 1..1 | SHALL |  | [1169-](#_bookmark886)  [33957](#_bookmark886) | 2015-01-29 |
| component | 1..1 | SHALL |  | [1169-](#_bookmark887)  [32704](#_bookmark887) |  |
| @typeCode | 1..1 | SHALL |  | [1169-](#_bookmark888)  [32705](#_bookmark888) | COMP |
| @contextConductionInd | 1..1 | SHALL |  | [1169-](#_bookmark889)  [32706](#_bookmark889) | true |
| observation | 1..1 | SHALL |  | [1169-](#_bookmark890)  [32707](#_bookmark890) | [Usual Industry History (identifier:](#_bookmark2107)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark2107)  [3.33:2015-01-29](#_bookmark2107) |
| component | 1..1 | SHALL |  | [1169-](#_bookmark891)  [32712](#_bookmark891) |  |
| @typeCode | 1..1 | SHALL |  | [1169-](#_bookmark892)  [32713](#_bookmark892) | COMP |
| @contextConductionInd | 1..1 | SHALL |  | [1169-](#_bookmark893)  [32714](#_bookmark893) | true |
| observation | 1..1 | SHALL |  | [1169-](#_bookmark894)  [32715](#_bookmark894) | [Usual Occupation History](#_bookmark2132)  [(identifier:](#_bookmark2132)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark2132)  [3.34:2015-01-29](#_bookmark2132) |

* + 1. **MAY** contain zero or one [0..1] **@nullFlavor** (CONF:1169-34250).
    2. **SHALL** contain exactly one [1..1] **@classCode**="CLUSTER" (CONF:1169-32701).
    3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CONF:1169-32702).
    4. **SHALL** contain exactly one [1..1] **templateId** (CONF:1169-33070).
       1. This templateId **SHALL** contain exactly one [1..1]

**@root**="2.16.840.1.113883.10.13.16" (CONF:1169-33071).

* + - 1. This templateId **SHALL** contain exactly one [1..1] **@extension**="2015-01-29"

(CONF:1169-33957).

If organizer/@nullFlavor is not present:

* + 1. **SHALL** contain exactly one [1..1] **component** (CONF:1169-32704) such that it
       1. **SHALL** contain exactly one [1..1] **@typeCode**="COMP" (CONF:1169-32705).
       2. **SHALL** contain exactly one [1..1] **@contextConductionInd**="true" (CONF:1169- 32706).
       3. **SHALL** contain exactly one [1..1] [**Usual Industry** **History**](#_bookmark2107) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.33:2015-01-29) (CONF:1169-32707).

If organizer/@nullFlavor is not present:

* + 1. **SHALL** contain exactly one [1..1] **component** (CONF:1169-32712) such that it
       1. **SHALL** contain exactly one [1..1] **@typeCode**="COMP" (CONF:1169-32713).
       2. **SHALL** contain exactly one [1..1] **@contextConductionInd**="true" (CONF:1169- 32714).
       3. **SHALL** contain exactly one [1..1] [**Usual Occupation** **History**](#_bookmark2132) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.34:2015-01-29) (CONF:1169-32715).

***Figure 46: Employment History Observation Organizer example***

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

<templateId root="2.16.840.1.113883.10.13.16" extension="2015-01-29" />

<!-- Employment history observation organizer -->

<statusCode code="completed" />

<component typeCode="COMP" contextConductionInd="true">

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

<templateId root="2.16.840.1.113883.10.13.33" extension="2015-01-29" />

<code code="21844-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Usual industry Hx" />

<effectiveTime>

<low value="20010101" />

</effectiveTime>

<value xsi:type="CD" code="7280" codeSystem="2.16.840.1.114222.4.5.315" codeSystemName="Industry CDC Census 2010" displayName="Accounting, tax preparation, bookkeeping, and payroll services" sdtc:valueSet="2.16.840.1.114222.4.11.7187">

<originalText>

<reference value="#Industry\_1" />

</originalText>

</value>

</observation>

</component>

<component typeCode="COMP" contextConductionInd="true">

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

<templateId root="2.16.840.1.113883.10.13.34" extension="2015-01-29" />

<code code="21843-8" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Usual occupation Hx" />

<effectiveTime>

<low value="20010101" />

</effectiveTime>

<value xsi:type="CD" code="0800" codeSystem="2.16.840.1.114222.4.5.314" codeSystemName="Occupation CDC Census 2010" displayName="Accountants and auditors" sdtc:valueSet="2.16.840.1.114222.4.11.7186">

<originalText>

<reference value="#Occupation\_1" />

</originalText>

</value>

</observation>

</component>

</organizer>

## Family History Observation (V2) - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.46:2014-06-09 (open)]

***Table 83: Family History Observation (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Family History Organizer (V2)](#_bookmark924) (required) |  |

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 84: Family History Observation (V2) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.46:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-](#_bookmark900)  [8586](#_bookmark900) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-](#_bookmark901)  [8587](#_bookmark901) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark902)  [8599](#_bookmark902) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark903)  [10496](#_bookmark903) | 2.16.840.1.113883.10.20.22.4.46 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark904)  [32605](#_bookmark904) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-](#_bookmark905)  [8592](#_bookmark905) |  |
| code | 1..1 | SHALL |  | [1098-](#_bookmark906)  [32427](#_bookmark906) | urn:oid:2.16.840.1.113883.3.88.1  2.3221.7.2 (Problem Type) |
| statusCode | 1..1 | SHALL |  | [1098-](#_bookmark907)  [8590](#_bookmark907) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark908)  [19098](#_bookmark908) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = completed |
| effectiveTime | 0..1 | SHOUL D |  | [1098-](#_bookmark909)  [8593](#_bookmark909) |  |
| value | 1..1 | SHALL | CD | [1098-](#_bookmark910)  [8591](#_bookmark910) | urn:oid:2.16.840.1.113883.3.88.1  2.3221.7.4 (Problem) |
| entryRelationship | 0..1 | MAY |  | [1098-](#_bookmark911)  [8675](#_bookmark911) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark912)  [8676](#_bookmark912) | urn:oid:2.16.840.1.113883.5.90  (HL7ParticipationType) = SUBJ |
| @inversionInd | 1..1 | SHALL |  | [1098-](#_bookmark913)  [8677](#_bookmark913) | true |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark914)  [15526](#_bookmark914) | Age Observation (identifier: urn:oid:2.16.840.1.113883.10.20. 22.4.31 |
| entryRelationship | 0..1 | MAY |  | [1098-](#_bookmark915)  [8678](#_bookmark915) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark916)  [8679](#_bookmark916) | urn:oid:2.16.840.1.113883.5.90  (HL7ParticipationType) = CAUS |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark917)  [15527](#_bookmark917) | Family History Death Observation (identifier: urn:oid:2.16.840.1.113883.10.20. 22.4.47 |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATI****C**) (CONF:1098-8586).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-8587).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-8599) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.46"

(CONF:1098-10496).

b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32605).

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1098-8592).
    2. **SHALL** contain exactly one [1..1] **code**, which **SHOULD** be selected from ValueSet **[Problem](#_bookmark919)**  [**Type**](#_bookmark919) urn:oid:2.16.840.1.113883.3.88.12.3221.7.2 **STATIC** 2014-09-02 (CONF:1098- 32427).
    3. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-8590).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098- 19098).
    4. **SHOULD** contain zero or one [0..1] **effectiveTime** (CONF:1098-8593).
    5. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD", where the code **SHALL** be selected from ValueSet **[Problem](#_bookmark921)** urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 **DYNAMIC** (CONF:1098-8591).
    6. **MAY** contain zero or one [0..1] **entryRelationshi****p** (CONF:1098-8675) such that it
       1. **SHALL** contain exactly one [1..1] **@typeCode**="SUBJ" Subject (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 **STATI****C**) (CONF:1098- 8676).
       2. **SHALL** contain exactly one [1..1] **@inversionInd**="true" True (CONF:1098-8677).
       3. **SHALL** contain exactly one [1..1] Age Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.31) (CONF:1098-15526).
    7. **MAY** contain zero or one [0..1] **entryRelationshi****p** (CONF:1098-8678) 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:1098-8679).
       2. **SHALL** contain exactly one [1..1] Family History Death Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.47) (CONF:1098-15527).

***Table*** ***85: Problem Type***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Problem Type urn:oid:2.16.840.1.113883.3.88.12.3221.7.2  This value set indicates the level of medical judgment used to determine the existence of a problem. Value Set Source: [**http://www.loinc.org/**](http://www.loinc.org/) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 75326-9 | LOINC | urn:oid:2.16.840.1.11388 3.6.1 | Problem HL7.CCDAR2 |
| 75325-1 | LOINC | urn:oid:2.16.840.1.11388 3.6.1 | Symptom HL7.CCDAR2 |
| 75324-4 | LOINC | urn:oid:2.16.840.1.11388 3.6.1 | Functional performance HL7.CCDAR2 |
| 75323-6 | LOINC | urn:oid:2.16.840.1.11388 3.6.1 | Functional performance HL7.CCDAR2 |
| 75323-6 | LOINC | urn:oid:2.16.840.1.11388 3.6.1 | Condition HL7.CCDAR2 |
| 29308-4 | LOINC | urn:oid:2.16.840.1.11388 3.6.1 | Diagnosis |
| 75322-8 | LOINC | urn:oid:2.16.840.1.11388 3.6.1 | Complaint HL7.CCDAR2 |
| 75321-0 | LOINC | urn:oid:2.16.840.1.11388 3.6.1 | Clinical finding HL7.CCDAR2 |
| 75319-4 | LOINC | urn:oid:2.16.840.1.11388 3.6.1 | Cognitive function family member HL7.CCDAR2 |
| 75319-4 | LOINC | urn:oid:2.16.840.1.11388 3.6.1 | Cognitive function family member HL7.CCDAR2 |
| ... | | | |

***Table*** ***86: Problem***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Problem urn:oid:2.16.840.1.113883.3.88.12.3221.7.4  A value set of SNOMED-CT codes limited to terms descending from the Clinical Findings (404684003) or Situation with Explicit Context (243796009) hierarchies.  Specific URL Pending Value Set Source:  [**http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.322**](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.3221.7.4)[**1.7.4**](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.3221.7.4) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 46635009 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | diabetes mellitus type 1 |
| 234422006 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | acute intermittent porphyria |
| 31712002 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | primary biliary cirrhosis |
| 302002000 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | difficulty moving |
| 15188001 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | hearing loss |
| 129851009 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | alteration in bowel elimination |
| 247472004 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | hives |
| 39579001 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | anaphylaxis |
| 274945004 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | AA amyloidosis (disorder) |
| 129851009 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | alteration in comfort: pain |
| ... | | | |

***Figure 47: Family History Observation (V2) Example***

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

<templateId root="2.16.840.1.113883.10.20.22.4.46" extension="2014-06-09" />

<!-- Family History Observation template -->

<id root="d42ebf70-5c89-11db-b0de-0800200c9a66" />

<code code="75315-2" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Condition Family Member"/>

<statusCode code="completed" />

<effectiveTime value="1967" />

<value xsi:type="CD" code="408643008" codeSystem="2.16.840.1.113883.6.96" displayName="Infiltrating duct carcinoma of breast" />

<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 (V2) - Published

[organizer: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.45:2014-06-09 (open)]

***Table 87: Family History Organizer (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Family History Section (V2)](#_bookmark390) (optional) | [Family History Observation (V2)](#_bookmark897) |

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 88: Family History Organizer (V2) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| organizer (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.45:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-](#_bookmark927)  [8600](#_bookmark927) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = CLUSTER |
| @moodCode | 1..1 | SHALL |  | [1098-](#_bookmark928)  [8601](#_bookmark928) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark929)  [8604](#_bookmark929) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark930)  [10497](#_bookmark930) | 2.16.840.1.113883.10.20.22.4.45 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark931)  [32606](#_bookmark931) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-](#_bookmark932)  [32485](#_bookmark932) |  |
| statusCode | 1..1 | SHALL |  | [1098-](#_bookmark933)  [8602](#_bookmark933) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark934)  [19099](#_bookmark934) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = completed |
| subject | 1..1 | SHALL |  | [1098-](#_bookmark935)  [8609](#_bookmark935) |  |
| relatedSubject | 1..1 | SHALL |  | [1098-](#_bookmark936)  [15244](#_bookmark936) |  |
| @classCode | 1..1 | SHALL |  | [1098-](#_bookmark937)  [15245](#_bookmark937) | urn:oid:2.16.840.1.113883.5.41  (EntityClass) = PRS |
| code | 1..1 | SHALL |  | [1098-](#_bookmark938)  [15246](#_bookmark938) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark939)  [15247](#_bookmark939) | urn:oid:2.16.840.1.113883.1.11.1  9579 (Family Member Value Set) |
| subject | 0..1 | SHOUL D |  | [1098-](#_bookmark940)  [15248](#_bookmark940) |  |
| administrativeGenderCode | 1..1 | SHALL |  | [1098-](#_bookmark941)  [15974](#_bookmark941) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark942)  [15975](#_bookmark942) | urn:oid:2.16.840.1.113883.1.11.1  (Administrative Gender (HL7 V3)) |
| birthTime | 0..1 | SHOUL D |  | [1098-](#_bookmark943)  [15976](#_bookmark943) |  |
| component | 1..\* | SHALL |  | [1098-](#_bookmark944)  [32428](#_bookmark944) |  |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark945)  [32429](#_bookmark945) | [Family History Observation (V2)](#_bookmark897)  [(identifier:](#_bookmark897)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark897)  [0.22.4.46:2014-06-09](#_bookmark897) |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="CLUSTER" Cluster (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATI****C**) (CONF:1098-8600).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-8601).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-8604) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.45"

(CONF:1098-10497).

b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32606).

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1098-32485).
    2. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-8602).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098- 19099).
    3. **SHALL** contain exactly one [1..1] **subject** (CONF:1098-8609).
       1. This subject **SHALL** contain exactly one [1..1] **relatedSubje****ct** (CONF:1098-15244).
          1. This relatedSubject **SHALL** contain exactly one [1..1] **@classCode**="PRS" Person (CodeSystem: EntityClass urn:oid:2.16.840.1.113883.5.41 **STATIC**) (CONF:1098-15245).
          2. This relatedSubject **SHALL** contain exactly one [1..1] **code** (CONF:1098- 15246).

This code **SHALL** contain exactly one [1..1] **@code**, which **SHOULD** be selected from ValueSet [**Family Member Value Set**](#_bookmark947)urn:oid:2.16.840.1.113883.1.11.19579 **DYNAMI****C** (CONF:1098- 15247).

* + - * 1. This relatedSubject **SHOULD** contain zero or one [0..1] **subject** (CONF:1098- 15248).

The subject, if present, **SHALL** contain exactly one [1..1]

**administrativeGenderCode** (CONF:1098-15974).

This administrativeGenderCode **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [**Administrative Gender (HL7 V3)**](#_bookmark331)urn:oid:2.16.840.1.113883.1.11.1 **DYNAMI****C** (CONF:1098- 15975).

The subject, if present, **SHOULD** contain zero or one [0..1] **birthTime**

(CONF:1098-15976).

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:1098-15249).

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:1098-15981).

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:1098-15982).

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:1098-15983).

**SHALL** contain at least one [1..\*] **component** (CONF:1098-32428).

Such components **SHALL** contain exactly one [1..1] [**Family History Observation**](#_bookmark897) **[(V2)](#_bookmark897)** (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.46:2014-06- 09) (CONF:1098-32429).

***Table*** ***89: Family Member Value Set***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Family Member Value Set urn:oid:2.16.840.1.113883.1.11.19579  Family Relationships record the familial relationship of a person to another person. This value set is to be used when it is necessary to record family relationships (e.g., next of kin, or blood relations). This is a subset of the value set used for personal relationships  Value Set Source: [**http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary\_tables/in**](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm)[**frastructure/vocabulary/vocabulary.htm**](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| ADOPT | RoleCode | urn:oid:2.16.840.1.11388 3.5.111 | adopted child |
| AUNT | RoleCode | urn:oid:2.16.840.1.11388 3.5.111 | aunt |
| CHILD | RoleCode | urn:oid:2.16.840.1.11388 3.5.111 | Child |
| CHLDINLAW | RoleCode | urn:oid:2.16.840.1.11388 3.5.111 | child in-law |
| COUSN | RoleCode | urn:oid:2.16.840.1.11388 3.5.111 | cousin |
| DOMPART | RoleCode | urn:oid:2.16.840.1.11388 3.5.111 | domestic partner |
| FAMMEMB | RoleCode | urn:oid:2.16.840.1.11388 3.5.111 | Family Member |
| CHLDFOST | RoleCode | urn:oid:2.16.840.1.11388 3.5.111 | foster child |
| GRNDCHILD | RoleCode | urn:oid:2.16.840.1.11388 3.5.111 | grandchild |
| GRPRN | RoleCode | urn:oid:2.16.840.1.11388 3.5.111 | Grandparent |
| ... | | | |

***Figure 48: Family History Organizer (V2) Example***

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

<templateId root="2.16.840.1.113883.10.20.22.4.45" extension="2014-06-09" />

<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" />

<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" />

. . .

</observation>

</component>

</organizer>

## Health Status Observation (V2) - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.5:2014-06-09 (open)]

***Table 90: Health Status Observation (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Problem Section (entries required) (V2)](#_bookmark520) (optional)  [Cancer Diagnosis Section (entries required) (V1.1)](#_bookmark372) (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 91: 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-](#_bookmark953)  [9057](#_bookmark953) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-](#_bookmark954)  [9072](#_bookmark954) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark955)  [16756](#_bookmark955) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark956)  [16757](#_bookmark956) | 2.16.840.1.113883.10.20.22.4.5 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark957)  [32558](#_bookmark957) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-](#_bookmark958)  [32486](#_bookmark958) |  |
| code | 1..1 | SHALL |  | [1098-](#_bookmark959)  [19143](#_bookmark959) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark960)  [19144](#_bookmark960) | 11323-3 |
| @codeSystem | 1..1 | SHALL |  | [1098-](#_bookmark961)  [32161](#_bookmark961) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1098-](#_bookmark962)  [9074](#_bookmark962) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark963)  [19103](#_bookmark963) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = completed |
| value | 1..1 | SHALL | CD | [1098-](#_bookmark964)  [9075](#_bookmark964) | urn:oid:2.16.840.1.113883.1.11.2  0.12 (HealthStatus) |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATI****C**) (CONF:1098-9057).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATI****C**) (CONF:1098-9072).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-16756) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.5"

(CONF:1098-16757).

**SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32558).

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1098-32486).
    2. **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).

* + 1. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-9074).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098- 19103).
    2. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD", where the code **SHALL** be selected from ValueSet **[HealthStatus](#_bookmark966)** urn:oid:2.16.840.1.113883.1.11.20.12 **DYNAMIC** (CONF:1098-9075).

***Table*** ***92: HealthStatus***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: HealthStatus urn:oid:2.16.840.1.113883.1.11.20.12 Represents the general health status of the patient.  Value Set Source: [**https://www.hl7.org/**](https://www.hl7.org/) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 81323004 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Alive and well |
| 313386006 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | In remission |
| 162467007 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Symptom free |
| 161901003 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Chronically ill |
| 271593001 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Severely ill |
| 21134002 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Disabled |
| 161045001 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Severely disabled |
| 419099009 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Deceased |
| 135818000 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | General health poor |
| 135815002 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | General health good |
| ... | | | |

***Figure 49: 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>

## Indication (V2) - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09 (open)]

***Table 93: Indication (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Medication Activity (V2)](#_bookmark996) (optional)  [Procedure Activity Procedure (V2)](#_bookmark1481) (optional)  [Planned Encounter (V2)](#_bookmark1131) (optional)  [Planned Procedure (V2)](#_bookmark1228) (optional)  [Planned Medication Activity (V2)](#_bookmark1187) (optional) |  |

This template represents the rationale for an action such as an encounter, a medication administration, or a procedure. The id element can be used to reference a problem recorded elsewhere in the document, or can be used with a code and value to record the problem.

Indications for treatment are not laboratory results; rather the problem associated with the laboratory result should be sited (e.g., hypokalemia instead of a laboratory result of Potassium

2.0 mEq/L). Use the Drug Monitoring Act [templateId 2.16.840.1.113883.10.20.22.4.123] to indicate if a particular drug needs special monitoring (e.g., anticoagulant therapy). Use Precondition for Substance Administration (V2) [templateId 2.16.840.1.113883.10.20.22.4.25.2] to represent that a medication is to be administered only when the associated criteria are met.

***Table 94: 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-](#_bookmark972)  [7480](#_bookmark972) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-](#_bookmark973)  [7481](#_bookmark973) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark974)  [7482](#_bookmark974) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark975)  [10502](#_bookmark975) | 2.16.840.1.113883.10.20.22.4.19 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark976)  [32570](#_bookmark976) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-](#_bookmark977)  [7483](#_bookmark977) |  |
| code | 1..1 | SHALL |  | [1098-](#_bookmark978)  [31229](#_bookmark978) | urn:oid:2.16.840.1.113883.3.88.1  2.3221.7.2 (Problem Type) |
| statusCode | 1..1 | SHALL |  | [1098-](#_bookmark979)  [7487](#_bookmark979) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark980)  [19105](#_bookmark980) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = completed |
| effectiveTime | 0..1 | SHOUL D |  | [1098-](#_bookmark981)  [7488](#_bookmark981) |  |
| value | 0..1 | MAY | CD | [1098-](#_bookmark982)  [7489](#_bookmark982) | urn:oid:2.16.840.1.113883.3.88.1  2.3221.7.4 (Problem) |

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-7480).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-7481).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7482) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.19"

(CONF:1098-10502).

b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32570).

1. **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.

1. **SHALL** contain exactly one [1..1] **code**, which **MAY** be selected from ValueSet **[Problem Type](#_bookmark919)** urn:oid:2.16.840.1.113883.3.88.12.3221.7.2 **STATIC** 2014-09-02 (CONF:1098- 31229).
2. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-7487).
   1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098- 19105).
3. **SHOULD** contain zero or one [0..1] **effectiveTime** (CONF:1098-7488).
4. **MAY** contain zero or one [0..1] **value** with @xsi:type="CD", where the code **SHOULD** be selected from ValueSet **[Problem](#_bookmark921)** urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 **DYNAMIC** (CONF:1098-7489).

***Figure 50: 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"/> -->

## Indication (V2) - Cancer IG Specific Constraints - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.13.19:2014-08-08 (open)]

***Table 95: Indication (V2) - Cancer IG Specific Constraints Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Medication Activity (V2) - Cancer IG Specific](#_bookmark1072)  [Constraints](#_bookmark1072) (required)  [Procedure Activity Procedure (V2) - Cancer IG Specific](#_bookmark1547)  [Constraints](#_bookmark1547) (required)  [Radiation Boost Modality Procedure](#_bookmark1606) (required)  [Radiation Regional Treatment Modality Procedure](#_bookmark1692) (required) |  |

This template defines Cancer Event Report-specific constraints to the C-CDA R2.0 Indication (V2) template.

***Table 96: Indication (V2) - Cancer IG Specific Constraints Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.13.19:2014-08-08) | | | | | |
| @classCode | 1..1 | SHALL |  | [1126-](#_bookmark988)  [33204](#_bookmark988) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1126-](#_bookmark989)  [33205](#_bookmark989) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1126-](#_bookmark990)  [33202](#_bookmark990) |  |
| @root | 1..1 | SHALL |  | [1126-](#_bookmark991)  [33206](#_bookmark991) | 2.16.840.1.113883.10.13.19 |
| @extension | 1..1 | SHALL |  | [1126-](#_bookmark992)  [33958](#_bookmark992) | 2014-08-08 |
| id | 1..\* | SHALL |  | [1126-](#_bookmark993)  [33215](#_bookmark993) |  |

* + 1. Conforms to [**Indication (V2)**](#_bookmark969) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09).
    2. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1126-33204).
    3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1126-33205).
    4. **SHALL** contain exactly one [1..1] **templateId** (CONF:1126-33202) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.19"

(CONF:1126-33206).

b. **SHALL** contain exactly one [1..1] **@extension**="2014-08-08" (CONF:1126-33958).

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1126-33215).

Note: The "id" is intended to reference a problem recorded in the Problem Observation, Medication Activity, Procedure Activity, Radiation Boost Modality Procedure, and Radiation Regional Treatment Modality Procedure, by matching the Observation's id element. When a related problem has not been recorded, then use a null flavor such as "NA" on this id element to indicate there is not a related problem documented (@nullFlavor="NA").

***Figure 51: Indication (V2) - Cancer IG Specific Constraints example***

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

<templateId root="2.16.840.1.113883.10.20.22.4.19" extension="2014-06-09" />

<templateId root="2.16.840.1.113883.10.13.19" extension="2014-08-08" />

<id root="ab1791b0-5c71-11db-b0de-0800200c9a66" />

<code code="29308-4" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Diagnosis"></code>

<statusCode code="completed" />

<effectiveTime value="20140731124200" />

<value xsi:type="CD" code="408643008" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Infiltrating duct carcinoma of breast" />

</observation>

## Medication Activity (V2) - Published

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

***Table 97: Medication Activity (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Medications Section (entries required) (V2)](#_bookmark430) (required)  [Procedure Activity Procedure (V2)](#_bookmark1481) (optional)  [Medications Administered Section (V2)](#_bookmark405) (optional) | [Author Participation](#_bookmark2202)  [Indication (V2)](#_bookmark969)  [Medication Information (V2)](#_bookmark1083) |

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

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

At a minimum, a Medication Activity shall include an effectiveTime indicating the duration of the administration (or single-administration timestamp). Ambulatory medication lists generally provide a summary of use for a given medication over time - a medication activity in event mood with the duration reflecting when the medication started and stopped. Ongoing

medications will not have a stop date (or will have a stop date with a suitable NULL value). Ambulatory medication lists will generally also have a frequency (e.g., a medication is being taken twice a day). Inpatient medications generally record each administration as a separate act.

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

***Table 98: 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-](#_bookmark999)  [7496](#_bookmark999) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = SBADM |
| @moodCode | 1..1 | SHALL |  | [1098-](#_bookmark1000)  [7497](#_bookmark1000) | urn:oid:2.16.840.1.113883.11.20.  9.18 (MoodCodeEvnInt) |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark1001)  [7499](#_bookmark1001) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark1002)  [10504](#_bookmark1002) | 2.16.840.1.113883.10.20.22.4.16 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark1003)  [32498](#_bookmark1003) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-](#_bookmark1004)  [7500](#_bookmark1004) |  |
| code | 0..1 | MAY |  | [1098-](#_bookmark1005)  [7506](#_bookmark1005) |  |
| statusCode | 1..1 | SHALL |  | [1098-](#_bookmark1006)  [7507](#_bookmark1006) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark1007)  [32360](#_bookmark1007) | urn:oid:2.16.840.1.113883.1.11.1  59331 (ActStatus) |
| effectiveTime | 1..1 | SHALL | IVL\_TS | [1098-](#_bookmark1008)  [7508](#_bookmark1008) |  |
| @value | 0..1 | SHOUL D |  | [1098-](#_bookmark1009)  [32775](#_bookmark1009) |  |
| low | 0..1 | SHOUL D |  | [1098-](#_bookmark1010)  [32776](#_bookmark1010) |  |
| high | 0..1 | MAY |  | [1098-](#_bookmark1011)  [32777](#_bookmark1011) |  |
| effectiveTime | 0..1 | SHOUL D |  | [1098-](#_bookmark1012)  [7513](#_bookmark1012) |  |
| @operator | 1..1 | SHALL |  | [1098-](#_bookmark1013)  [9106](#_bookmark1013) | A |
| repeatNumber | 0..1 | MAY |  | [1098-](#_bookmark1014)  [7555](#_bookmark1014) |  |
| routeCode | 0..1 | SHOUL D |  | [1098-](#_bookmark1015)  [7514](#_bookmark1015) | urn:oid:2.16.840.1.113883.3.88.1  2.3221.8.7 (Medication Route FDA) |
| approachSiteCode | 0..1 | MAY | SET<C D> | [1098-](#_bookmark1016)  [7515](#_bookmark1016) | urn:oid:2.16.840.1.113883.3.88.1  2.3221.8.9 (Body Site) |
| doseQuantity | 1..1 | SHALL |  | [1098-](#_bookmark1017)  [7516](#_bookmark1017) |  |
| @unit | 0..1 | SHOUL D |  | [1098-](#_bookmark1018)  [7526](#_bookmark1018) | urn:oid:2.16.840.1.113883.1.11.1 2839  (UnitsOfMeasureCaseSensitive) |
| rateQuantity | 0..1 | MAY |  | [1098-](#_bookmark1019) |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | 7517 |  |
| @unit | 1..1 | SHALL |  | [1098-](#_bookmark1020) | urn:oid:2.16.840.1.113883.1.11.1 |
| [7525](#_bookmark1020) | 2839 |
| (UnitsOfMeasureCaseSensitive) |
| maxDoseQuantity | 0..1 | MAY | RTO<P Q, PQ> | [1098-](#_bookmark1021)  [7518](#_bookmark1021) |  |
| administrationUnitCode | 0..1 | MAY |  | [1098-](#_bookmark1022)  [7519](#_bookmark1022) | urn:oid:2.16.840.1.113883.1.11.1  4570 (AdministrableDrugForm) |
| consumable | 1..1 | SHALL |  | [1098-](#_bookmark1023)  [7520](#_bookmark1023) |  |
| manufacturedProduct | 1..1 | SHALL |  | [1098-](#_bookmark1024)  [16085](#_bookmark1024) | [Medication Information (V2)](#_bookmark1083)  [(identifier:](#_bookmark1083)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark1083)  [0.22.4.23:2014-06-09](#_bookmark1083) |
| performer | 0..1 | MAY |  | [1098-](#_bookmark1025)  [7522](#_bookmark1025) |  |
| author | 0..\* | SHOUL |  | [1098-](#_bookmark1026) | [Author Participation (identifier:](#_bookmark2202) |
| D | [31150](#_bookmark1026) | [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2202) |
| [22.4.119](#_bookmark2202) |
| participant | 0..\* | MAY |  | [1098-](#_bookmark1027)  [7523](#_bookmark1027) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1028)  [7524](#_bookmark1028) | urn:oid:2.16.840.1.113883.5.90  (HL7ParticipationType) = CSM |
| participantRole | 1..1 | SHALL |  | [1098-](#_bookmark1029) | Drug Vehicle (identifier: |
| [16086](#_bookmark1029) | urn:oid:2.16.840.1.113883.10.20. |
| 22.4.24 |
| entryRelationship | 0..\* | MAY |  | [1098-](#_bookmark1030)  [7536](#_bookmark1030) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1031)  [7537](#_bookmark1031) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark1032)  [16087](#_bookmark1032) | [Indication (V2) (identifier:](#_bookmark969)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark969)  [0.22.4.19:2014-06-09](#_bookmark969) |
| entryRelationship | 0..1 | MAY |  | [1098-](#_bookmark1033)  [7539](#_bookmark1033) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1034)  [7540](#_bookmark1034) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = SUBJ |
| @inversionInd | 1..1 | SHALL |  | [1098-](#_bookmark1035)  [7542](#_bookmark1035) | true |
| act | 1..1 | SHALL |  | [1098-](#_bookmark1036)  [31387](#_bookmark1036) | Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2 0.22.4.20:2014-06-09 |
| entryRelationship | 0..1 | MAY |  | [1098-](#_bookmark1037)  [7543](#_bookmark1037) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1038)  [7547](#_bookmark1038) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = REFR |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| supply | 1..1 | SHALL |  | [1098-](#_bookmark1039)  [16089](#_bookmark1039) | Medication Supply Order (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2 0.22.4.17:2014-06-09 |
| entryRelationship | 0..\* | MAY |  | [1098-](#_bookmark1040)  [7549](#_bookmark1040) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1041)  [7553](#_bookmark1041) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = REFR |
| supply | 1..1 | SHALL |  | [1098-](#_bookmark1042)  [16090](#_bookmark1042) | Medication Dispense (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2 0.22.4.18:2014-06-09 |
| entryRelationship | 0..1 | MAY |  | [1098-](#_bookmark1043)  [7552](#_bookmark1043) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1044)  [7544](#_bookmark1044) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = CAUS |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark1045)  [16091](#_bookmark1045) | Reaction Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2 0.22.4.9:2014-06-09 |
| entryRelationship | 0..1 | MAY |  | [1098-](#_bookmark1046)  [30820](#_bookmark1046) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1047)  [30821](#_bookmark1047) | COMP |
| act | 1..1 | SHALL |  | [1098-](#_bookmark1048)  [30822](#_bookmark1048) | Drug Monitoring Act (identifier: urn:oid:2.16.840.1.113883.10.20. 22.4.123 |
| entryRelationship | 0..\* | MAY |  | [1098-](#_bookmark1049)  [31515](#_bookmark1049) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1050)  [31516](#_bookmark1050) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = COMP |
| @inversionInd | 1..1 | SHALL |  | [1098-](#_bookmark1051)  [31517](#_bookmark1051) | true |
| sequenceNumber | 0..1 | MAY |  | [1098-](#_bookmark1052)  [31518](#_bookmark1052) |  |
| act | 1..1 | SHALL |  | [1098-](#_bookmark1053)  [31519](#_bookmark1053) | Substance Administered Act (identifier: urn:oid:2.16.840.1.113883.10.20. 22.4.118 |
| precondition | 0..\* | MAY |  | [1098-](#_bookmark1054)  [31520](#_bookmark1054) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1055)  [31882](#_bookmark1055) | PRCN |
| criterion | 1..1 | SHALL |  | [1098-](#_bookmark1056)  [31883](#_bookmark1056) | Precondition for Substance Administration (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2 0.22.4.25:2014-06-09 |

* + 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**](#_bookmark1058) urn:oid:2.16.840.1.113883.11.20.9.18 **STATIC** 2011-04-03 (CONF:1098-7497).
    3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7499) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.16"

(CONF:1098-10504).

b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32498).

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1098-7500).
    2. **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.

* + 1. **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 [**ActStatus**](#_bookmark1068) urn:oid:2.16.840.1.113883.1.11.159331 **DYNAM****IC** (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: his 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

* + - 1. **SHOULD** contain zero or one [0..1] **low** (CONF:1098-32776).

Note: indicates when medication started

* + - 1. **MAY** contain zero or one [0..1] **high** (CONF:1098-32777).

Note: indicates when medication stopped

* + - 1. This effectiveTime **SHALL** contain either a low or a @value but not both (CONF:1098-32890).
    1. **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 [**Medication Route FDA**](#_bookmark1060) urn:oid:2.16.840.1.113883.3.88.12.3221.8.7 **DYNAMI****C** (CONF:1098-7514).
    3. **MAY** contain zero or one [0..1] **approachSiteCode**, where the code **SHALL** be selected from ValueSet [**Body Site**](#_bookmark1062) urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 **DYNAM****IC** (CONF:1098-7515).
    4. **SHALL** contain exactly one [1..1] **doseQuantity** (CONF:1098-7516).
       1. This doseQuantity **SHOULD** contain zero or one [0..1] **@unit**, which **SHALL** be selected from ValueSet [**UnitsOfMeasureCaseSensitive**](#_bookmark1064)urn:oid:2.16.840.1.113883.1.11.12839 **DYNAMI****C** (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).
    5. **MAY** contain zero or one [0..1] **rateQuantity** (CONF:1098-7517).
       1. The rateQuantity, if present, **SHALL** contain exactly one [1..1] **@unit**, which **SHALL** be selected from ValueSet **[UnitsOfMeasureCaseSensitive](#_bookmark1064)** urn:oid:2.16.840.1.113883.1.11.12839 **DYNAMIC** (CONF:1098-7525).
    6. **MAY** contain zero or one [0..1] **maxDoseQuantity** (CONF:1098-7518).
    7. **MAY** contain zero or one [0..1] **administrationUnitCode**, which **SHALL** be selected from ValueSet [**AdministrableDrugForm**](#_bookmark1066) urn:oid:2.16.840.1.113883.1.11.14570 **DYNAMI****C** (CONF:1098-7519).
    8. **SHALL** contain exactly one [1..1] **consumable** (CONF:1098-7520).
       1. This consumable **SHALL** contain exactly one [1..1] [**Medication Information** **(V2)**](#_bookmark1083)(identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09) (CONF:1098-16085).
    9. **MAY** contain zero or one [0..1] **performer** (CONF:1098-7522).
    10. **SHOULD** contain zero or more [0..\*] [**Author** **Participation**](#_bookmark2202) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31150).
    11. **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 **STATI****C**) (CONF:1098- 7524).
        2. **SHALL** contain exactly one [1..1] Drug Vehicle (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.24) (CONF:1098-16086).
    12. **MAY** contain zero or more [0..\*] **entryRelations****hip** (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 **STATI****C**) (CONF:1098-7537).
        2. **SHALL** contain exactly one [1..1] [**Indication (V2)**](#_bookmark969) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09) (CONF:1098- 16087).
    13. **MAY** contain zero or one [0..1] **entryRelationshi****p** (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 **STATI****C**) (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) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:1098- 31387).
    14. **MAY** contain zero or one [0..1] **entryRelationshi****p** (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 **STATI****C**) (CONF:1098-7547).
        2. **SHALL** contain exactly one [1..1] Medication Supply Order (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09) (CONF:1098- 16089).
    15. **MAY** contain zero or more [0..\*] **entryRelations****hip** (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 **STATI****C**) (CONF:1098-7553).
        2. **SHALL** contain exactly one [1..1] Medication Dispense (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2014-06-09) (CONF:1098- 16090).
    16. **MAY** contain zero or one [0..1] **entryRelationshi****p** (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 **STATI****C**) (CONF:1098-7544).
        2. **SHALL** contain exactly one [1..1] Reaction Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09) (CONF:1098- 16091).
    17. **MAY** contain zero or one [0..1] **entryRelationshi****p** (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 (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..\*] **entryRelations****hip** (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 (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.118) (CONF:1098-31519).
    2. **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).

* + - 1. The precondition, if present, **SHALL** contain exactly one [1..1] Precondition for Substance Administration (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09) (CONF:1098- 31883).
    1. Medication Activity **SHOULD** include doseQuantity **OR** rateQuantity (CONF:1098-30800).

***Tabl******e 99: MoodCodeEvnInt***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: MoodCodeEvnInt urn:oid:2.16.840.1.113883.11.20.9.18 Contains moodCode EVN and INT  Value Set Source: [**http://www.hl7.org**](http://www.hl7.org/) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| EVN | ActMood | urn:oid:2.16.840.1.11388 3.5.1001 | Event |
| INT | ActMood | urn:oid:2.16.840.1.11388 3.5.1001 | Intent |

***Table*** ***100: Medication Route FDA***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Medication Route FDA urn:oid:2.16.840.1.113883.3.88.12.3221.8.7  Route of Administration value set is based upon FDA Drug Registration and Listing Database (FDA Orange Book) which are used in FDA Structured Product Labeling (SPL).  Value Set Source: [**https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.32**](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.3221.8.7)[**21.8.7**](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.3221.8.7) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| C38192 | FDA  RouteOfAdministration | urn:oid:2.16.840.1.11388 3.3.26.1.1 | AURICULAR (OTIC) |
| C38193 | FDA  RouteOfAdministration | urn:oid:2.16.840.1.11388 3.3.26.1.1 | BUCCAL |
| C38194 | FDA  RouteOfAdministration | urn:oid:2.16.840.1.11388 3.3.26.1.1 | CONJUNCTIVAL |
| C38675 | FDA  RouteOfAdministration | urn:oid:2.16.840.1.11388 3.3.26.1.1 | CUTANEOUS |
| C38197 | FDA  RouteOfAdministration | urn:oid:2.16.840.1.11388 3.3.26.1.1 | DENTAL |
| C38633 | FDA  RouteOfAdministration | urn:oid:2.16.840.1.11388 3.3.26.1.1 | ELECTRO-OSMOSIS |
| C38205 | FDA  RouteOfAdministration | urn:oid:2.16.840.1.11388 3.3.26.1.1 | ENDOCERVICAL |
| C38206 | FDA  RouteOfAdministration | urn:oid:2.16.840.1.11388 3.3.26.1.1 | ENDOSINUSIAL |
| C38208 | FDA  RouteOfAdministration | urn:oid:2.16.840.1.11388 3.3.26.1.1 | ENDOTRACHEAL |
| C38209 | FDA  RouteOfAdministration | urn:oid:2.16.840.1.11388 3.3.26.1.1 | ENTERAL |
| ... | | | |

***Table*** ***101: Body Site***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Body Site urn:oid:2.16.840.1.113883.3.88.12.3221.8.9  Contains values descending from the SNOMED CT® Anatomical Structure (91723000) hierarchy or Acquired body structure (body structure) (280115004) or Anatomical site notations for tumor staging (body structure) (258331007) or Body structure, altered from its original anatomical structure (morphologic abnormality) (118956008) or Physical anatomical entity (body structure) (91722005) This indicates the anatomical site.  Value Set Source: [**http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.322**](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.3221.8.9)[**1.8.9**](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.3221.8.9) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 362783006 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | entire medial surface of lower extremity (body structure) |
| 302539009 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | entire hand (body structure) |
| 287679003 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | left hip region structure (body structure) |
| 3341006 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | right lung structure (body structure) |
| 87878005 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | left ventricular structure (body structure) |
| 49848007 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | structure of myocardium of left ventricle (body structure) |
| 38033009 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | amputation stump (body structure) |
| 305005006 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | 6/7 interchondral joint (body structure) |
| 28726007 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | corneal structure (body structure) |
| 75324005 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | 70 to 79 percent of body surface (body structure) |
| ... | | | |

***Tabl******e 102: UnitsOfMeasureCaseSensitive***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: UnitsOfMeasureCaseSensitive urn:oid:2.16.840.1.113883.1.11.12839  The UCUM code system provides a set of structural units from which working codes are built. There is an unlimited number of possible valid UCUM codes.  Value Set Source: [**http://unitsofmeasure.org/ucum.html**](http://unitsofmeasure.org/ucum.html) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| min | UCUM | urn:oid:2.16.840.1.11388 3.6.8 | minute |
| hour | UCUM | urn:oid:2.16.840.1.11388 3.6.8 | hr |
| % | UCUM | urn:oid:2.16.840.1.11388 3.6.8 | percent |
| cm | UCUM | urn:oid:2.16.840.1.11388 3.6.8 | centimeter |
| g | UCUM | urn:oid:2.16.840.1.11388 3.6.8 | gram |
| g/(12.h) | UCUM | urn:oid:2.16.840.1.11388 3.6.8 | gram per 12 hour |
| g/L | UCUM | urn:oid:2.16.840.1.11388 3.6.8 | gram per liter |
| mol | UCUM | urn:oid:2.16.840.1.11388 3.6.8 | mole |
| [IU] | UCUM | urn:oid:2.16.840.1.11388 3.6.8 | international unit |
| Hz | UCUM | urn:oid:2.16.840.1.11388 3.6.8 | Hertz |
| ... | | | |

***Table*** ***103: AdministrableDrugForm***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: AdministrableDrugForm urn:oid:2.16.840.1.113883.1.11.14570 Indicates the form in which the drug product should be administered.  Value Set Source: [**http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary\_tables/in**](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html)[**frastructure/vocabulary/vocabulary.html**](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| PUFF | orderableDrugForm | urn:oid:2.16.840.1.11388 3.5.85 | Puff |
| SCOOP | orderableDrugForm | urn:oid:2.16.840.1.11388 3.5.85 | Scoops |
| APPFUL | orderableDrugForm | urn:oid:2.16.840.1.11388 3.5.85 | Applicatorful |
| DROP | orderableDrugForm | urn:oid:2.16.840.1.11388 3.5.85 | Drops |
| SPRY | orderableDrugForm | urn:oid:2.16.840.1.11388 3.5.85 | Sprays |
| ... | | | |

***Table*** ***104: ActStatus***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: ActStatus urn:oid:2.16.840.1.113883.1.11.159331  Contains the names (codes) for each of the states in the state-machine of the RIM Act class. Value Set Source: [**http://www.hl7.org**](http://www.hl7.org/) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| normal | ActStatus | urn:oid:2.16.840.1.11388 3.5.14 | normal |
| aborted | ActStatus | urn:oid:2.16.840.1.11388 3.5.14 | aborted |
| active | ActStatus | urn:oid:2.16.840.1.11388 3.5.14 | active |
| cancelled | ActStatus | urn:oid:2.16.840.1.11388 3.5.14 | cancelled |
| completed | ActStatus | urn:oid:2.16.840.1.11388 3.5.14 | completed |
| held | ActStatus | urn:oid:2.16.840.1.11388 3.5.14 | held |
| new | ActStatus | urn:oid:2.16.840.1.11388 3.5.14 | new |
| suspended | ActStatus | urn:oid:2.16.840.1.11388 3.5.14 | suspended |
| nullified | ActStatus | urn:oid:2.16.840.1.11388 3.5.14 | nullified |
| obsolete | ActStatus | urn:oid:2.16.840.1.11388 3.5.14 | obsolete |

***Figure 52: 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 53: 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 Activity (V2) - Cancer IG Specific Constraints - Published

[substanceAdministration: identifier urn:hl7ii:2.16.840.1.113883.10.13.14:2014-08-08 (open)]

***Table 105: Medication Activity (V2) - Cancer IG Specific Constraints Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Medications Section (entries required) (V2) - Cancer IG](#_bookmark446)  [Specific Constraints](#_bookmark446) (required)  [Medications Administered Section (V2) - Cancer IG](#_bookmark420)  [Specific Constraints](#_bookmark420) (required) | [Indication (V2) - Cancer IG Specific Constraints](#_bookmark985) |

This template defines Cancer Event Report-specific constraints to the C-CDA R2 template “Medication Activity (V2)

***Table 106: Medication Activity (V2) - Cancer IG Specific Constraints Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| substanceAdministration (identifier: urn:hl7ii:2.16.840.1.113883.10.13.14:2014-08-08) | | | | | |
| templateId | 1..1 | SHALL |  | [1126-](#_bookmark1075)  [33066](#_bookmark1075) |  |
| @root | 1..1 | SHALL |  | [1126-](#_bookmark1076)  [33067](#_bookmark1076) | 2.16.840.1.113883.10.13.14 |
| @extension | 1..1 | SHALL |  | [1126-](#_bookmark1077)  [33959](#_bookmark1077) | 2014-08-08 |
| entryRelationship | 1..\* | SHALL |  | [1126-](#_bookmark1078)  [32664](#_bookmark1078) |  |
| @typeCode | 1..1 | SHALL |  | [1126-](#_bookmark1079)  [32665](#_bookmark1079) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [1126-](#_bookmark1080)  [33211](#_bookmark1080) | [Indication (V2) - Cancer IG](#_bookmark985)  [Specific Constraints (identifier:](#_bookmark985)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark985)  [3.19:2014-08-08](#_bookmark985) |

* + 1. Conforms to [**Medication Activity (V2)**](#_bookmark996) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1126-33066) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.14"

(CONF:1126-33067).

b. **SHALL** contain exactly one [1..1] **@extension**="2014-08-08" (CONF:1126-33959).

* + 1. **SHALL** contain at least one [1..\*] **entryRelations****hip** (CONF:1126-32664) such that it Note: The reason for administering medication SHALL be provided for all cancer-related medications. The reason for administering medication MAY be provided for all NON-cancer- related medications. If the reason is not known, then appropriate nullFlavor SHALL be used.
       1. **SHALL** contain exactly one [1..1] **@typeCode**="RSON" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1126- 32665).
       2. **SHALL** contain exactly one [1..1] [**Indication (V2) - Cancer IG Specific**](#_bookmark985) [**Constraints**](#_bookmark985) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.19:2014- 08-08) (CONF:1126-33211).

***Figure 54: Medication Activity (V2) - Cancer IG Specific Constraints example***

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

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

<templateId root="2.16.840.1.113883.10.13.14" extension="2014-08-08"/>

<id root="bc152409-65fc-4c5e-a498-ad3450f08981"/>

<text>

<reference value="#MedicationsAdmin\_1">

<!--PRIMITIVE: 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)-->

</reference>

</text>

<!--Indication snippet inside a Medication Activity-->

<statusCode code="completed"/>

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

<low value="20120318"/>

<high nullFlavor="UNK"/>

</effectiveTime>

<routeCode code="C38276" codeSystem="2.16.840.1.113883.3.26.1.1" codeSystemName="Medication Route FDA Value Set" displayName="Intravenous"/>

<approachSiteCode code="LA" codeSystem="2.16.840.1.113883.12.163" codeSystemName="Administrative Site" displayName="Left Arm">

<doseQuantity>

<low value="2" unit="mg/ml">

<translation>

<originalText>

<reference value="#MedicationAdminDose\_1"/>

</originalText>

</translation>

</low>

<high value="2" unit="mg/ml">

<translation>

<originalText>

<reference value="#MedicationAdminDose\_1"/>

</originalText>

</translation>

</high>

</doseQuantity>

</approachSiteCode>

<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="310024" displayName="Doxorubicin 2 MG/ML Injectable Solution" codeSystem="2.16.840.1.113883.6.88" codeSystemName="RxNorm">

<originalText>

<reference value="#MedicationAdminName\_1"/>

</originalText>

</code>

<name>Diflucortolone</name>

</manufacturedMaterial>

</manufacturedProduct>

</consumable>

<entryRelationship typeCode="RSON">

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

<templateId root="2.16.840.1.113883.10.20.22.4.19" extension="2014-06-09"/>

<templateId root="2.16.840.1.113883.10.13.19" extension="2014-08-08"/>

<id root="ab1791b0-5c71-11db-b0de-0800200c9a66"/>

<code code="29308-4" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Diagnosis"/>

<statusCode code="completed"/>

<effectiveTime value="20140731124200"/>

<value xsi:type="CD" code="408643008" codeSystem="2.16.840.1.113883.6.96" displayName="Infiltrating duct carcinoma of breast" sdtc:valueSet="2.16.840.1.113883.3.88.12.3221.7.4" />

</observation>

</entryRelationship>

</substanceAdministration>

## Medication Information (V2) - Published

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

***Table 107: Medication Information (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Medication Activity (V2)](#_bookmark996) (required)  [Planned Medication Activity (V2)](#_bookmark1187) (required) |  |

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 108: 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-](#_bookmark1086)  [7408](#_bookmark1086) | urn:oid:2.16.840.1.113883.5.110  (RoleClass) = MANU |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark1087)  [7409](#_bookmark1087) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark1088)  [10506](#_bookmark1088) | 2.16.840.1.113883.10.20.22.4.23 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark1089)  [32579](#_bookmark1089) | 2014-06-09 |
| id | 0..\* | MAY |  | [1098-](#_bookmark1090)  [7410](#_bookmark1090) |  |
| manufacturedMaterial | 1..1 | SHALL |  | [1098-](#_bookmark1091)  [7411](#_bookmark1091) |  |
| code | 1..1 | SHALL |  | [1098-](#_bookmark1092)  [7412](#_bookmark1092) | urn:oid:2.16.840.1.113762.1.4.10  10.4 (Medication Clinical Drug) |
| translation | 0..\* | MAY |  | [1098-](#_bookmark1093)  [31884](#_bookmark1093) | urn:oid:2.16.840.1.113762.1.4.10  10.2 (Clinical Substance) |
| manufacturerOrganization | 0..1 | MAY |  | [1098-](#_bookmark1094)  [7416](#_bookmark1094) |  |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="MANU" (CodeSystem: RoleClass urn:oid:2.16.840.1.113883.5.110 **STATIC**) (CONF:1098-7408).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7409) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.23"

(CONF:1098-10506).

b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32579).

* + 1. **MAY** contain zero or more [0..\*] **id** (CONF:1098-7410).
    2. **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**](#_bookmark1096)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**](#_bookmark1098)urn:oid:2.16.840.1.113762.1.4.1010.2 **DYNAMI****C** (CONF:1098-31884).
    1. **MAY** contain zero or one [0..1] **manufacturerOrga****nization** (CONF:1098-7416).

***Table*** ***109: Medication Clinical Drug***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Medication Clinical Drug urn:oid:2.16.840.1.113762.1.4.1010.4  All prescribable medication formulations represented using either a "generic" or "brand-specific" concept. This includes RxNorm codes whose Term Type is SCD (semantic clinical drug), SBD (semantic brand drug), GPCK (generic pack), BPCK (brand pack), SCDG (semantic clinical drug group), SBDG (semantic brand drug group), SCDF (semantic clinical drug form), or SBDF (semantic brand drug form).  Value set intensionally defined as a GROUPING made up of: Value Set: Medication Clinical General Drug (2.16.840.1.113883.3.88.12.80.17) (RxNorm Generic Drugs); Value Set: Medication Clinical Brand-specific Drug (2.16.840.1.113762.1.4.1010.5) (RxNorm Branded Drugs).  Value Set Source: [**http://phinvads.cdc.gov/vads/ViewValueSet.action?id=239BEF3E-971C-**](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=239BEF3E-971C-DF11-B334-0015173D1785) [**DF11-B334-0015173D1785**](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=239BEF3E-971C-DF11-B334-0015173D1785) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 978727 | RxNorm | urn:oid:2.16.840.1.11388 3.6.88 | 0.2 ML Dalteparin Sodium 12500 UNT/ML Prefilled Syringe [Fragmin] |
| 827318 | RxNorm | urn:oid:2.16.840.1.11388 3.6.88 | Acetaminophen 250 MG / Aspirin 250 MG / Caffeine 65 MG Oral Capsule |
| 199274 | RxNorm | urn:oid:2.16.840.1.11388 3.6.88 | Aspirin 300 MG Oral Capsule |
| 362867 | RxNorm | urn:oid:2.16.840.1.11388 3.6.88 | Cefotetan Injectable Solution [Cefotan] |
| ... | | | |

***Table*** ***110: Clinical Substance***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Clinical Substance urn:oid:2.16.840.1.113762.1.4.1010.2  All substances that may need to be represented in the context of health care related activities. This value set is quite broad in coverage and includes concepts that may never be needed in a health care activity event, particularly the included SNOMED CT concepts. The code system-specific value sets in this grouping value set are intended to provide broad coverage of all kinds of agents, but the expectation for use is that the chosen concept identifier for a substance should be appropriately specific and drawn from the appropriate code system as noted: prescribable medications should use RXNORM concepts, more specific drugs and chemicals should be represented using UNII concepts, and any substances not found in either of those two code systems, should use the appropriate SNOMED CT concept. This overarching grouping value set is intended to support identification of prescribable medications, foods, general substances and environmental entities.  Value set intensionally defined as a GROUPING made up of: Value Set: Medication Clinical Drug (2.16.840.1.113762.1.4.1010.4) (RxNorm generic and brand codes); Value Set: Unique Ingredient Identifier - Complete Set (2.16.840.1.113883.3.88.12.80.20) (UNII codes); Value Set: Substance Other Than Clinical Drug (2.16.840.1.113762.1.4.1010.9) (SNOMED CT codes).  Value Set Source: [**https://vsac.nlm.nih.gov/**](https://vsac.nlm.nih.gov/) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 369436 | RxNorm | urn:oid:2.16.840.1.11388 3.6.88 | 6-Aminocaproic Acid Oral Tablet [Amicar] |
| 1116447 | RxNorm | urn:oid:2.16.840.1.11388 3.6.88 | Acepromazine Oral Tablet |
| 9042592173 | Unique Ingredient Identifier (UNII) | urn:oid:2.16.840.1.11388 3.4.9 | ATROMEPINE |
| 7673326042 | Unique Ingredient Identifier (UNII) | urn:oid:2.16.840.1.11388 3.4.9 | IRINOTECAN |
| 413480003 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Almond product (substance) |
| 256915001 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Aluminum hydroxide absorbed plasma (substance) |
| ... | | | |

***Figure 55: 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="310024" displayName="Doxorubicin 2 MG/ML Injectable Solution" codeSystem="2.16.840.1.113883.6.88" codeSystemName="RxNorm">

<originalText>

<reference value="#MedicationAdminName\_1"/>

</originalText>

</code>

</manufacturedMaterial>

<manufacturerOrganization>

<name>Diflucortolone</name>

</manufacturerOrganization>

</manufacturedProduct>

## No Known TNM Clinical Stage Observation (V1.1) - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.13.31:2015-04-02 (open)]

***Table 111: No Known TNM Clinical Stage Observation (V1.1) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Cancer Diagnosis Observation (V1.1)](#_bookmark700) (required) |  |

Note: This template is modeled based on C-CDA R2 "No Known Medication" example.

TNM Clinical Stage describes detailed site-specific information on the progression of disease for the cancer/tumor as defined by AJCC and recorded by the ambulatory healthcare provider (physician).

The AJCC Staging Manual TNM system is proprietary and its definitions cannot be included in this IG or in other documents without permission.

This template is used when the cancer has not yet been staged, the TNM stage is not available, or when no TNM Staging system exists for the cancer. Examples include:

* A cancer is first diagnosed and has not yet had a full work-up to evaluate the extent of the cancer’s progression
* The stage has been determined elsewhere
* Cancers with no TNM staging system (e.g., leukemia, brain tumor)

This template allows the fact that no staging is available to be communicated without having to provide nullFlavors for each stage data element in the other template. It is accomplished by allowing the act to be negated via the negationInd.

***Table 112: No Known TNM Clinical Stage Observation (V1.1) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.13.31:2015-04-02) | | | | | |
| @nullFlavor | 0..0 | SHALL NOT |  | [1169-](#_bookmark1104)  [33777](#_bookmark1104) |  |
| @classCode | 1..1 | SHALL |  | [1169-](#_bookmark1105)  [33772](#_bookmark1105) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1169-](#_bookmark1106)  [33773](#_bookmark1106) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| @negationInd | 1..1 | SHALL |  | [1169-](#_bookmark1107)  [33780](#_bookmark1107) | true |
| templateId | 1..1 | SHALL |  | [1169-](#_bookmark1108)  [33727](#_bookmark1108) |  |
| @root | 1..1 | SHALL |  | [1169-](#_bookmark1109)  [33769](#_bookmark1109) | 2.16.840.1.113883.10.13.31 |
| @extension | 1..1 | SHALL |  | [1169-](#_bookmark1110)  [34367](#_bookmark1110) | 2015-04-02 |
| code | 1..1 | SHALL |  | [1169-](#_bookmark1111)  [33731](#_bookmark1111) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark1112)  [33775](#_bookmark1112) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 75620-5 |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark1113)  [33776](#_bookmark1113) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |

* + 1. **SHALL NOT** contain [0..0] **@nullFlavor** (CONF:1169-33777).
    2. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATI****C**) (CONF:1169-33772).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATI****C**) (CONF:1169-33773).
    2. **SHALL** contain exactly one [1..1] **@negationInd**="true" (CONF:1169-33780).
    3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1169-33727) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.31"

(CONF:1169-33769).

b. **SHALL** contain exactly one [1..1] **@extension**="2015-04-02" (CONF:1169-34367).

* + 1. **SHALL** contain exactly one [1..1] **code** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-33731).
       1. This code **SHALL** contain exactly one [1..1] **@code**="75620-5" TNM clinical staging before treatment panel Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-33775).
       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:1169-33776).

***Figure 56: No Known TNM Clinical Stage Observation Example***

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

<templateId root="2.16.840.1.113883.10.13.31" extension="2015-04-02" />

<code code="75620-5" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="TNM clinical staging before treatment panel Cancer" />

</observation>

## No Known TNM Pathologic Stage Observation (V1.1) - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.13.32:2015-04-02 (open)]

***Table 113: No Known TNM Pathologic Stage Observation (V1.1) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Cancer Diagnosis Observation (V1.1)](#_bookmark700) (required) |  |

Note: This template is modeled based on C-CDA R2 "No Known Medication" example.

TNM Pathologic Stage describes detailed site-specific information on the progression of disease for the cancer/tumor as defined by AJCC and recorded by the ambulatory healthcare provider (physician).

The AJCC Staging Manual TNM system is proprietary and its definitions cannot be included in this IG or in other documents without permission.

This template is used when the cancer has not yet been staged, the TNM stage is not available or when no TNM Staging system exists for the cancer. Examples include:

* A cancer is first diagnosed and has not yet had a full work-up to evaluate the extent of the cancer’s progression
* The stage has been determined elsewhere
* Cancers with no TNM staging system (e.g., leukemia, brain tumor)

This template allows the fact that no staging is available to be communicated without having to provide nullFlavors for each stage data element in the other template. It is accomplished by allowing the act to be negated via the negationInd.

***Table 114: No Known TNM Pathologic Stage Observation (V1.1) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.13.32:2015-04-02) | | | | | |
| @nullFlavor | 0..0 | SHALL NOT |  | [1169-](#_bookmark1119)  [34369](#_bookmark1119) |  |
| @classCode | 1..1 | SHALL |  | [1169-](#_bookmark1120)  [33852](#_bookmark1120) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1169-](#_bookmark1121)  [33853](#_bookmark1121) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| @negationInd | 0..1 | MAY |  | [1169-](#_bookmark1122)  [33858](#_bookmark1122) | true |
| templateId | 1..1 | SHALL |  | [1169-](#_bookmark1123)  [33805](#_bookmark1123) |  |
| @root | 1..1 | SHALL |  | [1169-](#_bookmark1124)  [33849](#_bookmark1124) | 2.16.840.1.113883.10.13.32 |
| @extension | 1..1 | SHALL |  | [1169-](#_bookmark1125)  [34368](#_bookmark1125) | 2015-04-02 |
| code | 1..1 | SHALL |  | [1169-](#_bookmark1126)  [33809](#_bookmark1126) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark1127)  [33855](#_bookmark1127) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 75621-3 |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark1128)  [33856](#_bookmark1128) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |

* + 1. **SHALL NOT** contain [0..0] **@nullFlavor** (CONF:1169-34369).
    2. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATI****C**) (CONF:1169-33852).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATI****C**) (CONF:1169-33853).
    2. **MAY** contain zero or one [0..1] **@negationInd**="true" (CONF:1169-33858).
    3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1169-33805) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.32"

(CONF:1169-33849).

b. **SHALL** contain exactly one [1..1] **@extension**="2015-04-02" (CONF:1169-34368).

* + 1. **SHALL** contain exactly one [1..1] **code** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-33809).
       1. This code **SHALL** contain exactly one [1..1] **@code**="75621-3" TNM pathologic staging after surgery panel Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-33855).
       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:1169-33856).

***Figure 57: No Known TNM Pathologic Stage Observation Example***

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

<templateId root="2.16.840.1.113883.10.13.32" extension="2015-04-02" />

<code code="75621-3" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="TNM pathologic staging after surgery panel Cancer" />

</observation>

## Planned Encounter (V2) - Published

[encounter: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.40:2014-06-09 (open)]

***Table 115: Planned Encounter (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Plan of Treatment Section (V2)](#_bookmark471) (optional) | [Author Participation](#_bookmark2202)  [Indication (V2)](#_bookmark969)  [Service Delivery Location](#_bookmark1835) |

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 116: 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-](#_bookmark1134)  [8564](#_bookmark1134) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = ENC |
| @moodCode | 1..1 | SHALL |  | [1098-](#_bookmark1135)  [8565](#_bookmark1135) | urn:oid:2.16.840.1.113883.11.20.  9.23 (Planned moodCode (Act/Encounter/Procedure)) |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark1136)  [30437](#_bookmark1136) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark1137)  [30438](#_bookmark1137) | 2.16.840.1.113883.10.20.22.4.40 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark1138)  [32553](#_bookmark1138) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-](#_bookmark1139)  [8567](#_bookmark1139) |  |
| code | 0..1 | SHOUL D |  | [1098-](#_bookmark1140)  [31032](#_bookmark1140) | urn:oid:2.16.840.1.113883.11.20.  9.52 (Encounter Planned) |
| statusCode | 1..1 | SHALL |  | [1098-](#_bookmark1141)  [30439](#_bookmark1141) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark1142)  [31880](#_bookmark1142) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = active |
| effectiveTime | 0..1 | SHOUL D |  | [1098-](#_bookmark1143)  [30440](#_bookmark1143) |  |
| performer | 0..\* | MAY |  | [1098-](#_bookmark1144)  [30442](#_bookmark1144) |  |
| assignedEntity | 1..1 | SHALL |  | [1098-](#_bookmark1145)  [31874](#_bookmark1145) |  |
| author | 0..\* | SHOUL D |  | [1098-](#_bookmark1146)  [32045](#_bookmark1146) | [Author Participation (identifier:](#_bookmark2202)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2202)  [22.4.119](#_bookmark2202) |
| participant | 0..\* | MAY |  | [1098-](#_bookmark1147)  [30443](#_bookmark1147) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1148)  [31875](#_bookmark1148) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = LOC |
| participantRole | 1..1 | SHALL |  | [1098-](#_bookmark1149)  [31876](#_bookmark1149) | [Service Delivery Location](#_bookmark1835)  [(identifier:](#_bookmark1835)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark1835)  [22.4.32](#_bookmark1835) |
| entryRelationship | 0..1 | MAY |  | [1098-](#_bookmark1150)  [31033](#_bookmark1150) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1151)  [31034](#_bookmark1151) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark1152)  [31035](#_bookmark1152) | Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | 22.4.143 |
| entryRelationship | 0..\* | MAY |  | [1098-](#_bookmark1153)  [31877](#_bookmark1153) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1154)  [31878](#_bookmark1154) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark1155)  [31879](#_bookmark1155) | [Indication (V2) (identifier:](#_bookmark969)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark969)  [0.22.4.19:2014-06-09](#_bookmark969) |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="ENC" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATI****C**) (CONF:1098-8564).
    2. **SHALL** contain exactly one [1..1] **@moodCode**, which **SHALL** be selected from ValueSet [**Planned moodCode (Act/Encounter/Procedure)**](#_bookmark1157)urn:oid:2.16.840.1.113883.11.20.9.23 **STATIC** 2011-09-30 (CONF:1098-8565).
    3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-30437) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.40"

(CONF:1098-30438).

b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32553).

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1098-8567). Records the type of encounter ordered or recommended.
    2. **SHOULD** contain zero or one [0..1] **code**, which **SHOULD** be selected from ValueSet [**Encounter**](#_bookmark1159) [**Planned**](#_bookmark1159) urn:oid:2.16.840.1.113883.11.20.9.52 **DYNAMI****C** (CONF:1098-31032).
    3. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-30439).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**="active" Active (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098- 31880).
    4. **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**](#_bookmark2202) (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: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1098- 31875).
       2. **SHALL** contain exactly one [1..1] [**Service Delivery Location**](#_bookmark1835) (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] **entryRelationshi****p** (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 (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..\*] **entryRelations****hip** (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)**](#_bookmark969) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09) (CONF:1098- 31879).

***Table*** ***117: 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: [**http://hl7.org/implement/standards/fhir/v3/ActMood/**](http://hl7.org/implement/standards/fhir/v3/ActMood/) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| INT | ActMood | urn:oid:2.16.840.1.11388 3.5.1001 | Intent |
| ARQ | ActMood | urn:oid:2.16.840.1.11388 3.5.1001 | Appointment Request |
| PRMS | ActMood | urn:oid:2.16.840.1.11388 3.5.1001 | Promise |
| PRP | ActMood | urn:oid:2.16.840.1.11388 3.5.1001 | Proposal |
| RQO | ActMood | urn:oid:2.16.840.1.11388 3.5.1001 | Request |
| APT | ActMood | urn:oid:2.16.840.1.11388 3.5.1001 | Appointment |

***Tabl******e 118: Encounter Planned***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Encounter Planned urn:oid:2.16.840.1.113883.11.20.9.52  A value set of SNOMED-CT codes descending from "308335008" patient encounter procedure (procedure). Value Set Source: [**http://vtsl.vetmed.vt.edu/TerminologyMgt/RF2Browser/ISA.cfm?SCT\_ConceptID=30833500**](http://vtsl.vetmed.vt.edu/TerminologyMgt/RF2Browser/ISA.cfm?SCT_ConceptID=308335008)  [**8**](http://vtsl.vetmed.vt.edu/TerminologyMgt/RF2Browser/ISA.cfm?SCT_ConceptID=308335008) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 185349003 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | encounter for "check-up" (procedure) |
| 439740005 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | postoperative follow-up visit (procedure) |
| 439708006 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | home visit (procedure) |
| 438515009 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | E-mail encounter from carer (procedure) |
| 14736009 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | patient evaluation and management |
| 4525004 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | emergency department patient visit |
| 12586001 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | physician direction of emergency medical systems |
| 11429006 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | consultation |
| 680007 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | radiation physics consultation |
| 726007 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | pathology consultation, comprehensive, records and specimen with report |
| ... | | | |

***Figure 58: 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 Encounter (V2) - Cancer IG Specific Constraints - Published

[encounter: identifier urn:hl7ii:2.16.840.1.113883.10.13.20:2014-08-08 (open)]

***Table 119: Planned Encounter (V2) - Cancer IG Specific Constraints Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Plan of Treatment Section (V2) - Cancer IG Specific](#_bookmark506)  [Constraints](#_bookmark506) (required) | [Service Delivery Location](#_bookmark1835)  [US Realm Address (AD.US.FIELDED)](#_bookmark2222)  [US Realm Person Name (PN.US.FIELDED)](#_bookmark2286) |

This template defines Cancer Event Report-specific constraints to the C-CDA R2.0 Planned Encounter (V2) template. Conformance has been changed to “SHALL” for performer and participant.

***Table 120: Planned Encounter (V2) - Cancer IG Specific Constraints Constraints Overview***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |  |
| encounter (identifier: urn:hl7ii:2.16.840.1.113883.10.13.20:2014-08-08) | | | | | | |
| @classCode | 1..1 | SHALL |  | [1126-](#_bookmark1165)  [33218](#_bookmark1165) | ENC |  |
| @moodCode | 1..1 | SHALL |  | [1126-](#_bookmark1166)  [33219](#_bookmark1166) |  | |
| templateId | 1..1 | SHALL |  | [1126-](#_bookmark1167)  [33216](#_bookmark1167) |  | |
| @root | 1..1 | SHALL |  | [1126-](#_bookmark1168)  [33217](#_bookmark1168) | 2.16.840.1.113883.10.13.20 | |
| @extension | 1..1 | SHALL |  | [1126-](#_bookmark1169)  [33962](#_bookmark1169) | 2014-08-08 |  |
| performer | 1..1 | SHALL |  | [1126-](#_bookmark1170)  [33220](#_bookmark1170) |  | |
| @typeCode | 1..1 | SHALL |  | [1126-](#_bookmark1171)  [33980](#_bookmark1171) | urn:oid:2.16.840.1.113883.5.90  (HL7ParticipationType) = PRF | |
| assignedEntity | 1..1 | SHALL |  | [1126-](#_bookmark1172)  [33937](#_bookmark1172) |  | |
| id | 1..\* | SHALL |  | [1126-](#_bookmark1173)  [33938](#_bookmark1173) |  | |
| @root | 0..1 | SHOUL D |  | [1126-](#_bookmark1174)  [33941](#_bookmark1174) | 2.16.840.1.113883.4.6 | |
| id | 0..\* | SHOUL D |  | [1126-](#_bookmark1175)  [33942](#_bookmark1175) |  | |
| addr | 0..1 | SHOUL D |  | [1126-](#_bookmark1176)  [33943](#_bookmark1176) | [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED) (identifier:](#_bookmark2222)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2222)  [22.5.2](#_bookmark2222) | |
| telecom | 0..\* | SHOUL D |  | [1126-](#_bookmark1177)  [33939](#_bookmark1177) |  | |
| assignedPerson | 0..1 | SHOUL D |  | [1126-](#_bookmark1178)  [33940](#_bookmark1178) |  | |
| name | 0..\* | SHOUL D |  | [1126-](#_bookmark1179)  [33945](#_bookmark1179) | [US Realm Person Name](#_bookmark2286)  [(PN.US.FIELDED) (identifier:](#_bookmark2286)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2286)  [22.5.1.1](#_bookmark2286) | |
| representedOrganization | 0..1 | SHOUL D |  | [1126-](#_bookmark1180)  [33979](#_bookmark1180) |  | |
| name | 0..1 | SHOUL D |  | [1126-](#_bookmark1181)  [33981](#_bookmark1181) |  | |
| participant | 1..\* | SHALL |  | [1126-](#_bookmark1182)  [33222](#_bookmark1182) |  | |
| @typeCode | 1..1 | SHALL |  | [1126-](#_bookmark1183)  [33982](#_bookmark1183) | urn:oid:2.16.840.1.113883.5.90  (HL7ParticipationType) = LOC | |
| participantRole | 1..1 | SHALL |  | [1126-](#_bookmark1184) [Service Deliv](#_bookmark1835) | | [ery Location](#_bookmark1835) |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | 33983 | (identifier: urn:oid:2.16.840.1.113883.10.20. 22.4.32 |

* + 1. Conforms to [**Planned Encounter (V2)**](#_bookmark1131) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.40:2014-06-09).
    2. **SHALL** contain exactly one [1..1] **@classCode**="ENC" Encounter (CONF:1126-33218).
    3. **SHALL** contain exactly one [1..1] **@moodCode** (CONF:1126-33219).
    4. **SHALL** contain exactly one [1..1] **templateId** (CONF:1126-33216) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.20"

(CONF:1126-33217).

b. **SHALL** contain exactly one [1..1] **@extension**="2014-08-08" (CONF:1126-33962).

* + 1. **SHALL** contain exactly one [1..1] **performer** (CONF:1126-33220) 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:1126-33980).

* + - 1. **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:1126-33937).
         1. This assignedEntity **SHALL** contain at least one [1..\*] **id** (CONF:1126-33938) such that it

1. **SHOULD** contain zero or one [0..1] **@root**="2.16.840.1.113883.4.6"

National Provider Identifier (CONF:1126-33941).

* + - * 1. This assignedEntity **SHOULD** contain zero or more [0..\*] **id** (CONF:1126- 33942).

Note: This id is to be used to provide the Cancer Registry approved local identifier.

* + - * 1. This assignedEntity **SHOULD** contain zero or one [0..1] [**US Realm Address**](#_bookmark2222) [**(AD.US.FIELDED)**](#_bookmark2222) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1126-33943).
        2. This assignedEntity **SHOULD** contain zero or more [0..\*] **telecom**

(CONF:1126-33939).

* + - * 1. This assignedEntity **SHOULD** contain zero or one [0..1] **assignedPerson**

(CONF:1126-33940) such that it

**SHOULD** contain zero or more [0..\*] [**US Realm Person Name**](#_bookmark2286) [**(PN.US.FIELDED)**](#_bookmark2286) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1126- 33945).

* + - * 1. This assignedEntity **SHOULD** contain zero or one [0..1]

**representedOrganization** (CONF:1126-33979) such that it

**SHOULD** contain zero or one [0..1] **name** (CONF:1126-33981).

* + 1. **SHALL** contain at least one [1..\*] **participant** (CONF:1126-33222) 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:1126-33982).

* + - 1. **SHALL** contain exactly one [1..1] [**Service** **Delivery Location**](#_bookmark1835) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32) (CONF:1126-33983).

***Figure 59: Planned Encounter (V2) - Cancer IG Specific Constraints 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 -->

<templateId root="2.16.840.1.113883.10.13.20" extension="2014-08-08" />

<id root="9a6d1bac-17d3-4195-89a4-1121bc809b4d" />

<code code="698314001" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Consultation for treatment (procedure)" />

<statusCode code="active" />

<effectiveTime value="20130615" />

<performer typeCode="PRF">

<assignedEntity classCode="ASSIGNED">

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

<id extension="111111111" root="2.16.840.1.113883.19.5"></id>

<code code="207QA0505X" codeSystem="2.16.840.1.113883.5.53"

codeSystemName="Health Care Provider Taxonomy" displayName="Adult Medicine" />

<addr>

<streetAddressLine>4444 Healthcare Drive</streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>99999</postalCode>

<country>US</country>

</addr>

<telecom use="WP" value="tel:+1(555)555-3001" />

<assignedPerson>

<name>

<given>Patricia</given>

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

<family>Primary</family>

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

</name>

</assignedPerson>

<representedOrganization>

<name> Level Seven Healthcare, Inc.</name>

</representedOrganization>

</assignedEntity>

</performer>

<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>

<participant typeCode="LOC">

<participantRole classCode="SDLOC">

<templateId root="2.16.840.1.113883.10.20.22.4.32" />

<code code="1200-5" codeSystem="2.16.840.1.113883.6.259" codeSystemName="HealthcareServiceLocation" displayName="Hematology/oncology clinic" />

<addr>

<streetAddressLine>1000 Hospital Lane</streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>99999</postalCode>

<country>US</country>

</addr>

<telecom use="WP" value="tel:+1(555)555-5000" />

<playingEntity classCode="PLC">

<name>Good Health Hospital</name>

</playingEntity>

</participantRole>

</participant>

</encounter>

</entry>

## Planned Medication Activity (V2) - Published

[substanceAdministration: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09 (open)]

***Table 121: Planned Medication Activity (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Plan of Treatment Section (V2)](#_bookmark471) (optional)  [Plan of Treatment Section (V2) - Cancer IG Specific](#_bookmark506) [Constraints](#_bookmark506) (required) | [Author Participation](#_bookmark2202)  [Indication (V2)](#_bookmark969)  [Medication Information (V2)](#_bookmark1083) |

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 122: 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-](#_bookmark1190)  [8572](#_bookmark1190) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = SBADM |
| @moodCode | 1..1 | SHALL |  | [1098-](#_bookmark1191)  [8573](#_bookmark1191) | urn:oid:2.16.840.1.113883.11.20.  9.24 (Planned moodCode (SubstanceAdministration/Suppl y)) |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark1192)  [30465](#_bookmark1192) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark1193)  [30466](#_bookmark1193) | 2.16.840.1.113883.10.20.22.4.42 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark1194)  [32557](#_bookmark1194) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-](#_bookmark1195)  [8575](#_bookmark1195) |  |
| statusCode | 1..1 | SHALL |  | [1098-](#_bookmark1196)  [32087](#_bookmark1196) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark1197)  [32088](#_bookmark1197) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = active |
| effectiveTime | 1..1 | SHALL |  | [1098-](#_bookmark1198)  [30468](#_bookmark1198) |  |
| repeatNumber | 0..1 | MAY |  | [1098-](#_bookmark1199)  [32066](#_bookmark1199) |  |
| routeCode | 0..1 | MAY |  | [1098-](#_bookmark1200)  [32067](#_bookmark1200) | urn:oid:2.16.840.1.113883.3.88.1  2.3221.8.7 (Medication Route FDA) |
| approachSiteCode | 0..\* | MAY |  | [1098-](#_bookmark1201)  [32078](#_bookmark1201) | urn:oid:2.16.840.1.113883.3.88.1  2.3221.8.9 (Body Site) |
| doseQuantity | 0..1 | MAY |  | [1098-](#_bookmark1202)  [32068](#_bookmark1202) |  |
| @unit | 0..1 | SHOUL D |  | [1098-](#_bookmark1203)  [32133](#_bookmark1203) | urn:oid:2.16.840.1.113883.1.11.1 2839  (UnitsOfMeasureCaseSensitive) |
| rateQuantity | 0..1 | MAY |  | [1098-](#_bookmark1204)  [32079](#_bookmark1204) |  |
| @unit | 0..1 | SHOUL D |  | [1098-](#_bookmark1205)  [32134](#_bookmark1205) | urn:oid:2.16.840.1.113883.1.11.1 2839  (UnitsOfMeasureCaseSensitive) |
| maxDoseQuantity | 0..1 | MAY |  | [1098-](#_bookmark1206)  [32080](#_bookmark1206) |  |
| administrationUnitCode | 0..1 | MAY |  | [1098-](#_bookmark1207)  [32081](#_bookmark1207) | urn:oid:2.16.840.1.113883.1.11.1  4570 (AdministrableDrugForm) |
| consumable | 1..1 | SHALL |  | [1098-](#_bookmark1208)  [32082](#_bookmark1208) |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| manufacturedProduct | 1..1 | SHALL |  | [1098-](#_bookmark1209)  [32083](#_bookmark1209) | [Medication Information (V2)](#_bookmark1083)  [(identifier:](#_bookmark1083)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark1083)  [0.22.4.23:2014-06-09](#_bookmark1083) |
| performer | 0..\* | MAY |  | [1098-](#_bookmark1210)  [30470](#_bookmark1210) |  |
| author | 0..1 | SHOUL D |  | [1098-](#_bookmark1211)  [32046](#_bookmark1211) | [Author Participation (identifier:](#_bookmark2202)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2202)  [22.4.119](#_bookmark2202) |
| entryRelationship | 0..\* | MAY |  | [1098-](#_bookmark1212)  [31104](#_bookmark1212) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1213)  [31105](#_bookmark1213) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark1214)  [31106](#_bookmark1214) | Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20. 22.4.143 |
| entryRelationship | 0..\* | MAY |  | [1098-](#_bookmark1215)  [32069](#_bookmark1215) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1216)  [32070](#_bookmark1216) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark1217)  [32071](#_bookmark1217) | [Indication (V2) (identifier:](#_bookmark969)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark969)  [0.22.4.19:2014-06-09](#_bookmark969) |
| entryRelationship | 0..\* | MAY |  | [1098-](#_bookmark1218)  [32072](#_bookmark1218) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1219)  [32073](#_bookmark1219) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = SUBJ |
| act | 1..1 | SHALL |  | [1098-](#_bookmark1220)  [32074](#_bookmark1220) | Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2 0.22.4.20:2014-06-09 |
| precondition | 0..\* | MAY |  | [1098-](#_bookmark1221)  [32084](#_bookmark1221) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1222)  [32085](#_bookmark1222) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = PRCN |
| criterion | 1..1 | SHALL |  | [1098-](#_bookmark1223)  [32086](#_bookmark1223) | Precondition for Substance Administration (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2 0.22.4.25:2014-06-09 |

* + 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)**](#_bookmark1225)urn:oid:2.16.840.1.113883.11.20.9.24 **STATIC** 2011-09-30 (CONF:1098-8573).
    3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-30465) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.42"

(CONF:1098-30466).

b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32557).

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1098-8575).
    2. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-32087).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**="active" Active (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098- 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).

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 [**Medication Route FDA**](#_bookmark1060) urn:oid:2.16.840.1.113883.3.88.12.3221.8.7 **DYNAMI****C** (CONF:1098-32067).
    3. **MAY** contain zero or more [0..\*] **approachSiteCode**, which **SHALL** be selected from ValueSet [**Body Site**](#_bookmark1062) urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 **DYNAMI****C** (CONF:1098- 32078).
    4. **MAY** contain zero or one [0..1] **doseQuantity** (CONF:1098-32068).
       1. The doseQuantity, if present, **SHOULD** contain zero or one [0..1] **@unit**, which **SHALL** be selected from ValueSet **[UnitsOfMeasureCaseSensitive](#_bookmark1064)** urn:oid:2.16.840.1.113883.1.11.12839 **DYNAMIC** (CONF:1098-32133).
    5. **MAY** contain zero or one [0..1] **rateQuantity** (CONF:1098-32079).
       1. The rateQuantity, if present, **SHOULD** contain zero or one [0..1] **@unit**, which **SHALL** be selected from ValueSet **[UnitsOfMeasureCaseSensitive](#_bookmark1064)** urn:oid:2.16.840.1.113883.1.11.12839 **DYNAMIC** (CONF:1098-32134).
    6. **MAY** contain zero or one [0..1] **maxDoseQuantity** (CONF:1098-32080).
    7. **MAY** contain zero or one [0..1] **administrationUnitCode**, which **SHALL** be selected from ValueSet [**AdministrableDrugForm**](#_bookmark1066) urn:oid:2.16.840.1.113883.1.11.14570 **DYNAMI****C** (CONF:1098-32081).
    8. **SHALL** contain exactly one [1..1] **consumable** (CONF:1098-32082).
       1. This consumable **SHALL** contain exactly one [1..1] [**Medication Information** **(V2)**](#_bookmark1083)(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**](#_bookmark2202) (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..\*] **entryRelations****hip** (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 (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..\*] **entryRelations****hip** (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)**](#_bookmark969) (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..\*] **entryRelations****hip** (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) (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..\*] **precond****ition** (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) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09) (CONF:1098- 32086).

***Table*** ***123: 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: [**http://hl7.org/implement/standards/fhir/v3/ActMood/**](http://hl7.org/implement/standards/fhir/v3/ActMood/) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| INT | ActMood | urn:oid:2.16.840.1.11388 3.5.1001 | Intent |
| PRMS | ActMood | urn:oid:2.16.840.1.11388 3.5.1001 | Promise |
| PRP | ActMood | urn:oid:2.16.840.1.11388 3.5.1001 | Proposal |
| RQO | ActMood | urn:oid:2.16.840.1.11388 3.5.1001 | Request |

***Figure 60: 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 Procedure (V2) - Published

[procedure: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2014-06-09 (open)]

***Table 124: Planned Procedure (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Plan of Treatment Section (V2)](#_bookmark471) (optional)  [Plan of Treatment Section (V2) - Cancer IG Specific](#_bookmark506)  [Constraints](#_bookmark506) (required) | [Author Participation](#_bookmark2202)  [Indication (V2)](#_bookmark969) |

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 125: 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-](#_bookmark1231)  [8568](#_bookmark1231) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = PROC |
| @moodCode | 1..1 | SHALL |  | [1098-](#_bookmark1232)  [8569](#_bookmark1232) | urn:oid:2.16.840.1.113883.11.20.  9.23 (Planned moodCode (Act/Encounter/Procedure)) |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark1233)  [30444](#_bookmark1233) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark1234)  [30445](#_bookmark1234) | 2.16.840.1.113883.10.20.22.4.41 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark1235)  [32554](#_bookmark1235) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-](#_bookmark1236)  [8571](#_bookmark1236) |  |
| code | 1..1 | SHALL |  | [1098-](#_bookmark1237)  [31976](#_bookmark1237) |  |
| statusCode | 1..1 | SHALL |  | [1098-](#_bookmark1238)  [30446](#_bookmark1238) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark1239)  [31978](#_bookmark1239) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = active |
| effectiveTime | 0..1 | SHOUL D |  | [1098-](#_bookmark1240)  [30447](#_bookmark1240) |  |
| methodCode | 0..\* | MAY |  | [1098-](#_bookmark1241)  [31980](#_bookmark1241) |  |
| targetSiteCode | 0..\* | MAY |  | [1098-](#_bookmark1242)  [31981](#_bookmark1242) | urn:oid:2.16.840.1.113883.3.88.1  2.3221.8.9 (Body Site) |
| performer | 0..\* | MAY |  | [1098-](#_bookmark1243)  [30449](#_bookmark1243) |  |
| author | 0..1 | SHOUL D |  | [1098-](#_bookmark1244)  [31979](#_bookmark1244) | [Author Participation (identifier:](#_bookmark2202)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2202)  [22.4.119](#_bookmark2202) |
| entryRelationship | 0..\* | MAY |  | [1098-](#_bookmark1245)  [31079](#_bookmark1245) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1246)  [31080](#_bookmark1246) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark1247)  [31081](#_bookmark1247) | Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20. 22.4.143 |
| entryRelationship | 0..\* | MAY |  | [1098-](#_bookmark1248)  [31982](#_bookmark1248) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1249)  [31983](#_bookmark1249) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = RSON |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark1250)  [31984](#_bookmark1250) | [Indication (V2) (identifier:](#_bookmark969)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark969)  [0.22.4.19:2014-06-09](#_bookmark969) |
| entryRelationship | 0..\* | MAY |  | [1098-](#_bookmark1251)  [31985](#_bookmark1251) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1252)  [31986](#_bookmark1252) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = SUBJ |
| @inversionInd | 1..1 | SHALL |  | [1098-](#_bookmark1253)  [31987](#_bookmark1253) | true |
| act | 1..1 | SHALL |  | [1098-](#_bookmark1254)  [31989](#_bookmark1254) | Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2 0.22.4.20:2014-06-09 |
| entryRelationship | 0..\* | MAY |  | [1098-](#_bookmark1255)  [31990](#_bookmark1255) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1256)  [31991](#_bookmark1256) | COMP |
| act | 1..1 | SHALL |  | [1098-](#_bookmark1257)  [31992](#_bookmark1257) | Planned Coverage (identifier: urn:oid:2.16.840.1.113883.10.20. 22.4.129 |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="PROC" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATI****C**) (CONF:1098-8568).
    2. **SHALL** contain exactly one [1..1] **@moodCode**, which **SHALL** be selected from ValueSet [**Planned moodCode (Act/Encounter/Procedure)**](#_bookmark1157)urn:oid:2.16.840.1.113883.11.20.9.23 **STATIC** 2011-09-30 (CONF:1098-8569).
    3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-30444) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.41"

(CONF:1098-30445).

b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32554).

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1098-8571).
    2. **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-4 (CodeSystem: 2.16.840.1.113883.6.12) **OR** ICD10 PCS (CodeSystem: 2.16.840.1.113883.6.4) (CONF:1098-31977).
    3. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-30446).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**="active" Active (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098- 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**](#_bookmark1062) urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 **DYNAMI****C** (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**](#_bookmark2202) (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..\*] **entryRelations****hip** (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 (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..\*] **entryRelations****hip** (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)**](#_bookmark969) (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..\*] **entryRelations****hip** (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) (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..\*] **entryRelations****hip** (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 (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.129) (CONF:1098-31992).

***Figure 61: 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>

## Policy Activity (V2) - Published

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.61:2014-06-09 (open)]

***Table 126: Policy Activity (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Coverage Activity (V2)](#_bookmark813) (required) | [US Realm Address (AD.US.FIELDED)](#_bookmark2222) |

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 127: Policy Activity (V2) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.61:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-](#_bookmark1263)  [8898](#_bookmark1263) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1098-](#_bookmark1264)  [8899](#_bookmark1264) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark1265)  [8900](#_bookmark1265) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark1266)  [10516](#_bookmark1266) | 2.16.840.1.113883.10.20.22.4.61 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark1267)  [32595](#_bookmark1267) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-](#_bookmark1268)  [8901](#_bookmark1268) |  |
| code | 1..1 | SHALL |  | [1098-](#_bookmark1269)  [8903](#_bookmark1269) | urn:oid:2.16.840.1.114222.4.11.3  591 (Payer) |
| statusCode | 1..1 | SHALL |  | [1098-](#_bookmark1270)  [8902](#_bookmark1270) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark1271)  [19109](#_bookmark1271) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = completed |
| performer | 1..1 | SHALL |  | [1098-](#_bookmark1272)  [8906](#_bookmark1272) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1273)  [8907](#_bookmark1273) | urn:oid:2.16.840.1.113883.5.90  (HL7ParticipationType) = PRF |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark1274)  [16808](#_bookmark1274) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark1275)  [16809](#_bookmark1275) | 2.16.840.1.113883.10.20.22.4.87 |
| assignedEntity | 1..1 | SHALL |  | [1098-](#_bookmark1276)  [8908](#_bookmark1276) |  |
| id | 1..\* | SHALL |  | [1098-](#_bookmark1277)  [8909](#_bookmark1277) |  |
| code | 0..1 | SHOUL D |  | [1098-](#_bookmark1278)  [8914](#_bookmark1278) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark1279)  [15992](#_bookmark1279) | urn:oid:2.16.840.1.113883.1.11.1 0416  (HL7FinanciallyResponsibleParty Type) |
| addr | 0..1 | MAY |  | [1098-](#_bookmark1280)  [8910](#_bookmark1280) | [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED) (identifier:](#_bookmark2222)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2222)  [22.5.2](#_bookmark2222) |
| telecom | 0..\* | MAY |  | [1098-](#_bookmark1281)  [8911](#_bookmark1281) |  |
| representedOrganization | 0..1 | SHOUL |  | [1098-](#_bookmark1282) |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | D |  | 8912 |  |
| name | 0..1 | SHOUL D |  | [1098-](#_bookmark1283)  [8913](#_bookmark1283) |  |
| performer | 0..1 | SHOUL D |  | [1098-](#_bookmark1284)  [8961](#_bookmark1284) | urn:oid:2.16.840.1.113883.5.90  (HL7ParticipationType) = PRF |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark1285)  [16810](#_bookmark1285) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark1286)  [16811](#_bookmark1286) | 2.16.840.1.113883.10.20.22.4.88 |
| time | 0..1 | SHOUL D |  | [1098-](#_bookmark1287)  [8963](#_bookmark1287) |  |
| assignedEntity | 1..1 | SHALL |  | [1098-](#_bookmark1288)  [8962](#_bookmark1288) |  |
| code | 1..1 | SHALL |  | [1098-](#_bookmark1289)  [8968](#_bookmark1289) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark1290)  [16096](#_bookmark1290) | GUAR |
| @codeSystem | 1..1 | SHALL |  | [1098-](#_bookmark1291)  [32165](#_bookmark1291) | 2.16.840.1.113883.5.110 |
| addr | 0..1 | SHOUL D |  | [1098-](#_bookmark1292)  [8964](#_bookmark1292) | [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED) (identifier:](#_bookmark2222)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2222)  [22.5.2](#_bookmark2222) |
| telecom | 0..\* | SHOUL D |  | [1098-](#_bookmark1293)  [8965](#_bookmark1293) |  |
| participant | 1..1 | SHALL |  | [1098-](#_bookmark1294)  [8916](#_bookmark1294) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1295)  [8917](#_bookmark1295) | urn:oid:2.16.840.1.113883.5.90  (HL7ParticipationType) = COV |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark1296)  [16812](#_bookmark1296) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark1297)  [16814](#_bookmark1297) | 2.16.840.1.113883.10.20.22.4.89 |
| time | 0..1 | SHOUL D |  | [1098-](#_bookmark1298)  [8918](#_bookmark1298) |  |
| low | 0..1 | SHOUL D |  | [1098-](#_bookmark1299)  [8919](#_bookmark1299) |  |
| high | 0..1 | SHOUL D |  | [1098-](#_bookmark1300)  [8920](#_bookmark1300) |  |
| participantRole | 1..1 | SHALL |  | [1098-](#_bookmark1301)  [8921](#_bookmark1301) |  |
| id | 1..\* | SHALL |  | [1098-](#_bookmark1302)  [8922](#_bookmark1302) |  |
| code | 1..1 | SHALL |  | [1098-](#_bookmark1303)  [8923](#_bookmark1303) |  |
| @code | 0..1 | SHOUL D |  | [1098-](#_bookmark1304)  [16078](#_bookmark1304) | urn:oid:2.16.840.1.113883.1.11.1  8877 (Coverage Role Type) |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| addr | 0..1 | SHOUL D |  | [1098-](#_bookmark1305)  [8956](#_bookmark1305) |  |
| playingEntity | 0..1 | SHOUL D |  | [1098-](#_bookmark1306)  [8932](#_bookmark1306) |  |
| name | 1..\* | SHALL |  | [1098-](#_bookmark1307)  [8930](#_bookmark1307) |  |
| sdtc:birthTime | 1..1 | SHALL |  | [1098-](#_bookmark1308)  [31344](#_bookmark1308) |  |
| participant | 0..1 | SHOUL D |  | [1098-](#_bookmark1309)  [8934](#_bookmark1309) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1310)  [8935](#_bookmark1310) | urn:oid:2.16.840.1.113883.5.90  (HL7ParticipationType) = HLD |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark1311)  [16813](#_bookmark1311) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark1312)  [16815](#_bookmark1312) | 2.16.840.1.113883.10.20.22.4.90 |
| time | 0..1 | MAY |  | [1098-](#_bookmark1313)  [8938](#_bookmark1313) |  |
| participantRole | 1..1 | SHALL |  | [1098-](#_bookmark1314)  [8936](#_bookmark1314) |  |
| id | 1..\* | SHALL |  | [1098-](#_bookmark1315)  [8937](#_bookmark1315) |  |
| addr | 0..1 | SHOUL D |  | [1098-](#_bookmark1316)  [8925](#_bookmark1316) |  |
| entryRelationship | 1..\* | SHALL |  | [1098-](#_bookmark1317)  [8939](#_bookmark1317) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1318)  [8940](#_bookmark1318) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = REFR |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="ACT" Act (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATI****C**) (CONF:1098-8898).
    2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATI****C**) (CONF:1098-8899).
    3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-8900) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.61"

(CONF:1098-10516).

b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32595). This id is a unique identifier for the policy or program providing the coverage

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1098-8901).
    2. **SHALL** contain exactly one [1..1] **code**, which **SHOULD** be selected from ValueSet [**Payer**](#_bookmark1320)

urn:oid:2.16.840.1.114222.4.11.3591 **DYNAMI****C** (CONF:1098-8903).

* + 1. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-8902).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098- 19109).

This performer represents the Payer.

* + 1. **SHALL** contain exactly one [1..1] **performer** (CONF:1098-8906) such that it
       1. **SHALL** contain exactly one [1..1] **@typeCode**="PRF" Performer (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 **STATI****C**) (CONF:1098- 8907).
       2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-16808).
          1. This templateId **SHALL** contain exactly one [1..1]

**@root**="2.16.840.1.113883.10.20.22.4.87" Payer Performer (CONF:1098-16809).

* + - 1. **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:1098-8908).
         1. This assignedEntity **SHALL** contain at least one [1..\*] **id** (CONF:1098-8909).
         2. This assignedEntity **SHOULD** contain zero or one [0..1] **code** (CONF:1098- 8914).

The code, if present, **SHALL** contain exactly one [1..1] **@code**, which **SHOULD** be selected from ValueSet [**HL7FinanciallyResponsiblePartyType**](#_bookmark1322)

urn:oid:2.16.840.1.113883.1.11.10416 **DYNAMI****C** (CONF:1098-

15992).

* + - * 1. This assignedEntity **MAY** contain zero or one [0..1] [**US Realm Address**](#_bookmark2222) [**(AD.US.FIELDED)**](#_bookmark2222) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1098-8910).
        2. This assignedEntity **MAY** contain zero or more [0..\*] **telecom** (CONF:1098- 8911).
        3. This assignedEntity **SHOULD** contain zero or one [0..1]

**representedOrganization** (CONF:1098-8912).

The representedOrganization, if present, **SHOULD** contain zero or one [0..1] **name** (CONF:1098-8913).

This performer represents the Guarantor.

* + 1. **SHOULD** contain zero or one [0..1] **performer**="PRF" Performer (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 **STATI****C**) (CONF:1098-8961) such that it
       1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-16810).
          1. This templateId **SHALL** contain exactly one [1..1]

**@root**="2.16.840.1.113883.10.20.22.4.88" Guarantor Performer (CONF:1098-16811).

* + - 1. **SHOULD** contain zero or one [0..1] **time** (CONF:1098-8963).
      2. **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:1098-8962).
         1. This assignedEntity **SHALL** contain exactly one [1..1] **code** (CONF:1098- 8968).

This code **SHALL** contain exactly one [1..1] **@code**="GUAR" Guarantor (CONF:1098-16096).

This code **SHALL** contain exactly one [1..1]

**@codeSystem**="2.16.840.1.113883.5.110" (CONF:1098-32165).

* + - * 1. This assignedEntity **SHOULD** contain zero or one [0..1] [**US Realm Address**](#_bookmark2222) [**(AD.US.FIELDED)**](#_bookmark2222) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1098-8964).
        2. This assignedEntity **SHOULD** contain zero or more [0..\*] **telecom**

(CONF:1098-8965).

* + - * 1. **SHOULD** include assignedEntity/assignedPerson/name AND/OR assignedEntity/representedOrganization/name (CONF:1098-8967).
    1. **SHALL** contain exactly one [1..1] **participant** (CONF:1098-8916) 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 **STATI****C**) (CONF:1098- 8917).
       2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-16812).
          1. This templateId **SHALL** contain exactly one [1..1]

**@root**="2.16.840.1.113883.10.20.22.4.89" Covered Party Participant (CONF:1098-16814).

* + - 1. **SHOULD** contain zero or one [0..1] **time** (CONF:1098-8918).
         1. The time, if present, **SHOULD** contain zero or one [0..1] **low** (CONF:1098- 8919).
         2. The time, if present, **SHOULD** contain zero or one [0..1] **high** (CONF:1098- 8920).
      2. **SHALL** contain exactly one [1..1] **participantRole** (CONF:1098-8921).
         1. This participantRole **SHALL** contain at least one [1..\*] **id** (CONF:1098-8922).

This id is a unique identifier for the covered party member. Implementers **SHOULD** use the same GUID for each instance of a member identifier from the same health plan (CONF:1098-8984).

* + - * 1. This participantRole **SHALL** contain exactly one [1..1] **code** (CONF:1098- 8923).

This code **SHOULD** contain zero or one [0..1] **@code**, which **SHOULD** be selected from ValueSet [**Coverage Role Type**](#_bookmark1324)urn:oid:2.16.840.1.113883.1.11.18877 **DYNAMI****C** (CONF:1098- 16078).

* + - * 1. This participantRole **SHOULD** contain zero or one [0..1] **addr** (CONF:1098- 8956).

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- 10484).

* + - * 1. This participantRole **SHOULD** contain zero or one [0..1] **playingEntity**

(CONF:1098-8932).

If the covered party’s name is recorded differently in the health plan and in the registration/pharmacy benefit summary (due to marriage or for other reasons), use the name as it is recorded in the health plan.

The playingEntity, if present, **SHALL** contain at least one [1..\*] **name**

(CONF:1098-8930).

If the covered party’s date of birth is recorded differently in the health plan and in the registration/pharmacy benefit summary, use the date of birth as it is recorded in the health plan.

The playingEntity, if present, **SHALL** contain exactly one [1..1]

**sdtc:birthTime** (CONF:1098-31344).

The prefix sdtc: **SHALL** be bound to the namespace “urn:hl7- org:sdtc”. The use of the namespace provides a necessary extension to CDA R2 for the use of the birthTime element (CONF:1098-31345).

When the Subscriber is the patient, the participant element describing the subscriber **SHALL NOT** be present. This information will be recorded instead in the data elements used to record member information.

* + 1. **SHOULD** contain zero or one [0..1] **participant** (CONF:1098-8934) such that it
       1. **SHALL** contain exactly one [1..1] **@typeCode**="HLD" Holder (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 **STATI****C**) (CONF:1098- 8935).
       2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-16813).
          1. This templateId **SHALL** contain exactly one [1..1]

**@root**="2.16.840.1.113883.10.20.22.4.90" Policy Holder Participant (CONF:1098-16815).

* + - 1. **MAY** contain zero or one [0..1] **time** (CONF:1098-8938).
      2. **SHALL** contain exactly one [1..1] **participantRole** (CONF:1098-8936).
         1. This participantRole **SHALL** contain at least one [1..\*] **id** (CONF:1098-8937).

This id is a unique identifier for the subscriber of the coverage (CONF:1098-10120).

* + - * 1. This participantRole **SHOULD** contain zero or one [0..1] **addr** (CONF:1098- 8925).

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- 10483).

* + - 1. When the Subscriber is the patient, the participant element describing the subscriber **SHALL NOT** be present. This information will be recorded instead in the data elements used to record member information (CONF:1098-17139).
    1. **SHALL** contain at least one [1..\*] **entryRelations****hip** (CONF:1098-8939) 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 **STATI****C**) (CONF:1098-8940).
       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:1098-8942).
       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:1098-8943).

***Tabl******e 128: Payer***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Payer urn:oid:2.16.840.1.114222.4.11.3591  A value set of Public Health Data Standards Consortium Source of Payment Typology Version 3.0 Codes Value Set Source: [**http://www.phdsc.org/standards/payer-typology.asp**](http://www.phdsc.org/standards/payer-typology.asp) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 1 | Source of Payment Typology (PHDSC) | urn:oid:2.16.840.1.11388 3.3.221.5 | Medicare |
| 2 | Source of Payment Typology (PHDSC) | urn:oid:2.16.840.1.11388 3.3.221.5 | Medicaid |
| 311 | Source of Payment Typology (PHDSC) | urn:oid:2.16.840.1.11388 3.3.221.5 | Tricare (CHAMPUS) |
| 33 | Source of Payment Typology (PHDSC) | urn:oid:2.16.840.1.11388 3.3.221.5 | Indian Health Service or Tribe |
| 62 | Source of Payment Typology (PHDSC) | urn:oid:2.16.840.1.11388 3.3.221.5 | BC Indemnity |
| 61 | Source of Payment Typology (PHDSC) | urn:oid:2.16.840.1.11388 3.3.221.5 | BC Managed Care |
| 611 | Source of Payment Typology (PHDSC) | urn:oid:2.16.840.1.11388 3.3.221.5 | BC Managed Care - HMO |
| 619 | Source of Payment Typology (PHDSC) | urn:oid:2.16.840.1.11388 3.3.221.5 | BC Managed Care - Other |
| 613 | Source of Payment Typology (PHDSC) | urn:oid:2.16.840.1.11388 3.3.221.5 | BC Managed Care - POS |
| 612 | Source of Payment Typology (PHDSC) | urn:oid:2.16.840.1.11388 3.3.221.5 | BC Managed Care - PPO |
| ... | | | |

***Table*** ***129: HL7FinanciallyResponsiblePartyType***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: HL7FinanciallyResponsiblePartyType urn:oid:2.16.840.1.113883.1.11.10416 RoleClass 2.16.840.1.113883.5.110  <http://www.hl7.org/memonly/downloads/v3edition.cfm#V32008>  Value Set Source: [**http://www.hl7.org**](http://www.hl7.org/) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| GUAR | RoleClass | urn:oid:2.16.840.1.11388 3.5.110 | Guarantor |
| EMP | RoleClass | urn:oid:2.16.840.1.11388 3.5.110 | Employee |
| INVSBJ | RoleClass | urn:oid:2.16.840.1.11388 3.5.110 | Investigation Subject |

***Table*** ***130: Coverage Role Type***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Coverage Role Type urn:oid:2.16.840.1.113883.1.11.18877  A value set of HL7 role Codes for role recognized through the issuance of insurance coverage to an identified covered party who has this relationship with the policy holder such as the policy holder themselves (self), spouse, child, etc.  Value Set Source: [**http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary\_tables/in**](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html) [**frastructure/vocabulary/vocabulary.html**](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| FAMDEP | RoleCode | urn:oid:2.16.840.1.11388 3.5.111 | Family dependent |
| FSTUD | RoleCode | urn:oid:2.16.840.1.11388 3.5.111 | Full-time student |
| SELF | RoleCode | urn:oid:2.16.840.1.11388 3.5.111 | Self |
| ... | | | |

***Figure 62: Policy Activity (V2) Example***

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

<templateId root="2.16.840.1.113883.10.20.22.4.61" extension="2014-06-09" />

<id root="3e676a50-7aac-11db-9fe1-0800200c9a66" />

<code code="81" displayName="self-pay" codeSystemName="Source of Payment Typology (PHDSC)" codeSystem="2.16.840.1.113883.3.221.5" />

<statusCode code="completed" />

<!-- Insurance company information -->

<performer typeCode="PRF">

<templateId root="2.16.840.1.113883.10.20.22.4.87" />

<time>

<low nullFlavor="UNK" />

<high nullFlavor="UNK" />

</time>

<assignedEntity>

<id root="2.16.840.1.113883.19" />

<code code="PAYOR" codeSystem="2.16.840.1.113883.5.110" codeSystemName="HL7 RoleCode" />

<addr use="WP">

<streetAddressLine>123 Insurance Road</streetAddressLine>

<city>Blue Bell</city>

<state>MA</state>

<postalCode>02368</postalCode>

<country>US</country>

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

</addr>

<telecom value="tel:+(555)555-1515" use="WP" />

<representedOrganization>

<name>Good Health Insurance</name>

<telecom value="tel:+(555)555-1515" use="WP" />

<addr use="WP">

<streetAddressLine>123 Insurance Road</streetAddressLine>

<city>Blue Bell</city>

<state>MA</state>

<postalCode>02368</postalCode>

<country>US</country>

</addr>

</representedOrganization>

</assignedEntity>

</performer>

<!-- Guarantor information (the person responsible for the final bill) -->

<performer typeCode="PRF">

<templateId root="2.16.840.1.113883.10.20.22.4.88" />

<time>

<low nullFlavor="UNK" />

<high nullFlavor="UNK" />

</time>

<assignedEntity>

<id root="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>

## Primary Tumor Clinical - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.13.36:2015-02-05 (open)]

***Table 131: Primary Tumor Clinical Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [TNM Clinical Stage Group](#_bookmark1937) (required) |  |

This template records the results of evaluating the tumor size or how far the primary tumor has spread directly to adjacent organs and structures.

***Table 132: Primary Tumor Clinical Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.13.36:2015-02-05) | | | | | |
| @classCode | 1..1 | SHALL |  | [1169-](#_bookmark1330)  [34077](#_bookmark1330) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1169-](#_bookmark1331)  [34078](#_bookmark1331) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1169-](#_bookmark1332)  [34074](#_bookmark1332) |  |
| @root | 1..1 | SHALL |  | [1169-](#_bookmark1333)  [34075](#_bookmark1333) | 2.16.840.1.113883.10.13.36 |
| @extension | 1..1 | SHALL |  | [1169-](#_bookmark1334)  [34076](#_bookmark1334) | 2015-02-05 |
| code | 1..1 | SHALL |  | [1169-](#_bookmark1335)  [34079](#_bookmark1335) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark1336)  [34080](#_bookmark1336) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 21905-5 |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark1337)  [34081](#_bookmark1337) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| value | 1..1 | SHALL | CD | [1169-](#_bookmark1338)  [34082](#_bookmark1338) |  |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark1339)  [34083](#_bookmark1339) | urn:oid:2.16.840.1.113883.3.520.  4.6 (TNM Clinical Tumor) |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark1340)  [34087](#_bookmark1340) | urn:oid:2.16.840.1.113883.15.6  (TNM 7. Edition) = 2.16.840.1.113883.15.6 |
| @sdtc:valueSet | 1..1 | SHALL |  | [1169-](#_bookmark1341)  [34088](#_bookmark1341) | urn:oid:2.16.840.1.113883.15.6  (TNM 7. Edition) = 2.16.840.1.113883.3.520.4.6 |
| originalText | 0..1 | SHOUL D |  | [1169-](#_bookmark1342)  [34084](#_bookmark1342) |  |
| reference | 0..1 | SHOUL D |  | [1169-](#_bookmark1343)  [34085](#_bookmark1343) |  |
| @value | 0..1 | SHOUL D |  | [1169-](#_bookmark1344)  [34086](#_bookmark1344) |  |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1169-34077).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1169-34078).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1169-34074) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.36"

(CONF:1169-34075).

b. **SHALL** contain exactly one [1..1] **@extension**="2015-02-05" (CONF:1169-34076).

* + 1. **SHALL** contain exactly one [1..1] **code** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34079).
       1. This code **SHALL** contain exactly one [1..1] **@code**="21905-5" Primary tumor.clinical [Class] Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34080).
       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:1169-34081).

* + 1. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD" (CONF:1169-34082).
       1. This value **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [**TNM Clinical Tumor**](#_bookmark1346) urn:oid:2.16.840.1.113883.3.520.4.6 (CONF:1169-34083).
       2. This value **SHALL** contain exactly one [1..1]

**@codeSystem**="2.16.840.1.113883.15.6" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1169-34087).

* + - 1. This value **SHALL** contain exactly one [1..1]

**@sdtc:valueSet**="2.16.840.1.113883.3.520.4.6" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1169-34088).

* + - 1. This value **SHOULD** contain zero or one [0..1] **originalTe****xt** (CONF:1169-34084).
         1. The originalText, if present, **SHOULD** contain zero or one [0..1] **reference**

(CONF:1169-34085).

The reference, if present, **SHOULD** contain zero or one [0..1] **@value**

(CONF:1169-34086).

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:1169-34089).

***Table*** ***133: TNM Clinical Tumor***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: TNM Clinical Tumor urn:oid:2.16.840.1.113883.3.520.4.6  Detailed site-specific codes for the clinical tumor (T) as defined by AJCC and recorded by the physician.  Note: The AJCC Staging Manual TNM system is proprietary and its definitions cannot be included in other documents without permission.  Value Set Source:  [**http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.6**](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.6) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| TX | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | Site specific descriptions prevent listing of text equivalents. |
| Tis | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| Ta | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| T4d | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| T4c | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| T4b | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| T4a | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| T4 | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| T3c | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| T3b | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| ... | | | |

***Figure 63: Primary Tumor Clinical example***

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

<templateId root="2.16.840.1.113883.10.13.36" extension="2015-02-05" />

<code code="21905-5" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Primary tumor.clinical [Class] Cancer" />

<value xsi:type="CD" code="T2" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM

7. Edition" displayName="Tumor &gt; 20 mm but &lt;= to 50 mm in greatest dimension" sdtc:valueSet="2.16.840.1.113883.3.520.4.6">

<originalText>

<reference value="#ClinicalPrimaryTumor\_1" />

</originalText>

</value>

</observation>

## Primary Tumor Pathologic - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.13.41:2015-02-05 (open)]

***Table 134: Primary Tumor Pathologic Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [TNM Pathologic Stage Group](#_bookmark2010) (required) |  |

This template records the results of evaluating the tumor size or how far the primary tumor has spread directly to adjacent organs and structures.

***Table 135: Primary Tumor Pathologic Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.13.41:2015-02-05) | | | | | |
| @classCode | 1..1 | SHALL |  | [1169-](#_bookmark1352)  [34187](#_bookmark1352) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1169-](#_bookmark1353)  [34188](#_bookmark1353) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1169-](#_bookmark1354)  [34186](#_bookmark1354) |  |
| @root | 1..1 | SHALL |  | [1169-](#_bookmark1355)  [34189](#_bookmark1355) | 2.16.840.1.113883.10.13.41 |
| @extension | 1..1 | SHALL |  | [1169-](#_bookmark1356)  [34190](#_bookmark1356) | 2015-02-05 |
| code | 1..1 | SHALL |  | [1169-](#_bookmark1357)  [34191](#_bookmark1357) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark1358)  [34192](#_bookmark1358) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 21899-0 |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark1359)  [34193](#_bookmark1359) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| value | 1..1 | SHALL | CD | [1169-](#_bookmark1360)  [34194](#_bookmark1360) |  |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark1361)  [34195](#_bookmark1361) | urn:oid:2.16.840.1.113883.3.520.  4.17 (TNM Pathologic Tumor) |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark1362)  [34196](#_bookmark1362) | urn:oid:2.16.840.1.113883.15.6  (TNM 7. Edition) = 2.16.840.1.113883.15.6 |
| @sdtc:valueSet | 1..1 | SHALL |  | [1169-](#_bookmark1363)  [34197](#_bookmark1363) | urn:oid:2.16.840.1.113883.15.6  (TNM 7. Edition) = 2.16.840.1.113883.3.520.4.17 |
| originalText | 0..1 | SHOUL D |  | [1169-](#_bookmark1364)  [34198](#_bookmark1364) |  |
| reference | 0..1 | SHOUL D |  | [1169-](#_bookmark1365)  [34199](#_bookmark1365) |  |
| @value | 0..1 | SHOUL D |  | [1169-](#_bookmark1366)  [34200](#_bookmark1366) |  |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1169-34187).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1169-34188).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1169-34186) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.41"

(CONF:1169-34189).

**SHALL** contain exactly one [1..1] **@extension**="2015-02-05" (CONF:1169-34190).

* + 1. **SHALL** contain exactly one [1..1] **code** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34191).
       1. This code **SHALL** contain exactly one [1..1] **@code**="21899-0" Primary tumor.pathology Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34192).
       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:1169-34193).

* + 1. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD" (CONF:1169-34194).
       1. This value **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [**TNM Pathologic Tumor**](#_bookmark1368) urn:oid:2.16.840.1.113883.3.520.4.17 (CONF:1169-34195).
       2. This value **SHALL** contain exactly one [1..1]

**@codeSystem**="2.16.840.1.113883.15.6" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1169-34196).

* + - 1. This value **SHALL** contain exactly one [1..1]

**@sdtc:valueSet**="2.16.840.1.113883.3.520.4.17" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1169-34197).

* + - 1. This value **SHOULD** contain zero or one [0..1] **originalTe****xt** (CONF:1169-34198).
         1. The originalText, if present, **SHOULD** contain zero or one [0..1] **reference**

(CONF:1169-34199).

The reference, if present, **SHOULD** contain zero or one [0..1] **@value**

(CONF:1169-34200).

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:1169-34201).

***Table*** ***136: TNM Pathologic Tumor***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: TNM Pathologic Tumor urn:oid:2.16.840.1.113883.3.520.4.17  Detailed site-specific codes for the pathological tumor (T) as defined by AJCC and recorded by the physician.  Note: The AJCC Staging Manual TNM system is proprietary and its definitions cannot be included in other documents without permission.  Value Set Source:  [**http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.17**](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.17) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| TX | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | Site specific descriptions prevent listing of text equivalents. |
| Tispu | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| Tispd | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| Tis | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| Ta | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| T4d | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| T4c | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| T4b | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| T4a | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| T4 | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| ... | | | |

***Figure 64: Primary Tumor Pathologic example***

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

<templateId root="2.16.840.1.113883.10.13.41" extension="2015-02-05" />

<code code="21899-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Primary tumor.pathology Cancer" />

<value xsi:type="CD" code="T2" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM

7. Edition" displayName="Tumor &gt; 20 mm but &lt;= to 50 mm in greatest dimension" sdtc:valueSet="2.16.840.1.113883.3.520.4.17" />

</observation>

## Problem Concern Act (V2) - Published

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.3:2014-06-09 (open)]

***Table 137: Problem Concern Act (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Problem Section (entries required) (V2)](#_bookmark520) (required) | [Author Participation](#_bookmark2202)  [Problem Observation (V2)](#_bookmark1410) |

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. 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).

A Problem Concern Act can contain many Problem Observations (templateId 2.16.840.1.113883.10.20.22.4.4.2). 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 138: Problem Concern Act (V2) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.3:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-](#_bookmark1374)  [9024](#_bookmark1374) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1098-](#_bookmark1375)  [9025](#_bookmark1375) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark1376)  [16772](#_bookmark1376) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark1377)  [16773](#_bookmark1377) | 2.16.840.1.113883.10.20.22.4.3 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark1378)  [32509](#_bookmark1378) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-](#_bookmark1379)  [9026](#_bookmark1379) |  |
| code | 1..1 | SHALL |  | [1098-](#_bookmark1380)  [9027](#_bookmark1380) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark1381)  [19184](#_bookmark1381) | CONC |
| @codeSystem | 1..1 | SHALL |  | [1098-](#_bookmark1382)  [32168](#_bookmark1382) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = 2.16.840.1.113883.5.6 |
| statusCode | 1..1 | SHALL |  | [1098-](#_bookmark1383)  [9029](#_bookmark1383) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark1384)  [31525](#_bookmark1384) | urn:oid:2.16.840.1.113883.11.20.  9.19 (ProblemAct statusCode) |
| effectiveTime | 1..1 | SHALL |  | [1098-](#_bookmark1385)  [9030](#_bookmark1385) |  |
| low | 1..1 | SHALL |  | [1098-](#_bookmark1386)  [9032](#_bookmark1386) |  |
| high | 0..1 | MAY |  | [1098-](#_bookmark1387)  [9033](#_bookmark1387) |  |
| author | 0..\* | SHOUL D |  | [1098-](#_bookmark1388)  [31146](#_bookmark1388) | [Author Participation (identifier:](#_bookmark2202)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2202)  [22.4.119](#_bookmark2202) |
| entryRelationship | 1..\* | SHALL |  | [1098-](#_bookmark1389)  [9034](#_bookmark1389) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1390)  [9035](#_bookmark1390) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = SUBJ |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark1391)  [15980](#_bookmark1391) | [Problem Observation (V2)](#_bookmark1410)  [(identifier:](#_bookmark1410)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark1410)  [0.22.4.4:2014-06-09](#_bookmark1410) |
| entryRelationship | 0..\* | MAY |  | [1098-](#_bookmark1392)  [31638](#_bookmark1392) |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1393)  [31639](#_bookmark1393) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark1394)  [31640](#_bookmark1394) | Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20. 22.4.143 |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="ACT" Act (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATI****C**) (CONF:1098-9024).
    2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATI****C**) (CONF:1098-9025).
    3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-16772) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.3"

(CONF:1098-16773).

**SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32509).

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1098-9026).
    2. **SHALL** contain exactly one [1..1] **code** (CONF:1098-9027).
       1. This code **SHALL** contain exactly one [1..1] **@code**="CONC" Concern (CONF:1098- 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:1098-32168).

* + 1. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-9029).

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**](#_bookmark697)urn:oid:2.16.840.1.113883.11.20.9.19 **STATIC** 2011-09-10 (CONF:1098- 31525).
    1. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1098-9030).
       1. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:1098-9032).

Note: The effectiveTime/low asserts when the concern became active. This equates to the time the concern was authored in the patient's chart.

* + - 1. This effectiveTime **MAY** contain zero or one [0..1] **high** (CONF:1098-9033).

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).

* + 1. **SHOULD** contain zero or more [0..\*] [**Author Participation**](#_bookmark2202) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31146).
    2. **SHALL** contain at least one [1..\*] **entryRelations****hip** (CONF:1098-9034) 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 **STATI****C**) (CONF:1098-9035).
       2. **SHALL** contain exactly one [1..1] [**Problem Observation (V2)**](#_bookmark1410) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2014-06-09) (CONF:1098- 15980).

The following entryRelationship represents the importance of the concern to a provider.

* + 1. **MAY** contain zero or more [0..\*] **entryRelations****hip** (CONF:1098-31638) 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:1098- 31639).
       2. **SHALL** contain exactly one [1..1] Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:1098-31640).

***Figure 65: Problem Concern Act (V2) Example***

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

<!-- \*\* Problem Concern Act (V2) \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.3"

extension="2014-06-09" />

<id root="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 (V2) \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2014-06-09" />

<id root="ab1791b0-5c71-11db-b0de-0800200c9a66" />

<code code="75323-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Condition" />

<!-- The statusCode reflects the status of the observation itself -->

<statusCode code="completed" />

<effectiveTime>

<!-- The low value reflects the date of onset -->

<!-- Based on patient symptoms, presumed onset is July 3, 2013 -->

<low value="20130703" />

<!-- The high value reflects when the problem was known to be resolved -->

<!-- Based on signs and symptoms, appears to be resolved on Aug 14, 2013 -->

<high value="20080814" />

</effectiveTime>

<value xsi:type="CD"

code="233604007" codeSystem="2.16.840.1.113883.6.96"

displayName="Pneumonia" />

<author typeCode="AUT">

<templateId root="2.16.840.1.113883.10.20.22.4.119" />

<time value="200808141030-0800" />

<assignedAuthor>

<id extension="555555555" root="2.16.840.1.113883.4.6" />

<code code="207QA0505X" displayName="Adult Medicine" codeSystem="2.16.840.1.113883.6.101"

codeSystemName="Healthcare Provider Taxonomy (HIPAA)" />

</assignedAuthor>

</author>

</observation>

</entryRelationship>

</act>

## Problem Concern Act (V2) - Cancer IG Specific Constraints -

***Published***

[act: identifier urn:hl7ii:2.16.840.1.113883.10.13.22:2014-08-08 (open)]

***Table 139: Problem Concern Act (V2) - Cancer IG Specific Constraints Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Problem Section (entries required) (V2) - Cancer IG](#_bookmark539)  [Specific Constraints](#_bookmark539) (required) | [Problem Observation (V2) - Cancer IG Specific](#_bookmark1450)  [Constraints](#_bookmark1450) |

This template defines Cancer Event Report-specific constraints to the C-CDA R2.0 Problem Concern Act (V2). It requires the Problem Observation (V2) – Cancer IG Specific Constraints template to be used.

***Table 140: Problem Concern Act (V2) - Cancer IG Specific Constraints Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| act (identifier: urn:hl7ii:2.16.840.1.113883.10.13.22:2014-08-08) | | | | | |
| @classCode | 1..1 | SHALL |  | [1126-](#_bookmark1400)  [33255](#_bookmark1400) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = ACT |
| @moodCode | 1..1 | SHALL |  | [1126-](#_bookmark1401)  [33257](#_bookmark1401) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1126-](#_bookmark1402)  [33254](#_bookmark1402) |  |
| @root | 1..1 | SHALL |  | [1126-](#_bookmark1403)  [33256](#_bookmark1403) | 2.16.840.1.113883.10.13.22 |
| @extension | 1..1 | SHALL |  | [1126-](#_bookmark1404)  [33963](#_bookmark1404) | 2014-08-08 |
| entryRelationship | 1..\* | SHALL |  | [1126-](#_bookmark1405)  [33258](#_bookmark1405) |  |
| @typeCode | 1..1 | SHALL |  | [1126-](#_bookmark1406)  [33259](#_bookmark1406) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = SUBJ |
| observation | 1..1 | SHALL |  | [1126-](#_bookmark1407)  [33260](#_bookmark1407) | [Problem Observation (V2) -](#_bookmark1450)  [Cancer IG Specific Constraints](#_bookmark1450)  [(identifier:](#_bookmark1450)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark1450)  [3.23:2014-08-08](#_bookmark1450) |

* + 1. Conforms to [**Problem Concern Act (V2)**](#_bookmark1371) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.3:2014-06-09).
    2. **SHALL** contain exactly one [1..1] **@classCode**="ACT" Act (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1126-33255).
    3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1126-33257).
    4. **SHALL** contain exactly one [1..1] **templateId** (CONF:1126-33254) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.22"

(CONF:1126-33256).

b. **SHALL** contain exactly one [1..1] **@extension**="2014-08-08" (CONF:1126-33963).

* + 1. **SHALL** contain at least one [1..\*] **entryRelations****hip** (CONF:1126-33258) 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:1126- 33259).
       2. **SHALL** contain exactly one [1..1] [**Problem Observation (V2) - Cancer IG**](#_bookmark1450) [**Specific Constraints**](#_bookmark1450) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.23:2014-08-08) (CONF:1126-33260).

***Figure 66: Problem Concern Act (V2) - Cancer IG Specific Constraints example***

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

<!-- \*\* Problem concern act \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.3" extension="2014-06-09" />

<templateId root="2.16.840.1.113883.10.13.22" extension="2014-08-08" />

<id root="ec8a6ff8-ed4b-4f7e-82c3-e98e58b45de7" />

<code code="CONC" codeSystem="2.16.840.1.113883.5.6" codSystemName="HL7ActClass" 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">

<!-- Same as Concern effectiveTime/low -->

<time value="201307061145-0800" />

<assignedAuthor>

<id extension="555555555" root="2.16.840.1.113883.19" />

</assignedAuthor>

</author>

<entryRelationship typeCode="SUBJ">

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

<!-- \*\* Problem observation \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2014-06-09" />

<templateId root="2.16.840.1.113883.10.13.23" extension="2014-08-08" />

<id root="ab1791b0-5c71-11db-b0de-0800200c9a66" />

<code code="64572001" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Condition" />

<!-- The statusCode reflects the status of the observation itself -->

<statusCode code="completed" />

<effectiveTime>

<!-- The low value reflects the date of onset -->

<low value="20080814" />

<!-- The high value reflects when the problem was known to be resolved -->

<high value="20130703" />

</effectiveTime>

<value xsi:type="CD" code="408643008" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Infiltrating duct carcinoma of breast" sdtc:valueSet="2.16.840.1.113883.3.88.12.3221.7.4 " />

<author typeCode="AUT">

<time value="201307061145-0800" />

<assignedAuthor>

<id extension="555555555" root="2.16.840.1.113883.19" />

</assignedAuthor>

</author>

</observation>

</entryRelationship>

</act>

## Problem Observation (V2) - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2014-06-09 (open)]

***Table 141: Problem Observation (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Problem Concern Act (V2)](#_bookmark1371) (required) | [Author Participation](#_bookmark2202)  [Problem Status (DEPRECATED)](#_bookmark1465) |

This template reflects a discrete observation about a patient's problem. Because it is a discrete observation, it will have a statusCode of "completed". The effectiveTime, also referred to as the “biologically relevant time” is the time at which the observation holds for the patient. For a provider seeing a patient in the clinic today, observing a history of heart attack that occurred five years ago, the effectiveTime is five years ago.

The effectiveTime of the Problem Observation is the definitive indication of whether or not the underlying condition is resolved. If the problem is known to be resolved, then an effectiveTime/high would be present. If the date of resolution is not known, then effectiveTime/high will be present with a nullFlavor of "UNK".

***Table 142: Problem Observation (V2) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-](#_bookmark1413)  [9041](#_bookmark1413) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-](#_bookmark1414)  [9042](#_bookmark1414) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| @negationInd | 0..1 | MAY |  | [1098-](#_bookmark1415)  [10139](#_bookmark1415) |  |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark1416)  [14926](#_bookmark1416) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark1417)  [14927](#_bookmark1417) | 2.16.840.1.113883.10.20.22.4.4 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark1418)  [32508](#_bookmark1418) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-](#_bookmark1419)  [9043](#_bookmark1419) |  |
| code | 1..1 | SHALL |  | [1098-](#_bookmark1420)  [9045](#_bookmark1420) | urn:oid:2.16.840.1.113883.3.88.1  2.3221.7.2 (Problem Type) |
| statusCode | 1..1 | SHALL |  | [1098-](#_bookmark1421)  [9049](#_bookmark1421) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark1422)  [19112](#_bookmark1422) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1098-](#_bookmark1423)  [9050](#_bookmark1423) |  |
| low | 1..1 | SHALL |  | [1098-](#_bookmark1424)  [15603](#_bookmark1424) |  |
| high | 0..1 | MAY |  | [1098-](#_bookmark1425)  [15604](#_bookmark1425) |  |
| value | 1..1 | SHALL | CD | [1098-](#_bookmark1426)  [9058](#_bookmark1426) | urn:oid:2.16.840.1.113883.3.88.1  2.3221.7.4 (Problem) |
| qualifier | 0..\* | MAY |  | [1098-](#_bookmark1427)  [31870](#_bookmark1427) |  |
| translation | 0..\* | MAY |  | [1098-](#_bookmark1428)  [16749](#_bookmark1428) |  |
| @code | 0..1 | MAY |  | [1098-](#_bookmark1429)  [16750](#_bookmark1429) | urn:oid:2.16.840.1.113883.6.90 (ICD10CM) |
| @code | 0..1 | MAY |  | [1098-](#_bookmark1430)  [31871](#_bookmark1430) |  |
| author | 0..\* | SHOUL D |  | [1098-](#_bookmark1431)  [31147](#_bookmark1431) | [Author Participation (identifier:](#_bookmark2202)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2202)  [22.4.119](#_bookmark2202) |
| entryRelationship | 0..1 | MAY |  | [1098-](#_bookmark1432)  [9059](#_bookmark1432) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1433)  [9060](#_bookmark1433) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | SUBJ |
| @inversionInd | 1..1 | SHALL |  | [1098-](#_bookmark1434)  [9069](#_bookmark1434) | true |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark1435)  [15590](#_bookmark1435) | Age Observation (identifier: urn:oid:2.16.840.1.113883.10.20. 22.4.31 |
| entryRelationship | 0..1 | MAY |  | [1098-](#_bookmark1436)  [29951](#_bookmark1436) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1437)  [31531](#_bookmark1437) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark1438)  [29952](#_bookmark1438) | Prognosis Observation (identifier: urn:oid:2.16.840.1.113883.10.20. 22.4.113 |
| entryRelationship | 0..\* | MAY |  | [1098-](#_bookmark1439)  [31063](#_bookmark1439) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1440)  [31532](#_bookmark1440) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark1441)  [31064](#_bookmark1441) | Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20. 22.4.143 |
| entryRelationship | 0..1 | MAY |  | [1098-](#_bookmark1442)  [9063](#_bookmark1442) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1443)  [9068](#_bookmark1443) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = REFR |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark1444)  [15591](#_bookmark1444) | [Problem Status (DEPRECATED)](#_bookmark1465)  [(identifier:](#_bookmark1465)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark1465)  [0.22.4.6:2014-06-09](#_bookmark1465) |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATI****C**) (CONF:1098-9041).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATI****C**) (CONF:1098-9042).

The negationInd is used to indicate the absence of the condition in observation/value. A negationInd of "true" coupled with an observation/value of SNOMED code 64572001 "Disease (disorder)" indicates that the patient has no known conditions.

* + 1. **MAY** contain zero or one [0..1] **@negat****ionInd** (CONF:1098-10139).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-14926) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.4"

(CONF:1098-14927).

b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32508).

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1098-9043).
    2. **SHALL** contain exactly one [1..1] **code**, which **SHOULD** be selected from ValueSet **[Problem](#_bookmark919)**  [**Type**](#_bookmark919) urn:oid:2.16.840.1.113883.3.88.12.3221.7.2 **STATIC** 2014-09-02 (CONF:1098- 9045).
    3. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-9049).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098- 19112).

If the problem is known to be resolved, but the date of resolution is not known, then the high element SHALL be present, and the nullFlavor attribute SHALL be set to 'UNK'. Therefore, the existence of an high element within a problem does indicate that the problem has been resolved.

* + 1. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1098-9050).

The effectiveTime/low (a.k.a. "onset date") asserts when the condition became biologically active.

* + - 1. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:1098-15603).

The effectiveTime/high (a.k.a. "resolution date") asserts when the condition became biologically resolved.

* + - 1. This effectiveTime **MAY** contain zero or one [0..1] **high** (CONF:1098-15604).
    1. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD", where the code **SHOULD** be selected from ValueSet **[Problem](#_bookmark921)** urn:oid:2.16.840.1.113883.3.88.12.3221.7.4 **DYNAMIC** (CONF:1098-9058).

The observation/value and all the qualifiers together (often referred to as a post-coordinated expression) make up one concept. Qualifiers constrain the meaning of the primary code, and cannot negate it or change its meaning. Qualifiers can only be used according to well-defined rules of post-coordination and only if the underlying code system defines the use of such qualifiers or if there is a third code system that specifies how other code systems may be combined.

For example, SNOMED CT allows constructing concepts as a combination of multiple codes. SNOMED CT defines a concept "pneumonia (disorder)" (233604007) an attribute "finding site" (363698007) and another concept "left lower lobe of lung (body structure)" (41224006).

SNOMED CT allows one to combine these codes in a code phrase, as shown in the sample XML.

* + - 1. This value **MAY** contain zero or more [0..\*] **qualifie****r** (CONF:1098-31870).
      2. This value **MAY** contain zero or more [0..\*] **translatio****n** (CONF:1098-16749) such that it
         1. **MAY** contain zero or one [0..1] **@code** (CodeSystem: ICD10CM urn:oid:2.16.840.1.113883.6.90 **STATIC**) (CONF:1098-16750).

A negationInd of "true" coupled with an observation/value/@code of SNOMED code 64572001 "Disease (disorder)" indicates that the patient has no known conditions.

* + - 1. This value **MAY** contain zero or one [0..1] **@code** (CONF:1098-31871).
    1. **SHOULD** contain zero or more [0..\*] [**Author** **Participation**](#_bookmark2202) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31147).
    2. **MAY** contain zero or one [0..1] **entryRelationshi****p** (CONF:1098-9059) 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 **STATI****C**) (CONF:1098-9060).
       2. **SHALL** contain exactly one [1..1] **@inversionInd**="true" True (CONF:1098-9069).
       3. **SHALL** contain exactly one [1..1] Age Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.31) (CONF:1098-15590).
    3. **MAY** contain zero or one [0..1] **entryRelationshi****p** (CONF:1098-29951) 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:1098- 31531).
       2. **SHALL** contain exactly one [1..1] Prognosis Observation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.113) (CONF:1098-29952).
    4. **MAY** contain zero or more [0..\*] **entryRelations****hip** (CONF:1098-31063) 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:1098- 31532).
       2. **SHALL** contain exactly one [1..1] Priority Preference (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.143) (CONF:1098-31064).
    5. **MAY** contain zero or one [0..1] **entryRelationshi****p** (CONF:1098-9063) 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:1098- 9068).
       2. **SHALL** contain exactly one [1..1] [**Problem Status** **(DEPRECATED)**](#_bookmark1465) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.6:2014-06-09) (CONF:1098- 15591).

***Figure 67: Problem Observation (V2) Example***

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

<!-- \*\* Problem Observation (V2) \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2014-06-09" />

<id root="ab1791b0-5c71-11db-b0de-0800200c9a66" />

<code code="75323-6"

codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="Condition" />

<!-- The statusCode reflects the status of the observation itself -->

<statusCode code="completed" />

<effectiveTime>

<!-- The low value reflects the date of onset -->

<!-- Based on patient symptoms, presumed onset is July 3, 2013 -->

<low value="20130703" />

<!-- The high value reflects when the problem was known to be resolved -->

<!-- Based on signs and symptoms, appears to be resolved on Aug 14, 2013 -->

<high value="20080814" />

</effectiveTime>

<value xsi:type="CD" code="233604007" codeSystem="2.16.840.1.113883.6.96"

displayName="Pneumonia" />

<author typeCode="AUT">

<templateId root="2.16.840.1.113883.10.20.22.4.119" />

<time value="200808141030-0800" />

<assignedAuthor>

<id extension="555555555" root="2.16.840.1.113883.4.6" />

<code code="207QA0505X" displayName="Adult Medicine" codeSystem="2.16.840.1.113883.6.101"

codeSystemName="Healthcare Provider Taxonomy (HIPAA)" />

</assignedAuthor>

</author>

</observation>

***Figure 68: No Known Problems Example***

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

<!-- Model of Meaning for No Problems -->

<!-- This is more consistent with how we did no known allergies. -->

<!-- The use of negationInd corresponds with the newer Observation.ValueNegationInd -->

<!-- The negationInd = true negates the value element. -->

<!-- problem observation template -->

<templateId root="2.16.840.1.113883.10.20.22.4.4"

extension="2014-06-09" />

<id root="4adc1021-7b14-11db-9fe1-0800200c9a67" />

<code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4" />

<text>

<reference value="#problems1" />

</text>

<statusCode code="completed" />

<effectiveTime>

<low value="20130607160506" />

</effectiveTime>

<!-- The time when this was biologically relevant, i.e., true for the patient. -->

<!-- As a minimum time interval over which this is true, populate the effectiveTime/low with the current time. -->

<!-- It would be equally valid to have a longer range of time over which this statement was represented as being true. -->

<!-- As a maximum, you would never indicate an effectiveTime/high that was greater than the current point in time. -->

<!-- This idea assumes that the value element could come from the Problem value set, or--

>

<!-- when negationInd was true, is could also come from the ProblemType value set (and

code would be ASSERTION). -->

<value xsi:type="CD" code="55607006" displayName="Problem" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT">

<originalText>

<reference value="#problemType1" />

</originalText>

</value>

</observation>

***Figure 69: Resolved Problem and Resolved Concern Example***

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

<!-- \*\* Problem concern act (V2) \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.3"

extension="2014-06-09" />

<id root="b5159d48-04aa-4927-b355-00d1dcb7158c" />

<code code="CONC" codeSystem="2.16.840.1.113883.5.6" displayName="Concern" />

<!-- The statusCode represents the need to continue tracking the problem -->

<!-- This is no longer of ongoing concern to the provider -->

<statusCode code="completed" />

<effectiveTime>

<!-- The low value represents when the problem was first recorded in the patient's chart -->

<!-- Concern was documented on Mar 10, 1998 -->

<low value="199803101030-0800" />

<!-- The high value reflects when there was no longer a need to track the problem -->

<!-- Concern was closed on May 4, 1998 -->

<high value="199805041145-0800" />

</effectiveTime>

<author typeCode="AUT">

<templateId root="2.16.840.1.113883.10.20.22.4.119" />

<!-- Same as Concern effectiveTime/low -->

<time value="199803161030-0800" />

<assignedAuthor>

<id extension="555555555" root="2.16.840.1.113883.4.6" />

<code code="207QA0505X" displayName="Adult Medicine"

codeSystem="2.16.840.1.113883.6.101"

codeSystemName="Healthcare Provider Taxonomy (HIPAA)" />

</assignedAuthor>

</author>

<entryRelationship typeCode="SUBJ">

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

<!-- \*\* Problem observation (V2) \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.4"

extension="2014-06-09" />

<id root="10506b4d-c30a-4220-8bec-97bff9568fd1" />

<code code="75323-6" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="Condition" />

<!-- The statusCode reflects the status of the observation itself -->

<statusCode code="completed" />

<effectiveTime>

<!-- The low value reflects the date of onset -->

<!-- Based on patient symptoms, presumed onset is Mar 10, 1998 -->

<low value="19980310" />

<!-- The high value reflects when the problem was known to be resolved -->

<high value="19980316" />

</effectiveTime>

<value xsi:type="CD"

code="233604007" codeSystem="2.16.840.1.113883.6.96"

displayName="Pneumonia">

<qualifier>

<name code="363698007" displayName="Finding site" />

<value code="41224006" displayName="Left lower lobe of lung" />

</qualifier>

</value>

<author typeCode="AUT">

<templateId root="2.16.840.1.113883.10.20.22.4.119" />

<time value="199803161030-0800" />

<assignedAuthor>

<id extension="555555555" root="2.16.840.1.113883.4.6" />

<code code="207QA0505X" displayName="Adult Medicine" codeSystem="2.16.840.1.113883.6.101"

codeSystemName="Healthcare Provider Taxonomy (HIPAA)" />

</assignedAuthor>

</author>

</observation>

</entryRelationship>

</act>

***Figure 70: Problem with Qualifiers Example***

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

<!-- \*\* Problem observation (V2) \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.4"

extension="2014-06-09" />

<id root="10506b4d-c30a-4220-8bec-97bff9568fd1" />

<code code="75323-6" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="Condition" />

<!-- The statusCode reflects the status of the observation itself -->

<statusCode code="completed" />

<effectiveTime>

<!-- The low value reflects the date of onset -->

<!-- Based on patient symptoms, presumed onset is Mar 10, 1998 -->

<low value="19980310" />

<!-- The high value reflects when the problem was known to be resolved -->

<high value="19980316" />

</effectiveTime>

<value xsi:type="CD" code="233604007" codeSystem="2.16.840.1.113883.6.96"

displayName="Pneumonia">

<qualifier>

<name code="363698007" displayName="Finding site" />

<value code="41224006" displayName="Left lower lobe of lung" />

</qualifier>

</value>

<author typeCode="AUT">

<templateId root="2.16.840.1.113883.10.20.22.4.119" />

<time value="199803161030-0800" />

<assignedAuthor>

<id extension="555555555" root="2.16.840.1.113883.4.6" />

<code code="207QA0505X" displayName="Adult Medicine" codeSystem="2.16.840.1.113883.6.101"

codeSystemName="Healthcare Provider Taxonomy (HIPAA)" />

</assignedAuthor>

</author>

</observation>

## Problem Observation (V2) - Cancer IG Specific Constraints -

***Published***

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.13.23:2014-08-08 (open)]

***Table 143: Problem Observation (V2) - Cancer IG Specific Constraints Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Problem Concern Act (V2) - Cancer IG Specific](#_bookmark1397)  [Constraints](#_bookmark1397) (required) |  |

This template defines Cancer Event Report-specific constraints to the C-CDA R2.0 Problem Observation (V2). It further defines value sets that should be used to represent the problem.

***Table 144: Problem Observation (V2) - Cancer IG Specific Constraints Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.13.23:2014-08-08) | | | | | |
| @classCode | 1..1 | SHALL |  | [1126-](#_bookmark1453)  [33261](#_bookmark1453) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1126-](#_bookmark1454)  [33262](#_bookmark1454) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1126-](#_bookmark1455)  [33263](#_bookmark1455) |  |
| @root | 1..1 | SHALL |  | [1126-](#_bookmark1456)  [33264](#_bookmark1456) | 2.16.840.1.113883.10.13.23 |
| @extension | 1..1 | SHALL |  | [1126-](#_bookmark1457)  [33964](#_bookmark1457) | 2014-08-08 |
| value | 1..1 | SHALL | CD | [1126-](#_bookmark1458)  [33265](#_bookmark1458) |  |
| @code | 1..1 | SHALL |  | [1126-](#_bookmark1459)  [33267](#_bookmark1459) |  |
| @codeSystem | 1..1 | SHALL |  | [1126-](#_bookmark1460)  [33269](#_bookmark1460) |  |
| @displayName | 1..1 | SHALL |  | [1126-](#_bookmark1461)  [33270](#_bookmark1461) |  |
| @sdtc:valueSet | 0..1 | MAY |  | [1126-](#_bookmark1462)  [34005](#_bookmark1462) |  |

* + 1. Conforms to [**Problem Observation (V2)**](#_bookmark1410) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2014-06-09).
    2. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1126-33261).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1126-33262).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1126-33263) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.23"

(CONF:1126-33264).

b. **SHALL** contain exactly one [1..1] **@extension**="2014-08-08" (CONF:1126-33964).

* + 1. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD" (CONF:1126-33265).
       1. This value **SHALL** contain exactly one [1..1] **@code** (CONF:1126-33267).
          1. @code in a problem observation **SHALL** be selected from:

(a) **Problem Value Set** (Value Set OID: 2.16.840.1.113883.3.88.12.3221.7.4)

or

(b) **ICD-10-CM** (CodeSystem: 2.16.840.1.113883.6.90) or (c) **ICD-9-CM** (CodeSystem: 2.16.840.1.113883.6.103) (CONF:1126-33268).

Note: Problem Value Set a subset of SNOMED CT CodeSystem: 2.16.840.1.113883.6.96).

* + - 1. This value **SHALL** contain exactly one [1..1] **@codeSyst****em** (CONF:1126-33269).
         1. @codeSystem associated with the code for problem **SHALL** be selected from: (a) **SNOMED-CT** (Code System: 2.16.840.1.113883.6.96) or

(b) **ICD-10-CM** (CodeSystem: 2.16.840.1.113883.6.90) or (c) **ICD-9-CM** (CodeSystem: 2.16.840.1.113883.6.103) (CONF:1126-33601).

Note: Problem Value Set a subset of SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96).

* + - 1. This value **SHALL** contain exactly one [1..1] **@displayNam****e** (CONF:1126-33270).
         1. @displayName associated with the code for problem **SHALL** be selected from: (a) **Problem Value Set** (Value Set OID: 2.16.840.1.113883.3.88.12.3221.7.4) or

(b) **ICD-10-CM** (CodeSystem: 2.16.840.1.113883.6.90) or (c) **ICD-9-CM** (CodeSystem: 2.16.840.1.113883.6.103) (CONF:1126-33271).

* + - 1. This value **MAY** contain zero or one [0..1] **@sdtc:valueSet** (CONF:1126-34005).

***Figure 71: Problem Observation (V2) - Cancer IG Specific Constraints example***

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

<!-- \*\* Problem observation \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2014-06-09" />

<templateId root="2.16.840.1.113883.10.13.23" extension="2014-08-08" />

<id root="ab1791b0-5c71-11db-b0de-0800200c9a66" />

<code code="64572001" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Condition" />

<!-- The statusCode reflects the status of the observation itself -->

<statusCode code="completed" />

<effectiveTime>

<!-- The low value reflects the date of onset -->

<low value="20080814" />

<!-- The high value reflects when the problem was known to be resolved -->

<high value="20130703" />

</effectiveTime>

<value xsi:type="CD" code="408643008" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Infiltrating duct carcinoma of breast" />

<author typeCode="AUT">

<templateId root="2.16.840.1.113883.10.20.22.4.119" />

<time value="201307061145-0800" />

<assignedAuthor>

<id extension="555555555" root="2.16.840.1.113883.19" />

</assignedAuthor>...

</author>

</observation>

## Problem Status (DEPRECATED) - Deprecated

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.6:2014-06-09 (open)]

***Table 145: Problem Status (DEPRECATED) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Problem Observation (V2)](#_bookmark1410) (optional) |  |

The Problem Status records whether the indicated problem is active, inactive, or resolved.

THIS TEMPLATE HAS BEEN DEPRECATED IN C-CDA R2 AND MAY BE DELETED FROM A FUTURE RELEASE OF THIS IMPLEMENTATION GUIDE. USE OF THIS TEMPLATE IS NOT RECOMMENDED.

**Reason for deprecation**: Per the explanation in Consolidated CDA R2, Volume 1, Section 3.2 "Determining a Clinical Statement's Status", the status of a problem is determined based on attributes of the Problem Observation.

***Table 146: Problem Status (DEPRECATED) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.6:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-](#_bookmark1468)  [7357](#_bookmark1468) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-](#_bookmark1469)  [7358](#_bookmark1469) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark1470)  [7359](#_bookmark1470) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark1471)  [10518](#_bookmark1471) | 2.16.840.1.113883.10.20.22.4.6 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark1472)  [32581](#_bookmark1472) | 2014-06-09 |
| code | 1..1 | SHALL |  | [1098-](#_bookmark1473)  [19162](#_bookmark1473) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark1474)  [19163](#_bookmark1474) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 33999-4 |
| statusCode | 1..1 | SHALL |  | [1098-](#_bookmark1475)  [7364](#_bookmark1475) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark1476)  [19113](#_bookmark1476) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = completed |
| value | 1..1 | SHALL | CD | [1098-](#_bookmark1477)  [7365](#_bookmark1477) | urn:oid:2.16.840.1.113883.3.88.1  2.80.68 (Problem Status) |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATI****C**) (CONF:1098-7357).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-7358).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7359) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.6"

(CONF:1098-10518).

b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32581).

* + 1. **SHALL** contain exactly one [1..1] **code** (CONF:1098-19162).
       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:1098-19163).

* + 1. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-7364).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098- 19113).
    2. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD", where the code **SHALL** be selected from ValueSet **[Problem Status](#_bookmark1479)** urn:oid:2.16.840.1.113883.3.88.12.80.68 **DYNAMIC** (CONF:1098-7365).

***Tabl******e 147: Problem Status***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Problem Status urn:oid:2.16.840.1.113883.3.88.12.80.68 A value set of SNOMED-CT codes reflecting state of existence.  Value Set Source: [**https://vsac.nlm.nih.gov**](https://vsac.nlm.nih.gov/) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 55561003 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Active |
| 73425007 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Inactive |
| 413322009 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Resolved |

## Procedure Activity Procedure (V2) - Published

[procedure: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09 (open)]

***Table 148: Procedure Activity Procedure (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Procedures Section (entries required) (V2)](#_bookmark549) (optional) | [Author Participation](#_bookmark2202)  [Indication (V2)](#_bookmark969)  [Medication Activity (V2)](#_bookmark996)  [Service Delivery Location](#_bookmark1835) |

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 149: 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-](#_bookmark1484)  [7652](#_bookmark1484) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = PROC |
| @moodCode | 1..1 | SHALL |  | [1098-](#_bookmark1485)  [7653](#_bookmark1485) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark1486)  [7654](#_bookmark1486) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark1487)  [10521](#_bookmark1487) | 2.16.840.1.113883.10.20.22.4.14 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark1488)  [32506](#_bookmark1488) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-](#_bookmark1489)  [7655](#_bookmark1489) |  |
| code | 1..1 | SHALL |  | [1098-](#_bookmark1490)  [7656](#_bookmark1490) |  |
| originalText | 0..1 | SHOUL D |  | [1098-](#_bookmark1491)  [19203](#_bookmark1491) |  |
| reference | 0..1 | SHOUL D |  | [1098-](#_bookmark1492)  [19204](#_bookmark1492) |  |
| @value | 0..1 | SHOUL D |  | [1098-](#_bookmark1493)  [19205](#_bookmark1493) |  |
| statusCode | 1..1 | SHALL |  | [1098-](#_bookmark1494)  [7661](#_bookmark1494) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark1495)  [32366](#_bookmark1495) | urn:oid:2.16.840.1.113883.11.20.  9.22 (ProcedureAct statusCode) |
| effectiveTime | 0..1 | SHOUL D |  | [1098-](#_bookmark1496)  [7662](#_bookmark1496) |  |
| priorityCode | 0..1 | MAY |  | [1098-](#_bookmark1497)  [7668](#_bookmark1497) | urn:oid:2.16.840.1.113883.1.11.1  6866 (Act Priority) |
| methodCode | 0..1 | MAY |  | [1098-](#_bookmark1498)  [7670](#_bookmark1498) |  |
| targetSiteCode | 0..\* | SHOUL D |  | [1098-](#_bookmark1499)  [7683](#_bookmark1499) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark1500)  [16082](#_bookmark1500) | urn:oid:2.16.840.1.113883.3.88.1  2.3221.8.9 (Body Site) |
| specimen | 0..\* | MAY |  | [1098-](#_bookmark1501)  [7697](#_bookmark1501) |  |
| specimenRole | 1..1 | SHALL |  | [1098-](#_bookmark1502)  [7704](#_bookmark1502) |  |
| id | 0..\* | SHOUL D |  | [1098-](#_bookmark1503)  [7716](#_bookmark1503) |  |
| performer | 0..\* | SHOUL D |  | [1098-](#_bookmark1504)  [7718](#_bookmark1504) |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| assignedEntity | 1..1 | SHALL |  | [1098-](#_bookmark1505)  [7720](#_bookmark1505) |  |
| id | 1..\* | SHALL |  | [1098-](#_bookmark1506)  [7722](#_bookmark1506) |  |
| addr | 1..\* | SHALL |  | [1098-](#_bookmark1507)  [7731](#_bookmark1507) |  |
| telecom | 1..\* | SHALL |  | [1098-](#_bookmark1508)  [7732](#_bookmark1508) |  |
| representedOrganization | 0..1 | SHOUL D |  | [1098-](#_bookmark1509)  [7733](#_bookmark1509) |  |
| id | 0..\* | SHOUL D |  | [1098-](#_bookmark1510)  [7734](#_bookmark1510) |  |
| name | 0..\* | MAY |  | [1098-](#_bookmark1511)  [7735](#_bookmark1511) |  |
| telecom | 1..1 | SHALL |  | [1098-](#_bookmark1512)  [7737](#_bookmark1512) |  |
| addr | 1..1 | SHALL |  | [1098-](#_bookmark1513)  [7736](#_bookmark1513) |  |
| author | 1..\* | SHOUL D |  | [1098-](#_bookmark1514)  [32479](#_bookmark1514) | [Author Participation (identifier:](#_bookmark2202)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2202)  [22.4.119](#_bookmark2202) |
| participant | 0..\* | MAY |  | [1098-](#_bookmark1515)  [7751](#_bookmark1515) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1516)  [7752](#_bookmark1516) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = DEV |
| participantRole | 1..1 | SHALL |  | [1098-](#_bookmark1517)  [15911](#_bookmark1517) | Product Instance (identifier: urn:oid:2.16.840.1.113883.10.20. 22.4.37 |
| participant | 0..\* | MAY |  | [1098-](#_bookmark1518)  [7765](#_bookmark1518) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1519)  [7766](#_bookmark1519) | urn:oid:2.16.840.1.113883.5.90  (HL7ParticipationType) = LOC |
| participantRole | 1..1 | SHALL |  | [1098-](#_bookmark1520)  [15912](#_bookmark1520) | [Service Delivery Location](#_bookmark1835)  [(identifier:](#_bookmark1835)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark1835)  [22.4.32](#_bookmark1835) |
| entryRelationship | 0..\* | MAY |  | [1098-](#_bookmark1521)  [7768](#_bookmark1521) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1522)  [7769](#_bookmark1522) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = COMP |
| @inversionInd | 1..1 | SHALL |  | [1098-](#_bookmark1523)  [8009](#_bookmark1523) | true |
| encounter | 1..1 | SHALL |  | [1098-](#_bookmark1524)  [7770](#_bookmark1524) |  |
| @classCode | 1..1 | SHALL |  | [1098-](#_bookmark1525)  [7771](#_bookmark1525) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = ENC |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| @moodCode | 1..1 | SHALL |  | [1098-](#_bookmark1526)  [7772](#_bookmark1526) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| id | 1..1 | SHALL |  | [1098-](#_bookmark1527)  [7773](#_bookmark1527) |  |
| entryRelationship | 0..1 | MAY |  | [1098-](#_bookmark1528)  [7775](#_bookmark1528) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1529)  [7776](#_bookmark1529) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = SUBJ |
| @inversionInd | 1..1 | SHALL |  | [1098-](#_bookmark1530)  [7777](#_bookmark1530) | true |
| act | 1..1 | SHALL |  | [1098-](#_bookmark1531)  [31395](#_bookmark1531) | Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2 0.22.4.20:2014-06-09 |
| entryRelationship | 0..\* | MAY |  | [1098-](#_bookmark1532)  [7779](#_bookmark1532) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1533)  [7780](#_bookmark1533) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark1534)  [15914](#_bookmark1534) | [Indication (V2) (identifier:](#_bookmark969)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark969)  [0.22.4.19:2014-06-09](#_bookmark969) |
| entryRelationship | 0..\* | MAY |  | [1098-](#_bookmark1535)  [7886](#_bookmark1535) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1536)  [7887](#_bookmark1536) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = COMP |
| substanceAdministration | 1..1 | SHALL |  | [1098-](#_bookmark1537)  [15915](#_bookmark1537) | [Medication Activity (V2)](#_bookmark996)  [(identifier:](#_bookmark996)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark996)  [0.22.4.16:2014-06-09](#_bookmark996) |
| entryRelationship | 0..\* | MAY |  | [1098-](#_bookmark1538)  [32473](#_bookmark1538) |  |
| @typeCode | 1..1 | SHALL |  | [1098-](#_bookmark1539)  [32474](#_bookmark1539) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = COMP |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark1540)  [32475](#_bookmark1540) | Reaction Observation (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.2 0.22.4.9:2014-06-09 |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="PROC" Procedure (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-7652).
    2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-7653).
    3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7654) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.14"

(CONF:1098-10521).

b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32506).

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1098-7655).
    2. **SHALL** contain exactly one [1..1] **code** (CONF:1098-7656).
       1. This code **SHOULD** contain zero or one [0..1] **originalTe****xt** (CONF:1098-19203).
          1. The originalText, if present, **SHOULD** contain zero or one [0..1] **reference**

(CONF:1098-19204).

The reference, if present, **SHOULD** contain zero or one [0..1] **@value**

(CONF:1098-19205).

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).

This @code **SHOULD** be selected from LOINC (CodeSystem: 2.16.840.1.113883.6.1) or SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96), and **MAY** be selected from CPT-4 (CodeSystem: 2.16.840.1.113883.6.12) or ICD10 PCS (CodeSystem: 2.16.840.1.113883.6.4) or CDT-2 (Code System: 2.16.840.1.113883.6.13) (CONF:1098-19207).

* + 1. **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**](#_bookmark1544)urn:oid:2.16.840.1.113883.11.20.9.22 **STATIC** 2014-04-23 (CONF:1098- 32366).
    2. **SHOULD** contain zero or one [0..1] **effectiveTime** (CONF:1098-7662).
    3. **MAY** contain zero or one [0..1] **priorityCode**, which **SHALL** be selected from ValueSet **[Act](#_bookmark1542)**  [**Priority**](#_bookmark1542) urn:oid:2.16.840.1.113883.1.11.16866 **DYNAMIC** (CONF:1098-7668).
    4. **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** (CONF:1098-7683).
       1. The targetSiteCode, if present, **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [**Body Site**](#_bookmark1062)urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 **DYNAMI****C** (CONF:1098-16082).
    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).

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).

* + - 1. This specimen is for representing specimens obtained from a procedure (CONF:1098-16842).
    1. **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).

The representedOrganization, if present, **SHOULD** contain zero or more [0..\*] **id** (CONF:1098-7734).

The representedOrganization, if present, **MAY** contain zero or more [0..\*] **name** (CONF:1098-7735).

The representedOrganization, if present, **SHALL** contain exactly one [1..1] **telecom** (CONF:1098-7737).

The representedOrganization, if present, **SHALL** contain exactly one [1..1] **addr** (CONF:1098-7736).

* + 1. **SHOULD** contain at least one [1..\*] [**Author** **Participation**](#_bookmark2202) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-32479).
    2. **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 **STATI****C**) (CONF:1098-7752).
       2. **SHALL** contain exactly one [1..1] Product Instance (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.37) (CONF:1098-15911).
    3. **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 **STATI****C**) (CONF:1098- 7766).
       2. **SHALL** contain exactly one [1..1] [**Service** **Delivery Location**](#_bookmark1835) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32) (CONF:1098-15912).
    4. **MAY** contain zero or more [0..\*] **entryRelations****hip** (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 **STATI****C**) (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: ActMood 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).

Set the encounter ID to the ID of an encounter in another section to signify they are the same encounter (CONF:1098-16843).

* + 1. **MAY** contain zero or one [0..1] **entryRelationshi****p** (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 **STATI****C**) (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) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:1098- 31395).
    2. **MAY** contain zero or more [0..\*] **entryRelations****hip** (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 **STATI****C**) (CONF:1098-7780).
       2. **SHALL** contain exactly one [1..1] [**Indication (V2)**](#_bookmark969) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09) (CONF:1098- 15914).
    3. **MAY** contain zero or more [0..\*] **entryRelations****hip** (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 **STATI****C**) (CONF:1098-7887).
       2. **SHALL** contain exactly one [1..1] [**Medication Activity (V2)**](#_bookmark996) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09) (CONF:1098- 15915).
    4. **MAY** contain zero or more [0..\*] **entryRelations****hip** (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) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09) (CONF:1098- 32475).

***Table*** ***150: Act Priority***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Act Priority urn:oid:2.16.840.1.113883.1.11.16866 Value Set Source:  [**http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary\_tables/in**](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm)  [**frastructure/vocabulary/vocabulary.htm**](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| A | ActPriority | urn:oid:2.16.840.1.11388 3.5.7 | ASAP |
| CR | ActPriority | urn:oid:2.16.840.1.11388 3.5.7 | Callback results |
| CS | ActPriority | urn:oid:2.16.840.1.11388 3.5.7 | Callback for scheduling |
| CSP | ActPriority | urn:oid:2.16.840.1.11388 3.5.7 | Callback placer for scheduling |
| CSR | ActPriority | urn:oid:2.16.840.1.11388 3.5.7 | Contact recipient for scheduling |
| EL | ActPriority | urn:oid:2.16.840.1.11388 3.5.7 | Elective |
| EM | ActPriority | urn:oid:2.16.840.1.11388 3.5.7 | Emergency |
| P | ActPriority | urn:oid:2.16.840.1.11388 3.5.7 | Preoperative |
| PRN | ActPriority | urn:oid:2.16.840.1.11388 3.5.7 | As needed |
| R | ActPriority | urn:oid:2.16.840.1.11388 3.5.7 | Routine |
| ... | | | |

***Table*** ***151: ProcedureAct statusCode***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: ProcedureAct statusCode urn:oid:2.16.840.1.113883.11.20.9.22 Code System: ActStatus 2.16.840.1.113883.5.14  A ValueSet of HL7 actStatus codes for use with a procedure activity Value Set Source: [**http://www.hl7.org**](http://www.hl7.org/) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| completed | ActStatus | urn:oid:2.16.840.1.11388 3.5.14 | Completed |
| active | ActStatus | urn:oid:2.16.840.1.11388 3.5.14 | Active |
| aborted | ActStatus | urn:oid:2.16.840.1.11388 3.5.14 | Aborted |
| cancelled | ActStatus | urn:oid:2.16.840.1.11388 3.5.14 | Cancelled |

***Figure 72: 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 Activity Procedure (V2) - Cancer IG Specific Constraints -

***Published***

[procedure: identifier urn:hl7ii:2.16.840.1.113883.10.13.15:2014-08-08 (open)]

***Table 152: Procedure Activity Procedure (V2) - Cancer IG Specific Constraints Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Procedures Section (entries required) (V2) - Cancer IG](#_bookmark567)  [Specific Constraints](#_bookmark567) (required) | [Indication (V2) - Cancer IG Specific Constraints](#_bookmark985)  [Service Delivery Location](#_bookmark1835)  [US Realm Address (AD.US.FIELDED)](#_bookmark2222)  [US Realm Person Name (PN.US.FIELDED)](#_bookmark2286) |

This template defines Cancer Event Report-specific constraints to the C-CDA R2 template "Procedure Activity Procedure (V2)". Conformance has been changed to “SHALL” for Participant/Service Delivery Location and Indication Observation.

***Table 153: Procedure Activity Procedure (V2) - Cancer IG Specific Constraints Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| procedure (identifier: urn:hl7ii:2.16.840.1.113883.10.13.15:2014-08-08) | | | | | |
| templateId | 1..1 | SHALL |  | [1126-](#_bookmark1550)  [33068](#_bookmark1550) |  |
| @root | 1..1 | SHALL |  | [1126-](#_bookmark1551)  [33069](#_bookmark1551) | 2.16.840.1.113883.10.13.15 |
| @extension | 1..1 | SHALL |  | [1126-](#_bookmark1552)  [33965](#_bookmark1552) | 2014-08-08 |
| effectiveTime | 1..1 | SHALL |  | [1126-](#_bookmark1553)  [33248](#_bookmark1553) |  |
| low | 1..1 | SHALL |  | [1126-](#_bookmark1554)  [33249](#_bookmark1554) |  |
| performer | 0..\* | SHOUL D |  | [1126-](#_bookmark1555)  [33927](#_bookmark1555) |  |
| assignedEntity | 1..1 | SHALL |  | [1126-](#_bookmark1556)  [33928](#_bookmark1556) |  |
| id | 1..\* | SHALL |  | [1126-](#_bookmark1557)  [33929](#_bookmark1557) |  |
| @root | 0..1 | SHOUL D |  | [1126-](#_bookmark1558)  [33932](#_bookmark1558) | 2.16.840.1.113883.4.6 |
| id | 0..\* | SHOUL D |  | [1126-](#_bookmark1559)  [33933](#_bookmark1559) |  |
| addr | 0..\* | SHOUL D |  | [1126-](#_bookmark1560)  [33934](#_bookmark1560) | [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED) (identifier:](#_bookmark2222)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2222)  [22.5.2](#_bookmark2222) |
| telecom | 0..\* | SHOUL D |  | [1126-](#_bookmark1561)  [33930](#_bookmark1561) |  |
| assignedPerson | 0..1 | SHOUL D |  | [1126-](#_bookmark1562)  [33931](#_bookmark1562) |  |
| name | 0..\* | SHOUL D |  | [1126-](#_bookmark1563)  [33936](#_bookmark1563) | [US Realm Person Name](#_bookmark2286)  [(PN.US.FIELDED) (identifier:](#_bookmark2286)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2286)  [22.5.1.1](#_bookmark2286) |
| participant | 1..\* | SHALL |  | [1126-](#_bookmark1564)  [32672](#_bookmark1564) |  |
| @typeCode | 1..1 | SHALL |  | [1126-](#_bookmark1565)  [32673](#_bookmark1565) | urn:oid:2.16.840.1.113883.5.90  (HL7ParticipationType) = LOC |
| participantRole | 1..1 | SHALL |  | [1126-](#_bookmark1566)  [33024](#_bookmark1566) | [Service Delivery Location](#_bookmark1835)  [(identifier:](#_bookmark1835)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark1835)  [22.4.32](#_bookmark1835) |
| entryRelationship | 1..\* | SHALL |  | [1126-](#_bookmark1567)  [33212](#_bookmark1567) |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| @typeCode | 1..1 | SHALL |  | [1126-](#_bookmark1568)  [33213](#_bookmark1568) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [1126-](#_bookmark1569)  [33214](#_bookmark1569) | [Indication (V2) - Cancer IG](#_bookmark985)  [Specific Constraints (identifier:](#_bookmark985)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark985)  [3.19:2014-08-08](#_bookmark985) |

* + 1. Conforms to [**Procedure Activity Procedure (V2)**](#_bookmark1481) template (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1126-33068) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.15"

(CONF:1126-33069).

b. **SHALL** contain exactly one [1..1] **@extension**="2014-08-08" (CONF:1126-33965).

* + 1. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1126-33248).
       1. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:1126-33249).
    2. **SHOULD** contain zero or more [0..\*] **perf****ormer** (CONF:1126-33927) such that it
       1. **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:1126-33928).
          1. This assignedEntity **SHALL** contain at least one [1..\*] **id** (CONF:1126-33929) such that it

1. **SHOULD** contain zero or one [0..1] **@root**="2.16.840.1.113883.4.6"

National Provider Identifier (CONF:1126-33932).

* + - * 1. This assignedEntity **SHOULD** contain zero or more [0..\*] **id** (CONF:1126- 33933).

Note: Local Cancer Registry approved provider identifier

* + - * 1. This assignedEntity **SHOULD** contain zero or more [0..\*] [**US Realm Address**](#_bookmark2222) [**(AD.US.FIELDED)**](#_bookmark2222) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2) (CONF:1126-33934).
        2. This assignedEntity **SHOULD** contain zero or more [0..\*] **telecom**

(CONF:1126-33930).

* + - * 1. This assignedEntity **SHOULD** contain zero or one [0..1] **assignedPerson**

(CONF:1126-33931).

The assignedPerson, if present, **SHOULD** contain zero or more [0..\*] [**US**](#_bookmark2286) [**Realm Person Name (PN.US.FIELDED)**](#_bookmark2286) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1126- 33936).

* + 1. **SHALL** contain at least one [1..\*] **participant** (CONF:1126-32672) 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:1126-32673).

* + - 1. **SHALL** contain exactly one [1..1] [**Service Delivery Location**](#_bookmark1835) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32) (CONF:1126-33024).
    1. **SHALL** contain at least one [1..\*] **entryRelations****hip** (CONF:1126-33212) 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 **STATI****C**) (CONF:1126-33213).
       2. **SHALL** contain exactly one [1..1] [**Indication (V2) - Cancer IG Specific**](#_bookmark985) **[Constraints](#_bookmark985)** (identifier: urn:hl7ii:2.16.840.1.113883.10.13.19:2014- 08-08) (CONF:1126-33214).

***Figure 73: Procedure Activity Procedure (V2) - Cancer IG Specific Constraints 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" />

<!-- Procedure Activity Procedure (V2) - Cancer IG Specific Constraints-->

<templateId root="2.16.840.1.113883.10.13.15" extension="2014-08-08" />

<id root="d5b614bd-01ce-410d-8726-e1fd01dcc72a" />

<code code="392021009" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Lumpectomy of breast ">

<originalText>

<reference value="#Proc1" />

</originalText>

</code>

<statusCode code="completed" />

<effectiveTime>

<low value="20130512"></low>

</effectiveTime>

<targetSiteCode code="181131000" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Entire breast" sdtc:valueSet="2.16.840.1.113883.3.88.12.3221.8.9" />

<specimen typeCode="SPC">

<specimenRole classCode="SPEC">

<id root="a6d7b927-2b70-43c7-bdf3-0e7c4133062c" />

<specimenPlayingEntity>

<code code="258416002" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Breast tissue sample" />

</specimenPlayingEntity>

</specimenRole>

</specimen>

<performer typeCode="PRF">

<assignedEntity classCode="ASSIGNED">

<id root="2.16.840.1.113883.4.6" extension="222222222" />

<addr>

<streetAddressLine>1000 Hospital Lane</streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>99999</postalCode>

<country>US</country>

</addr>

<telecom use="WP" value="tel:+1(555)555-5000" />

<assignedPerson>

<name>

<first>Harold</first>

<last>Hippocrates</last>

<suffix>MD</suffix>

</name>

</assignedPerson>

</assignedEntity>

</performer>

<participant typeCode="LOC">

<participantRole classCode="SDLOC">

<templateId root="2.16.840.1.113883.10.20.22.4.32" />

<code code="1200-5" codeSystem="2.16.840.1.113883.6.259" codeSystemName="HealthcareServiceLocation" displayName="Hematology/oncology clinic" />

<addr>

<streetAddressLine>1000 Hospital Lane</streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>99999</postalCode>

<country>US</country>

</addr>

<telecom use="WP" value="tel:+1(555)555-5000" />

<playingEntity classCode="PLC">

<name>Good Health Hospital</name>

</playingEntity>

</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" />

<templateId root="2.16.840.1.113883.10.13.19" extension="2014-08-08" />

<id root="ab1791b0-5c71-11db-b0de-0800200c9a66" />

<code code="29308-4" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Diagnosis"/>

<statusCode code="completed" />

<effectiveTime value="20140731124200" />

<value xsi:type="CD" code="408643008" codeSystem="2.16.840.1.113883.6.96" displayName="Infiltrating duct carcinoma of breast" sdtc:valueSet="2.16.840.1.113883.3.88.12.3221.7.4 " />

</observation>

</entryRelationship>

</procedure>

## Radiation Boost Dose - cGy - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.13.28:2014-08-08 (open)]

***Table 154: Radiation Boost Dose - cGy Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Radiation Boost Modality Procedure](#_bookmark1606) (optional) |  |

Records the additional dose delivered to that part of the treatment volume encompassed by the boost fields or devices. The unit of measure is centiGray (cGy).

To evaluate patterns of radiation oncology care, it is necessary to describe the boost radiation dose. Outcomes are strongly related to the dose delivered.

***Table 155: Radiation Boost Dose - cGy Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.13.28:2014-08-08) | | | | | |
| @classCode | 1..1 | SHALL |  | [1126-](#_bookmark1575)  [33629](#_bookmark1575) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1126-](#_bookmark1576)  [33630](#_bookmark1576) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1126-](#_bookmark1577)  [33621](#_bookmark1577) |  |
| @root | 1..1 | SHALL |  | [1126-](#_bookmark1578)  [33622](#_bookmark1578) | 2.16.840.1.113883.10.13.28 |
| @extension | 1..1 | SHALL |  | [1126-](#_bookmark1579)  [33966](#_bookmark1579) | 2014-08-08 |
| code | 1..1 | SHALL |  | [1126-](#_bookmark1580)  [33626](#_bookmark1580) |  |
| @code | 0..1 | MAY |  | [1126-](#_bookmark1581)  [33631](#_bookmark1581) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 42119-8 |
| @codeSystem | 1..1 | SHALL |  | [1126-](#_bookmark1582)  [33632](#_bookmark1582) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 0..1 | MAY |  | [1126-](#_bookmark1583)  [33627](#_bookmark1583) |  |
| @code | 1..1 | SHALL |  | [1126-](#_bookmark1584)  [33633](#_bookmark1584) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = completed |
| value | 1..1 | SHALL | PQ | [1126-](#_bookmark1585)  [33628](#_bookmark1585) |  |
| @value | 1..1 | SHALL |  | [1126-](#_bookmark1586)  [33634](#_bookmark1586) |  |
| @unit | 1..1 | SHALL |  | [1126-](#_bookmark1587)  [33635](#_bookmark1587) | urn:oid:2.16.840.1.113883.6.8 (UCUM) = cGy |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1126-33629).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1126-33630).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1126-33621).
       1. This templateId **SHALL** contain exactly one [1..1]

**@root**="2.16.840.1.113883.10.13.28" (CONF:1126-33622).

* + - 1. This templateId **SHALL** contain exactly one [1..1] **@extension**="2014-08-08"

(CONF:1126-33966).

* + 1. **SHALL** contain exactly one [1..1] **code** (CONF:1126-33626).
       1. This code **MAY** contain zero or one [0..1] **@code**="42119-8" Boost radiation dose [Energy/mass] (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33631).
       2. This code **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:1126-33632).

* + 1. **MAY** contain zero or one [0..1] **statusCode** (CONF:1126-33627).
       1. The statusCode, if present, **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1126-33633).
    2. **SHALL** contain exactly one [1..1] **value** with @xsi:type="PQ" (CONF:1126-33628).
       1. This value **SHALL** contain exactly one [1..1] **@valu****e** (CONF:1126-33634).
       2. This value **SHALL** contain exactly one [1..1] **@unit**="cGy" centiGray (CodeSystem:

UCUM urn:oid:2.16.840.1.113883.6.8) (CONF:1126-33635).

***Figure 74: Radiation Boost Dose - cGy example***

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

<templateId root="2.16.840.1.113883.10.13.28" extension="2014-08-08" />

<code code="42119-8" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Boost radiation dose [Energy/mass]" />

<statusCode code="completed" />

<value xsi:type="PQ" value="5500" unit="cGy" />

</observation>

## Radiation Boost Modality Organizer - Published

[organizer: identifier urn:hl7ii:2.16.840.1.113883.10.13.30:2014-08-08 (open)]

***Table 156: Radiation Boost Modality Organizer Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Radiation Oncology Section](#_bookmark579) (required) | [Radiation Boost Modality Procedure](#_bookmark1606) |

Organizer for radiation boost modality procedures.

***Table 157: Radiation Boost Modality Organizer Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| organizer (identifier: urn:hl7ii:2.16.840.1.113883.10.13.30:2014-08-08) | | | | | |
| @classCode | 1..1 | SHALL |  | [1126-](#_bookmark1593)  [33642](#_bookmark1593) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = CLUSTER |
| @moodCode | 1..1 | SHALL |  | [1126-](#_bookmark1594)  [33643](#_bookmark1594) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1126-](#_bookmark1595)  [33967](#_bookmark1595) |  |
| @root | 1..1 | SHALL |  | [1126-](#_bookmark1596)  [33968](#_bookmark1596) | 2.16.840.1.113883.10.13.30 |
| @extension | 1..1 | SHALL |  | [1126-](#_bookmark1597)  [33969](#_bookmark1597) | 2014-08-08 |
| code | 1..1 | SHALL |  | [1126-](#_bookmark1598)  [33640](#_bookmark1598) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| @code | 1..1 | SHALL |  | [1126-](#_bookmark1599)  [33644](#_bookmark1599) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 42128-9 |
| @codeSystem | 1..1 | SHALL |  | [1126-](#_bookmark1600)  [33645](#_bookmark1600) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| component | 1..\* | SHALL |  | [1126-](#_bookmark1601)  [33641](#_bookmark1601) |  |
| @typeCode | 1..1 | SHALL |  | [1126-](#_bookmark1602)  [33646](#_bookmark1602) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = COMP |
| procedure | 1..1 | SHALL |  | [1126-](#_bookmark1603)  [33647](#_bookmark1603) | [Radiation Boost Modality](#_bookmark1606)  [Procedure (identifier:](#_bookmark1606)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark1606)  [3.26:2014-08-08](#_bookmark1606) |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="CLUSTER" cluster (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1126-33642).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1126-33643).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1126-33967).
       1. This templateId **SHALL** contain exactly one [1..1]

**@root**="2.16.840.1.113883.10.13.30" (CONF:1126-33968).

* + - 1. This templateId **SHALL** contain exactly one [1..1] **@extension**="2014-08-08"

(CONF:1126-33969).

* + 1. **SHALL** contain exactly one [1..1] **code** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33640).
       1. This code **SHALL** contain exactly one [1..1] **@code**="42128-9" Boost radiation treatment modality Radiation treatment (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33644).
       2. This code **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:1126- 33645).
    2. **SHALL** contain at least one [1..\*] **component** (CONF:1126-33641).
       1. Such components **SHALL** contain exactly one [1..1] **@typeCode**="COMP" component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1126-33646).
       2. Such components **SHALL** contain exactly one [1..1] [**Radiation Boost Modality**](#_bookmark1606) **[Procedure](#_bookmark1606)** (identifier: urn:hl7ii:2.16.840.1.113883.10.13.26:2014-08- 08) (CONF:1126-33647).

***Figure 75: Radiation Boost Modality Organizer example***

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

<!-- Radiation Boost Modality Organizer Constraints -->

<templateId root="2.16.840.1.113883.10.13.30" extension="2014-08-08" />

<code code="42128-9" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Boost radiation treatment modality Radiation treatment" />

<statusCode code="active" />

<component typeCode="COMP">

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

<!-- Radiation Boost Modality Procedure Constraints -->

<templateId root="2.16.840.1.113883.10.13.26" extension="2014-08-08" />

<id root="87cb6d8e-b33f-4b8b-a19e-443db01bde15" />

<code code="77404" codeSystem="2.16.840.1.113883.6.12" codeSystemName="CPT-4" displayName="Radiation treatment delivery, single treatment area, single port or parallel opposed ports, simple blocks or no blocks; 11-19 MeV" /> ...

</procedure>

</component>

...

</organizer>

## Radiation Boost Modality Procedure - Published

[procedure: identifier urn:hl7ii:2.16.840.1.113883.10.13.26:2014-08-08 (open)]

***Table 158: Radiation Boost Modality Procedure Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Radiation Boost Modality Organizer](#_bookmark1590) (required) | [Indication (V2) - Cancer IG Specific Constraints](#_bookmark985)  [Radiation Boost Dose - cGy](#_bookmark1572)  [Service Delivery Location](#_bookmark1835)  [US Realm Person Name (PN.US.FIELDED)](#_bookmark2286) |

Records the radiation treatment—boost modality used to deliver the most clinically significant dose to the primary volume of interest during the first course of treatment. This is accomplished with external beam fields of reduced size (relative to the regional treatment fields), implants, stereotactic radiosurgery, conformal therapy, or intensity-modulated radiation

therapy. External beam boosts may consist of two or more successive phases with progressively smaller fields, and they are generally coded as a single entity.

***Table 159: Radiation Boost Modality Procedure Constraints Overview***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |  |
| procedure (identifier: urn:hl7ii:2.16.840.1.113883.10.13.26:2014-08-08) | | | | | | |
| @classCode | 1..1 | SHALL |  | [1126-](#_bookmark1609)  [33339](#_bookmark1609) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = PROC | |
| @moodCode | 1..1 | SHALL |  | [1126-](#_bookmark1610)  [33340](#_bookmark1610) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN | |
| templateId | 1..1 | SHALL |  | [1126-](#_bookmark1611)  [33328](#_bookmark1611) |  | |
| @root | 1..1 | SHALL |  | [1126-](#_bookmark1612)  [33341](#_bookmark1612) | 2.16.840.1.113883.10.13.26 | |
| @extension | 1..1 | SHALL |  | [1126-](#_bookmark1613)  [33970](#_bookmark1613) | 2014-08-08 |  |
| id | 1..\* | SHALL |  | [1126-](#_bookmark1614)  [33342](#_bookmark1614) |  | |
| code | 1..1 | SHALL |  | [1126-](#_bookmark1615)  [33329](#_bookmark1615) |  | |
| @code | 1..1 | SHALL |  | [1126-](#_bookmark1616)  [33587](#_bookmark1616) | urn:oid:2.16.840.1.113883.3.520.  4.23 (Radiation Regional Treatment and Boost Radiation Grouping) | |
| @codeSystem | 1..1 | SHALL |  | [1126-](#_bookmark1617)  [33588](#_bookmark1617) |  | |
| @displayName | 1..1 | SHALL |  | [1126-](#_bookmark1618)  [33661](#_bookmark1618) | urn:oid:2.16.840.1.113883.3.520.  4.23 (Radiation Regional Treatment and Boost Radiation Grouping) | |
| @sdtc:valueSet | 1..1 | SHALL |  | [1126-](#_bookmark1619)  [33724](#_bookmark1619) | 2.16.840.1.113883.3.520.4.23 | |
| originalText | 0..1 | SHOUL D |  | [1126-](#_bookmark1620)  [33330](#_bookmark1620) |  | |
| reference | 0..1 | SHOUL D |  | [1126-](#_bookmark1621)  [33331](#_bookmark1621) |  | |
| @value | 0..1 | SHOUL D |  | [1126-](#_bookmark1622)  [33332](#_bookmark1622) |  | |
| statusCode | 1..1 | SHALL |  | [1126-](#_bookmark1623)  [33345](#_bookmark1623) |  | |
| @code | 1..1 | SHALL |  | [1126-](#_bookmark1624)  [33591](#_bookmark1624) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = completed | |
| effectiveTime | 0..1 | SHOUL D |  | [1126-](#_bookmark1625)  [33346](#_bookmark1625) |  | |
| low | 1..1 | SHALL |  | [1126-](#_bookmark1626)  [33592](#_bookmark1626) |  | |
| targetSiteCode | 0..\* | SHOUL D |  | [1126-](#_bookmark1627)  [33333](#_bookmark1627) |  | |
| @code | 1..1 | SHALL |  | [1126-](#_bookmark1628) urn:oid:2.16.840 | | .1.113883.3.88.1 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | 33347 | 2.3221.8.9 (Body Site) |
| @codeSystem | 1..1 | SHALL |  | [1126-](#_bookmark1629)  [33593](#_bookmark1629) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.6.96 |
| @displayName | 1..1 | SHOUL D |  | [1126-](#_bookmark1630)  [33656](#_bookmark1630) | urn:oid:2.16.840.1.113883.3.88.1  2.3221.8.9 (Body Site) |
| @sdtc:valueSet | 1..1 | SHALL |  | [1126-](#_bookmark1631)  [33721](#_bookmark1631) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.3.88.12.3221.  8.9 |
| performer | 0..\* | SHOUL D |  | [1126-](#_bookmark1632)  [33334](#_bookmark1632) |  |
| assignedEntity | 1..1 | SHALL |  | [1126-](#_bookmark1633)  [33335](#_bookmark1633) |  |
| id | 1..\* | SHALL |  | [1126-](#_bookmark1634)  [33348](#_bookmark1634) |  |
| addr | 1..1 | SHALL |  | [1126-](#_bookmark1635)  [33349](#_bookmark1635) |  |
| telecom | 1..1 | SHALL |  | [1126-](#_bookmark1636)  [33350](#_bookmark1636) |  |
| assignedPerson | 0..1 | MAY |  | [1126-](#_bookmark1637)  [33581](#_bookmark1637) |  |
| name | 0..1 | MAY |  | [1126-](#_bookmark1638)  [33582](#_bookmark1638) | [US Realm Person Name](#_bookmark2286)  [(PN.US.FIELDED) (identifier:](#_bookmark2286)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2286)  [22.5.1.1](#_bookmark2286) |
| representedOrganization | 0..1 | SHOUL D |  | [1126-](#_bookmark1639)  [33336](#_bookmark1639) |  |
| id | 1..\* | SHALL |  | [1126-](#_bookmark1640)  [33351](#_bookmark1640) |  |
| name | 0..\* | MAY |  | [1126-](#_bookmark1641)  [33352](#_bookmark1641) |  |
| telecom | 1..1 | SHALL |  | [1126-](#_bookmark1642)  [33353](#_bookmark1642) |  |
| addr | 1..1 | SHALL |  | [1126-](#_bookmark1643)  [33354](#_bookmark1643) |  |
| participant | 0..\* | MAY |  | [1126-](#_bookmark1644)  [33337](#_bookmark1644) |  |
| @typeCode | 1..1 | SHALL |  | [1126-](#_bookmark1645)  [33355](#_bookmark1645) | urn:oid:2.16.840.1.113883.5.90  (HL7ParticipationType) = LOC |
| participantRole | 1..1 | SHALL |  | [1126-](#_bookmark1646)  [33356](#_bookmark1646) | [Service Delivery Location](#_bookmark1835)  [(identifier:](#_bookmark1835)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark1835)  [22.4.32](#_bookmark1835) |
| entryRelationship | 0..1 | MAY |  | [1126-](#_bookmark1647)  [33338](#_bookmark1647) |  |
| @typeCode | 1..1 | SHALL |  | [1126-](#_bookmark1648)  [33358](#_bookmark1648) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = SUBJ |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| @inversionInd | 1..1 | SHALL |  | [1126-](#_bookmark1649)  [33359](#_bookmark1649) | true |
| observation | 1..1 | SHALL |  | [1126-](#_bookmark1650)  [33360](#_bookmark1650) | [Radiation Boost Dose - cGy](#_bookmark1572)  [(identifier:](#_bookmark1572)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark1572)  [3.28:2014-08-08](#_bookmark1572) |
| entryRelationship | 1..1 | SHALL |  | [1126-](#_bookmark1651)  [33392](#_bookmark1651) |  |
| @typeCode | 1..1 | SHALL |  | [1126-](#_bookmark1652)  [33393](#_bookmark1652) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = RSON |
| observation | 1..1 | SHALL |  | [1126-](#_bookmark1653)  [33394](#_bookmark1653) | [Indication (V2) - Cancer IG](#_bookmark985)  [Specific Constraints (identifier:](#_bookmark985)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark985)  [3.19:2014-08-08](#_bookmark985) |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="PROC" procedure (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1126-33339).
    2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1126-33340).
    3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1126-33328).
       1. This templateId **SHALL** contain exactly one [1..1]

**@root**="2.16.840.1.113883.10.13.26" (CONF:1126-33341).

* + - 1. This templateId **SHALL** contain exactly one [1..1] **@extension**="2014-08-08"

(CONF:1126-33970).

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1126-33342).
    2. **SHALL** contain exactly one [1..1] **code** (CONF:1126-33329).

Note: Procedure code that identifies the radiation treatment—boost modality used to deliver the most clinically significant dose to the primary volume of interest during the first course of treatment.

* + - 1. This code **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [**Radiation Regional** **Treatment and Boost Radiation Grouping**](#_bookmark1655)urn:oid:2.16.840.1.113883.3.520.4.23 (CONF:1126-33587).
      2. This code **SHALL** contain exactly one [1..1] **@codeSyste****m** (CONF:1126-33588).
         1. This codeSystem in a Radiation Regional Treatment Modality **SHOULD** be selected from HCPCS (CodeSystem: 2.16.840.1.113883.6.14) and **MAY** be selected from SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) or ICD10 PCS (CodeSystem: 2.16.840.1.113883.6.4) (CONF:1126-33590).
      3. This code **SHALL** contain exactly one [1..1] **@displayName**, which **SHALL** be selected from ValueSet [**Radiation Regional Treatment and** **Boost Radiation**](#_bookmark1655) [**Grouping**](#_bookmark1655) urn:oid:2.16.840.1.113883.3.520.4.23 (CONF:1126-33661).
      4. This code **SHALL** contain exactly one [1..1]

**@sdtc:valueSet**="2.16.840.1.113883.3.520.4.23" (CONF:1126-33724).

* + - 1. This code **SHOULD** contain zero or one [0..1] **originalTe****xt** (CONF:1126-33330).
         1. The originalText, if present, **SHOULD** contain zero or one [0..1] **reference**

(CONF:1126-33331).

The reference, if present, **SHOULD** contain zero or one [0..1] **@value**

(CONF:1126-33332).

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:1126-33343).

* + 1. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1126-33345).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1126- 33591).
    2. **SHOULD** contain zero or one [0..1] **effectiveTime** (CONF:1126-33346).
       1. The effectiveTime, if present, **SHALL** contain exactly one [1..1] **low** (CONF:1126- 33592).
    3. **SHOULD** contain zero or more [0..\*] **targetSiteCode** (CONF:1126-33333).
       1. The targetSiteCode, if present, **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [**Body Site**](#_bookmark1062)urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 **DYNAMI****C** (CONF:1126-33347).
       2. The targetSiteCode, if present, **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:1126-33593).

* + - 1. The targetSiteCode, if present, **SHOULD** contain exactly one [1..1] **@displayName**, which **SHALL** be selected from ValueSet [**Body Site**](#_bookmark1062)urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 (CONF:1126-33656).
      2. The targetSiteCode, if present, **SHALL** contain exactly one [1..1]

**@sdtc:valueSet**="2.16.840.1.113883.3.88.12.3221.8.9" (CodeSystem:

SNOMED CT urn:oid:2.16.840.1.113883.6.96) (CONF:1126-33721).

* + 1. **SHOULD** contain zero or more [0..\*] **performer** (CONF:1126-33334).
       1. The performer, if present, **SHALL** contain exactly one [1..1] **assignedEntity**

(CONF:1126-33335).

* + - * 1. This assignedEntity **SHALL** contain at least one [1..\*] **id** (CONF:1126-33348).
        2. This assignedEntity **SHALL** contain exactly one [1..1] **addr** (CONF:1126- 33349).
        3. This assignedEntity **SHALL** contain exactly one [1..1] **telecom** (CONF:1126- 33350).
        4. This assignedEntity **MAY** contain zero or one [0..1] **assignedPerson**

(CONF:1126-33581).

The assignedPerson, if present, **MAY** contain zero or one [0..1] [**US**](#_bookmark2286) [**Realm Person Name (PN.US.FIELDED)**](#_bookmark2286) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1126- 33582).

* + - * 1. This assignedEntity **SHOULD** contain zero or one [0..1]

**representedOrganization** (CONF:1126-33336).

The representedOrganization, if present, **SHALL** contain at least one [1..\*] **id** (CONF:1126-33351).

The representedOrganization, if present, **MAY** contain zero or more [0..\*] **name** (CONF:1126-33352).

The representedOrganization, if present, **SHALL** contain exactly one [1..1] **telecom** (CONF:1126-33353).

The representedOrganization, if present, **SHALL** contain exactly one [1..1] **addr** (CONF:1126-33354).

* + 1. **MAY** contain zero or more [0..\*] **participant** (CONF:1126-33337).
       1. The participant, if present, **SHALL** contain exactly one [1..1] **@typeCode**="LOC" location (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90) (CONF:1126-33355).
       2. The participant, if present, **SHALL** contain exactly one [1..1] [**Service Del****ivery**](#_bookmark1835) [**Location**](#_bookmark1835) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32) (CONF:1126-33356).
    2. **MAY** contain zero or one [0..1] **entryRelationshi****p** (CONF:1126-33338) such that it
       1. **SHALL** contain exactly one [1..1] **@typeCode**="SUBJ" subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1126- 33358).
       2. **SHALL** contain exactly one [1..1] **@inversionInd**="true" (CONF:1126-33359).
       3. **SHALL** contain exactly one [1..1] [**Radiation Boost Dose** **- cGy**](#_bookmark1572) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.28:2014-08-08) (CONF:1126-33360).
    3. **SHALL** contain exactly one [1..1] **entryRelationship** (CONF:1126-33392) 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:1126- 33393).
       2. **SHALL** contain exactly one [1..1] [**Indication (V2) - Cancer IG Specific**](#_bookmark985) **[Constraints](#_bookmark985)** (identifier: urn:hl7ii:2.16.840.1.113883.10.13.19:2014- 08-08) (CONF:1126-33394).

***Table*** ***160: Radiation Regional Treatment and Boost Radiation Grouping***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Radiation Regional Treatment and Boost Radiation Grouping urn:oid:2.16.840.1.113883.3.520.4.23 This value set grouping lists all value sets that contain the codes for Radiation Regional Treatment and Boost Radiation Modality. The codes from these value sets SHALL be selected in the following order:  The code SHOULD be selected from "Radiation Regional Treatment and Boost Radiation HCPCS codes" (ValueSet OID: 2.16.840.1.113883.3.520.4.24) and MAY be selected from "Radiation Regional Treatment and Boost Radiation SNOMED CT codes" (ValueSet OID: 2.16.840.1.113883.3.520.4.26) or "Radiation Regional Treatment and Boost Radiation ICD10-PCS codes" (ValueSet OID: 2.16.840.1.113883.3.520.4.25).  Note:  "Radiation Regional Treatment and Boost Radiation HCPCS codes" consist of HCPCS Level I and Level II codes. Level I codes are a subset of CPT-4 codes (see codes 55860 and 55862 in below table) and Level II codes are alphanumeric HCPCS codes. (see codes C1715 and G0173 in below table).  "Radiation Regional Treatment and Boost Radiation SNOMED CT codes" Value Set consist of SNOMED CT code 108290001 (Radiation oncology AND/OR radiotherapy (procedure)) and all descendants.  "Radiation Regional Treatment and Boost Radiation ICD10-PCS codes" Value Set consists of ICD10-PCS codes beginning with letter "D".  Copyright Note: CPT copyright 2013 American Medical Association. All rights reserved. CPT is a registered trademark of the American Medical Association. CPT codes and text are for informational purposes only and cannot be used for further purposes unless a user license from the American Medical Association has been obtained.  Value Set Source:  [**https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.23**](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.23) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 55860 | HCPCS | urn:oid:2.16.840.1.11388 3.6.14 | SURGICAL EXPOSURE, PROSTATE |
| 55862 | HCPCS | urn:oid:2.16.840.1.11388 3.6.14 | EXTENSIVE PROSTATE SURGERY...... |
| D0000ZZ | ICD10PCS | urn:oid:2.16.840.1.11388 3.6.4 | Beam Radiation of Brain using Photons <1 MeV |
| D0001ZZ | ICD10PCS | urn:oid:2.16.840.1.11388 3.6.4 | Beam Radiation of Brain using Photons 1 - 10 MeV |
| 33356009 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Betatron teleradiotherapy |
| 445232009 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Boost radiation therapy |
| C1715 | HCPCS | urn:oid:2.16.840.1.11388 3.6.14 | Brachytherapy needle |
| G0173 | HCPCS | urn:oid:2.16.840.1.11388 3.6.14 | Linear acc stereo radsur com |
| ... | | | |

***Figure 76: Radiation Boost Modality Procedure example***

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

<templateId root="2.16.840.1.113883.10.13.26" extension="2014-08-08" />

<id root="87cb6d8e-b33f-4b8b-a19e-443db01bde15" />

<code code="77404" codeSystem="2.16.840.1.113883.6.12" codeSystemName="CPT-4" displayName="Radiation treatment delivery, single treatment area, single port or parallel opposed ports, simple blocks or no blocks; 11-19 MeV" sdtc:valueSet="2.16.840.1.113883.3.520.4.23">

<originalText>

<reference value="#a1" />

</originalText>

</code>

<statusCode code="complete" />

<effectiveTime>

<low value="20140725161343" />

</effectiveTime>

<targetSiteCode code="49668003" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Bone structure of L5" sdtc:valueSet="2.16.840.1.113883.3.88.12.3221.8.9"/>

<performer>

<assignedEntity>

<id extension="5555555555" root="2.16.840.1.113883.19" />

<addr>

<streetAddressLine>1004 Healthcare Drive</streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>99999</postalCode>

<country>US</country>

</addr>

<telecom use="WP" value="tel:+1(555)555-1004" />

<assignedPerson>

<name>

<given>Christine</given>

<family>Curie</family>

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

</name>

</assignedPerson>

<representedOrganization>

<id extension="219BX" root="2.16.840.1.113883.19" />

<name>Good Health Hospital Radiology</name>

<telecom use="WP" value="tel:+1(555)555-3010" />

<addr>

<streetAddressLine>1000 Hospital Lane</streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>99999</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" />

<code code="1008-2" codeSystem="2.16.840.1.113883.6.259" codeSystemName="HealthcareServiceLocation" displayName="Radiology diagnostics or therapeutics unit" />

<addr>

<streetAddressLine>1000 Hospital Lane</streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>99999</postalCode>

<country>US</country>

</addr>

<telecom use="WP" value="tel:+1(555)555-5000" />

<playingEntity classCode="PLC">

<name>Good Health Hospital</name>

</playingEntity>

</participantRole>

</participant>

<entryRelationship typeCode="SUBJ" inversionInd="true">

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

<templateId root="2.16.840.1.113883.10.13.28" extension="2014-08-08" />

<code code="21958-4" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Regional radiation treatment Dose" />

<statusCode code="complete" />

<value xsi:type="PQ" value="5500" unit="cGy" />

</observation>

</entryRelationship>

<entryRelationship typeCode="RSON"> ... </entryRelationship>

</procedure>

## Radiation Regional Dose - cGy - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.13.27:2014-08-08 (open)]

***Table 161: Radiation Regional Dose - cGy Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Radiation Regional Treatment Modality Procedure](#_bookmark1692) (optional) |  |

The dominant or most clinically significant total dose of regional radiation therapy delivered to the patient during the first course of treatment. The unit of measure is centiGray (cGy).

To evaluate patterns of radiation oncology care, it is necessary to describe the regional radiation dose. Outcomes are strongly related to the dose delivered.

***Table 162: Radiation Regional Dose - cGy Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.13.27:2014-08-08) | | | | | |
| @classCode | 1..1 | SHALL |  | [1126-](#_bookmark1661)  [33321](#_bookmark1661) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1126-](#_bookmark1662)  [33322](#_bookmark1662) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1126-](#_bookmark1663)  [33317](#_bookmark1663) |  |
| @root | 1..1 | SHALL |  | [1126-](#_bookmark1664)  [33323](#_bookmark1664) | 2.16.840.1.113883.10.13.27 |
| @extension | 1..1 | SHALL |  | [1126-](#_bookmark1665)  [33971](#_bookmark1665) | 2014-08-08 |
| code | 1..1 | SHALL |  | [1126-](#_bookmark1666)  [33318](#_bookmark1666) |  |
| @code | 1..1 | SHALL |  | [1126-](#_bookmark1667)  [33324](#_bookmark1667) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 21958-4 |
| @codeSystem | 1..1 | SHALL |  | [1126-](#_bookmark1668)  [33325](#_bookmark1668) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 0..1 | MAY |  | [1126-](#_bookmark1669)  [33583](#_bookmark1669) |  |
| @code | 1..1 | SHALL |  | [1126-](#_bookmark1670)  [33584](#_bookmark1670) | completed |
| value | 1..1 | SHALL | PQ | [1126-](#_bookmark1671)  [33319](#_bookmark1671) |  |
| @value | 1..1 | SHALL |  | [1126-](#_bookmark1672)  [33326](#_bookmark1672) |  |
| @unit | 0..1 | SHALL |  | [1126-](#_bookmark1673)  [33327](#_bookmark1673) | urn:oid:2.16.840.1.113883.6.8 (UCUM) = cGy |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1126-33321).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1126-33322).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1126-33317).
       1. This templateId **SHALL** contain exactly one [1..1]

**@root**="2.16.840.1.113883.10.13.27" (CONF:1126-33323).

* + - 1. This templateId **SHALL** contain exactly one [1..1] **@extension**="2014-08-08"

(CONF:1126-33971).

* + 1. **SHALL** contain exactly one [1..1] **code** (CONF:1126-33318).
       1. This code **SHALL** contain exactly one [1..1] **@code**="21958-4" Regional radiation treatment Dose (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33324).
       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:1126-33325).

* + 1. **MAY** contain zero or one [0..1] **statusCode** (CONF:1126-33583).
       1. The statusCode, if present, **SHALL** contain exactly one [1..1] **@code**="completed"

Completed (CONF:1126-33584).

* + 1. **SHALL** contain exactly one [1..1] **value** with @xsi:type="PQ" (CONF:1126-33319).
       1. This value **SHALL** contain exactly one [1..1] **@valu****e** (CONF:1126-33326).
       2. This value **SHALL** contain zero or one [0..1] **@unit**="cGy" centiGray (CodeSystem:

UCUM urn:oid:2.16.840.1.113883.6.8) (CONF:1126-33327).

***Figure 77: Regional Dose – cGy example***

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

<templateId root="2.16.840.1.113883.10.13.27" extension="2014-08-08" />

<code code="21958-4" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Regional radiation treatment Dose" />

<statusCode code="completed" />

<value xsi:type="PQ" value="5500" unit="cGy" />

</observation>

## Radiation Regional Treatment Modality Organizer - Published

[organizer: identifier urn:hl7ii:2.16.840.1.113883.10.13.29:2014-08-08 (open)]

***Table 163: Radiation Regional Treatment Modality Organizer Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Radiation Oncology Section](#_bookmark579) (required) | [Radiation Regional Treatment Modality Procedure](#_bookmark1692) |

Organizer for radiation regional treatment procedures.

***Table 164: Radiation Regional Treatment Modality Organizer Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| organizer (identifier: urn:hl7ii:2.16.840.1.113883.10.13.29:2014-08-08) | | | | | |
| @classCode | 1..1 | SHALL |  | [1126-](#_bookmark1679)  [33637](#_bookmark1679) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = CLUSTER |
| @moodCode | 1..1 | SHALL |  | [1126-](#_bookmark1680)  [33638](#_bookmark1680) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1126-](#_bookmark1681)  [33972](#_bookmark1681) |  |
| @root | 1..1 | SHALL |  | [1126-](#_bookmark1682)  [33973](#_bookmark1682) | 2.16.840.1.113883.10.13.29 |
| @extension | 1..1 | SHALL |  | [1126-](#_bookmark1683)  [33974](#_bookmark1683) | 2014-08-08 |
| code | 1..1 | SHALL |  | [1126-](#_bookmark1684)  [33648](#_bookmark1684) |  |
| @code | 1..1 | SHALL |  | [1126-](#_bookmark1685)  [33649](#_bookmark1685) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 21964-2 |
| @codeSystem | 1..1 | SHALL |  | [1126-](#_bookmark1686)  [33650](#_bookmark1686) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| component | 1..\* | SHALL |  | [1126-](#_bookmark1687)  [33636](#_bookmark1687) |  |
| @typeCode | 1..1 | SHALL |  | [1126-](#_bookmark1688)  [33651](#_bookmark1688) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = COMP |
| procedure | 1..1 | SHALL |  | [1126-](#_bookmark1689)  [33639](#_bookmark1689) | [Radiation Regional Treatment](#_bookmark1692)  [Modality Procedure (identifier:](#_bookmark1692)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark1692)  [3.25:2014-08-08](#_bookmark1692) |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="CLUSTER" cluster (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1126-33637).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1126-33638).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1126-33972).
       1. This templateId **SHALL** contain exactly one [1..1]

**@root**="2.16.840.1.113883.10.13.29" (CONF:1126-33973).

* + - 1. This templateId **SHALL** contain exactly one [1..1] **@extension**="2014-08-08"

(CONF:1126-33974).

* + 1. **SHALL** contain exactly one [1..1] **code** (CONF:1126-33648).
       1. This code **SHALL** contain exactly one [1..1] **@code**="21964-2" Modality Radiation treatment (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126- 33649).
       2. This code **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:1126- 33650).
    2. **SHALL** contain at least one [1..\*] **component** (CONF:1126-33636).
       1. Such components **SHALL** contain exactly one [1..1] **@typeCode**="COMP" component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1126-33651).
       2. Such components **SHALL** contain exactly one [1..1] [**Radiation Regional**](#_bookmark1692) [**Treatment Modality Procedure**](#_bookmark1692) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.25:2014-08-08) (CONF:1126-33639).

***Figure 78: Radiation Regionsal Treatment Modality Organizer example***

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

<templateId root="2.16.840.1.113883.10.13.29" extension="2014-08-08" />

<!-- Radiation Regional Treatment Modality Organizer Constraints -->

<code code="21964-2" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Modality Radiation treatment" />

<statusCode code="completed" />

<component typeCode="COMP">

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

<!-- Radiation Regional Treatment Modality Procedure Constraints -->

<templateId root="2.16.840.1.113883.10.13.25" extension="2014-08-08" />

<id root="4a7eed3b-d1d4-4f67-80fa-4972c563606c" />

<code code="77404" codeSystem="2.16.840.1.113883.6.12" codeSystemName="CPT-4" displayName="Radiation treatment delivery, single treatment area, single port or parallel opposed ports, simple blocks or no blocks; 11-19 MeV" /> ...

</procedure>

...

</component>

</organizer>

## Radiation Regional Treatment Modality Procedure - Published

[procedure: identifier urn:hl7ii:2.16.840.1.113883.10.13.25:2014-08-08 (open)]

***Table 165: Radiation Regional Treatment Modality Procedure Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Radiation Regional Treatment Modality Organizer](#_bookmark1676) (required) | [Indication (V2) - Cancer IG Specific Constraints](#_bookmark985)  [Radiation Regional Dose - cGy](#_bookmark1658)  [Service Delivery Location](#_bookmark1835)  [US Realm Person Name (PN.US.FIELDED)](#_bookmark2286) |

Records the dominant modality of radiation therapy used to deliver the clinically most significant regional dose to the primary volume of interest during the first course of treatment.

***Table 166: Radiation Regional Treatment Modality Procedure Constraints Overview***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |  |
| procedure (identifier: urn:hl7ii:2.16.840.1.113883.10.13.25:2014-08-08) | | | | | | |
| @classCode | 1..1 | SHALL |  | [1126-](#_bookmark1695)  [33372](#_bookmark1695) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = PROC | |
| @moodCode | 1..1 | SHALL |  | [1126-](#_bookmark1696)  [33373](#_bookmark1696) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN | |
| templateId | 1..1 | SHALL |  | [1126-](#_bookmark1697)  [33361](#_bookmark1697) |  | |
| @root | 1..1 | SHALL |  | [1126-](#_bookmark1698)  [33374](#_bookmark1698) | 2.16.840.1.113883.10.13.25 | |
| @extension | 1..1 | SHALL |  | [1126-](#_bookmark1699)  [33975](#_bookmark1699) | 2014-08-08 |  |
| id | 1..\* | SHALL |  | [1126-](#_bookmark1700)  [33375](#_bookmark1700) |  | |
| code | 1..1 | SHALL |  | [1126-](#_bookmark1701)  [33362](#_bookmark1701) |  | |
| @code | 1..1 | SHALL |  | [1126-](#_bookmark1702)  [33594](#_bookmark1702) | urn:oid:2.16.840.1.113883.3.520.  4.23 (Radiation Regional Treatment and Boost Radiation Grouping) | |
| @codeSystem | 1..1 | SHALL |  | [1126-](#_bookmark1703)  [33595](#_bookmark1703) |  | |
| @displayName | 1..1 | SHALL |  | [1126-](#_bookmark1704)  [33662](#_bookmark1704) | urn:oid:2.16.840.1.113883.3.520.  4.23 (Radiation Regional Treatment and Boost Radiation Grouping) | |
| @sdtc:valueSet | 1..1 | SHALL |  | [1126-](#_bookmark1705)  [33723](#_bookmark1705) | 2.16.840.1.113883.3.520.4.23 | |
| originalText | 0..1 | SHOUL D |  | [1126-](#_bookmark1706)  [33363](#_bookmark1706) |  | |
| reference | 0..1 | SHOUL D |  | [1126-](#_bookmark1707)  [33364](#_bookmark1707) |  | |
| @value | 0..1 | SHOUL D |  | [1126-](#_bookmark1708)  [33365](#_bookmark1708) |  | |
| statusCode | 1..1 | SHALL |  | [1126-](#_bookmark1709)  [33378](#_bookmark1709) |  | |
| @code | 1..1 | SHALL |  | [1126-](#_bookmark1710)  [33598](#_bookmark1710) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = completed | |
| effectiveTime | 0..1 | SHOUL D |  | [1126-](#_bookmark1711)  [33379](#_bookmark1711) |  | |
| low | 1..1 | SHALL |  | [1126-](#_bookmark1712)  [33599](#_bookmark1712) |  | |
| targetSiteCode | 0..\* | SHOUL D |  | [1126-](#_bookmark1713)  [33366](#_bookmark1713) |  | |
| @code | 1..1 | SHALL |  | [1126-](#_bookmark1714) urn:oid:2.16.840 | | .1.113883.3.88.1 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | 33380 | 2.3221.8.9 (Body Site) |
| @codeSystem | 1..1 | SHALL |  | [1126-](#_bookmark1715)  [33600](#_bookmark1715) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.6.96 |
| @displayName | 1..1 | SHOUL D |  | [1126-](#_bookmark1716)  [33655](#_bookmark1716) | urn:oid:2.16.840.1.113883.3.88.1  2.3221.8.9 (Body Site) |
| @sdtc:valueSet | 1..1 | SHALL |  | [1126-](#_bookmark1717)  [33722](#_bookmark1717) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) = 2.16.840.1.113883.3.88.12.3221.  8.9 |
| performer | 0..\* | SHOUL D |  | [1126-](#_bookmark1718)  [33367](#_bookmark1718) |  |
| assignedEntity | 1..1 | SHALL |  | [1126-](#_bookmark1719)  [33368](#_bookmark1719) |  |
| id | 1..\* | SHALL |  | [1126-](#_bookmark1720)  [33381](#_bookmark1720) |  |
| addr | 1..1 | SHALL |  | [1126-](#_bookmark1721)  [33382](#_bookmark1721) |  |
| telecom | 1..1 | SHALL |  | [1126-](#_bookmark1722)  [33383](#_bookmark1722) |  |
| assignedPerson | 0..1 | SHOUL D |  | [1126-](#_bookmark1723)  [33585](#_bookmark1723) |  |
| name | 0..1 | SHOUL D |  | [1126-](#_bookmark1724)  [33586](#_bookmark1724) | [US Realm Person Name](#_bookmark2286)  [(PN.US.FIELDED) (identifier:](#_bookmark2286)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2286)  [22.5.1.1](#_bookmark2286) |
| representedOrganization | 0..1 | SHOUL D |  | [1126-](#_bookmark1725)  [33369](#_bookmark1725) |  |
| id | 1..\* | SHALL |  | [1126-](#_bookmark1726)  [33384](#_bookmark1726) |  |
| name | 0..\* | MAY |  | [1126-](#_bookmark1727)  [33385](#_bookmark1727) |  |
| telecom | 1..1 | SHALL |  | [1126-](#_bookmark1728)  [33386](#_bookmark1728) |  |
| addr | 1..1 | SHALL |  | [1126-](#_bookmark1729)  [33387](#_bookmark1729) |  |
| participant | 0..\* | MAY |  | [1126-](#_bookmark1730)  [33370](#_bookmark1730) |  |
| @typeCode | 1..1 | SHALL |  | [1126-](#_bookmark1731)  [33388](#_bookmark1731) | urn:oid:2.16.840.1.113883.5.90  (HL7ParticipationType) = LOC |
| participantRole | 1..1 | SHALL |  | [1126-](#_bookmark1732)  [33389](#_bookmark1732) | [Service Delivery Location](#_bookmark1835)  [(identifier:](#_bookmark1835)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark1835)  [22.4.32](#_bookmark1835) |
| entryRelationship | 1..\* | SHALL |  | [1126-](#_bookmark1733)  [33371](#_bookmark1733) |  |
| @typeCode | 1..1 | SHALL |  | [1126-](#_bookmark1734)  [33390](#_bookmark1734) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = RSON |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| observation | 1..1 | SHALL |  | [1126-](#_bookmark1735)  [33391](#_bookmark1735) | [Indication (V2) - Cancer IG](#_bookmark985)  [Specific Constraints (identifier:](#_bookmark985)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark985)  [3.19:2014-08-08](#_bookmark985) |
| entryRelationship | 1..\* | SHOUL D |  | [1126-](#_bookmark1736)  [33624](#_bookmark1736) |  |
| observation | 1..1 | SHALL |  | [1126-](#_bookmark1737)  [33625](#_bookmark1737) | [Radiation Regional Dose - cGy](#_bookmark1658)  [(identifier:](#_bookmark1658)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark1658)  [3.27:2014-08-08](#_bookmark1658) |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="PROC" Procedure (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1126-33372).
    2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1126-33373).
    3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1126-33361).
       1. This templateId **SHALL** contain exactly one [1..1]

**@root**="2.16.840.1.113883.10.13.25" (CONF:1126-33374).

* + - 1. This templateId **SHALL** contain exactly one [1..1] **@extension**="2014-08-08"

(CONF:1126-33975).

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1126-33375).
    2. **SHALL** contain exactly one [1..1] **code** (CONF:1126-33362).

Note: Procedure code that identifies the dominant modality of radiation therapy used to deliver the clinically most significant regional dose to the primary volume of interest during the first course of treatment.

* + - 1. This code **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [**Radiation Regional Treatme****nt and Boost Radiation Grouping**](#_bookmark1655)urn:oid:2.16.840.1.113883.3.520.4.23 (CONF:1126-33594).
      2. This code **SHALL** contain exactly one [1..1] **@codeSyste****m** (CONF:1126-33595).
         1. This codeSystem in a Radiation Regional Treatment Modality **SHOULD** be selected from CPT-4 (CodeSystem: 2.16.840.1.113883.6.12) **MAY** be selected from SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) or ICD10 PCS (CodeSystem: 2.16.840.1.113883.6.4) (CONF:1126-33597).
      3. This code **SHALL** contain exactly one [1..1] **@displayName**, which **SHALL** be selected from ValueSet [**Radiation Regional Treatment and** **Boost Radiation**](#_bookmark1655) [**Grouping**](#_bookmark1655) urn:oid:2.16.840.1.113883.3.520.4.23 (CONF:1126-33662).
      4. This code **SHALL** contain exactly one [1..1]

**@sdtc:valueSet**="2.16.840.1.113883.3.520.4.23" (CONF:1126-33723).

* + - 1. This code **SHOULD** contain zero or one [0..1] **originalTe****xt** (CONF:1126-33363).
         1. The originalText, if present, **SHOULD** contain zero or one [0..1] **reference**

(CONF:1126-33364).

The reference, if present, **SHOULD** contain zero or one [0..1] **@value**

(CONF:1126-33365).

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:1126-33376).

* + 1. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1126-33378).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1126- 33598).
    2. **SHOULD** contain zero or one [0..1] **effectiveTime** (CONF:1126-33379).
       1. The effectiveTime, if present, **SHALL** contain exactly one [1..1] **low** (CONF:1126- 33599).
    3. **SHOULD** contain zero or more [0..\*] **targetSiteCode** (CONF:1126-33366).
       1. The targetSiteCode, if present, **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [**Body Site**](#_bookmark1062)urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 **DYNAMI****C** (CONF:1126-33380).
       2. The targetSiteCode, if present, **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:1126-33600).

* + - 1. The targetSiteCode, if present, **SHOULD** contain exactly one [1..1] **@displayName**, which **SHALL** be selected from ValueSet [**Body Site**](#_bookmark1062)urn:oid:2.16.840.1.113883.3.88.12.3221.8.9 (CONF:1126-33655).
      2. The targetSiteCode, if present, **SHALL** contain exactly one [1..1]

**@sdtc:valueSet**="2.16.840.1.113883.3.88.12.3221.8.9" (CodeSystem:

SNOMED CT urn:oid:2.16.840.1.113883.6.96) (CONF:1126-33722).

* + 1. **SHOULD** contain zero or more [0..\*] **performer** (CONF:1126-33367).
       1. The performer, if present, **SHALL** contain exactly one [1..1] **assignedEntity**

(CONF:1126-33368).

* + - * 1. This assignedEntity **SHALL** contain at least one [1..\*] **id** (CONF:1126-33381).
        2. This assignedEntity **SHALL** contain exactly one [1..1] **addr** (CONF:1126- 33382).
        3. This assignedEntity **SHALL** contain exactly one [1..1] **telecom** (CONF:1126- 33383).
        4. This assignedEntity **SHOULD** contain zero or one [0..1] **assignedPerson**

(CONF:1126-33585).

The assignedPerson, if present, **SHOULD** contain zero or one [0..1] [**US**](#_bookmark2286) [**Realm Person Name (PN.US.FIELDED)**](#_bookmark2286) (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1.1) (CONF:1126- 33586).

* + - * 1. This assignedEntity **SHOULD** contain zero or one [0..1]

**representedOrganization** (CONF:1126-33369).

The representedOrganization, if present, **SHALL** contain at least one [1..\*] **id** (CONF:1126-33384).

The representedOrganization, if present, **MAY** contain zero or more [0..\*] **name** (CONF:1126-33385).

The representedOrganization, if present, **SHALL** contain exactly one [1..1] **telecom** (CONF:1126-33386).

The representedOrganization, if present, **SHALL** contain exactly one [1..1] **addr** (CONF:1126-33387).

* + 1. **MAY** contain zero or more [0..\*] **participant** (CONF:1126-33370).
       1. The participant, if present, **SHALL** contain exactly one [1..1] **@typeCode**="LOC" location (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90) (CONF:1126-33388).
       2. The participant, if present, **SHALL** contain exactly one [1..1] [**Service Deliv****ery**](#_bookmark1835) [**Location**](#_bookmark1835) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32) (CONF:1126-33389).
    2. **SHALL** contain at least one [1..\*] **entryRelations****hip** (CONF:1126-33371) 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:1126- 33390).
       2. **SHALL** contain exactly one [1..1] [**Indication (V2) - Cancer IG Specific**](#_bookmark985) **[Constraints](#_bookmark985)** (identifier: urn:hl7ii:2.16.840.1.113883.10.13.19:2014- 08-08) (CONF:1126-33391).
    3. **SHOULD** contain at least one [1..\*] **entryRelationship** (CONF:1126-33624) such that it
       1. **SHALL** contain exactly one [1..1] [**Radiation Regional** **Dose - cGy**](#_bookmark1658) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.27:2014-08-08) (CONF:1126-33625).

***Figure 79: Radiation Regional Treatment Modality Procedure example***

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

<templateId root="2.16.840.1.113883.10.13.25" extension="2014-08-08" />

<id root="4a7eed3b-d1d4-4f67-80fa-4972c563606c" />

<code code="77404" codeSystem="2.16.840.1.113883.6.12" codeSystemName="CPT-4" displayName="Radiation treatment delivery, single treatment area, single port or parallel opposed ports, simple blocks or no blocks; 11-19 MeV" sdtc:valueSet="2.16.840.1.113883.3.520.4.23">

<originalText>

<reference value="#a1" />

</originalText>

</code>

<statusCode code="completed" />

<effectiveTime>

<low value="20140725161343" />

</effectiveTime>

<targetSiteCode code="49668003" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT" displayName="Bone structure of L5" sdtc:valueSet="2.16.840.1.113883.3.88.12.3221.8.9" />

<performer>

<assignedEntity>

<id extension="5555555555" root="2.16.840.1.113883.19" />

<addr>

<streetAddressLine>1004 Healthcare Drive</streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>99999</postalCode>

<country>US</country>

</addr>

<telecom use="WP" value="tel:+1(555)555-1004" />

<assignedPerson>

<name>

<given>Christine</given>

<family>Curie</family>

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

</name>

</assignedPerson>

<representedOrganization>

<id extension="219BX" root="2.16.840.1.113883.19" />

<name>Good Health Hospital Radiology</name>

<telecom use="WP" value="tel:+1(555)555-3010" />

<addr>

<streetAddressLine>1000 Hospital Lane</streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>99999</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" />

<code code="1008-2" codeSystem="2.16.840.1.113883.6.259" codeSystemName="HealthcareServiceLocation" displayName="Radiology diagnostics or therapeutics unit" />

<addr>

<streetAddressLine>1000 Hospital Lane</streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>99999</postalCode>

<country>US</country>

</addr>

<telecom use="WP" value="tel:+1(555)555-5000" />

<playingEntity classCode="PLC">

<name>Good Health Hospital</name>

</playingEntity>

</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" />

<templateId root="2.16.840.1.113883.10.13.19" extension="2014-08- 08"></templateId>

<id root="ab1791b0-5c71-11db-b0de-0800200c9a66" />

<code code="75323-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Condition HL7.CCDAR2" />

<statusCode code="completed" />

</observation>

</entryRelationship>

<entryRelationship typeCode="SUBJ" inversionInd="true">

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

<templateId root="2.16.840.1.113883.10.13.27" extension="2014-08-08" />

<code code="21958-4" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Regional radiation treatment Dose" />

<statusCode code="completed" />

<value xsi:type="PQ" value="5500" unit="cGy" />

</observation>

</entryRelationship>

...

</procedure>

## Regional Lymph Nodes Clinical - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.13.37:2015-02-05 (open)]

***Table 167: Regional Lymph Nodes Clinical Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [TNM Clinical Stage Group](#_bookmark1937) (required) |  |

This template records the results of evaluating whether regional lymph nodes are involved by tumor and if so, to what extent.

***Table 168: Regional Lymph Nodes Clinical Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.13.37:2015-02-05) | | | | | |
| @classCode | 1..1 | SHALL |  | [1169-](#_bookmark1743)  [34100](#_bookmark1743) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1169-](#_bookmark1744)  [34101](#_bookmark1744) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1169-](#_bookmark1745)  [34099](#_bookmark1745) |  |
| @root | 1..1 | SHALL |  | [1169-](#_bookmark1746)  [34102](#_bookmark1746) | 2.16.840.1.113883.10.13.37 |
| @extension | 1..1 | SHALL |  | [1169-](#_bookmark1747)  [34103](#_bookmark1747) | 2015-02-05 |
| code | 1..1 | SHALL |  | [1169-](#_bookmark1748)  [34104](#_bookmark1748) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark1749)  [34105](#_bookmark1749) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 21906-3 |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark1750)  [34106](#_bookmark1750) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| value | 1..1 | SHALL | CD | [1169-](#_bookmark1751)  [34107](#_bookmark1751) |  |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark1752)  [34111](#_bookmark1752) | urn:oid:2.16.840.1.113883.3.520.  4.7 (TNM Clinical Node) |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark1753)  [34112](#_bookmark1753) | urn:oid:2.16.840.1.113883.15.6  (TNM 7. Edition) = 2.16.840.1.113883.15.6 |
| @sdtc:valueSet | 1..1 | SHALL |  | [1169-](#_bookmark1754)  [34113](#_bookmark1754) | urn:oid:2.16.840.1.113883.15.6  (TNM 7. Edition) = 2.16.840.1.113883.3.520.4.7 |
| originalText | 0..1 | SHOUL D |  | [1169-](#_bookmark1755)  [34108](#_bookmark1755) |  |
| reference | 0..1 | SHOUL D |  | [1169-](#_bookmark1756)  [34109](#_bookmark1756) |  |
| @value | 0..1 | SHOUL D |  | [1169-](#_bookmark1757)  [34110](#_bookmark1757) |  |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1169-34100).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1169-34101).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1169-34099) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.37"

(CONF:1169-34102).

* + - 1. **SHALL** contain exactly one [1..1] **@extension**="2015-02-05" (CONF:1169-34103).
    1. **SHALL** contain exactly one [1..1] **code** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34104).
       1. This code **SHALL** contain exactly one [1..1] **@code**="21906-3" Regional lymph nodes.clinical [Class] Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34105).
       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:1169-34106).

* + 1. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD" (CONF:1169-34107).
       1. This value **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [**TNM Clinical Node**](#_bookmark1759) urn:oid:2.16.840.1.113883.3.520.4.7 (CONF:1169-34111).
       2. This value **SHALL** contain exactly one [1..1]

**@codeSystem**="2.16.840.1.113883.15.6" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1169-34112).

* + - 1. This value **SHALL** contain exactly one [1..1]

**@sdtc:valueSet**="2.16.840.1.113883.3.520.4.7" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1169-34113).

* + - 1. This value **SHOULD** contain zero or one [0..1] **originalTe****xt** (CONF:1169-34108).
         1. The originalText, if present, **SHOULD** contain zero or one [0..1] **reference**

(CONF:1169-34109).

The reference, if present, **SHOULD** contain zero or one [0..1] **@value**

(CONF:1169-34110).

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:1169-34114).

***Table*** ***169: TNM Clinical Node***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: TNM Clinical Node urn:oid:2.16.840.1.113883.3.520.4.7  Detailed site-specific codes for the clinical tumor (N) as defined by AJCC and recorded by the physician.  Note: The AJCC Staging Manual TNM system is proprietary and its definitions cannot be included in other documents without permission.  Value Set Source:  [**http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.7**](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.7) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| N1A | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | Site specific descriptions prevent listing of text equivalents. |
| N0 | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| N2B | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| N3C | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| N3B | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| N3A | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| N2C | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| N2A | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| N2 | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| N1B | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| ... | | | |

***Figure 80: Regional Lymph Nodes Clinical example***

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

<templateId root="2.16.840.1.113883.10.13.37" extension="2015-02-05" />

<code code="21906-3" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Regional lymph nodes.clinical [Class] Cancer" />

<value xsi:type="CD" code="N1" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM

7. Edition" displayName="Metastases to movable ipsilateral level I, II axillary lymph node(s)" sdtc:valueSet="2.16.840.1.113883.3.520.4.7">

<originalText>

<reference value="#ClinicalNode\_1" />

</originalText>

</value>

</observation>

## Regional Lymph Nodes Pathologic - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.13.42:2015-02-05 (open)]

***Table 170: Regional Lymph Nodes Pathologic Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [TNM Pathologic Stage Group](#_bookmark2010) (required) |  |

This template records the results of evaluating whether regional lymph nodes are involved by tumor and if so, to what extent.

***Table 171: Regional Lymph Nodes Pathologic Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.13.42:2015-02-05) | | | | | |
| @classCode | 1..1 | SHALL |  | [1169-](#_bookmark1765)  [34203](#_bookmark1765) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1169-](#_bookmark1766)  [34204](#_bookmark1766) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1169-](#_bookmark1767)  [34202](#_bookmark1767) |  |
| @root | 1..1 | SHALL |  | [1169-](#_bookmark1768)  [34205](#_bookmark1768) | 2.16.840.1.113883.10.13.42 |
| @extension | 1..1 | SHALL |  | [1169-](#_bookmark1769)  [34206](#_bookmark1769) | 2015-02-05 |
| code | 1..1 | SHALL |  | [1169-](#_bookmark1770)  [34207](#_bookmark1770) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark1771)  [34208](#_bookmark1771) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 21900-6 |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark1772)  [34209](#_bookmark1772) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| value | 1..1 | SHALL | CD | [1169-](#_bookmark1773)  [34210](#_bookmark1773) |  |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark1774)  [34211](#_bookmark1774) | urn:oid:2.16.840.1.113883.3.520.  4.18 (TNM Pathologic Node) |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark1775)  [34212](#_bookmark1775) | urn:oid:2.16.840.1.113883.15.6  (TNM 7. Edition) = 2.16.840.1.113883.15.6 |
| @sdtc:valueSet | 1..1 | SHALL |  | [1169-](#_bookmark1776)  [34216](#_bookmark1776) | urn:oid:2.16.840.1.113883.15.6  (TNM 7. Edition) = 2.16.840.1.113883.3.520.4.18 |
| originalText | 0..1 | SHOUL D |  | [1169-](#_bookmark1777)  [34213](#_bookmark1777) |  |
| reference | 0..1 | SHOUL D |  | [1169-](#_bookmark1778)  [34214](#_bookmark1778) |  |
| @value | 0..1 | SHOUL D |  | [1169-](#_bookmark1779)  [34215](#_bookmark1779) |  |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1169-34203).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1169-34204).
    2. **SHALL** contain exactly one [1..1] **templa****teId** (CONF:1169-34202) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.42"

(CONF:1169-34205).

**SHALL** contain exactly one [1..1] **@extension**="2015-02-05" (CONF:1169-34206).

* + 1. **SHALL** contain exactly one [1..1] **code** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34207).
       1. This code **SHALL** contain exactly one [1..1] **@code**="21900-6" Regional lymph nodes.pathology [Class] Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34208).
       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:1169-34209).

* + 1. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD" (CONF:1169-34210).
       1. This value **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [**TNM Pathologic Node**](#_bookmark1781) urn:oid:2.16.840.1.113883.3.520.4.18 (CONF:1169-34211).
       2. This value **SHALL** contain exactly one [1..1]

**@codeSystem**="2.16.840.1.113883.15.6" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1169-34212).

* + - 1. This value **SHALL** contain exactly one [1..1]

**@sdtc:valueSet**="2.16.840.1.113883.3.520.4.18" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1169-34216).

* + - 1. This value **SHOULD** contain zero or one [0..1] **originalTe****xt** (CONF:1169-34213).
         1. The originalText, if present, **SHOULD** contain zero or one [0..1] **reference**

(CONF:1169-34214).

The reference, if present, **SHOULD** contain zero or one [0..1] **@value**

(CONF:1169-34215).

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:1169-34217).

***Tabl******e 172: TNM Pathologic Node***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: TNM Pathologic Node urn:oid:2.16.840.1.113883.3.520.4.18  Detailed site-specific codes for the pathologic node (N) as defined by AJCC and recorded by the physician.  Note: The AJCC Staging Manual TNM system is proprietary and its definitions cannot be included in other documents without permission.  Value Set Source:  [**http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.18**](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.18) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| NX | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | Site specific descriptions prevent listing of text equivalents. |
| N0 | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| N0I- | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| N0I+ | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| N0M- | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| N0M+ | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| N0a | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| N0b | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| N1 | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| N1b | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| ... | | | |

***Figure 81: Regional Lymph Nodes Pathologic example***

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

<templateId root="2.16.840.1.113883.10.13.42" extension="2015-02-05" />

<code code="21900-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Regional lymph nodes.pathology [Class] Cancer" />

<value xsi:type="CD" code="N1" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM

7. Edition" displayName="Micrometastases; or metastases in 1 to 3 axillary lymph nodes; and/or in internal mammary nodes with metastases detected by sentinel lymph node biopsy but not clinically detected." sdtc:valueSet="2.16.840.1.113883.3.520.4.18" />

</observation>

## Result Observation (V2) - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.2:2014-06-09 (open)]

***Table 173: Result Observation (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Result Organizer (V2)](#_bookmark1815) (required) | [Author Participation](#_bookmark2202) |

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 174: Result Observation (V2) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.2:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-](#_bookmark1787)  [7130](#_bookmark1787) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-](#_bookmark1788)  [7131](#_bookmark1788) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark1789)  [7136](#_bookmark1789) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark1790)  [9138](#_bookmark1790) | 2.16.840.1.113883.10.20.22.4.2 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark1791)  [32575](#_bookmark1791) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-](#_bookmark1792)  [7137](#_bookmark1792) |  |
| code | 1..1 | SHALL |  | [1098-](#_bookmark1793)  [7133](#_bookmark1793) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| statusCode | 1..1 | SHALL |  | [1098-](#_bookmark1794)  [7134](#_bookmark1794) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark1795)  [14849](#_bookmark1795) | urn:oid:2.16.840.1.113883.11.20.  9.39 (Result Status) |
| effectiveTime | 1..1 | SHALL |  | [1098-](#_bookmark1796)  [7140](#_bookmark1796) |  |
| value | 0..1 | SHOUL D |  | [1098-](#_bookmark1797)  [7143](#_bookmark1797) | urn:oid:2.16.840.1.113883.6.96 (SNOMED CT) |
| interpretationCode | 0..\* | SHOUL D |  | [1098-](#_bookmark1798)  [7147](#_bookmark1798) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark1799)  [32476](#_bookmark1799) | urn:oid:2.16.840.1.113883.1.11.7  8 (Observation Interpretation (HL7)) |
| methodCode | 0..1 | MAY | SET<C E> | [1098-](#_bookmark1800)  [7148](#_bookmark1800) |  |
| targetSiteCode | 0..1 | MAY | SET<C D> | [1098-](#_bookmark1801)  [7153](#_bookmark1801) |  |
| author | 0..\* | SHOUL D |  | [1098-](#_bookmark1802)  [7149](#_bookmark1802) | [Author Participation (identifier:](#_bookmark2202)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2202)  [22.4.119](#_bookmark2202) |
| referenceRange | 0..\* | SHOUL D |  | [1098-](#_bookmark1803)  [7150](#_bookmark1803) |  |
| observationRange | 1..1 | SHALL |  | [1098-](#_bookmark1804)  [7151](#_bookmark1804) |  |
| code | 0..0 | SHALL NOT |  | [1098-](#_bookmark1805)  [7152](#_bookmark1805) |  |
| value | 1..1 | SHALL |  | [1098-](#_bookmark1806)  [32175](#_bookmark1806) |  |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATI****C**) (CONF:1098-7130).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-7131).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7136) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.2"

(CONF:1098-9138).

**SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32575).

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1098-7137).
    2. **SHALL** contain exactly one [1..1] **code**, which **SHOULD** be selected from CodeSystem LOINC (urn:oid:2.16.840.1.113883.6.1) (CONF:1098-7133).
       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:1098-19212).
    3. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-7134).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet **[Result Status](#_bookmark1808)** urn:oid:2.16.840.1.113883.11.20.9.39 **STATIC** 2013-08-09 (CONF:1098-14849).
    4. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1098-7140).

Note: Represents the biologically relevant time of the measurement (e.g., the time a blood pressure reading is obtained, the time the blood sample was obtained for a chemistry test).

* + 1. **SHOULD** contain zero or one [0..1] **value**, which **SHOULD** be selected from CodeSystem

SNOMED CT (urn:oid:2.16.840.1.113883.6.96) (CONF:1098-7143).

* + - 1. If Observation/value is a physical quantity (**xsi:type**=**"PQ"**), the unit of measure **SHALL** be selected from ValueSet UnitsOfMeasureCaseSensitive 2.16.840.1.113883.1.11.12839 **DYNAMIC** (CONF:1098-31484).
      2. A coded value **MAY** contain zero or more [0..\*] translations, which can be used to represent the original results as output by the lab (CONF:1098-31866).
      3. If Observation/value is a CD (**xsi:type**=**"CD"**) the value **SHOULD** be SNOMED-CT (CONF:1098-32610).
    1. **SHOULD** contain zero or more [0..\*] **interpretationCode** (CONF:1098-7147).
       1. The interpretationCode, if present, **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [**Observation** **Interpretation (HL7)**](#_bookmark1810)urn:oid:2.16.840.1.113883.1.11.78 **STATIC** 2014-09-01 (CONF:1098-32476).
    2. **MAY** contain zero or one [0..1] **methodCode** (CONF:1098-7148).
    3. **MAY** contain zero or one [0..1] **targetSiteCode** (CONF:1098-7153).
    4. **SHOULD** contain zero or more [0..\*] [**Author** **Participation**](#_bookmark2202) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-7149).
    5. **SHOULD** contain zero or more [0..\*] **referenceRange** (CONF:1098-7150).
       1. The referenceRange, if present, **SHALL** contain exactly one [1..1] **observat****ionRange**

(CONF:1098-7151).

* + - * 1. This observationRange **SHALL NOT** contain [0..0] **code** (CONF:1098-7152).
        2. This observationRange **SHALL** contain exactly one [1..1] **value** (CONF:1098- 32175).

***Tabl******e 175: Result Status***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Result Status urn:oid:2.16.840.1.113883.11.20.9.39 Value Set Source: [**http://www.hl7.org**](http://www.hl7.org/) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| aborted | ActStatus | urn:oid:2.16.840.1.11388 3.5.14 | aborted |
| active | ActStatus | urn:oid:2.16.840.1.11388 3.5.14 | active |
| cancelled | ActStatus | urn:oid:2.16.840.1.11388 3.5.14 | cancelled |
| completed | ActStatus | urn:oid:2.16.840.1.11388 3.5.14 | completed |
| held | ActStatus | urn:oid:2.16.840.1.11388 3.5.14 | held |
| suspended | ActStatus | urn:oid:2.16.840.1.11388 3.5.14 | suspended |

***Table*** ***176: Observation Interpretation (HL7)***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Observation Interpretation (HL7) urn:oid:2.16.840.1.113883.1.11.78 Value Set Source:  [**http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary\_tables/in**](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm)  [**frastructure/vocabulary/vocabulary.htm**](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| A | HITSP-CS-83 | urn:oid:2.16.840.1.11388 3.5.83 | abnormal |
| B | HITSP-CS-83 | urn:oid:2.16.840.1.11388 3.5.83 | better |
| Carrier | HITSP-CS-83 | urn:oid:2.16.840.1.11388 3.5.83 | carrier |
| D | HITSP-CS-83 | urn:oid:2.16.840.1.11388 3.5.83 | decreased |
| HX | HITSP-CS-83 | urn:oid:2.16.840.1.11388 3.5.83 | above high threshold |
| I | HITSP-CS-83 | urn:oid:2.16.840.1.11388 3.5.83 | intermediate |
| IND | HITSP-CS-83 | urn:oid:2.16.840.1.11388 3.5.83 | indeterminate |
| LX | HITSP-CS-83 | urn:oid:2.16.840.1.11388 3.5.83 | below low threshold |
| MS | HITSP-CS-83 | urn:oid:2.16.840.1.11388 3.5.83 | moderately susceptible |
| N | HITSP-CS-83 | urn:oid:2.16.840.1.11388 3.5.83 | normal |
| ... | | | |

***Figure 82: Result Observation (V2) Example***

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

<templateId root="2.16.840.1.113883.10.20.22.4.2" extension="2014-06-09" />

<id root="7c0704bb-9c40-41b5-9c7d-26b2d59e234f" />

<code code="4544-3" displayName="Hematocrit" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />

<statusCode code="completed" />

<effectiveTime value="200803190830-0800" />

<value xsi:type="PQ" value="35.3" unit="%" />

<interpretationCode code="L" codeSystem="2.16.840.1.113883.5.83" />

<author>

<time value="200803190830-0800" />

<assignedAuthor>

<id extension="333444444" root="1.1.1.1.1.1.1.4" />

<addr>

<streetAddressLine>1017 Health Drive</streetAddressLine>

<city>Portland</city>

<state>OR</state>

<postalCode>99123</postalCode>

<country>US</country>

</addr>

<telecom use="WP" value="tel:+1(555)555-1017" />

<assignedPerson>

<name>

<given>William</given>

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

<family>Beaker</family>

</name>

</assignedPerson>

<representedOrganization>

<name>Good Health Laboratory</name>

</representedOrganization>

</assignedAuthor>

</author>

<referenceRange>

<observationRange>

<value xsi:type="IVL\_PQ">

<low value="34.9" unit="%" />

<high value="44.5" unit="%" />

</value>

</observationRange>

</referenceRange>

</observation>

***Figure 83: Pending Result Observation (V2) Example***

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

<!-- \*\* Result observation \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.2" extension="2014-06-09" />

<id root="aed821af-3330-4138-97f0-e84dfe5f3c35" />

<code code="3094-0" displayName="Urea nitrogen, Serum" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />

<statusCode code="active" />

<effectiveTime value="200803200930-0800" />

<value xsi:type="PQ" nullFlavor="NI" />

</observation>

***Figure 84: Original Lab Units in <translation> Example***

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

<!-- \*\* Result observation \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.2" extension="2014-06-09" />

<id root="a69b3d60-2ffd-4440-958b-72b3335ff35f" />

<code code="6690-2" displayName="Leukocytes" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />

<statusCode code="completed" />

<effectiveTime value="200803190830-0800" />

<value xsi:type="PQ" value="6.7" unit="10\*9/L">

<translation>

<originalText>6.7 billion per liter</originalText>

</translation>

</value>

<interpretationCode code="N" codeSystem="2.16.840.1.113883.5.83" />

<author typeCode="AUT">

<time value="200803190830-0800" />

<assignedAuthor>

<id extension="333444444" root="1.1.1.1.1.1.1.4" />

</assignedAuthor>

</author>

<referenceRange>

<observationRange>

<value xsi:type="IVL\_PQ">

<low value="4.3" unit="10\*9/L" />

<high value="10.8" unit="10\*9/L" />

</value>

</observationRange>

</referenceRange>

</observation>

## Result Organizer (V2) - Published

[organizer: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.1:2014-06-09 (open)]

***Table 177: Result Organizer (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Results Section (entries required) (V2)](#_bookmark595) (required) | [Author Participation](#_bookmark2202)  [Result Observation (V2)](#_bookmark1784) |

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 178: Result Organizer (V2) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| organizer (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.1:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-](#_bookmark1818)  [7121](#_bookmark1818) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) |
| @moodCode | 1..1 | SHALL |  | [1098-](#_bookmark1819)  [7122](#_bookmark1819) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark1820)  [7126](#_bookmark1820) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark1821)  [9134](#_bookmark1821) | 2.16.840.1.113883.10.20.22.4.1 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark1822)  [32588](#_bookmark1822) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-](#_bookmark1823)  [7127](#_bookmark1823) |  |
| code | 1..1 | SHALL |  | [1098-](#_bookmark1824)  [7128](#_bookmark1824) |  |
| statusCode | 1..1 | SHALL |  | [1098-](#_bookmark1825)  [7123](#_bookmark1825) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark1826)  [14848](#_bookmark1826) | urn:oid:2.16.840.1.113883.11.20.  9.39 (Result Status) |
| effectiveTime | 0..1 | MAY |  | [1098-](#_bookmark1827)  [31865](#_bookmark1827) |  |
| low | 1..1 | SHALL |  | [1098-](#_bookmark1828)  [32488](#_bookmark1828) |  |
| high | 1..1 | SHALL |  | [1098-](#_bookmark1829)  [32489](#_bookmark1829) |  |
| author | 0..\* | SHOUL D |  | [1098-](#_bookmark1830)  [31149](#_bookmark1830) | [Author Participation (identifier:](#_bookmark2202)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2202)  [22.4.119](#_bookmark2202) |
| component | 1..\* | SHALL |  | [1098-](#_bookmark1831)  [7124](#_bookmark1831) |  |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark1832)  [14850](#_bookmark1832) | [Result Observation (V2)](#_bookmark1784)  [(identifier:](#_bookmark1784)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark1784)  [0.22.4.2:2014-06-09](#_bookmark1784) |

* + 1. **SHALL** contain exactly one [1..1] **@classCode** (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-7121).
    2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-7122).
    3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7126) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.1"

(CONF:1098-9134).

* + - 1. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32588).
    1. **SHALL** contain at least one [1..\*] **id** (CONF:1098-7127).
    2. **SHALL** contain exactly one [1..1] **code** (CONF:1098-7128).
       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-4 (codeSystem 2.16.840.1.113883.6.12) (CONF:1098-19218).
       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:1098- 19219).
    3. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-7123).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet **[Result Status](#_bookmark1808)** urn:oid:2.16.840.1.113883.11.20.9.39 **STATIC** 2013-08-09 (CONF:1098-14848).
    4. **MAY** contain zero or one [0..1] **effectiveTime** (CONF:1098-31865).

Note: The effectiveTime is an interval that spans the effectiveTimes of the contained result observations. Because all contained result observations have a required time stamp, it is not required that this effectiveTime be populated.

* + - 1. The effectiveTime, if present, **SHALL** contain exactly one [1..1] **low** (CONF:1098- 32488).
      2. The effectiveTime, if present, **SHALL** contain exactly one [1..1] **high** (CONF:1098- 32489).
    1. **SHOULD** contain zero or more [0..\*] [**Author** **Participation**](#_bookmark2202) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31149).
    2. **SHALL** contain at least one [1..\*] **component** (CONF:1098-7124) such that it
       1. **SHALL** contain exactly one [1..1] [**Result Observation (V2)**](#_bookmark1784) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.2:2014-06-09) (CONF:1098- 14850).

***Figure 85: Result Organizer (V2) Example***

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

<templateId root="2.16.840.1.113883.10.20.22.4.1" extension="2014-06-09" />

<id root="7d5a02b0-67a4-11db-bd13-0800200c9a66" />

<code code="57021-8" displayName="CBC W Auto Differential panel in Blood" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" />

<statusCode code="completed" />

<effectiveTime>

<low value="200803190830-0800" />

<high value="200803190830-0800" />

</effectiveTime>

<author>

. . .

</author>

<component>

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

<!-- \*\* Result observation \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.2" extension="2014-06-09" />

. . .

</observation>

</component>

</organizer>

## Service Delivery Location - Published

[participantRole: identifier urn:oid:2.16.840.1.113883.10.20.22.4.32 (open)]

***Table 179: Service Delivery Location Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Procedure Activity Procedure (V2)](#_bookmark1481) (optional)  [Planned Encounter (V2)](#_bookmark1131) (optional)  [Procedure Activity Procedure (V2) - Cancer IG Specific](#_bookmark1547)  [Constraints](#_bookmark1547) (required)  [Planned Encounter (V2) - Cancer IG Specific](#_bookmark1162)  [Constraints](#_bookmark1162) (required)  [Radiation Boost Modality Procedure](#_bookmark1606) (optional)  [Radiation Regional Treatment Modality Procedure](#_bookmark1692) (optional) |  |

This clinical statement represents the location of a service event where an act, observation or procedure took place.

***Table 180: 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-](#_bookmark1838)  [7758](#_bookmark1838) | urn:oid:2.16.840.1.113883.5.111  (RoleCode) = SDLOC |
| templateId | 1..1 | SHALL |  | [81-](#_bookmark1839)  [7635](#_bookmark1839) |  |
| @root | 1..1 | SHALL |  | [81-](#_bookmark1840)  [10524](#_bookmark1840) | 2.16.840.1.113883.10.20.22.4.32 |
| code | 1..1 | SHALL |  | [81-](#_bookmark1841)  [16850](#_bookmark1841) | urn:oid:2.16.840.1.113883.1.11.2  0275 (HealthcareServiceLocation) |
| addr | 0..\* | SHOUL D |  | [81-](#_bookmark1842)  [7760](#_bookmark1842) |  |
| telecom | 0..\* | SHOUL D |  | [81-](#_bookmark1843)  [7761](#_bookmark1843) |  |
| playingEntity | 0..1 | MAY |  | [81-](#_bookmark1844)  [7762](#_bookmark1844) |  |
| @classCode | 1..1 | SHALL |  | [81-](#_bookmark1845)  [7763](#_bookmark1845) | urn:oid:2.16.840.1.113883.5.41  (EntityClass) = PLC |
| name | 0..1 | MAY |  | [81-](#_bookmark1846)  [16037](#_bookmark1846) |  |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="SDLOC" (CodeSystem: RoleCode urn:oid:2.16.840.1.113883.5.111 **STATIC**) (CONF:81-7758).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:81-7635) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.32"

(CONF:81-10524).

* + 1. **SHALL** contain exactly one [1..1] **code**, which **SHALL** be selected from ValueSet [**HealthcareServiceLocation**](#_bookmark1848) urn:oid:2.16.840.1.113883.1.11.20275 **STATI****C** (CONF:81-16850).
    2. **SHOULD** contain zero or more [0..\*] **addr** (CONF:81-7760).
    3. **SHOULD** contain zero or more [0..\*] **telecom** (CONF:81-7761).
    4. **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: EntityClass 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*** ***181: HealthcareServiceLocation***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: HealthcareServiceLocation urn:oid:2.16.840.1.113883.1.11.20275  A comprehensive classification of locations and settings where healthcare services are provided. This value set is based on the National Healthcare Safety Network (NHSN) location code system that has been developed over a number of years through CDC's interaction with a variety of healthcare facilities and is intended to serve a variety of reporting needs where coding of healthcare service locations is required.  Value Set Source:  [**http://phinvads.cdc.gov/vads/SearchAllVocab\_search.action?searchOptions.searchText**](http://phinvads.cdc.gov/vads/SearchAllVocab_search.action?searchOptions.searchText=Healthcare%2BService%2BLocation%2B%28NHSN%29)  [**=Healthcare+Service+Location+%28NHSN%29**](http://phinvads.cdc.gov/vads/SearchAllVocab_search.action?searchOptions.searchText=Healthcare%2BService%2BLocation%2B%28NHSN%29) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 1162-7 | HL7  HealthcareServiceLocatio n | urn:oid:2.16.840.1.11388 3.6.259 | 24-Hour observation area |
| 1184-1 | HL7  HealthcareServiceLocatio n | urn:oid:2.16.840.1.11388 3.6.259 | Administrative area |
| 1210-4 | HL7  HealthcareServiceLocatio n | urn:oid:2.16.840.1.11388 3.6.259 | Adult Mixed Acuity Unit |
| 1099-1 | HL7  HealthcareServiceLocatio n | urn:oid:2.16.840.1.11388 3.6.259 | Adult step down unit [post-critical care] |
| 1110-6 | HL7  HealthcareServiceLocatio n | urn:oid:2.16.840.1.11388 3.6.259 | Allergy clinic |
| 1166-8 | HL7  HealthcareServiceLocatio n | urn:oid:2.16.840.1.11388 3.6.259 | Ambulatory surgical setting |
| 1212-0 | HL7  HealthcareServiceLocatio n | urn:oid:2.16.840.1.11388 3.6.259 | Any Age Mixed Acuity Unit |
| 1106-4 | HL7  HealthcareServiceLocatio n | urn:oid:2.16.840.1.11388 3.6.259 | Assisted living area |
| 1145-2 | HL7  HealthcareServiceLocatio n | urn:oid:2.16.840.1.11388 3.6.259 | Behavioral health clinic |
| 1185-8 | HL7  HealthcareServiceLocatio n | urn:oid:2.16.840.1.11388 3.6.259 | Blood bank |
| ... | | | |

***Figure 86: 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>

## Smoking Status - Meaningful Use (V2) - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09 (open)]

***Table 182: Smoking Status - Meaningful Use (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Social History Section (V2)](#_bookmark611) (optional) | [Author Participation](#_bookmark2202) |

This template represents the current smoking status of the patient as specified in Meaningful Use (MU) Stage 2 requirements. Historic smoking status observations as well as details about the smoking habit (e.g., how many per day) would be represented in the Tobacco Use template.

This template represents a “snapshot in time” observation, simply reflecting what the patient’s current smoking status is at the time of the observation. As a result, the effectiveTime is constrained to a time stamp, and will approximately correspond with the author/time. Details regarding the time period when the patient is/was smoking would be recorded in the Tobacco Use template.

If the patient's current smoking status is unknown, the value element must be populated with SNOMED CT code 266927001 to communicate "Unknown if ever smoked" from the Current Smoking Status Value Set.

***Table 183: 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-](#_bookmark1854)  [14806](#_bookmark1854) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-](#_bookmark1855)  [14807](#_bookmark1855) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark1856)  [14815](#_bookmark1856) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark1857)  [14816](#_bookmark1857) | 2.16.840.1.113883.10.20.22.4.78 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark1858)  [32573](#_bookmark1858) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-](#_bookmark1859)  [32401](#_bookmark1859) |  |
| code | 1..1 | SHALL |  | [1098-](#_bookmark1860)  [19170](#_bookmark1860) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark1861)  [31039](#_bookmark1861) | 72166-2 |
| @codeSystem | 1..1 | SHALL |  | [1098-](#_bookmark1862)  [32157](#_bookmark1862) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1098-](#_bookmark1863)  [14809](#_bookmark1863) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark1864)  [19116](#_bookmark1864) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1098-](#_bookmark1865)  [31928](#_bookmark1865) |  |
| value | 1..1 | SHALL | CD | [1098-](#_bookmark1866)  [14810](#_bookmark1866) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark1867)  [14817](#_bookmark1867) | urn:oid:2.16.840.1.113883.11.20.  9.38 (Current Smoking Status) |
| author | 0..\* | SHOUL D |  | [1098-](#_bookmark1868)  [31148](#_bookmark1868) | [Author Participation (identifier:](#_bookmark2202)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2202)  [22.4.119](#_bookmark2202) |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATI****C**) (CONF:1098-14806).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-14807).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-14815) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.78"

(CONF:1098-14816).

b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32573).

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1098-32401).
    2. **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).

* + 1. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-14809).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098- 19116).
    2. **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. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD" (CONF:1098-14810).
       1. This value **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [**Current** **Smoking Status**](#_bookmark1870) urn:oid:2.16.840.1.113883.11.20.9.38 **STATIC** 2014-09-01 (CONF:1098-14817).
       2. If the patient's current smoking status is unknown, @code **SHALL** contain '266927001' (Unknown if ever smoked) from ValueSet Current Smoking Status (2.16.840.1.113883.11.20.9.38 STATIC 2014-09-01) (CONF:1098-31019).
    2. **SHOULD** contain zero or more [0..\*] [**Author** **Participation**](#_bookmark2202) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31148).

***Table*** ***184: Current Smoking Status***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Current Smoking Status urn:oid:2.16.840.1.113883.11.20.9.38 This value set indicates the current smoking status of a patient.  Value Set Source: [**https://vsac.nlm.nih.gov**](https://vsac.nlm.nih.gov/) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 449868002 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Current every day smoker |
| 428041000124106 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Current some day smoker |
| 8517006 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Former smoker |
| 266919005 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Never smoker (Never Smoked) |
| 77176002 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Smoker, current status unknown |
| 266927001 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Unknown if ever smoked |
| 428071000124103 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Heavy tobacco smoker |
| 428061000124105 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Light tobacco smoker |

***Figure 87: 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 (V2) - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2014-06-09 (open)]

***Table 185: Social History Observation (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Social History Section (V2)](#_bookmark611) (optional)  [Social History Section (V2) - Cancer IG Specific](#_bookmark638)  [Constraints (V1.1)](#_bookmark638) (optional) | [Author Participation](#_bookmark2202) |

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 186: Social History Observation (V2) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-](#_bookmark1876)  [8548](#_bookmark1876) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-](#_bookmark1877)  [8549](#_bookmark1877) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark1878)  [8550](#_bookmark1878) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark1879)  [10526](#_bookmark1879) | 2.16.840.1.113883.10.20.22.4.38 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark1880)  [32495](#_bookmark1880) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-](#_bookmark1881)  [8551](#_bookmark1881) |  |
| code | 1..1 | SHALL |  | [1098-](#_bookmark1882)  [8558](#_bookmark1882) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| originalText | 0..1 | SHOUL D |  | [1098-](#_bookmark1883)  [19221](#_bookmark1883) |  |
| reference | 0..1 | SHOUL D |  | [1098-](#_bookmark1884)  [19222](#_bookmark1884) |  |
| @value | 0..1 | SHOUL D |  | [1098-](#_bookmark1885)  [19223](#_bookmark1885) |  |
| statusCode | 1..1 | SHALL |  | [1098-](#_bookmark1886)  [8553](#_bookmark1886) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark1887)  [19117](#_bookmark1887) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1098-](#_bookmark1888)  [31868](#_bookmark1888) |  |
| value | 0..1 | SHOUL D |  | [1098-](#_bookmark1889)  [8559](#_bookmark1889) |  |
| author | 0..\* | SHOUL D |  | [1098-](#_bookmark1890)  [31869](#_bookmark1890) | [Author Participation (identifier:](#_bookmark2202)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2202)  [22.4.119](#_bookmark2202) |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATI****C**) (CONF:1098-8548).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-8549).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-8550) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.38"

(CONF:1098-10526).

b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32495).

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1098-8551).
    2. **SHALL** contain exactly one [1..1] **code**, which **SHOULD** be selected from CodeSystem LOINC (urn:oid:2.16.840.1.113883.6.1) **DYNAMIC** (CONF:1098-8558).
       1. This code **SHOULD** contain zero or one [0..1] **originalTe****xt** (CONF:1098-19221).
          1. The originalText, if present, **SHOULD** contain zero or one [0..1] **reference**

(CONF:1098-19222).

The reference, if present, **SHOULD** contain zero or one [0..1] **@value**

(CONF:1098-19223).

This reference/@value **SHALL** begin with a '#' and **SHALL** point to its corresponding narrative (using the approach defined in CDA Release 2, section 4.3.5.1) (CONF:1098- 19224).

* + 1. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-8553).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098- 19117).
    2. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1098-31868).
    3. **SHOULD** contain zero or one [0..1] **value** (CONF:1098-8559).
       1. If Observation/value is a physical quantity (xsi:type="PQ"), the unit of measure **SHALL** be selected from ValueSet UnitsOfMeasureCaseSensitive (2.16.840.1.113883.1.11.12839) **DYNAMIC** (CONF:1098-8555).
    4. **SHOULD** contain zero or more [0..\*] [**Author** **Participation**](#_bookmark2202) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31869).

***Figure 88: Social History Observation (V2) Example***

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

<templateId root="2.16.840.1.113883.10.20.22.4.38"

extension="2014-06-09" />

<id root="37f76c51-6411-4e1d-8a37-957fd49d2cef" />

<code code="74013-4" codeSystem="2.16.840.1.113883.6.1"

codeSystemName="LOINC" displayName="Alcoholic drinks per day" />

<statusCode code="completed" />

<effectiveTime>

<low value="20120215" />

</effectiveTime>

<value xsi:type="PQ" value="12" />

<author typeCode="AUT">

<templateId root="2.16.840.1.113883.10.20.22.4.119" />

...

</author>

</observation>

## Stager Clinical Cancer - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.13.39:2015-02-05 (open)]

***Table 187: Stager Clinical Cancer Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [TNM Clinical Stage Group](#_bookmark1937) (required) |  |

This template identifies the person who recorded the clinical AJCC staging elements and stage group in the patient's medical record.

***Table 188: Stager Clinical Cancer Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.13.39:2015-02-05) | | | | | |
| @classCode | 1..1 | SHALL |  | [1169-](#_bookmark1896)  [34129](#_bookmark1896) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1169-](#_bookmark1897)  [34130](#_bookmark1897) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1169-](#_bookmark1898)  [34128](#_bookmark1898) |  |
| @root | 1..1 | SHALL |  | [1169-](#_bookmark1899)  [34131](#_bookmark1899) | 2.16.840.1.113883.10.13.39 |
| @extension | 1..1 | SHALL |  | [1169-](#_bookmark1900)  [34132](#_bookmark1900) | 2015-02-05 |
| code | 1..1 | SHALL |  | [1169-](#_bookmark1901)  [34133](#_bookmark1901) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark1902)  [34134](#_bookmark1902) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 21910-5 |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark1903)  [34135](#_bookmark1903) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| value | 1..1 | SHALL | CD | [1169-](#_bookmark1904)  [34136](#_bookmark1904) |  |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark1905)  [34137](#_bookmark1905) | urn:oid:2.16.840.1.113883.3.520.  4.4 (NAACCR TNM Clinical Staged By) |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark1906)  [34138](#_bookmark1906) | 2.16.840.1.113883.3.520.3.4 |
| @sdtc:valueSet | 1..1 | SHALL |  | [1169-](#_bookmark1907)  [34139](#_bookmark1907) | 2.16.840.1.113883.3.520.4.4 |
| originalText | 0..1 | SHOUL D |  | [1169-](#_bookmark1908)  [34140](#_bookmark1908) |  |
| reference | 0..1 | SHOUL D |  | [1169-](#_bookmark1909)  [34141](#_bookmark1909) |  |
| @value | 0..1 | SHOUL D |  | [1169-](#_bookmark1910)  [34142](#_bookmark1910) |  |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1169-34129).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1169-34130).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1169-34128) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.39"

(CONF:1169-34131).

**SHALL** contain exactly one [1..1] **@extension**="2015-02-05" (CONF:1169-34132).

* + 1. **SHALL** contain exactly one [1..1] **code** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34133).
       1. This code **SHALL** contain exactly one [1..1] **@code**="21910-5" Stager.clinical Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34134).
       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:1169-34135).

* + 1. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD" (CONF:1169-34136).
       1. This value **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [**NAACCR TNM Clinical Staged By**](#_bookmark1912)urn:oid:2.16.840.1.113883.3.520.4.4 **DYNAMI****C** (CONF:1169-34137).
       2. This value **SHALL** contain exactly one [1..1]

**@codeSystem**="2.16.840.1.113883.3.520.3.4" NAACCR TNM Clinical Staged By (CONF:1169-34138).

* + - 1. This value **SHALL** contain exactly one [1..1]

**@sdtc:valueSet**="2.16.840.1.113883.3.520.4.4" NAACCR TNM Clinical Staged By (CONF:1169-34139).

* + - 1. This value **SHOULD** contain zero or one [0..1] **originalTe****xt** (CONF:1169-34140).
         1. The originalText, if present, **SHOULD** contain zero or one [0..1] **reference**

(CONF:1169-34141).

The reference, if present, **SHOULD** contain zero or one [0..1] **@value**

(CONF:1169-34142).

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:1169-34143).

***Table*** ***189: NAACCR TNM Clinical Staged By***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: NAACCR TNM Clinical Staged By urn:oid:2.16.840.1.113883.3.520.4.4  Identifies the person who recorded the clinical AJCC staging elements and the stage group in the patient's medical record.  Value Set Source: [**https://phinvads.cdc.gov/vads/ViewValueSet.action?id=6336A7B1-E404-**](https://phinvads.cdc.gov/vads/ViewValueSet.action?id=6336A7B1-E404-E011-9273-00188B39829B) [**E011-9273-00188B39829B**](https://phinvads.cdc.gov/vads/ViewValueSet.action?id=6336A7B1-E404-E011-9273-00188B39829B) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 0 | NAACCR TNM Clinical Staged By | urn:oid:2.16.840.1.11388 3.3.520.3.4 | Not Staged |
| 1 | NAACCR TNM Clinical Staged By | urn:oid:2.16.840.1.11388 3.3.520.3.4 | Managing physician |
| 2 | NAACCR TNM Clinical Staged By | urn:oid:2.16.840.1.11388 3.3.520.3.4 | Pathologist |
| ... | | | |

***Figure 89: Stager Clinical Cancer example***

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

<templateId root="2.16.840.1.113883.10.13.39" extension="2015-02-05" />

<code code="21910-5" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Stager.clinical Cancer " />

<value xsi:type="CD" code="3" codeSystem="2.16.840.1.113883.3.520.3.4" codeSystemName="NAACCR TNM Clinical Staged By " displayName="Pathologist and managing physician" sdtc:valueSet="2.16.840.1.113883.3.520.4.4">

<originalText>

<reference value="#ClinicalStagedBy\_1" />

</originalText>

</value>

</observation>

## Stager Pathologic Cancer - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.13.44:2015-02-05 (open)]

***Table 190: Stager Pathologic Cancer Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [TNM Pathologic Stage Group](#_bookmark2010) (required) |  |

This template identifies the person who recorded the pathologic AJCC staging elements and stage group in the patient's medical record.

***Table 191: Stager Pathologic Cancer Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.13.44:2015-02-05) | | | | | |
| @classCode | 1..1 | SHALL |  | [1169-](#_bookmark1918)  [34235](#_bookmark1918) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1169-](#_bookmark1919)  [34236](#_bookmark1919) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1169-](#_bookmark1920)  [34234](#_bookmark1920) |  |
| @root | 1..1 | SHALL |  | [1169-](#_bookmark1921)  [34237](#_bookmark1921) | 2.16.840.1.113883.10.13.44 |
| @extension | 1..1 | SHALL |  | [1169-](#_bookmark1922)  [34238](#_bookmark1922) | 2015-02-05 |
| code | 1..1 | SHALL |  | [1169-](#_bookmark1923)  [34239](#_bookmark1923) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark1924)  [34241](#_bookmark1924) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 21904-8 |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark1925)  [34242](#_bookmark1925) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| value | 1..1 | SHALL | CD | [1169-](#_bookmark1926)  [34240](#_bookmark1926) |  |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark1927)  [34243](#_bookmark1927) | urn:oid:2.16.840.1.113883.3.520.  4.27 (NAACCR TNM Pathologic Staged By) |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark1928)  [34244](#_bookmark1928) | urn:oid:2.16.840.1.113883.3.520.  3.17 (NAACCR TNM Pathologic Staged By) = 2.16.840.1.113883.3.520.3.17 |
| @sdtc:valueSet | 1..1 | SHALL |  | [1169-](#_bookmark1929)  [34245](#_bookmark1929) | 2.16.840.1.113883.3.520.4.27 |
| originalText | 0..1 | SHOUL D |  | [1169-](#_bookmark1930)  [34246](#_bookmark1930) |  |
| reference | 0..1 | SHOUL D |  | [1169-](#_bookmark1931)  [34247](#_bookmark1931) |  |
| @value | 0..1 | SHOUL D |  | [1169-](#_bookmark1932)  [34248](#_bookmark1932) |  |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1169-34235).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1169-34236).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1169-34234) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.44"

(CONF:1169-34237).

**SHALL** contain exactly one [1..1] **@extension**="2015-02-05" (CONF:1169-34238).

* + 1. **SHALL** contain exactly one [1..1] **code** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34239).
       1. This code **SHALL** contain exactly one [1..1] **@code**="21904-8" Stager.pathology Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169- 34241).
       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:1169-34242).

* + 1. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD" (CONF:1169-34240).
       1. This value **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [**NAACCR TNM Pathologic Staged By**](#_bookmark1934)urn:oid:2.16.840.1.113883.3.520.4.27 **DYNAMI****C** (CONF:1169-34243).
       2. This value **SHALL** contain exactly one [1..1]

**@codeSystem**="2.16.840.1.113883.3.520.3.17" NAACCR TNM Pathologic Staged By (CodeSystem: NAACCR TNM Pathologic Staged By urn:oid:2.16.840.1.113883.3.520.3.17) (CONF:1169-34244).

* + - 1. This value **SHALL** contain exactly one [1..1]

**@sdtc:valueSet**="2.16.840.1.113883.3.520.4.27" NAACCR TNM Pathologic Staged By (CONF:1169-34245).

* + - 1. This value **SHOULD** contain zero or one [0..1] **originalTe****xt** (CONF:1169-34246).
         1. The originalText, if present, **SHOULD** contain zero or one [0..1] **reference**

(CONF:1169-34247).

The reference, if present, **SHOULD** contain zero or one [0..1] **@value**

(CONF:1169-34248).

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:1169-34249).

***Table*** ***192: NAACCR TNM Pathologic Staged By***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: NAACCR TNM Pathologic Staged By urn:oid:2.16.840.1.113883.3.520.4.27 Value Set Source:  [**https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.27**](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.27) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 0 | NAACCR TNM Pathologic Staged By | urn:oid:2.16.840.1.11388 3.3.520.3.17 | Not Staged |
| 1 | NAACCR TNM Pathologic Staged By | urn:oid:2.16.840.1.11388 3.3.520.3.17 | Managing physician |
| 2 | NAACCR TNM Pathologic Staged By | urn:oid:2.16.840.1.11388 3.3.520.3.17 | Pathologist |
| ... | | | |

***Figure 90: Stager Pathologic Cancer example***

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

<templateId root="2.16.840.1.113883.10.13.44" extension="2015-02-05" />

<code code="21904-8" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Stager.pathology Cancer" />

<value xsi:type="CD" code="3" codeSystem="2.16.840.1.113883.3.520.3.17" codeSystemName="NAACCR TNM Pathologic Staged By" displayName="Pathologist and managing physician" sdtc:valueSet="2.16.840.1.113883.3.520.4.27" />

</observation>

## TNM Clinical Stage Group - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.13.35:2015-02-05 (open)]

***Table 193: TNM Clinical Stage Group Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [TNM Clinical Stage Observation (V1.1)](#_bookmark1987) (required) | [Distant Metastases Clinical](#_bookmark834)  [Primary Tumor Clinical](#_bookmark1327)  [Regional Lymph Nodes Clinical](#_bookmark1740)  [Stager Clinical Cancer](#_bookmark1893) |

This template records the combined extent of disease results into a single value, represented by Roman numerals I – IV. A clinical stage group encompasses diagnostic/assessment information prior to the start of treatment.

***Table 194: TNM Clinical Stage Group Constraints Overview***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |  |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.13.35:2015-02-05) | | | | | | |
| @classCode | 1..1 | SHALL |  | [1169-](#_bookmark1940)  [34047](#_bookmark1940) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS | |
| @moodCode | 1..1 | SHALL |  | [1169-](#_bookmark1941)  [34048](#_bookmark1941) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN | |
| templateId | 1..1 | SHALL |  | [1169-](#_bookmark1942)  [34254](#_bookmark1942) |  | |
| @root | 1..1 | SHALL |  | [1169-](#_bookmark1943)  [34255](#_bookmark1943) | 2.16.840.1.113883.10.13.35 | |
| @extension | 1..1 | SHALL |  | [1169-](#_bookmark1944)  [34256](#_bookmark1944) | 2015-02-05 |  |
| code | 1..1 | SHALL |  | [1169-](#_bookmark1945)  [34049](#_bookmark1945) |  | |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark1946)  [34050](#_bookmark1946) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 21908-9 | |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark1947)  [34051](#_bookmark1947) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 | |
| statusCode | 1..1 | SHALL |  | [1169-](#_bookmark1948)  [34052](#_bookmark1948) |  | |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark1949)  [34053](#_bookmark1949) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = completed | |
| value | 1..1 | SHALL | CD | [1169-](#_bookmark1950)  [34054](#_bookmark1950) |  | |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark1951)  [34055](#_bookmark1951) | urn:oid:2.16.840.1.113883.3.520.  4.9 (TNM Clinical Stage Group) | |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark1952)  [34056](#_bookmark1952) | urn:oid:2.16.840.1.113883.15.6  (TNM 7. Edition) = 2.16.840.1.113883.15.6 | |
| @sdtc:valueSet | 1..1 | SHALL |  | [1169-](#_bookmark1953)  [34057](#_bookmark1953) | urn:oid:2.16.840.1.113883.15.6  (TNM 7. Edition) = 2.16.840.1.113883.3.520.4.9 | |
| originalText | 0..1 | SHOUL D |  | [1169-](#_bookmark1954)  [34058](#_bookmark1954) |  | |
| reference | 0..1 | SHOUL D |  | [1169-](#_bookmark1955)  [34059](#_bookmark1955) |  | |
| @value | 0..1 | SHOUL D |  | [1169-](#_bookmark1956)  [34060](#_bookmark1956) |  | |
| qualifier | 1..1 | SHALL |  | [1169-](#_bookmark1957)  [34062](#_bookmark1957) |  | |
| name | 1..1 | SHALL |  | [1169-](#_bookmark1958)  [34063](#_bookmark1958) | urn:oid:2.16.840.1.113883.6.1 (LOINC) | |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark1959)  [34064](#_bookmark1959) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 21909-7 | |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark1960) urn:oid:2.16.84 | | 0.1.113883.6.1 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | 34065 | (LOINC) = 2.16.840.1.113883.6.1 |
| value | 1..1 | SHALL |  | [1169-](#_bookmark1961)  [34066](#_bookmark1961) |  |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark1962)  [34067](#_bookmark1962) | urn:oid:2.16.840.1.113883.3.520.  4.10 (TNM Clinical Stage Descriptor) |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark1963)  [34068](#_bookmark1963) | urn:oid:2.16.840.1.113883.15.6  (TNM 7. Edition) = 2.16.840.1.113883.15.6 |
| @displayName | 0..1 | SHOUL D |  | [1169-](#_bookmark1964)  [34069](#_bookmark1964) |  |
| @sdtc:valueSet | 1..1 | SHALL |  | [1169-](#_bookmark1965)  [34070](#_bookmark1965) | urn:oid:2.16.840.1.113883.15.6  (TNM 7. Edition) = 2.16.840.1.113883.3.520.4.10 |
| originalText | 0..1 | SHOUL D |  | [1169-](#_bookmark1966)  [34257](#_bookmark1966) |  |
| reference | 0..1 | SHOUL D |  | [1169-](#_bookmark1967)  [34258](#_bookmark1967) |  |
| @value | 0..1 | SHOUL D |  | [1169-](#_bookmark1968)  [34259](#_bookmark1968) |  |
| entryRelationship | 1..1 | SHALL |  | [1169-](#_bookmark1969)  [34071](#_bookmark1969) |  |
| @typeCode | 1..1 | SHALL |  | [1169-](#_bookmark1970)  [34072](#_bookmark1970) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = COMP |
| observation | 1..1 | SHALL |  | [1169-](#_bookmark1971)  [34073](#_bookmark1971) | [Primary Tumor Clinical](#_bookmark1327)  [(identifier:](#_bookmark1327)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark1327)  [3.36:2015-02-05](#_bookmark1327) |
| entryRelationship | 1..1 | SHALL |  | [1169-](#_bookmark1972)  [34090](#_bookmark1972) |  |
| @typeCode | 1..1 | SHALL |  | [1169-](#_bookmark1973)  [34091](#_bookmark1973) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = COMP |
| observation | 1..1 | SHALL |  | [1169-](#_bookmark1974)  [34092](#_bookmark1974) | [Regional Lymph Nodes Clinical](#_bookmark1740)  [(identifier:](#_bookmark1740)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark1740)  [3.37:2015-02-05](#_bookmark1740) |
| entryRelationship | 1..1 | SHALL |  | [1169-](#_bookmark1975)  [34093](#_bookmark1975) |  |
| @typeCode | 1..1 | SHALL |  | [1169-](#_bookmark1976)  [34094](#_bookmark1976) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = COMP |
| observation | 1..1 | SHALL |  | [1169-](#_bookmark1977)  [34097](#_bookmark1977) | [Distant Metastases Clinical](#_bookmark834)  [(identifier:](#_bookmark834)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark834)  [3.38:2015-02-05](#_bookmark834) |
| entryRelationship | 1..1 | SHALL |  | [1169-](#_bookmark1978)  [34095](#_bookmark1978) |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| @typeCode | 1..1 | SHALL |  | [1169-](#_bookmark1979)  [34096](#_bookmark1979) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = COMP |
| observation | 1..1 | SHALL |  | [1169-](#_bookmark1980)  [34098](#_bookmark1980) | [Stager Clinical Cancer (identifier:](#_bookmark1893)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark1893)  [3.39:2015-02-05](#_bookmark1893) |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1169-34047).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1169-34048).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1169-34254) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.35"

(CONF:1169-34255).

**SHALL** contain exactly one [1..1] **@extension**="2015-02-05" (CONF:1169-34256).

* + 1. **SHALL** contain exactly one [1..1] **code** (CONF:1169-34049).
       1. This code **SHALL** contain exactly one [1..1] **@code**="21908-9" Stage group.clinical (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34050).
       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:1169-34051).

* + 1. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1169-34052).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1169- 34053).
    2. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD" (CONF:1169-34054).
       1. This value **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [**TNM Clinical Stage Group**](#_bookmark1982) urn:oid:2.16.840.1.113883.3.520.4.9 **DYNAM****IC** (CONF:1169-34055).
       2. This value **SHALL** contain exactly one [1..1]

**@codeSystem**="2.16.840.1.113883.15.6" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1169-34056).

* + - 1. This value **SHALL** contain exactly one [1..1]

**@sdtc:valueSet**="2.16.840.1.113883.3.520.4.9" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1169-34057).

* + - 1. This value **SHOULD** contain zero or one [0..1] **originalTe****xt** (CONF:1169-34058).
         1. The originalText, if present, **SHOULD** contain zero or one [0..1] **reference**

(CONF:1169-34059).

The reference, if present, **SHOULD** contain zero or one [0..1] **@value**

(CONF:1169-34060).

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:1169-34061).

* + - 1. This value **SHALL** contain exactly one [1..1] **qualifi****er** (CONF:1169-34062).
         1. This qualifier **SHALL** contain exactly one [1..1] **name** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34063).

This name **SHALL** contain exactly one [1..1] **@code**="21909-7" Descriptor.clinical Cancer Narrative (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34064).

This name **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:1169-34065).

* + - * 1. This qualifier **SHALL** contain exactly one [1..1] **val****ue** (CONF:1169-34066).

This value **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [**TNM Clinical Stage** **Descriptor**](#_bookmark1984)urn:oid:2.16.840.1.113883.3.520.4.10 **DYNAMIC** (CONF:1169- 34067).

This value **SHALL** contain exactly one [1..1]

**@codeSystem**="2.16.840.1.113883.15.6" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1169-34068).

This value **SHOULD** contain zero or one [0..1] **@displayNa****me**

(CONF:1169-34069).

This value **SHALL** contain exactly one [1..1]

**@sdtc:valueSet**="2.16.840.1.113883.3.520.4.10" (CodeSystem:

TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1169-34070).

This value **SHOULD** contain zero or one [0..1] **originalTe****xt**

(CONF:1169-34257).

The originalText, if present, **SHOULD** contain zero or one [0..1]

**refer****ence** (CONF:1169-34258).

The reference, if present, **SHOULD** contain zero or one [0..1] **@value** (CONF:1169-34259).

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:1169-34260).

* + 1. **SHALL** contain exactly one [1..1] **entryRelationship** (CONF:1169-34071) such that it Note: This entryRelationship provides information on the TNM Clinical Stage Tumor (T).
       1. **SHALL** contain exactly one [1..1] **@typeCode**="COMP" Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1169- 34072).
       2. **SHALL** contain exactly one [1..1] [**Primary Tumor** **Clinical**](#_bookmark1327) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.36:2015-02-05) (CONF:1169-34073).
    2. **SHALL** contain exactly one [1..1] **entryRelationship** (CONF:1169-34090) such that it Note: This entryRelationship provides information on the TNM Clinical Stage Node (N).
       1. **SHALL** contain exactly one [1..1] **@typeCode**="COMP" Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1169- 34091).
       2. **SHALL** contain exactly one [1..1] [**Regional Lymph Nodes** **Clinical**](#_bookmark1740) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.37:2015-02-05) (CONF:1169-34092).
    3. **SHALL** contain exactly one [1..1] **entryRelationship** (CONF:1169-34093) such that it Note: This entryRelationship provides information on the TNM Clinical Stage Metastasis (M).
       1. **SHALL** contain exactly one [1..1] **@typeCode**="COMP" Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1169- 34094).
       2. **SHALL** contain exactly one [1..1] [**Distant Metastases** **Clinical**](#_bookmark834) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.38:2015-02-05) (CONF:1169-34097).
    4. **SHALL** contain exactly one [1..1] **entryRelationship** (CONF:1169-34095) such that it Note: Identifies the role of the person who recorded the staging elements.
       1. **SHALL** contain exactly one [1..1] **@typeCode**="COMP" Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1169- 34096).
       2. **SHALL** contain exactly one [1..1] [**Stager Clinical** **Cancer**](#_bookmark1893) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.39:2015-02-05) (CONF:1169-34098).

***Table*** ***195: TNM Clinical Stage Group***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: TNM Clinical Stage Group urn:oid:2.16.840.1.113883.3.520.4.9  Detailed site-specific code for the clinical stage group as defined by AJCC and recorded by the ambulatory healthcare provider (physician).  Note: The AJCC Staging Manual TNM system is proprietary and its definitions cannot be included in other documents without permission.  Value Set Source:  [**http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.9**](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.9) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| IVB | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | No display name applicable. |
| IVB | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| IVA | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| IV | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| IIIC | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| IIIB | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| IIIA | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| III | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| IIC | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| IIB | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| 99 | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | “” |
| ... | | | |

***Table*** ***196: TNM Clinical Stage Descriptor***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: TNM Clinical Stage Descriptor urn:oid:2.16.840.1.113883.3.520.4.10 Identify special cases that need separate data analysis.  Value Set Source: [**https://phinvads.cdc.gov/vads/ViewValueSet.action?id=37448BA8-3006-**](https://phinvads.cdc.gov/vads/ViewValueSet.action?id=37448BA8-3006-E011-9273-00188B39829B) [**E011-9273-00188B39829B**](https://phinvads.cdc.gov/vads/ViewValueSet.action?id=37448BA8-3006-E011-9273-00188B39829B) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 0 | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | None |
| 1 | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | E (Extranodal, lymphomas only) |
| 2 | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | S (Spleen, lymphomas only) |
| ... | | | |

***Figure 91: TNM Clinical Stage Group example***

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

<templateId root="2.16.840.1.113883.10.13.35" extension="2015-02-05" />

<code code="21908-9" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Stage group.clinical" />

<statusCode code="completed" />

<value xsi:type="CD" code="IIB" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" sdtc:valueSet="2.16.840.1.113883.3.520.4.9">

<originalText>

<reference value="#ClinicalStageGroup\_1" />

</originalText>

<qualifier>

<name code="21909-7" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Descriptor.clinical Cancer Narrative" />

<value code="0" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7.

Edition" displayName="None" sdtc:valueSet="2.16.840.1.113883.3.520.4.10">

<originalText>

<reference value="#ClinicalNarrative\_1" />

</originalText>

</value>

</qualifier>

</value>

<entryRelationship typeCode="COMP">

...

</observation>

## TNM Clinical Stage Observation (V1.1) - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.13.5:2015-02-05 (open)]

***Table 197: TNM Clinical Stage Observation (V1.1) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Cancer Diagnosis Observation (V1.1)](#_bookmark700) (required) | [TNM Clinical Stage Group](#_bookmark1937) |

Note: This template is modeled based on C-CDA R2 "Problem Observation (V2)" template.

TNM Clinical Stage describes detailed site-specific information on the progression of disease for the cancer/tumor as defined by AJCC and recorded by the ambulatory healthcare provider (physician).

The AJCC Staging Manual TNM system is proprietary and its definitions cannot be included in this IG or in other documents without permission.

This template is used to record TNM stage when the stage values are known, including situations when, after staging workup, the stage group and/or TNM component(s) are found to be unknown (e.g., Stage Group= 9, and/or TX, and/or NX).

***Table 198: TNM Clinical Stage Observation (V1.1) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.13.5:2015-02-05) | | | | | |
| @nullFlavor | 0..0 | SHALL NOT |  | [1169-](#_bookmark1990)  [33188](#_bookmark1990) |  |
| @classCode | 1..1 | SHALL |  | [1169-](#_bookmark1991)  [32505](#_bookmark1991) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1169-](#_bookmark1992)  [32506](#_bookmark1992) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1169-](#_bookmark1993)  [32494](#_bookmark1993) |  |
| @root | 1..1 | SHALL |  | [1169-](#_bookmark1994)  [32508](#_bookmark1994) | 2.16.840.1.113883.10.13.5 |
| @extension | 1..1 | SHALL |  | [1169-](#_bookmark1995)  [33976](#_bookmark1995) | 2015-02-05 |
| id | 1..\* | SHALL |  | [1169-](#_bookmark1996)  [32509](#_bookmark1996) |  |
| code | 1..1 | SHALL |  | [1169-](#_bookmark1997)  [32510](#_bookmark1997) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark1998)  [33659](#_bookmark1998) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 75620-5 |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark1999)  [33660](#_bookmark1999) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1169-](#_bookmark2000)  [32498](#_bookmark2000) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = completed |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark2001)  [32512](#_bookmark2001) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1169-](#_bookmark2002)  [32499](#_bookmark2002) |  |
| low | 1..1 | SHALL |  | [1169-](#_bookmark2003)  [32513](#_bookmark2003) |  |
| @nullFlavor | 0..1 | MAY |  | [1169-](#_bookmark2004)  [32640](#_bookmark2004) |  |
| entryRelationship | 1..1 | SHALL |  | [1169-](#_bookmark2005)  [33399](#_bookmark2005) |  |
| @typeCode | 1..1 | SHALL |  | [1169-](#_bookmark2006)  [33470](#_bookmark2006) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = COMP |
| observation | 1..1 | SHALL |  | [1169-](#_bookmark2007)  [33400](#_bookmark2007) | [TNM Clinical Stage Group](#_bookmark1937)  [(identifier:](#_bookmark1937)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark1937)  [3.35:2015-02-05](#_bookmark1937) |

* + 1. **SHALL NOT** contain [0..0] **@nullFlavor** (CONF:1169-33188).
    2. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATI****C**) (CONF:1169-32505).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1169-32506).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1169-32494) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.5"

(CONF:1169-32508).

b. **SHALL** contain exactly one [1..1] **@extension**="2015-02-05" (CONF:1169-33976).

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1169-32509).
    2. **SHALL** contain exactly one [1..1] **code** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-32510).
       1. This code **SHALL** contain exactly one [1..1] **@code**="75620-5" TNM clinical staging before treatment panel Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-33659).
       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:1169-33660).

* + 1. **SHALL** contain exactly one [1..1] **statusCode**="completed" (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1169-32498).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1169- 32512).
    2. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1169-32499).

The effectiveTime/low documents when detailed site-specific information on the progression of disease for the cancer/tumor was recorded.

* + - 1. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:1169-32513).
         1. This low **MAY** contain zero or one [0..1] **@nullFlavor** (CONF:1169-32640).
    1. **SHALL** contain exactly one [1..1] **entryRelationship** (CONF:1169-33399).

Note: This entryRelationship provides information on the TNM Clinical Stage Group.

* + - 1. This entryRelationship **SHALL** contain exactly one [1..1] **@typeCode**="COMP" Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1169-33470).
      2. This entryRelationship **SHALL** contain exactly one [1..1] [**TNM Clinical Stage**](#_bookmark1937) [**Group**](#_bookmark1937) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.35:2015-02-05) (CONF:1169-33400).

***Figure 92: TNM Clinical Stage Observation example***

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

<templateId root="2.16.840.1.113883.10.13.5" extension="2015-02-05"/>

<id root="91473759-6678-48a2-a0d5-084c5ded5afc"/>

<code code="75620-5" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="TNM clinical staging before treatment panel Cancer"/>

<statusCode code="completed"/>

<effectiveTime>

<low value="20140801112102"/>

</effectiveTime>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.35" extension="2015-02-05"/>

<code code="21908-9" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Stage group.clinical"/>

<statusCode code="completed"/>

<value xsi:type="CD" code="IIB" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" sdtc:valueSet="2.16.840.1.113883.3.520.4.9">

<originalText>

<reference value="#ClinicalStageGroup\_1"/>

</originalText>

<qualifier>

<name code="21909-7" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Descriptor.clinical Cancer Narrative"/>

<value code="0" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" displayName="None" sdtc:valueSet="2.16.840.1.113883.3.520.4.10">

<originalText>

<reference value="#ClinicalNarrative\_1"/>

</originalText>

</value>

</qualifier>

</value>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.36" extension="2015-02-05"/>

<code code="21905-5" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Primary tumor.clinical [Class] Cancer"/>

<value xsi:type="CD" code="T2" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" displayName="Tumor &gt; 20 mm but &lt;= to 50 mm in greatest dimension" sdtc:valueSet="2.16.840.1.113883.3.520.4.6">

<originalText>

<reference value="#ClinicalPrimaryTumor\_1"/>

</originalText>

</value>

</observation>

</entryRelationship>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.37" extension="2015-02-05"/>

<code code="21906-3" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Regional lymph nodes.clinical [Class] Cancer"/>

<value xsi:type="CD" code="N1" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" displayName="Metastases to movable ipsilateral level I, II axillary lymph node(s)" sdtc:valueSet="2.16.840.1.113883.3.520.4.7">

<originalText>

<reference value="#ClinicalNode\_1"/>

</originalText>

</value>

</observation>

</entryRelationship>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.38" extension="2015-02-05"/>

<code code="21907-1" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Distant metastases.clinical [Class] Cancer"/>

<value xsi:type="CD" code="M0" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" displayName="No clinical or radiographic evidence of distant metastases" sdtc:valueSet="2.16.840.1.113883.3.520.4.8">

<originalText>

<reference value="#ClinicalMetasases\_1"/>

</originalText>

</value>

</observation>

</entryRelationship>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.39" extension="2015-02-05"/>

<code code="21910-5" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Stager.clinical Cancer "/>

<value xsi:type="CD" code="3" codeSystem="2.16.840.1.113883.3.520.3.4" codeSystemName="NAACCR TNM Clinical Staged By " displayName="Pathologist and managing physician" sdtc:valueSet="2.16.840.1.113883.3.520.4.4">

<originalText>

<reference value="#ClinicalStagedBy\_1"/>

</originalText>

</value>

</observation>

</entryRelationship>

</observation>

</entryRelationship>

</observation>

## TNM Pathologic Stage Group - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.13.40:2015-02-05 (open)]

***Table 199: TNM Pathologic Stage Group Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [TNM Pathologic Stage Observation (V1.1)](#_bookmark2060) (required) | [Distant Metastases Pathologic](#_bookmark856)  [Primary Tumor Pathologic](#_bookmark1349)  [Regional Lymph Nodes Pathologic](#_bookmark1762)  [Stager Pathologic Cancer](#_bookmark1915) |

This template records the combined extent of disease results into a single value, represented by Roman numerals I – IV. A pathologic stage group encompasses diagnostic/assessment information and information obtained histologic examination of the surgical specimens.

***Table 200: TNM Pathologic Stage Group Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.13.40:2015-02-05) | | | | | |
| @classCode | 1..1 | SHALL |  | [1169-](#_bookmark2013)  [34146](#_bookmark2013) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1169-](#_bookmark2014)  [34147](#_bookmark2014) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1169-](#_bookmark2015)  [34261](#_bookmark2015) |  |
| @root | 1..1 | SHALL |  | [1169-](#_bookmark2016)  [34262](#_bookmark2016) | 2.16.840.1.113883.10.13.40 |
| @extension | 1..1 | SHALL |  | [1169-](#_bookmark2017)  [34263](#_bookmark2017) | 2015-02-05 |
| code | 1..1 | SHALL |  | [1169-](#_bookmark2018)  [34148](#_bookmark2018) |  |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark2019)  [34149](#_bookmark2019) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 21902-2 |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark2020)  [34150](#_bookmark2020) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1169-](#_bookmark2021)  [34151](#_bookmark2021) |  |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark2022)  [34152](#_bookmark2022) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = completed |
| value | 1..1 | SHALL | CD | [1169-](#_bookmark2023)  [34153](#_bookmark2023) |  |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark2024)  [34154](#_bookmark2024) | urn:oid:2.16.840.1.113883.3.520.  4.20 (TNM Pathologic Stage Group) |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark2025)  [34155](#_bookmark2025) | urn:oid:2.16.840.1.113883.15.6  (TNM 7. Edition) = 2.16.840.1.113883.15.6 |
| @sdtc:valueSet | 1..1 | SHALL |  | [1169-](#_bookmark2026)  [34156](#_bookmark2026) | urn:oid:2.16.840.1.113883.15.6  (TNM 7. Edition) = 2.16.840.1.113883.3.520.4.20 |
| originalText | 0..1 | SHOUL D |  | [1169-](#_bookmark2027)  [34157](#_bookmark2027) |  |
| reference | 0..1 | SHOUL D |  | [1169-](#_bookmark2028)  [34158](#_bookmark2028) |  |
| @value | 0..1 | SHOUL D |  | [1169-](#_bookmark2029)  [34159](#_bookmark2029) |  |
| qualifier | 1..1 | SHALL |  | [1169-](#_bookmark2030)  [34161](#_bookmark2030) |  |
| name | 1..1 | SHALL |  | [1169-](#_bookmark2031)  [34162](#_bookmark2031) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark2032)  [34163](#_bookmark2032) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 21903-0 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark2033)  [34164](#_bookmark2033) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| value | 1..1 | SHALL |  | [1169-](#_bookmark2034)  [34165](#_bookmark2034) |  |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark2035)  [34168](#_bookmark2035) | urn:oid:2.16.840.1.113883.3.520.  4.21 (TNM Pathologic Stage Descriptor) |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark2036)  [34169](#_bookmark2036) | urn:oid:2.16.840.1.113883.15.6  (TNM 7. Edition) = 2.16.840.1.113883.15.6 |
| @displayName | 0..1 | SHOUL D |  | [1169-](#_bookmark2037)  [34170](#_bookmark2037) |  |
| @sdtc:valueSet | 1..1 | SHALL |  | [1169-](#_bookmark2038)  [34171](#_bookmark2038) | urn:oid:2.16.840.1.113883.15.6  (TNM 7. Edition) = 2.16.840.1.113883.3.520.4.21 |
| originalText | 0..1 | SHOUL D |  | [1169-](#_bookmark2039)  [34166](#_bookmark2039) |  |
| reference | 0..1 | SHOUL D |  | [1169-](#_bookmark2040)  [34167](#_bookmark2040) |  |
| @value | 0..1 | SHOUL D |  | [1169-](#_bookmark2041)  [34172](#_bookmark2041) |  |
| entryRelationship | 1..1 | SHALL |  | [1169-](#_bookmark2042)  [34174](#_bookmark2042) |  |
| @typeCode | 1..1 | SHALL |  | [1169-](#_bookmark2043)  [34175](#_bookmark2043) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = COMP |
| observation | 1..1 | SHALL |  | [1169-](#_bookmark2044)  [34176](#_bookmark2044) | [Primary Tumor Pathologic](#_bookmark1349)  [(identifier:](#_bookmark1349)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark1349)  [3.41:2015-02-05](#_bookmark1349) |
| entryRelationship | 1..1 | SHALL |  | [1169-](#_bookmark2045)  [34177](#_bookmark2045) |  |
| @typeCode | 1..1 | SHALL |  | [1169-](#_bookmark2046)  [34178](#_bookmark2046) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = COMP |
| observation | 1..1 | SHALL |  | [1169-](#_bookmark2047)  [34179](#_bookmark2047) | [Regional Lymph Nodes Pathologic](#_bookmark1762)  [(identifier:](#_bookmark1762)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark1762)  [3.42:2015-02-05](#_bookmark1762) |
| entryRelationship | 1..1 | SHALL |  | [1169-](#_bookmark2048)  [34180](#_bookmark2048) |  |
| @typeCode | 1..1 | SHALL |  | [1169-](#_bookmark2049)  [34181](#_bookmark2049) | urn:oid:2.16.840.1.113883.5.106  0 (HL7EntityCode) = COMP |
| observation | 1..1 | SHALL |  | [1169-](#_bookmark2050)  [34182](#_bookmark2050) | [Distant Metastases Pathologic](#_bookmark856)  [(identifier:](#_bookmark856)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark856)  [3.43:2015-02-05](#_bookmark856) |
| entryRelationship | 1..1 | SHALL |  | [1169-](#_bookmark2051)  [34183](#_bookmark2051) |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| @typeCode | 1..1 | SHALL |  | [1169-](#_bookmark2052)  [34184](#_bookmark2052) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = COMP |
| observation | 1..1 | SHALL |  | [1169-](#_bookmark2053)  [34185](#_bookmark2053) | [Stager Pathologic Cancer](#_bookmark1915)  [(identifier:](#_bookmark1915)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark1915)  [3.44:2015-02-05](#_bookmark1915) |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1169-34146).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1169-34147).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1169-34261) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.40"

(CONF:1169-34262).

b. **SHALL** contain exactly one [1..1] **@extension**="2015-02-05" (CONF:1169-34263).

* + 1. **SHALL** contain exactly one [1..1] **code** (CONF:1169-34148).
       1. This code **SHALL** contain exactly one [1..1] **@code**="21902-2" Stage group.pathology Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169- 34149).
       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:1169-34150).

* + 1. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1169-34151).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1169- 34152).
    2. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD" (CONF:1169-34153).
       1. This value **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [**TNM Pathologic Stage Group**](#_bookmark2055)urn:oid:2.16.840.1.113883.3.520.4.20 **DYNAMI****C** (CONF:1169-34154).
       2. This value **SHALL** contain exactly one [1..1]

**@codeSystem**="2.16.840.1.113883.15.6" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1169-34155).

* + - 1. This value **SHALL** contain exactly one [1..1]

**@sdtc:valueSet**="2.16.840.1.113883.3.520.4.20" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1169-34156).

* + - 1. This value **SHOULD** contain zero or one [0..1] **originalTe****xt** (CONF:1169-34157).
         1. The originalText, if present, **SHOULD** contain zero or one [0..1] **reference**

(CONF:1169-34158).

The reference, if present, **SHOULD** contain zero or one [0..1] **@value**

(CONF:1169-34159).

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:1169-34160).

* + - 1. This value **SHALL** contain exactly one [1..1] **qualifi****er** (CONF:1169-34161).
         1. This qualifier **SHALL** contain exactly one [1..1] **name** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34162).

This name **SHALL** contain exactly one [1..1] **@code**="21903-0" Descriptor.pathology Cancer Narrative (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34163).

This name **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:1169-34164).

* + - * 1. This qualifier **SHALL** contain exactly one [1..1] **val****ue** (CONF:1169-34165).

This value **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [**TNM Pathologic** **Stage Descriptor**](#_bookmark2057)urn:oid:2.16.840.1.113883.3.520.4.21 (CONF:1169-34168).

This value **SHALL** contain exactly one [1..1]

**@codeSystem**="2.16.840.1.113883.15.6" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1169-34169).

This value **SHOULD** contain zero or one [0..1] **@displayNa****me**

(CONF:1169-34170).

This value **SHALL** contain exactly one [1..1]

**@sdtc:valueSet**="2.16.840.1.113883.3.520.4.21" (CodeSystem:

TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1169-34171).

This value **SHOULD** contain zero or one [0..1] **originalTe****xt**

(CONF:1169-34166).

The originalText, if present, **SHOULD** contain zero or one [0..1]

**reference** (CONF:1169-34167).

The reference, if present, **SHOULD** contain zero or one [0..1] **@value** (CONF:1169-34172).

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:1169-34173).

* + 1. **SHALL** contain exactly one [1..1] **entryRelationship** (CONF:1169-34174) such that it Note: This entryRelationship provides information on the TNM Pathologic Stage Tumor (T).
       1. **SHALL** contain exactly one [1..1] **@typeCode**="COMP" Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1169- 34175).
       2. **SHALL** contain exactly one [1..1] [**Primary Tumor** **Pathologic**](#_bookmark1349) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.41:2015-02-05) (CONF:1169-34176).
    2. **SHALL** contain exactly one [1..1] **entryRelationship** (CONF:1169-34177) such that it Note: This entryRelationship provides information on the TNM Pathologic Stage Node (N).
       1. **SHALL** contain exactly one [1..1] **@typeCode**="COMP" Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1169- 34178).
       2. **SHALL** contain exactly one [1..1] [**Regional Lymph Nodes Pathologic**](#_bookmark1762)(identifier: urn:hl7ii:2.16.840.1.113883.10.13.42:2015-02-05) (CONF:1169-34179).
    3. **SHALL** contain exactly one [1..1] **entryRelationship** (CONF:1169-34180) such that it Note: This entryRelationship provides information on the TNM Pathologic Stage Metastasis (M).
       1. **SHALL** contain exactly one [1..1] **@typeCode**="COMP" Component (CodeSystem:

HL7EntityCode urn:oid:2.16.840.1.113883.5.1060) (CONF:1169-34181).

* + - 1. **SHALL** contain exactly one [1..1] [**Distant Metastases** **Pathologic**](#_bookmark856) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.43:2015-02-05) (CONF:1169-34182).
    1. **SHALL** contain exactly one [1..1] **entryRelationship** (CONF:1169-34183) such that it Note: Identifies the role of the person who recorded the staging elements.
       1. **SHALL** contain exactly one [1..1] **@typeCode**="COMP" Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1169- 34184).
       2. **SHALL** contain exactly one [1..1] [**Stager Pathologic** **Cancer**](#_bookmark1915) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.44:2015-02-05) (CONF:1169-34185).

***Table*** ***201: TNM Pathologic Stage Group***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: TNM Pathologic Stage Group urn:oid:2.16.840.1.113883.3.520.4.20  Detailed site-specific code for the pathologic stage group as defined by AJCC and recorded by the ambulatory healthcare provider (physician).  Note: The AJCC Staging Manual TNM system is proprietary and its definitions cannot be included in other documents without permission.  Value Set Source:  [**http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.20**](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.20) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| IVB | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | No display name applicable. |
| IVB | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| IVA | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| IV | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| IIIC | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| IIIB | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| IIIA | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| III | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| IIC | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| IIB | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | "" |
| 99 | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | “” |
| ... | | | |

***Table*** ***202: TNM Pathologic Stage Descriptor***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: TNM Pathologic Stage Descriptor urn:oid:2.16.840.1.113883.3.520.4.21 Identify special cases that need separate data analysis.  Value Set Source:  [**https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.21**](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.21) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 0 | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | None |
| 3 | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | M (Multiple primary tumors in a single site) |
| 9 | TNM 7. Edition | urn:oid:2.16.840.1.11388 3.15.6 | Unknown, not stated in patient record |
| ... | | | |

***Figure 93: TNM Pathologic Stage Group example***

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

<templateId root="2.16.840.1.113883.10.13.40" extension="2015-02-05" />

<code code="21902-2" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Stage group.pathology Cancer" />

<statusCode code="completed" />

<value xsi:type="CD" code="IIB" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" sdtc:valueSet="2.16.840.1.113883.3.520.4.20">

<originalText>

<reference value="#PathologicStageGroup\_1" />

</originalText>

<qualifier>

<name code="21903-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Descriptor.pathology Cancer Narrative " />

<value code="0" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7.

Edition" sdtc:valueSet="2.16.840.1.113883.3.520.4.21" />

</qualifier>

</value>

<entryRelationship typeCode="COMP">

...

</observation>

## TNM Pathologic Stage Observation (V1.1) - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.13.7:2015-02-06 (open)]

***Table 203: TNM Pathologic Stage Observation (V1.1) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Cancer Diagnosis Observation (V1.1)](#_bookmark700) (required) | [TNM Pathologic Stage Group](#_bookmark2010) |

Note: This template is modeled based on C-CDA R2 "Problem Observation (V2)" template.

TNM Pathologic Stage describes detailed site-specific information on the progression of disease for the cancer/tumor as defined by AJCC and recorded by the ambulatory healthcare provider (physician).

The AJCC Staging Manual TNM system is proprietary and its definitions cannot be included in this IG or in other documents without permission.

This template is used to record TNM stage when the stage values are known, including situations when, after staging workup, the stage group and/or TNM component(s) are found to be unknown (e.g., Stage Group= 9, and/or TX, and/or NX).

***Table 204: TNM Pathologic Stage Observation (V1.1) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.13.7:2015-02-06) | | | | | |
| @nullFlavor | 0..0 | SHALL NOT |  | [1169-](#_bookmark2063)  [33189](#_bookmark2063) |  |
| @classCode | 1..1 | SHALL |  | [1169-](#_bookmark2064)  [33167](#_bookmark2064) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1169-](#_bookmark2065)  [33168](#_bookmark2065) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1169-](#_bookmark2066)  [33117](#_bookmark2066) |  |
| @root | 1..1 | SHALL |  | [1169-](#_bookmark2067)  [33149](#_bookmark2067) | 2.16.840.1.113883.10.13.7 |
| @extension | 1..1 | SHALL |  | [1169-](#_bookmark2068)  [33977](#_bookmark2068) | 2015-02-06 |
| id | 1..\* | SHALL |  | [1169-](#_bookmark2069)  [33169](#_bookmark2069) |  |
| code | 1..1 | SHALL |  | [1169-](#_bookmark2070)  [33170](#_bookmark2070) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark2071)  [33657](#_bookmark2071) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 75621-3 |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark2072)  [33658](#_bookmark2072) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1169-](#_bookmark2073)  [33121](#_bookmark2073) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = completed |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark2074)  [33151](#_bookmark2074) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1169-](#_bookmark2075)  [33122](#_bookmark2075) |  |
| low | 1..1 | SHALL |  | [1169-](#_bookmark2076)  [33123](#_bookmark2076) |  |
| @nullFlavor | 0..1 | MAY |  | [1169-](#_bookmark2077)  [33152](#_bookmark2077) |  |
| entryRelationship | 1..1 | SHALL |  | [1169-](#_bookmark2078)  [33468](#_bookmark2078) |  |
| @typeCode | 1..1 | SHALL |  | [1169-](#_bookmark2079)  [33471](#_bookmark2079) | urn:oid:2.16.840.1.113883.5.100  2 (HL7ActRelationshipType) = COMP |
| observation | 1..1 | SHALL |  | [1169-](#_bookmark2080)  [33469](#_bookmark2080) | [TNM Pathologic Stage Group](#_bookmark2010)  [(identifier:](#_bookmark2010)  [urn:hl7ii:2.16.840.1.113883.10.1](#_bookmark2010)  [3.40:2015-02-05](#_bookmark2010) |

* + 1. **SHALL NOT** contain [0..0] **@nullFlavor** (CONF:1169-33189).
    2. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATI****C**) (CONF:1169-33167).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1169-33168).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1169-33117) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.7"

(CONF:1169-33149).

b. **SHALL** contain exactly one [1..1] **@extension**="2015-02-06" (CONF:1169-33977).

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1169-33169).
    2. **SHALL** contain exactly one [1..1] **code** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-33170).
       1. This code **SHALL** contain exactly one [1..1] **@code**="75621-3" TNM pathologic staging after surgery panel Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-33657).
       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:1169-33658).

* + 1. **SHALL** contain exactly one [1..1] **statusCode**="completed" (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1169-33121).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1169- 33151).
    2. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1169-33122).

The effectiveTime/low documents when detailed site-specific information on the progression of disease for the cancer/tumor was recorded.

* + - 1. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:1169-33123).
         1. This low **MAY** contain zero or one [0..1] **@nullFlavor** (CONF:1169-33152).
    1. **SHALL** contain exactly one [1..1] **entryRelationship** (CONF:1169-33468).

Note: This entryRelationship provides information on the TNM Pathologic Stage Group.

* + - 1. This entryRelationship **SHALL** contain exactly one [1..1] **@typeCode**="COMP" Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1169-33471).
      2. This entryRelationship **SHALL** contain exactly one [1..1] [**TNM Pathologic Stage**](#_bookmark2010) [**Group**](#_bookmark2010) (identifier: urn:hl7ii:2.16.840.1.113883.10.13.40:2015-02-05) (CONF:1169-33469).

***Figure 94: TNM Pathologic Stage Observation example***

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

<templateId root="2.16.840.1.113883.10.13.7" extension="2015-02-06"/>

<id root="6d064a91-fdae-4acf-9eb8-e1695cf301c9"/>

<code code="75621-3" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="TNM pathologic staging after surgery panel"/>

<statusCode code="completed"/>

<effectiveTime>

<low value="20140801112253"/>

</effectiveTime>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.40" extension="2015-02-05"/>

<code code="21902-2" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Stage group.pathology Cancer"/>

<statusCode code="completed"/>

<value xsi:type="CD" code="IIB" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" sdtc:valueSet="2.16.840.1.113883.3.520.4.20">

<originalText>

<reference value="#PathologicStageGroup\_1"/>

</originalText>

<qualifier>

<name code="21903-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Descriptor.pathology Cancer Narrative "/>

<value code="0" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" sdtc:valueSet="2.16.840.1.113883.3.520.4.21"/>

</qualifier>

</value>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.41" extension="2015-02-05"/>

<code code="21899-0" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Primary tumor.pathology Cancer"/>

<value xsi:type="CD" code="T2" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" displayName="Tumor &gt; 20 mm but &lt;= to 50 mm in greatest dimension" sdtc:valueSet="2.16.840.1.113883.3.520.4.17"/>

</observation>

</entryRelationship>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.42" extension="2015-02-05"/>

<code code="21900-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Regional lymph nodes.pathology [Class] Cancer"/>

<value xsi:type="CD" code="N1" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" displayName="Micrometastases; or metastases in 1 to 3 axillary lymph nodes; and/or in internal mammary nodes with metastases detected by sentinel lymph node biopsy but not clinically detected." sdtc:valueSet="2.16.840.1.113883.3.520.4.18"/>

</observation>

</entryRelationship>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.43" extension="2015-02-05"/>

<code code="21901-4" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Distant metastases.pathology [Class] Cancer"/>

<value xsi:type="CD" code="MX" codeSystem="2.16.840.1.113883.15.6" codeSystemName="TNM 7. Edition" sdtc:valueSet="2.16.840.1.113883.3.520.4.19"/>

</observation>

</entryRelationship>

<entryRelationship typeCode="COMP">

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

<templateId root="2.16.840.1.113883.10.13.44" extension="2015-02-05"/>

<code code="21904-8" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Stager.pathology Cancer"/>

<value xsi:type="CD" code="3" codeSystem="2.16.840.1.113883.3.520.3.17" codeSystemName="NAACCR TNM Pathologic Staged By" displayName="Pathologist and managing physician" sdtc:valueSet="2.16.840.1.113883.3.520.4.27"/>

</observation>

</entryRelationship>

</observation>

</entryRelationship>

</observation>

## Tobacco Use (V2) - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09 (open)]

***Table 205: Tobacco Use (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Social History Section (V2)](#_bookmark611) (optional) | [Author Participation](#_bookmark2202) |

This template represents a patient’s tobacco use.

All the types of tobacco use are represented using the codes from the tobacco use and exposure-finding hierarchy in SNOMED CT, including codes required for recording smoking status in Meaningful Use Stage 2.

The effectiveTime element is used to describe dates associated with the patient's tobacco use. Whereas the Smoking Status - Meaningful Use (V2) template (2.16.840.1.113883.10.20.22.4.78:2014-06-09) represents a “snapshot in time” observation, simply reflecting what the patient’s current smoking status is at the time of the observation, this Tobacco Use template uses effectiveTime to represent the biologically relevant time of the observation. Thus, to record a former smoker, an observation of “cigarette smoker” will have an effectiveTime/low defining the time the patient started to smoke cigarettes and an effectiveTime/high defining the time the patient ceased to smoke cigarettes. To record a current smoker, the effectiveTime/low will define the time the patient started smoking and will have no effectiveTime/high to indicated that the patient is still smoking.

***Table 206: 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-](#_bookmark2086)  [16558](#_bookmark2086) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-](#_bookmark2087)  [16559](#_bookmark2087) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark2088)  [16566](#_bookmark2088) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark2089)  [16567](#_bookmark2089) | 2.16.840.1.113883.10.20.22.4.85 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark2090)  [32589](#_bookmark2090) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-](#_bookmark2091)  [32400](#_bookmark2091) |  |
| code | 1..1 | SHALL |  | [1098-](#_bookmark2092)  [19174](#_bookmark2092) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark2093)  [19175](#_bookmark2093) | 11367-0 |
| @codeSystem | 1..1 | SHALL |  | [1098-](#_bookmark2094)  [32172](#_bookmark2094) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1098-](#_bookmark2095)  [16561](#_bookmark2095) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark2096)  [19118](#_bookmark2096) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1098-](#_bookmark2097)  [16564](#_bookmark2097) |  |
| low | 1..1 | SHALL |  | [1098-](#_bookmark2098)  [16565](#_bookmark2098) |  |
| high | 0..1 | MAY |  | [1098-](#_bookmark2099)  [31431](#_bookmark2099) |  |
| value | 1..1 | SHALL | CD | [1098-](#_bookmark2100)  [16562](#_bookmark2100) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark2101)  [16563](#_bookmark2101) | urn:oid:2.16.840.1.113883.11.20.  9.41 (Tobacco Use) |
| author | 0..\* | SHOUL D |  | [1098-](#_bookmark2102)  [31152](#_bookmark2102) | [Author Participation (identifier:](#_bookmark2202)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2202)  [22.4.119](#_bookmark2202) |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATI****C**) (CONF:1098-16558).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-16559).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-16566) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.85"

(CONF:1098-16567).

b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32589).

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1098-32400).
    2. **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).

* + 1. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-16561).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098- 19118).
    2. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1098-16564).

Note: The effectiveTime represents the biologically relevant time of the observation. Thus, an observation of “former smoker” will have an effectiveTime defining the time during which the patient has been a former smoker; an observation of “current smoker” will have an effectiveTime defining the time during which the patient has been a current 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).
    1. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD" (CONF:1098-16562).
       1. This value **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [**Tobacco Use**](#_bookmark2104) urn:oid:2.16.840.1.113883.11.20.9.41 **DYNAMI****C** (CONF:1098-16563).
    2. **SHOULD** contain zero or more [0..\*] [**Author** **Participation**](#_bookmark2202) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31152).

***Table*** ***207: Tobacco Use***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Tobacco Use urn:oid:2.16.840.1.113883.11.20.9.41  Contains values descending from the SNOMED CT® Finding of tobacco use and exposure (finding) (365980008) hierarchy.  Value Set Source: [**http://vtsl.vetmed.vt.edu/TerminologyMgt/RF2Browser/ISA.cfm?SCT\_ConceptID=36598000**](http://vtsl.vetmed.vt.edu/TerminologyMgt/RF2Browser/ISA.cfm?SCT_ConceptID=365980008)[**8**](http://vtsl.vetmed.vt.edu/TerminologyMgt/RF2Browser/ISA.cfm?SCT_ConceptID=365980008) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 81703003 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Chews tobacco |
| 228494002 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Snuff user |
| 59978006 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Cigar smoker |
| 43381005 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Passive smoker |
| 228524006 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Exposed to tobacco smoke at home |
| 427189007 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Maternal tobacco use |
| 394871007 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Thinking about stopping smoking |
| 65568007 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Cigarette smoker |
| 160619003 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Rolls own cigarettes |
| 266927001 | SNOMED CT | urn:oid:2.16.840.1.11388 3.6.96 | Pipe smoker |
| ... | | | |

***Figure 95: 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>

## Usual Industry History - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.13.33:2015-01-29 (open)]

***Table 208: Usual Industry History Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Employment History Observation Organizer (V1.1)](#_bookmark878) (required) |  |

This template records the business/industry associated with the patient’s usual occupation.

***Table 209: Usual Industry History Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.13.33:2015-01-29) | | | | | |
| @classCode | 1..1 | SHALL |  | [1169-](#_bookmark2110)  [34006](#_bookmark2110) | OBS |
| @moodCode | 1..1 | SHALL |  | [1169-](#_bookmark2111)  [34007](#_bookmark2111) | EVN |
| templateId | 1..1 | SHALL |  | [1169-](#_bookmark2112)  [34377](#_bookmark2112) |  |
| @root | 1..1 | SHALL |  | [1169-](#_bookmark2113)  [34378](#_bookmark2113) | 2.16.840.1.113883.10.13.33 |
| @extension | 1..1 | SHALL |  | [1169-](#_bookmark2114)  [34379](#_bookmark2114) | 2015-01-29 |
| code | 1..1 | SHALL |  | [1169-](#_bookmark2115)  [34005](#_bookmark2115) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark2116)  [34008](#_bookmark2116) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 21844-6 |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark2117)  [34009](#_bookmark2117) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| effectiveTime | 1..1 | SHALL |  | [1169-](#_bookmark2118)  [34010](#_bookmark2118) |  |
| low | 0..1 | SHOUL D |  | [1169-](#_bookmark2119)  [34011](#_bookmark2119) |  |
| high | 0..1 | MAY |  | [1169-](#_bookmark2120)  [34012](#_bookmark2120) |  |
| value | 1..1 | SHALL | CD | [1169-](#_bookmark2121)  [34013](#_bookmark2121) |  |
| @nullFlavor | 0..1 | MAY |  | [1169-](#_bookmark2122)  [34371](#_bookmark2122) |  |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark2123)  [34014](#_bookmark2123) | urn:oid:2.16.840.1.114222.4.11.7 187  (PHVS\_Industry\_CDC\_Census201 0) |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark2124)  [34015](#_bookmark2124) | urn:oid:2.16.840.1.114222.4.5.31  5 (Industry CDC Census 2010) =  2.16.840.1.114222.4.5.315 |
| @displayName | 1..1 | SHALL |  | [1169-](#_bookmark2125)  [34016](#_bookmark2125) | urn:oid:2.16.840.1.114222.4.11.7 187  (PHVS\_Industry\_CDC\_Census201 0) |
| @sdtc:valueSet | 1..1 | SHALL |  | [1169-](#_bookmark2126)  [34017](#_bookmark2126) | urn:oid:2.16.840.1.114222.4.5.31  5 (Industry CDC Census 2010) =  2.16.840.1.114222.4.11.7187 |
| originalText | 1..1 | SHOUL D |  | [1169-](#_bookmark2127)  [34018](#_bookmark2127) |  |
| reference | 1..1 | SHOUL D |  | [1169-](#_bookmark2128)  [34019](#_bookmark2128) |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| @value | 1..1 | SHOUL D |  | [1169-](#_bookmark2129)  [34020](#_bookmark2129) |  |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CONF:1169-34006).
    2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CONF:1169-34007).
    3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1169-34377) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.33"

(CONF:1169-34378).

b. **SHALL** contain exactly one [1..1] **@extension**="2015-01-29" (CONF:1169-34379).

* + 1. **SHALL** contain exactly one [1..1] **code** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34005).
       1. This code **SHALL** contain exactly one [1..1] **@code**="21844-6" Usual Industry Hx (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34008).
       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:1169-34009).

* + 1. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1169-34010).
       1. This effectiveTime **SHOULD** contain zero or one [0..1] **low** (CONF:1169-34011).
       2. This effectiveTime **MAY** contain zero or one [0..1] **high** (CONF:1169-34012).
    2. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD" (CONF:1169-34013).
       1. This value **MAY** contain zero or one [0..1] **@nullFlavor** (CONF:1169-34371).

If value/@nullFlavor is not present then

* + - 1. This value **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet **PHVS\_Industry\_CDC\_Census2010** urn:oid:2.16.840.1.114222.4.11.7187 **STATI****C** (CONF:1169-34014).

If value/@nullFlavor is not present then

* + - 1. This value **SHALL** contain exactly one [1..1]

**@codeSystem**="2.16.840.1.114222.4.5.315" Industry CDC Census 2010 (CodeSystem: Industry CDC Census 2010 urn:oid:2.16.840.1.114222.4.5.315) (CONF:1169-34015).

If value/@nullFlavor is not present then

* + - 1. This value **SHALL** contain exactly one [1..1] **@displayName**, which **SHALL** be selected from ValueSet **PHVS\_Industry\_CDC\_Census2010** urn:oid:2.16.840.1.114222.4.11.7187 **STATI****C** (CONF:1169-34016).

If value/@nullFlavor is not present then

* + - 1. This value **SHALL** contain exactly one [1..1]

**@sdtc:valueSet**="2.16.840.1.114222.4.11.7187" (CodeSystem: Industry CDC Census 2010 urn:oid:2.16.840.1.114222.4.5.315) (CONF:1169-34017).

If value/@nullFlavor is not present then

* + - 1. This value **SHOULD** contain exactly one [1..1] **originalTe****xt** (CONF:1169-34018).
         1. This originalText **SHOULD** contain exactly one [1..1] **reference** (CONF:1169- 34019).

This reference **SHOULD** contain exactly one [1..1] **@valu****e** (CONF:1169- 34020).

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:1169-34021).

***Figure 96: Usual Industry History example***

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

<templateId root="2.16.840.1.113883.10.13.33" extension="2015-01-29" />

<code code="21844-6" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Usual industry Hx" />

<effectiveTime>

<low value="20010101" />

</effectiveTime>

<value xsi:type="CD" code="7280" codeSystem="2.16.840.1.114222.4.5.315" codeSystemName="Industry CDC Census 2010" displayName="Accounting, tax preparation, bookkeeping, and payroll services" sdtc:valueSet="2.16.840.1.114222.4.11.7187">

<originalText>

<reference value="#Industry\_1" />

</originalText>

</value>

</observation>

## Usual Occupation History - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.13.34:2015-01-29 (open)]

***Table 210: Usual Occupation History Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Employment History Observation Organizer (V1.1)](#_bookmark878) (required) |  |

This template records the kind of work (occupation) performed during most of the patient's working life before diagnosis of this tumor.

***Table 211: Usual Occupation History Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.13.34:2015-01-29) | | | | | |
| @classCode | 1..1 | SHALL |  | [1169-](#_bookmark2135)  [34022](#_bookmark2135) | OBS |
| @moodCode | 1..1 | SHALL |  | [1169-](#_bookmark2136)  [34023](#_bookmark2136) | EVN |
| templateId | 1..1 | SHALL |  | [1169-](#_bookmark2137)  [34380](#_bookmark2137) |  |
| @root | 1..1 | SHALL |  | [1169-](#_bookmark2138)  [34381](#_bookmark2138) | 2.16.840.1.113883.10.13.34 |
| @extension | 1..1 | SHALL |  | [1169-](#_bookmark2139)  [34382](#_bookmark2139) | 2015-01-29 |
| code | 1..1 | SHALL |  | [1169-](#_bookmark2140)  [34024](#_bookmark2140) | urn:oid:2.16.840.1.113883.6.1 (LOINC) |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark2141)  [34025](#_bookmark2141) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 21843-8 |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark2142)  [34026](#_bookmark2142) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| effectiveTime | 1..1 | SHALL |  | [1169-](#_bookmark2143)  [34027](#_bookmark2143) |  |
| low | 0..1 | SHOUL D |  | [1169-](#_bookmark2144)  [34028](#_bookmark2144) |  |
| high | 0..1 | MAY |  | [1169-](#_bookmark2145)  [34029](#_bookmark2145) |  |
| value | 1..1 | SHALL | CD | [1169-](#_bookmark2146)  [34030](#_bookmark2146) |  |
| @nullFlavor | 0..1 | MAY |  | [1169-](#_bookmark2147)  [34372](#_bookmark2147) |  |
| @code | 1..1 | SHALL |  | [1169-](#_bookmark2148)  [34031](#_bookmark2148) | urn:oid:2.16.840.1.114222.4.11.7 186  (PHVS\_Occupation\_CDC\_Census 2010) |
| @codeSystem | 1..1 | SHALL |  | [1169-](#_bookmark2149)  [34032](#_bookmark2149) | urn:oid:2.16.840.1.114222.4.5.31  4 (Occupation CDC Census 2010)  = 2.16.840.1.114222.4.5.314 |
| @displayName | 1..1 | SHALL |  | [1169-](#_bookmark2150)  [34033](#_bookmark2150) | urn:oid:2.16.840.1.114222.4.11.7 186  (PHVS\_Occupation\_CDC\_Census 2010) |
| @sdtc:valueSet | 1..1 | SHALL |  | [1169-](#_bookmark2151)  [34034](#_bookmark2151) | urn:oid:2.16.840.1.114222.4.5.31  4 (Occupation CDC Census 2010)  = 2.16.840.1.114222.4.11.7186 |
| originalText | 1..1 | SHOUL D |  | [1169-](#_bookmark2152)  [34035](#_bookmark2152) |  |
| reference | 1..1 | SHOUL D |  | [1169-](#_bookmark2153)  [34036](#_bookmark2153) |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| @value | 1..1 | SHOUL D |  | [1169-](#_bookmark2154)  [34037](#_bookmark2154) |  |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CONF:1169-34022).
    2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CONF:1169-34023).
    3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1169-34380) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.13.34"

(CONF:1169-34381).

**SHALL** contain exactly one [1..1] **@extension**="2015-01-29" (CONF:1169-34382).

* + 1. **SHALL** contain exactly one [1..1] **code** (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34024).
       1. This code **SHALL** contain exactly one [1..1] **@code**="21843-8" Usual occupation Hx (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34025).
       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:1169-34026).

* + 1. **SHALL** contain exactly one [1..1] **effec****tiveTime** (CONF:1169-34027).
       1. This effectiveTime **SHOULD** contain zero or one [0..1] **low** (CONF:1169-34028).
       2. This effectiveTime **MAY** contain zero or one [0..1] **high** (CONF:1169-34029).
    2. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD" (CONF:1169-34030).
       1. This value **MAY** contain zero or one [0..1] **@nullFlavor** (CONF:1169-34372).

If value/@nullFlavor is not present then

* + - 1. This value **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet **PHVS\_Occupation\_CDC\_Census2010** urn:oid:2.16.840.1.114222.4.11.7186 **STATI****C** (CONF:1169-34031).

If value/@nullFlavor is not present then

* + - 1. This value **SHALL** contain exactly one [1..1]

**@codeSystem**="2.16.840.1.114222.4.5.314" Occupation CDC Census 2010 (CodeSystem: Occupation CDC Census 2010 urn:oid:2.16.840.1.114222.4.5.314) (CONF:1169-34032).

If value/@nullFlavor is not present then

* + - 1. This value **SHALL** contain exactly one [1..1] **@displayName**, which **SHALL** be selected from ValueSet **PHVS\_Occupation\_CDC\_Census2010** urn:oid:2.16.840.1.114222.4.11.7186 **STATIC** (CONF:1169-34033).

If value/@nullFlavor is not present then

* + - 1. This value **SHALL** contain exactly one [1..1]

**@sdtc:valueSet**="2.16.840.1.114222.4.11.7186" (CodeSystem: Occupation CDC Census 2010 urn:oid:2.16.840.1.114222.4.5.314) (CONF:1169-34034).

If value/@nullFlavor is not present then

* + - 1. This value **SHOULD** contain exactly one [1..1] **originalTe****xt** (CONF:1169-34035).
         1. This originalText **SHOULD** contain exactly one [1..1] **reference** (CONF:1169- 34036).

This reference **SHOULD** contain exactly one [1..1] **@valu****e** (CONF:1169- 34037).

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:1169-34038).

***Figure 97: Usual Occupation History example***

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

<templateId root="2.16.840.1.113883.10.13.34" extension="2015-01-29" />

<code code="21843-8" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC" displayName="Usual occupation Hx" />

<effectiveTime>

<low value="20010101" />

</effectiveTime>

<value xsi:type="CD" code="0800" codeSystem="2.16.840.1.114222.4.5.314" codeSystemName="Occupation CDC Census 2010" displayName="Accountants and auditors" sdtc:valueSet="2.16.840.1.114222.4.11.7186">

<originalText>

<reference value="#Occupation\_1" />

</originalText>

</value>

</observation>

## Vital Sign Observation (V2) - Published

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.27:2014-06-09 (open)]

***Table 212: Vital Sign Observation (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Vital Signs Organizer (V2)](#_bookmark2181) (required) | [Author Participation](#_bookmark2202) |

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 |

|  |  |
| --- | --- |
| Name | Unit |
| BSA | m2 |

***Table 213: 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-](#_bookmark2160)  [7297](#_bookmark2160) | urn:oid:2.16.840.1.113883.5.6  (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL |  | [1098-](#_bookmark2161)  [7298](#_bookmark2161) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark2162)  [7299](#_bookmark2162) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark2163)  [10527](#_bookmark2163) | 2.16.840.1.113883.10.20.22.4.27 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark2164)  [32574](#_bookmark2164) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-](#_bookmark2165)  [7300](#_bookmark2165) |  |
| code | 1..1 | SHALL |  | [1098-](#_bookmark2166)  [7301](#_bookmark2166) | urn:oid:2.16.840.1.113883.3.88.1  2.80.62 (Vital Sign Result) |
| statusCode | 1..1 | SHALL |  | [1098-](#_bookmark2167)  [7303](#_bookmark2167) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark2168)  [19119](#_bookmark2168) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = completed |
| effectiveTime | 1..1 | SHALL |  | [1098-](#_bookmark2169)  [7304](#_bookmark2169) |  |
| value | 1..1 | SHALL | PQ | [1098-](#_bookmark2170)  [7305](#_bookmark2170) |  |
| @unit | 1..1 | SHALL |  | [1098-](#_bookmark2171)  [31579](#_bookmark2171) | urn:oid:2.16.840.1.113883.1.11.1 2839  (UnitsOfMeasureCaseSensitive) |
| interpretationCode | 0..1 | MAY |  | [1098-](#_bookmark2172)  [7307](#_bookmark2172) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark2173)  [32886](#_bookmark2173) | urn:oid:2.16.840.1.113883.1.11.7  8 (Observation Interpretation (HL7)) |
| methodCode | 0..1 | MAY | SET<C E> | [1098-](#_bookmark2174)  [7308](#_bookmark2174) |  |
| targetSiteCode | 0..1 | MAY | SET<C D> | [1098-](#_bookmark2175)  [7309](#_bookmark2175) |  |
| author | 0..\* | SHOUL D |  | [1098-](#_bookmark2176)  [7310](#_bookmark2176) | [Author Participation (identifier:](#_bookmark2202)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2202)  [22.4.119](#_bookmark2202) |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATI****C**) (CONF:1098-7297).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-7298).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7299) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.27"

(CONF:1098-10527).

**SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32574).

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1098-7300).
    2. **SHALL** contain exactly one [1..1] **code**, which **SHOULD** be selected from ValueSet **[Vital Sign](#_bookmark2178)**  [**Result**](#_bookmark2178) urn:oid:2.16.840.1.113883.3.88.12.80.62 **DYNAMIC** (CONF:1098-7301).
    3. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-7303).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098- 19119).
    4. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1098-7304).
    5. **SHALL** contain exactly one [1..1] **value** with @xsi:type="PQ" (CONF:1098-7305).
       1. This value **SHALL** contain exactly one [1..1] **@unit**, which **SHALL** be selected from ValueSet [**UnitsOfMeasureCaseSensitive**](#_bookmark1064)urn:oid:2.16.840.1.113883.1.11.12839 **DYNAMI****C** (CONF:1098-31579).
    6. **MAY** contain zero or one [0..1] **interpretationCo****de** (CONF:1098-7307).
       1. The interpretationCode, if present, **SHALL** contain exactly one [1..1] **@code** (ValueSet: [**Observation** **Interpretation (HL7)**](#_bookmark1810) urn:oid:2.16.840.1.113883.1.11.78 **STATIC** 2014-09-01) (CONF:1098-32886).
    7. **MAY** contain zero or one [0..1] **methodCode** (CONF:1098-7308).
    8. **MAY** contain zero or one [0..1] **targetSiteCode** (CONF:1098-7309).
    9. **SHOULD** contain zero or more [0..\*] [**Author** **Participation**](#_bookmark2202) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-7310).

***Tabl******e 214: Vital Sign Result***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: Vital Sign Result urn:oid:2.16.840.1.113883.3.88.12.80.62 This identifies the vital sign result type. Specific URL Pending  Value Set Source: [**http://www.loinc.org/**](http://www.loinc.org/) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 8310-5 | LOINC | urn:oid:2.16.840.1.11388 3.6.1 | Body Temperature |
| 8462-4 | LOINC | urn:oid:2.16.840.1.11388 3.6.1 | BP Diastolic |
| 8480-6 | LOINC | urn:oid:2.16.840.1.11388 3.6.1 | BP Systolic |
| 8287-5 | LOINC | urn:oid:2.16.840.1.11388 3.6.1 | Head Circumference |
| 8867-4 | LOINC | urn:oid:2.16.840.1.11388 3.6.1 | Heart Rate |
| 8302-2 | LOINC | urn:oid:2.16.840.1.11388 3.6.1 | Height |
| 39156-5 | LOINC | urn:oid:2.16.840.1.11388 3.6.1 | BMI (Body Mass Index) |
| 2710-2 | LOINC | urn:oid:2.16.840.1.11388 3.6.1 | O2 % BldC Oximetry |
| 9279-1 | LOINC | urn:oid:2.16.840.1.11388 3.6.1 | Respiratory Rate |
| 3141-9 | LOINC | urn:oid:2.16.840.1.11388 3.6.1 | Weight Measured |
| ... | | | |

***Figure 98: 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 (V2) - Published

[organizer: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.26:2014-06-09 (open)]

***Table 215: Vital Signs Organizer (V2) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Vital Signs Section (entries required) (V2)](#_bookmark658) (required) | [Author Participation](#_bookmark2202)  [Vital Sign Observation (V2)](#_bookmark2157) |

This template provides a mechanism for grouping vital signs (e.g., grouping systolic blood pressure and diastolic blood pressure).

***Table 216: Vital Signs Organizer (V2) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| organizer (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.26:2014-06-09) | | | | | |
| @classCode | 1..1 | SHALL |  | [1098-](#_bookmark2184)  [7279](#_bookmark2184) | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = CLUSTER |
| @moodCode | 1..1 | SHALL |  | [1098-](#_bookmark2185)  [7280](#_bookmark2185) | urn:oid:2.16.840.1.113883.5.100  1 (ActMood) = EVN |
| templateId | 1..1 | SHALL |  | [1098-](#_bookmark2186)  [7281](#_bookmark2186) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark2187)  [10528](#_bookmark2187) | 2.16.840.1.113883.10.20.22.4.26 |
| @extension | 1..1 | SHALL |  | [1098-](#_bookmark2188)  [32582](#_bookmark2188) | 2014-06-09 |
| id | 1..\* | SHALL |  | [1098-](#_bookmark2189)  [7282](#_bookmark2189) |  |
| code | 0..1 | MAY |  | [1098-](#_bookmark2190)  [32740](#_bookmark2190) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark2191)  [32741](#_bookmark2191) | 74728-7 |
| @codeSystem | 1..1 | SHALL |  | [1098-](#_bookmark2192)  [32742](#_bookmark2192) | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL |  | [1098-](#_bookmark2193)  [7284](#_bookmark2193) |  |
| @code | 1..1 | SHALL |  | [1098-](#_bookmark2194)  [19120](#_bookmark2194) | urn:oid:2.16.840.1.113883.5.14  (ActStatus) = completed |
| effectiveTime | 0..1 | MAY |  | [1098-](#_bookmark2195)  [7288](#_bookmark2195) |  |
| author | 0..\* | SHOUL D |  | [1098-](#_bookmark2196)  [31153](#_bookmark2196) | [Author Participation (identifier:](#_bookmark2202)  [urn:oid:2.16.840.1.113883.10.20.](#_bookmark2202)  [22.4.119](#_bookmark2202) |
| component | 1..\* | SHALL |  | [1098-](#_bookmark2197)  [7285](#_bookmark2197) |  |
| observation | 1..1 | SHALL |  | [1098-](#_bookmark2198)  [15946](#_bookmark2198) | [Vital Sign Observation (V2)](#_bookmark2157)  [(identifier:](#_bookmark2157)  [urn:hl7ii:2.16.840.1.113883.10.2](#_bookmark2157)  [0.22.4.27:2014-06-09](#_bookmark2157) |

* + 1. **SHALL** contain exactly one [1..1] **@classCode**="CLUSTER" CLUSTER (CodeSystem:

HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATI****C**) (CONF:1098-7279).

* + 1. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-7280).
    2. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-7281) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.26"

(CONF:1098-10528).

b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32582).

* + 1. **SHALL** contain at least one [1..\*] **id** (CONF:1098-7282).
    2. **MAY** contain zero or one [0..1] **code** (CONF:1098-32740).
       1. The code, if present, **SHALL** contain exactly one [1..1] **@code**="74728-7" Vital signs, weight, height, head circumference, oximetry, BMI, and BSA panel - HL7.CCDAr1.1 (CONF:1098-32741).
       2. The code, if present, **SHALL** contain exactly one [1..1]

**@codeSystem**="2.16.840.1.113883.6.1 " LOINC (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1098-32742).

* + 1. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-7284).
       1. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14 **STATIC**) (CONF:1098- 19120).
    2. **MAY** contain zero or one [0..1] **effectiveTime** (CONF:1098-7288).

Note: The effectiveTime is an interval that spans the effectiveTimes of the contained vital signs observations. Because all contained vital signs observations have a required time stamp, it is not required that this effectiveTime be populated.

* + 1. **SHOULD** contain zero or more [0..\*] [**Author** **Participation**](#_bookmark2202) (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-31153).
    2. **SHALL** contain at least one [1..\*] **component** (CONF:1098-7285) such that it
       1. **SHALL** contain exactly one [1..1] [**Vital Sign Observation** **(V2)**](#_bookmark2157) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.27:2014-06-09) (CONF:1098- 15946).

***Figure 99: Vital Signs Organizer (V2) Example***

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

<!-- \*\* Vital signs organizer \*\* -->

<templateId root="2.16.840.1.113883.10.20.22.4.26" extension="2014-06-09" />

<id root="24f6ad18-c512-40fc-82bd-1e131aa9e52b" />

<code code="46680005" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED -CT" displayName="Vital signs" />

<statusCode code="completed" />

<effectiveTime>

<low value="20120910" />

<high value="20120910" />

</effectiveTime>

<component>

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

<templateId root="2.16.840.1.113883.10.20.22.4.27" extension="2014-06-09" />

<!-- Vital Sign Observation template -->

...

</observation>

</component>

<component>

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

<templateId root="2.16.840.1.113883.10.20.22.4.27" extension="2014-06-09" />

<!-- Vital Sign Observation template -->

...

</observation>

</component>

<component>

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

<templateId root="2.16.840.1.113883.10.20.22.4.27" extension="2014-06-09" />

<!-- Vital Sign Observation template -->

...

</observation>

</component>

</organizer>

# P A R T I C I P A T I O N A N D O T H E R T E M P L A T E S

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 - Published

[author: identifier urn:oid:2.16.840.1.113883.10.20.22.4.119 (open)]

***Table 217: Author Participation Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Social History Observation (V2)](#_bookmark1873) (optional)  [Medication Activity (V2)](#_bookmark996) (optional)  [Procedure Activity Procedure (V2)](#_bookmark1481) (optional)  [Problem Observation (V2)](#_bookmark1410) (optional)  [Problem Concern Act (V2)](#_bookmark1371) (optional)  [Planned Encounter (V2)](#_bookmark1131) (optional)  [Planned Procedure (V2)](#_bookmark1228) (optional)  [Planned Medication Activity (V2)](#_bookmark1187) (optional)  [Smoking Status - Meaningful Use (V2)](#_bookmark1851) (optional)  [Vital Sign Observation (V2)](#_bookmark2157) (optional)  [Result Observation (V2)](#_bookmark1784) (optional)  [Vital Signs Organizer (V2)](#_bookmark2181) (optional)  [Result Organizer (V2)](#_bookmark1815) (optional)  [Tobacco Use (V2)](#_bookmark2083) (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 218: 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-](#_bookmark2205)  [32017](#_bookmark2205) |  |
| @root | 1..1 | SHALL |  | [1098-](#_bookmark2206)  [32018](#_bookmark2206) | 2.16.840.1.113883.10.20.22.4.11  9 |
| time | 1..1 | SHALL |  | [1098-](#_bookmark2207)  [31471](#_bookmark2207) |  |
| assignedAuthor | 1..1 | SHALL |  | [1098-](#_bookmark2208)  [31472](#_bookmark2208) |  |
| id | 1..\* | SHALL |  | [1098-](#_bookmark2209)  [31473](#_bookmark2209) |  |
| code | 0..1 | SHOUL D |  | [1098-](#_bookmark2210)  [31671](#_bookmark2210) | urn:oid:2.16.840.1.114222.4.11.1  066 (Healthcare Provider Taxonomy (HIPAA)) |
| assignedPerson | 0..1 | MAY |  | [1098-](#_bookmark2211)  [31474](#_bookmark2211) |  |
| name | 0..\* | MAY |  | [1098-](#_bookmark2212)  [31475](#_bookmark2212) |  |
| representedOrganization | 0..1 | MAY |  | [1098-](#_bookmark2213)  [31476](#_bookmark2213) |  |
| @classCode | 1..1 | SHALL |  | [1098-](#_bookmark2214)  [31477](#_bookmark2214) | ORG |
| id | 0..\* | MAY |  | [1098-](#_bookmark2215)  [31478](#_bookmark2215) |  |
| name | 0..\* | MAY |  | [1098-](#_bookmark2216)  [31479](#_bookmark2216) |  |
| telecom | 0..\* | MAY |  | [1098-](#_bookmark2217)  [31480](#_bookmark2217) |  |
| addr | 0..\* | MAY |  | [1098-](#_bookmark2218)  [31481](#_bookmark2218) |  |

* + 1. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-32017) such that it

a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.119"

(CONF:1098-32018).

* + 1. **SHALL** contain exactly one [1..1] **time** (CONF:1098-31471).
    2. **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).
      1. This assignedAuthor **SHOULD** contain zero or one [0..1] **code**, which **SHOULD** be selected from ValueSet [**Healthcare Provider** **Taxonomy (HIPAA)**](#_bookmark351)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).
      2. 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).

* + - 1. This assignedAuthor **MAY** contain zero or one [0..1] **representedOrganiz****ation**

(CONF:1098-31476).

* + - * 1. The representedOrganization, if present, **SHALL** contain exactly one [1..1]

**@classCode**="ORG" (CONF:1098-31477).

* + - * 1. The representedOrganization, if present, **MAY** contain zero or more [0..\*] **id**

(CONF:1098-31478).

* + - * 1. The representedOrganization, if present, **MAY** contain zero or more [0..\*] **na****me**

(CONF:1098-31479).

* + - * 1. The representedOrganization, if present, **MAY** contain zero or more [0..\*]

**telecom** (CONF:1098-31480).

* + - * 1. The representedOrganization, if present, **MAY** contain zero or more [0..\*] **ad****dr**

(CONF:1098-31481).

***Figure 100: 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 101: 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>

## US Realm Address (AD.US.FIELDED) - Published

[addr: identifier urn:oid:2.16.840.1.113883.10.20.22.5.2 (open)]

***Table 219: US Realm Address (AD.US.FIELDED) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [US Realm Header (V2)](#_bookmark141) (required)  [Policy Activity (V2)](#_bookmark1260) (optional)  [Procedure Activity Procedure (V2) - Cancer IG Specific](#_bookmark1547)  [Constraints](#_bookmark1547) (optional)  [Planned Encounter (V2) - Cancer IG Specific](#_bookmark1162)  [Constraints](#_bookmark1162) (optional)  [Cancer Event Report Document (V1.1)](#_bookmark3) (required) |  |

Reusable address template, for use in US Realm CDA Header.

***Table 220: 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 | SHOUL D |  | [81-](#_bookmark2225)  [7290](#_bookmark2225) | urn:oid:2.16.840.1.113883.1.11.1  0637 (PostalAddressUse) |
| country | 0..1 | SHOUL D |  | [81-](#_bookmark2226)  [7295](#_bookmark2226) | urn:oid:2.16.840.1.113883.3.88.1  2.80.63 (Country) |
| state | 0..1 | SHOUL D | ST | [81-](#_bookmark2227)  [7293](#_bookmark2227) | urn:oid:2.16.840.1.113883.3.88.1  2.80.1 (StateValueSet) |
| city | 1..1 | SHALL |  | [81-](#_bookmark2228)  [7292](#_bookmark2228) |  |
| postalCode | 0..1 | SHOUL D |  | [81-](#_bookmark2229)  [7294](#_bookmark2229) | urn:oid:2.16.840.1.113883.3.88.1  2.80.2 (PostalCode) |
| streetAddressLine | 0..0 | SHALL |  | [81-](#_bookmark2230)  [7291](#_bookmark2230) |  |

* + 1. **SHOULD** contain zero or one [0..1] **@use**, which **SHALL** be selected from ValueSet [**PostalAddressUse**](#_bookmark2232) 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**](#_bookmark341)

urn:oid:2.16.840.1.113883.3.88.12.80.63 **DYNAM****IC** (CONF:81-7295).

* + 1. **SHOULD** contain zero or one [0..1] **state** (ValueSet: [**StateValueSet**](#_bookmark2234)

urn:oid:2.16.840.1.113883.3.88.12.80.1 **DYNAMI****C**) (CONF:81-7293).

* + - 1. State is required if the country is US. If country is not specified, it's assumed to be US. If country is something other than US, the state **MAY** be present but **MAY** be bound to different vocabularies (CONF:81-10024).
    1. **SHALL** contain exactly one [1..1] **city** (CONF:81-7292).
    2. **SHOULD** contain zero or one [0..1] **postalCode**, which **SHOULD** be selected from ValueSet

[**PostalCode**](#_bookmark343) urn:oid:2.16.840.1.113883.3.88.12.80.2 **DYNAMI****C** (CONF:81-7294).

* + - 1. PostalCode is required if the country is US. If country is not specified, it's assumed to be US. If country is something other than US, the postalCode **MAY** be present but **MAY** be bound to different vocabularies (CONF:81-10025).
    1. **SHALL** contain [0..0] **streetAddressLine** (CONF:81-7291).
    2. **SHALL NOT** have mixed content except for white space (CONF:81-7296).

***Table*** ***221: 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: [**http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary\_tables/in**](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html) [**frastructure/vocabulary/vocabulary.html**](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| BAD | AddressUse | urn:oid:2.16.840.1.11388 3.5.1119 | bad address |
| CONF | AddressUse | urn:oid:2.16.840.1.11388 3.5.1119 | confidential |
| DIR | AddressUse | urn:oid:2.16.840.1.11388 3.5.1119 | direct |
| H | AddressUse | urn:oid:2.16.840.1.11388 3.5.1119 | home address |
| HP | AddressUse | urn:oid:2.16.840.1.11388 3.5.1119 | primary home |
| HV | AddressUse | urn:oid:2.16.840.1.11388 3.5.1119 | vacation home |
| PHYS | AddressUse | urn:oid:2.16.840.1.11388 3.5.1119 | physical visit address |
| PST | AddressUse | urn:oid:2.16.840.1.11388 3.5.1119 | postal address |
| PUB | AddressUse | urn:oid:2.16.840.1.11388 3.5.1119 | public |
| TMP | AddressUse | urn:oid:2.16.840.1.11388 3.5.1119 | temporary |
| ... | | | |

***Table*** ***222: 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: [**http://www.census.gov/geo/reference/ansi\_statetables.html**](http://www.census.gov/geo/reference/ansi_statetables.html) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| AL | FIPS 5-2 (State) | urn:oid:2.16.840.1.11388 3.6.92 | Alabama |
| AK | FIPS 5-2 (State) | urn:oid:2.16.840.1.11388 3.6.92 | Alaska |
| AZ | FIPS 5-2 (State) | urn:oid:2.16.840.1.11388 3.6.92 | Arizona |
| AR | FIPS 5-2 (State) | urn:oid:2.16.840.1.11388 3.6.92 | Arkansas |
| CA | FIPS 5-2 (State) | urn:oid:2.16.840.1.11388 3.6.92 | California |
| CO | FIPS 5-2 (State) | urn:oid:2.16.840.1.11388 3.6.92 | Colorado |
| CT | FIPS 5-2 (State) | urn:oid:2.16.840.1.11388 3.6.92 | Connecticut |
| DE | FIPS 5-2 (State) | urn:oid:2.16.840.1.11388 3.6.92 | Delaware |
| DC | FIPS 5-2 (State) | urn:oid:2.16.840.1.11388 3.6.92 | District of Columbia |
| FL | FIPS 5-2 (State) | urn:oid:2.16.840.1.11388 3.6.92 | Florida |
| ... | | | |

***Figure 102: 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 Address (AD.US.FIELDED) (V2) - Cancer IG Specific Constraints - Published

[addr: identifier urn:hl7ii:2.16.840.1.113883.10.13.17:2014-08-08 (open)]

***Table 223: US Realm Address (AD.US.FIELDED) (V2) - Cancer IG Specific Constraints Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Cancer Event Report Document (V1.1)](#_bookmark3) (required) |  |

This section describes further constraints to "US Realm Address (AD.US.FIELDED) (V2)" that are specific for Cancer Implementation Guide. There are additional constrains for the following two elements:

1. city
2. usablePeriod

In order to provide an address history for a cancer patient, we expect ambulatory health care providers to maintain each of the addresses a cancer patient provides over time. Addresses should not be overwritten by newer addresses.

When an address is first collected for a patient, the date the patient began living at the address, if known, should be recorded and maintained as the start date for the address. If not known, the date of the encounter should be recorded and maintained as the start date for the address. When a new address is provided, the end date of the old address should be set to the day before the start date of the new address.

This template is intended for use only with the patient associated with the document.

***Table 224: US Realm Address (AD.US.FIELDED) (V2) - Cancer IG Specific Constraints Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| addr (identifier: urn:hl7ii:2.16.840.1.113883.10.13.17:2014-08-08) | | | | | |
| country | 1..1 | SHALL |  | [1126-](#_bookmark2240)  [33226](#_bookmark2240) | urn:oid:2.16.840.1.113883.3.88.1  2.80.63 (Country) |
| state | 1..1 | SHALL |  | [1126-](#_bookmark2241)  [33228](#_bookmark2241) | urn:oid:2.16.840.1.113883.3.88.1  2.80.1 (StateValueSet) |
| city | 1..1 | SHALL |  | [1126-](#_bookmark2242)  [202](#_bookmark2242) | urn:oid:2.16.840.1.114222.4.11.9  73 (City) |
| postalCode | 1..1 | SHALL |  | [1126-](#_bookmark2243)  [33227](#_bookmark2243) | urn:oid:2.16.840.1.113883.3.88.1  2.80.2 (PostalCode) |
| useablePeriod | 1..\* | SHALL | IVL\_TS | [1126-](#_bookmark2244)  [206](#_bookmark2244) |  |
| low | 1..1 | SHALL | IVL\_TS | [1126-](#_bookmark2245)  [207](#_bookmark2245) |  |
| high | 0..1 | SHALL | IVL\_TS | [1126-](#_bookmark2246)  [208](#_bookmark2246) |  |
| @nullFlavor | 0..1 | MAY |  | [1126-](#_bookmark2247)  [209](#_bookmark2247) |  |

1. Conforms to [**US Realm Address (AD.US.FIELDED)**](#_bookmark2222) template (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.2).
2. **SHALL** contain exactly one [1..1] **country**, which **SHALL** be selected from ValueSet [**Country**](#_bookmark341)

urn:oid:2.16.840.1.113883.3.88.12.80.63 (CONF:1126-33226).

1. **SHALL** contain exactly one [1..1] **state**, which **SHOULD** be selected from ValueSet

[**StateValueSet**](#_bookmark2234) urn:oid:2.16.840.1.113883.3.88.12.80.1 (CONF:1126-33228).

1. **SHALL** contain exactly one [1..1] **city** (ValueSet: [**City**](#_bookmark2249)

urn:oid:2.16.840.1.114222.4.11.973 **DYNAMIC**) (CONF:1126-202).

Note: City is required if the country is US. If country is not specified, it's assumed to be US. If country is something other than US, the city MAY be present but MAY be bound to different vocabularies. The value for city element SHALL be the "display name", selected from "city" Value Set.

1. **SHALL** contain exactly one [1..1] **postalCode**, which **SHOULD** be selected from ValueSet [**PostalCode**](#_bookmark343) urn:oid:2.16.840.1.113883.3.88.12.80.2 (CONF:1126-33227). Note: The expected format for the Postal Code is either NNNNN or NNNNN-NNNN
2. **SHALL** contain at least one [1..\*] **useablePeriod** (CONF:1126-206).

Note: usablePeriod indicates patient’s address history. For example, if patient had multiple prior addresses, then occupancy start (low) and end (high) date need to be provided for each address.

* 1. Such useablePeriods **SHALL** contain exactly one [1..1] **low** (CONF:1126-207). Note: to indicate the time when the patient began living at the address.
  2. Such useablePeriods **SHALL** contain zero or one [0..1] **high** (CONF:1126-208). Note: to indicate the time when the patient stopped living at the address.
     1. The high, if present, **MAY** contain zero or one [0..1] **@nullFlavor**

(CONF:1126-209).

Note: If the patient is currently residing at the specified address then "high" element should use nullFlavor attribute (@nullFlavor) with the value "NA" (Not applicable. Known to have no proper value); this value, in the context of address, means that patient address is CURRENT.

***Table*** ***225: City***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: City urn:oid:2.16.840.1.114222.4.11.973  US Geological Survey Geographic Names Information System - location codes.  Value Set Source: [**https://phinvads.cdc.gov/vads/ViewValueSet.action?id=19D34BBC-617F-**](https://phinvads.cdc.gov/vads/ViewValueSet.action?id=19D34BBC-617F-DD11-B38D-00188B398520) [**DD11-B38D-00188B398520**](https://phinvads.cdc.gov/vads/ViewValueSet.action?id=19D34BBC-617F-DD11-B38D-00188B398520) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| 975772 | U.S. Board on Geographic Names (USGS - GNIS) | urn:oid:2.16.840.1.11388 3.6.245 | New York |
| 1512650 | U.S. Board on Geographic Names (USGS - GNIS) | urn:oid:2.16.840.1.11388 3.6.245 | Seattle |
| 295004 | U.S. Board on Geographic Names (USGS - GNIS) | urn:oid:2.16.840.1.11388 3.6.245 | Miami |
| 423587 | U.S. Board on Geographic Names (USGS - GNIS) | urn:oid:2.16.840.1.11388 3.6.245 | Chicago |
| 531871 | U.S. Board on Geographic Names (USGS - GNIS) | urn:oid:2.16.840.1.11388 3.6.245 | Washington |
| ... | | | |

***Figure 103: US Realm Address (AD.US.FIELDED) (V2) - Cancer IG Specific Constraints example***

<addr use="HP">

<streetAddressLine>2222 Home Street</streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>99999</postalCode>

<country>US</country>

<useablePeriod>

<low velue="19700722" />

<high value="20130117" />

</useablePeriod>

</addr>

<addr use="HP">

<streetAddressLine>5555 Home Street Court</streetAddressLine>

<city>Ann Arbor</city>

<state>MI</state>

<postalCode>99999</postalCode>

<country>US</country>

<useablePeriod>

<low velue="20130117" />

<high nullFlavor="NA" />

</useablePeriod>

</addr>

## US Realm Date and Time (DTM.US.FIELDED) - Published

[effectiveTime: identifier urn:oid:2.16.840.1.113883.10.20.22.5.4 (open)]

***Table 226: US Realm Date and Time (DTM.US.FIELDED) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [US Realm Header (V2)](#_bookmark141) (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 227: US Realm Date and Time (DTM.US.FIELDED) Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **X P**  **a t h** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| effectiveTime (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.4) | | | | | |

* + 1. **SHALL** be precise to the day (CONF:81-10127).
    2. **SHOULD** be precise to the minute (CONF:81-10128).
    3. **MAY** be precise to the second (CONF:81-10129).
    4. If more precise than day, **SHOULD** include time-zone offset (CONF:81-10130).

***Figure 104: 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) - Published

[name: identifier urn:oid:2.16.840.1.113883.10.20.22.5.1 (open)]

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 [(h](http://www.w3c.org/TR/2008/REC-xml-20081126/))t[tp://www.w3c.org/TR/2008/REC-xml-20081126/).](http://www.w3c.org/TR/2008/REC-xml-20081126/))

***Table 228: 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-](#_bookmark2259)  [7154](#_bookmark2259) | urn:oid:2.16.840.1.113883.1.11.1  5913 (EntityNameUse) |
| family | 1..1 | SHALL | ST | [81-](#_bookmark2260)  [7159](#_bookmark2260) |  |
| @qualifier | 0..1 | MAY |  | [81-](#_bookmark2261)  [7160](#_bookmark2261) | urn:oid:2.16.840.1.113883.11.20. 9.26  (EntityPersonNamePartQualifier) |
| given | 1..\* | SHALL | ST | [81-](#_bookmark2262)  [7157](#_bookmark2262) |  |
| @qualifier | 0..1 | MAY |  | [81-](#_bookmark2263)  [7158](#_bookmark2263) | urn:oid:2.16.840.1.113883.11.20. 9.26  (EntityPersonNamePartQualifier) |
| prefix | 0..\* | MAY | ST | [81-](#_bookmark2264)  [7155](#_bookmark2264) |  |
| @qualifier | 0..1 | MAY |  | [81-](#_bookmark2265)  [7156](#_bookmark2265) | urn:oid:2.16.840.1.113883.11.20. 9.26  (EntityPersonNamePartQualifier) |
| suffix | 0..1 | MAY | ST | [81-](#_bookmark2266)  [7161](#_bookmark2266) |  |
| @qualifier | 0..1 | MAY |  | [81-](#_bookmark2267)  [7162](#_bookmark2267) | urn:oid:2.16.840.1.113883.11.20. 9.26  (EntityPersonNamePartQualifier) |

* + 1. **MAY** contain zero or one [0..1] **@use**, which **SHALL** be selected from ValueSet **[EntityNameUse](#_bookmark2269)**

urn:oid:2.16.840.1.113883.1.11.15913 **STATIC** 2005-05-01 (CONF:81-7154).

* + 1. **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**](#_bookmark2271)urn:oid:2.16.840.1.113883.11.20.9.26 **STATIC** 2011-09-30 (CONF:81-7160).
    2. **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**](#_bookmark2271)urn:oid:2.16.840.1.113883.11.20.9.26 **STATIC** 2011-09-30 (CONF:81-7158).
       2. The second occurrence of given (given2]) if provided, **SHALL** include middle name or middle initial (CONF:81-7163).
    3. **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**](#_bookmark2271)urn:oid:2.16.840.1.113883.11.20.9.26 **STATIC** 2011-09-30 (CONF:81-7156).
    4. **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**](#_bookmark2271)urn:oid:2.16.840.1.113883.11.20.9.26 **STATIC** 2011-09-30 (CONF:81-7162).
    5. **SHALL NOT** have mixed content except for white space (CONF:81-7278).

***Table*** ***229: EntityNameUse***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: EntityNameUse urn:oid:2.16.840.1.113883.1.11.15913 Value Set Source:  [**http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary\_tables/in**](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm)  [**frastructure/vocabulary/vocabulary.htm**](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| A | EntityNameUse | urn:oid:2.16.840.1.11388 3.5.45 | Artist/Stage |
| ABC | EntityNameUse | urn:oid:2.16.840.1.11388 3.5.45 | Alphabetic |
| ASGN | EntityNameUse | urn:oid:2.16.840.1.11388 3.5.45 | Assigned |
| C | EntityNameUse | urn:oid:2.16.840.1.11388 3.5.45 | License |
| I | EntityNameUse | urn:oid:2.16.840.1.11388 3.5.45 | Indigenous/Tribal |
| IDE | EntityNameUse | urn:oid:2.16.840.1.11388 3.5.45 | Ideographic |
| L | EntityNameUse | urn:oid:2.16.840.1.11388 3.5.45 | Legal |
| P | EntityNameUse | urn:oid:2.16.840.1.11388 3.5.45 | Pseudonym |
| PHON | EntityNameUse | urn:oid:2.16.840.1.11388 3.5.45 | Phonetic |
| R | EntityNameUse | urn:oid:2.16.840.1.11388 3.5.45 | Religious |
| ... | | | |

***Tabl******e 230: EntityPersonNamePartQualifier***

|  |  |  |  |
| --- | --- | --- | --- |
| Value Set: EntityPersonNamePartQualifier urn:oid:2.16.840.1.113883.11.20.9.26 Value Set Source: [**http://www.hl7.org**](http://www.hl7.org/) | | | |
| **Code** | **Code System** | **Code System OID** | **Print Name** |
| AC | EntityNamePartQualifier | urn:oid:2.16.840.1.11388 3.5.43 | academic |
| AD | EntityNamePartQualifier | urn:oid:2.16.840.1.11388 3.5.43 | adopted |
| BR | EntityNamePartQualifier | urn:oid:2.16.840.1.11388 3.5.43 | birth |
| CL | EntityNamePartQualifier | urn:oid:2.16.840.1.11388 3.5.43 | callme |
| IN | EntityNamePartQualifier | urn:oid:2.16.840.1.11388 3.5.43 | initial |
| NB | EntityNamePartQualifier | urn:oid:2.16.840.1.11388 3.5.43 | nobility |
| PR | EntityNamePartQualifier | urn:oid:2.16.840.1.11388 3.5.43 | professional |
| SP | EntityNamePartQualifier | urn:oid:2.16.840.1.11388 3.5.43 | spouse |
| TITLE | EntityNamePartQualifier | urn:oid:2.16.840.1.11388 3.5.43 | title |
| VV | EntityNamePartQualifier | urn:oid:2.16.840.1.11388 3.5.43 | voorvoegsel |

***Figure 105: US Realm Patient Name Example***

<name use="L">

<prefix qualifier="TITLE">Rep</suffix>

<given>Evelyn</given>

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

<family qualifier="BR">Everywoman</family>

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

</name>

## US Realm Patient Name (PTN.US.FIELDED) - Cancer IG Specific Constraints - Published

[name: identifier urn:hl7ii:2.16.840.1.113883.10.13.18:2014-08-08 (open)]

***Table 231: US Realm Patient Name (PTN.US.FIELDED) - Cancer IG Specific Constraints Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [Cancer Event Report Document (V1.1)](#_bookmark3) (required) |  |

***Table 232: US Realm Patient Name (PTN.US.FIELDED) - Cancer IG Specific Constraints Constraints Overview***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **XPath** | **Card.** | **Verb** | **Data Type** | **CONF#** | **Value** |
| name (identifier: urn:hl7ii:2.16.840.1.113883.10.13.18:2014-08-08) | | | | | |
| family | 1..1 | SHALL |  | [1126-](#_bookmark2277)  [244](#_bookmark2277) |  |
| @nullFlavor | 0..0 | SHALL NOT |  | [1126-](#_bookmark2278)  [33032](#_bookmark2278) |  |
| given | 1..\* | SHALL |  | [1126-](#_bookmark2279)  [243](#_bookmark2279) |  |
| @nullFlavor | 0..0 | SHALL NOT |  | [1126-](#_bookmark2280)  [33033](#_bookmark2280) |  |
| given | 1..\* | SHALL |  | [1126-](#_bookmark2281)  [33240](#_bookmark2281) |  |
| @nullFlavor | 0..1 | MAY |  | [1126-](#_bookmark2282)  [33241](#_bookmark2282) |  |
| suffix | 1..1 | SHOUL D |  | [1126-](#_bookmark2283)  [33242](#_bookmark2283) |  |

* + 1. Conforms to [**US Realm Patient Name (PTN.US.FIELDED)**](#_bookmark2257) template (identifier: urn:oid:2.16.840.1.113883.10.20.22.5.1).
    2. **SHALL** contain exactly one [1..1] **family** (CONF:1126-244).
       1. This family **SHALL NOT** contain [0..0] **@nullFlavor** (CONF:1126-33032).
    3. **SHALL** contain at least one [1..\*] **given** (CONF:1126-243) such that it Note: This (the first) occurrence of given is used for the first name.
       1. **SHALL NOT** contain [0..0] **@nullFlavor** (CONF:1126-33033).
    4. **SHALL** contain at least one [1..\*] **given** (CONF:1126-33240) such that it

Note: This (the second) occurrence of given is used for the middle name or middle initial.

* + - 1. **MAY** contain zero or one [0..1] **@nullFlavor** (CONF:1126-33241).
    1. **SHOULD** contain exactly one [1..1] **suffix** (CONF:1126-33242).

***Figure 106: US Realm Patient Name (PTN.US.FIELDED) - Cancer IG Specific Constraints example***

<name use="L">

<prefix qualifier="TITLE">Rep</prefix>

<given>Evelyn</given>

<given qualifier="IN">E</given>

<family qualifier="BR">Everywoman</family>

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

</name>

## US Realm Person Name (PN.US.FIELDED) - Published

[name: identifier urn:oid:2.16.840.1.113883.10.20.22.5.1.1 (open)]

***Table 233: US Realm Person Name (PN.US.FIELDED) Contexts***

|  |  |
| --- | --- |
| **Contained By:** | **Contains:** |
| [US Realm Header (V2)](#_bookmark141) (required)  [Procedure Activity Procedure (V2) - Cancer IG Specific](#_bookmark1547)  [Constraints](#_bookmark1547) (optional)  [Planned Encounter (V2) - Cancer IG Specific](#_bookmark1162)  [Constraints](#_bookmark1162) (optional)  [Radiation Boost Modality Procedure](#_bookmark1606) (optional)  [Radiation Regional Treatment Modality Procedure](#_bookmark1692) (optional)  [Cancer Event Report Document (V1.1)](#_bookmark3) (required) |  |

The US Realm Clinical Document Person Name datatype flavor is a set of reusable constraints that can be used for Persons.

***Table 234: 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-](#_bookmark2289)  [9368](#_bookmark2289) |  |

* + 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).

# T E M P L A T E I D S I N T H I S G U I D E

***Table 235: Template List***

|  |  |  |
| --- | --- | --- |
| **Template Title** | **Template Type** | **templateId** |
| [Cancer Event Report Document](#_bookmark3)  [(V1.1)](#_bookmark3) | document | urn:hl7ii:2.16.840.1.113883.10.13. 1:2015-01-29 |
| [US Realm Header (V2)](#_bookmark141) | document | urn:hl7ii:2.16.840.1.113883.10.20. 22.1.1:2014-06-09 |
| [Assessment Section](#_bookmark360) | section | urn:oid:2.16.840.1.113883.10.20.2 2.2.8 |
| [Cancer Diagnosis Section (entries](#_bookmark372)  [required) (V1.1)](#_bookmark372) | section | urn:hl7ii:2.16.840.1.113883.10.13. 2:2015-02-05 |
| [Family History Section (V2)](#_bookmark390) | section | urn:hl7ii:2.16.840.1.113883.10.20. 22.2.15:2014-06-09 |
| [Medications Administered Section](#_bookmark405)  [(V2)](#_bookmark405) | section | urn:hl7ii:2.16.840.1.113883.10.20. 22.2.38:2014-06-09 |
| [Medications Administered Section](#_bookmark420)  [(V2) - Cancer IG Specific](#_bookmark420)  [Constraints](#_bookmark420) | section | urn:hl7ii:2.16.840.1.113883.10.13. 12:2014-08-08 |
| [Medications Section (entries](#_bookmark430)  [required) (V2)](#_bookmark430) | section | urn:hl7ii:2.16.840.1.113883.10.20. 22.2.1.1:2014-06-09 |
| [Medications Section (entries](#_bookmark446)  [required) (V2) - Cancer IG Specific](#_bookmark446)  [Constraints](#_bookmark446) | section | urn:hl7ii:2.16.840.1.113883.10.13. 13:2014-08-08 |
| [Payers Section (V2)](#_bookmark456) | section | urn:hl7ii:2.16.840.1.113883.10.20. 22.2.18:2014-06-09 |
| [Plan of Treatment Section (V2)](#_bookmark471) | section | urn:hl7ii:2.16.840.1.113883.10.20. 22.2.10:2014-06-09 |
| [Plan of Treatment Section (V2) -](#_bookmark506)  [Cancer IG Specific Constraints](#_bookmark506) | section | urn:hl7ii:2.16.840.1.113883.10.13. 9:2014-08-08 |
| [Problem Section (entries required)](#_bookmark520)  [(V2)](#_bookmark520) | section | urn:hl7ii:2.16.840.1.113883.10.20. 22.2.5.1:2014-06-09 |
| [Problem Section (entries required)](#_bookmark539)  [(V2) - Cancer IG Specific](#_bookmark539)  [Constraints](#_bookmark539) | section | urn:hl7ii:2.16.840.1.113883.10.13. 21:2014-08-08 |
| [Procedures Section (entries](#_bookmark549)  [required) (V2)](#_bookmark549) | section | urn:hl7ii:2.16.840.1.113883.10.20. 22.2.7.1:2014-06-09 |
| [Procedures Section (entries](#_bookmark567)  [required) (V2) - Cancer IG Specific](#_bookmark567)  [Constraints](#_bookmark567) | section | urn:hl7ii:2.16.840.1.113883.10.13. 10:2014-08-08 |
| [Radiation Oncology Section](#_bookmark579) | section | urn:hl7ii:2.16.840.1.113883.10.13. 24:2014-08-08 |
| [Results Section (entries required)](#_bookmark595)  [(V2)](#_bookmark595) | section | urn:hl7ii:2.16.840.1.113883.10.20. 22.2.3.1:2014-06-09 |
| [Social History Section (V2)](#_bookmark611) | section | urn:hl7ii:2.16.840.1.113883.10.20. 22.2.17:2014-06-09 |

|  |  |  |
| --- | --- | --- |
| **Template Title** | **Template Type** | **templateId** |
| [Social History Section (V2) - Cancer](#_bookmark638)  [IG Specific Constraints (V1.1)](#_bookmark638) | section | urn:hl7ii:2.16.840.1.113883.10.13. 11:2015-01-29 |
| [Vital Signs Section (entries](#_bookmark658)  [required) (V2)](#_bookmark658) | section | urn:hl7ii:2.16.840.1.113883.10.20. 22.2.4.1:2014-06-09 |
| [Cancer Diagnosis Concern Act](#_bookmark675)  [(V1.1)](#_bookmark675) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 3:2015-02-05 |
| [Cancer Diagnosis Observation](#_bookmark700)  [(V1.1)](#_bookmark700) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 4:2015-02-05 |
| [Coverage Activity (V2)](#_bookmark813) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.60:2014-06-09 |
| [Distant Metastases Clinical](#_bookmark834) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 38:2015-02-05 |
| [Distant Metastases Pathologic](#_bookmark856) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 43:2015-02-05 |
| [Employment History Observation](#_bookmark878)  [Organizer (V1.1)](#_bookmark878) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 16:2015-01-29 |
| [Family History Observation (V2)](#_bookmark897) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.46:2014-06-09 |
| [Family History Organizer (V2)](#_bookmark924) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.45:2014-06-09 |
| [Health Status Observation (V2)](#_bookmark950) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.5:2014-06-09 |
| [Indication (V2)](#_bookmark969) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.19:2014-06-09 |
| [Indication (V2) - Cancer IG Specific](#_bookmark985)  [Constraints](#_bookmark985) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 19:2014-08-08 |
| [Medication Activity (V2)](#_bookmark996) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.16:2014-06-09 |
| [Medication Activity (V2) - Cancer](#_bookmark1072)  [IG Specific Constraints](#_bookmark1072) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 14:2014-08-08 |
| [Medication Information (V2)](#_bookmark1083) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.23:2014-06-09 |
| [No Known TNM Clinical Stage](#_bookmark1101)  [Observation (V1.1)](#_bookmark1101) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 31:2015-04-02 |
| [No Known TNM Pathologic Stage](#_bookmark1116)  [Observation (V1.1)](#_bookmark1116) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 32:2015-04-02 |
| [Planned Encounter (V2)](#_bookmark1131) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.40:2014-06-09 |
| [Planned Encounter (V2) - Cancer](#_bookmark1162)  [IG Specific Constraints](#_bookmark1162) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 20:2014-08-08 |
| [Planned Medication Activity (V2)](#_bookmark1187) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.42:2014-06-09 |
| [Planned Procedure (V2)](#_bookmark1228) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.41:2014-06-09 |
| [Policy Activity (V2)](#_bookmark1260) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.61:2014-06-09 |

|  |  |  |
| --- | --- | --- |
| **Template Title** | **Template Type** | **templateId** |
| [Primary Tumor Clinical](#_bookmark1327) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 36:2015-02-05 |
| [Primary Tumor Pathologic](#_bookmark1349) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 41:2015-02-05 |
| [Problem Concern Act (V2)](#_bookmark1371) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.3:2014-06-09 |
| [Problem Concern Act (V2) - Cancer](#_bookmark1397)  [IG Specific Constraints](#_bookmark1397) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 22:2014-08-08 |
| [Problem Observation (V2)](#_bookmark1410) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.4:2014-06-09 |
| [Problem Observation (V2) - Cancer](#_bookmark1450)  [IG Specific Constraints](#_bookmark1450) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 23:2014-08-08 |
| [Problem Status (DEPRECATED)](#_bookmark1465) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.6:2014-06-09 |
| [Procedure Activity Procedure (V2)](#_bookmark1481) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.14:2014-06-09 |
| [Procedure Activity Procedure (V2) -](#_bookmark1547)  [Cancer IG Specific Constraints](#_bookmark1547) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 15:2014-08-08 |
| [Radiation Boost Dose - cGy](#_bookmark1572) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 28:2014-08-08 |
| [Radiation Boost Modality Organizer](#_bookmark1590) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 30:2014-08-08 |
| [Radiation Boost Modality](#_bookmark1606)  [Procedure](#_bookmark1606) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 26:2014-08-08 |
| [Radiation Regional Dose - cGy](#_bookmark1658) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 27:2014-08-08 |
| [Radiation Regional Treatment](#_bookmark1676)  [Modality Organizer](#_bookmark1676) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 29:2014-08-08 |
| [Radiation Regional Treatment](#_bookmark1692)  [Modality Procedure](#_bookmark1692) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 25:2014-08-08 |
| [Regional Lymph Nodes Clinical](#_bookmark1740) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 37:2015-02-05 |
| [Regional Lymph Nodes Pathologic](#_bookmark1762) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 42:2015-02-05 |
| [Result Observation (V2)](#_bookmark1784) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.2:2014-06-09 |
| [Result Organizer (V2)](#_bookmark1815) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.1:2014-06-09 |
| [Service Delivery Location](#_bookmark1835) | entry | urn:oid:2.16.840.1.113883.10.20.2 2.4.32 |
| [Smoking Status - Meaningful Use](#_bookmark1851)  [(V2)](#_bookmark1851) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.78:2014-06-09 |
| [Social History Observation (V2)](#_bookmark1873) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.38:2014-06-09 |
| [Stager Clinical Cancer](#_bookmark1893) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 39:2015-02-05 |

|  |  |  |
| --- | --- | --- |
| **Template Title** | **Template Type** | **templateId** |
| [Stager Pathologic Cancer](#_bookmark1915) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 44:2015-02-05 |
| [TNM Clinical Stage Group](#_bookmark1937) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 35:2015-02-05 |
| [TNM Clinical Stage Observation](#_bookmark1987)  [(V1.1)](#_bookmark1987) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 5:2015-02-05 |
| [TNM Pathologic Stage Group](#_bookmark2010) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 40:2015-02-05 |
| [TNM Pathologic Stage Observation](#_bookmark2060)  [(V1.1)](#_bookmark2060) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 7:2015-02-06 |
| [Tobacco Use (V2)](#_bookmark2083) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.85:2014-06-09 |
| [Usual Industry History](#_bookmark2107) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 33:2015-01-29 |
| [Usual Occupation History](#_bookmark2132) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 34:2015-01-29 |
| [Vital Sign Observation (V2)](#_bookmark2157) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.27:2014-06-09 |
| [Vital Signs Organizer (V2)](#_bookmark2181) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.26:2014-06-09 |
| [Author Participation](#_bookmark2202) | unspecified | urn:oid:2.16.840.1.113883.10.20.2 2.4.119 |
| [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED)](#_bookmark2222) | unspecified | urn:oid:2.16.840.1.113883.10.20.2 2.5.2 |
| [US Realm Address](#_bookmark2237)  [(AD.US.FIELDED) (V2) - Cancer IG](#_bookmark2237)  [Specific Constraints](#_bookmark2237) | unspecified | urn:hl7ii:2.16.840.1.113883.10.13. 17:2014-08-08 |
| [US Realm Date and Time](#_bookmark2252)  [(DTM.US.FIELDED)](#_bookmark2252) | unspecified | urn:oid:2.16.840.1.113883.10.20.2 2.5.4 |
| [US Realm Patient Name](#_bookmark2257)  [(PTN.US.FIELDED)](#_bookmark2257) | unspecified | urn:oid:2.16.840.1.113883.10.20.2 2.5.1 |
| [US Realm Patient Name](#_bookmark2274)  [(PTN.US.FIELDED) - Cancer IG](#_bookmark2274)  [Specific Constraints](#_bookmark2274) | unspecified | urn:hl7ii:2.16.840.1.113883.10.13. 18:2014-08-08 |
| [US Realm Person Name](#_bookmark2286)  [(PN.US.FIELDED)](#_bookmark2286) | unspecified | urn:oid:2.16.840.1.113883.10.20.2 2.5.1.1 |

***Table 236: Template Containments***

|  |  |  |
| --- | --- | --- |
| **Template Title** | **Template Type** | **templateId** |
| [Cancer Event Report Document](#_bookmark3)  [(V1.1)](#_bookmark3) | document | urn:hl7ii:2.16.840.1.113883.10.13. 1:2015-01-29 |
| [Assessment Section](#_bookmark360) | section | urn:oid:2.16.840.1.113883.10.20.2 2.2.8 |
| [Cancer Diagnosis Section (entries](#_bookmark372)  [required) (V1.1)](#_bookmark372) | section | urn:hl7ii:2.16.840.1.113883.10.13. 2:2015-02-05 |
| [Cancer Diagnosis Concern Act](#_bookmark675)  [(V1.1)](#_bookmark675) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 3:2015-02-05 |
| [Cancer Diagnosis Observation](#_bookmark700)  [(V1.1)](#_bookmark700) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 4:2015-02-05 |
| [No Known TNM Clinical](#_bookmark1101)  [Stage Observation (V1.1)](#_bookmark1101) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 31:2015-04-02 |
| [No Known TNM Pathologic](#_bookmark1116)  [Stage Observation (V1.1)](#_bookmark1116) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 32:2015-04-02 |
| [TNM Clinical Stage](#_bookmark1987)  [Observation (V1.1)](#_bookmark1987) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 5:2015-02-05 |
| [TNM Clinical Stage Group](#_bookmark1937) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 35:2015-02-05 |
| [Distant Metastases](#_bookmark834)  [Clinical](#_bookmark834) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 38:2015-02-05 |
| [Primary Tumor Clinical](#_bookmark1327) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 36:2015-02-05 |
| [Regional Lymph Nodes](#_bookmark1740)  [Clinical](#_bookmark1740) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 37:2015-02-05 |
| [Stager Clinical Cancer](#_bookmark1893) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 39:2015-02-05 |
| [TNM Pathologic Stage](#_bookmark2060)  [Observation (V1.1)](#_bookmark2060) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 7:2015-02-06 |
| [TNM Pathologic Stage](#_bookmark2010)  [Group](#_bookmark2010) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 40:2015-02-05 |
| [Distant Metastases](#_bookmark856)  [Pathologic](#_bookmark856) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 43:2015-02-05 |
| [Primary Tumor](#_bookmark1349)  [Pathologic](#_bookmark1349) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 41:2015-02-05 |
| [Regional Lymph Nodes](#_bookmark1762)  [Pathologic](#_bookmark1762) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 42:2015-02-05 |
| [Stager Pathologic Cancer](#_bookmark1915) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 44:2015-02-05 |
| [Health Status Observation (V2)](#_bookmark950) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.5:2014-06-09 |
| [Family History Section (V2)](#_bookmark390) | section | urn:hl7ii:2.16.840.1.113883.10.20. 22.2.15:2014-06-09 |
| [Family History Organizer (V2)](#_bookmark924) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.45:2014-06-09 |

|  |  |  |
| --- | --- | --- |
| **Template Title** | **Template Type** | **templateId** |
| [Family History Observation](#_bookmark897)  [(V2)](#_bookmark897) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.46:2014-06-09 |
| [Medications Administered Section](#_bookmark420)  [(V2) - Cancer IG Specific](#_bookmark420)  [Constraints](#_bookmark420) | section | urn:hl7ii:2.16.840.1.113883.10.13. 12:2014-08-08 |
| [Medication Activity (V2) -](#_bookmark1072)  [Cancer IG Specific Constraints](#_bookmark1072) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 14:2014-08-08 |
| [Indication (V2) - Cancer IG](#_bookmark985)  [Specific Constraints](#_bookmark985) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 19:2014-08-08 |
| [Medications Section (entries](#_bookmark446)  [required) (V2) - Cancer IG](#_bookmark446)  [Specific Constraints](#_bookmark446) | section | urn:hl7ii:2.16.840.1.113883.10.13. 13:2014-08-08 |
| [Medication Activity (V2) -](#_bookmark1072)  [Cancer IG Specific Constraints](#_bookmark1072) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 14:2014-08-08 |
| [Indication (V2) - Cancer IG](#_bookmark985)  [Specific Constraints](#_bookmark985) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 19:2014-08-08 |
| [Payers Section (V2)](#_bookmark456) | section | urn:hl7ii:2.16.840.1.113883.10.20. 22.2.18:2014-06-09 |
| [Coverage Activity (V2)](#_bookmark813) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.60:2014-06-09 |
| [Policy Activity (V2)](#_bookmark1260) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.61:2014-06-09 |
| [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED)](#_bookmark2222) | unspecified | urn:oid:2.16.840.1.113883.10.20.2 2.5.2 |
| [Plan of Treatment Section (V2) -](#_bookmark506)  [Cancer IG Specific Constraints](#_bookmark506) | section | urn:hl7ii:2.16.840.1.113883.10.13. 9:2014-08-08 |
| [Planned Encounter (V2) -](#_bookmark1162)  [Cancer IG Specific Constraints](#_bookmark1162) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 20:2014-08-08 |
| [Service Delivery Location](#_bookmark1835) | entry | urn:oid:2.16.840.1.113883.10.20.2 2.4.32 |
| [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED)](#_bookmark2222) | unspecified | urn:oid:2.16.840.1.113883.10.20.2 2.5.2 |
| [US Realm Person Name](#_bookmark2286)  [(PN.US.FIELDED)](#_bookmark2286) | unspecified | urn:oid:2.16.840.1.113883.10.20.2 2.5.1.1 |
| [Planned Medication Activity (V2)](#_bookmark1187) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.42:2014-06-09 |
| [Author Participation](#_bookmark2202) | unspecified | urn:oid:2.16.840.1.113883.10.20.2 2.4.119 |
| [Indication (V2)](#_bookmark969) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.19:2014-06-09 |
| [Medication Information (V2)](#_bookmark1083) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.23:2014-06-09 |
| [Planned Procedure (V2)](#_bookmark1228) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.41:2014-06-09 |
| [Author Participation](#_bookmark2202) | unspecified | urn:oid:2.16.840.1.113883.10.20.2 2.4.119 |

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| [Problem Section (entries required)](#_bookmark539)  [(V2) - Cancer IG Specific](#_bookmark539)  [Constraints](#_bookmark539) | section | urn:hl7ii:2.16.840.1.113883.10.13. 21:2014-08-08 |
| [Problem Concern Act (V2) -](#_bookmark1397)  [Cancer IG Specific Constraints](#_bookmark1397) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 22:2014-08-08 |
| [Problem Observation (V2) -](#_bookmark1450)  [Cancer IG Specific Constraints](#_bookmark1450) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 23:2014-08-08 |
| [Procedures Section (entries](#_bookmark567)  [required) (V2) - Cancer IG](#_bookmark567)  [Specific Constraints](#_bookmark567) | section | urn:hl7ii:2.16.840.1.113883.10.13. 10:2014-08-08 |
| [Procedure Activity Procedure](#_bookmark1547)  [(V2) - Cancer IG Specific](#_bookmark1547)  [Constraints](#_bookmark1547) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 15:2014-08-08 |
| [Indication (V2) - Cancer IG](#_bookmark985)  [Specific Constraints](#_bookmark985) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 19:2014-08-08 |
| [Service Delivery Location](#_bookmark1835) | entry | urn:oid:2.16.840.1.113883.10.20.2 2.4.32 |
| [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED)](#_bookmark2222) | unspecified | urn:oid:2.16.840.1.113883.10.20.2 2.5.2 |
| [US Realm Person Name](#_bookmark2286)  [(PN.US.FIELDED)](#_bookmark2286) | unspecified | urn:oid:2.16.840.1.113883.10.20.2 2.5.1.1 |
| [Radiation Oncology Section](#_bookmark579) | section | urn:hl7ii:2.16.840.1.113883.10.13. 24:2014-08-08 |
| [Radiation Boost Modality](#_bookmark1590)  [Organizer](#_bookmark1590) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 30:2014-08-08 |
| [Radiation Boost Modality](#_bookmark1606)  [Procedure](#_bookmark1606) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 26:2014-08-08 |
| [Indication (V2) - Cancer IG](#_bookmark985)  [Specific Constraints](#_bookmark985) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 19:2014-08-08 |
| [Radiation Boost Dose - cGy](#_bookmark1572) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 28:2014-08-08 |
| [Service Delivery Location](#_bookmark1835) | entry | urn:oid:2.16.840.1.113883.10.20.2 2.4.32 |
| [US Realm Person Name](#_bookmark2286)  [(PN.US.FIELDED)](#_bookmark2286) | unspecified | urn:oid:2.16.840.1.113883.10.20.2 2.5.1.1 |
| [Radiation Regional Treatment](#_bookmark1676)  [Modality Organizer](#_bookmark1676) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 29:2014-08-08 |
| [Radiation Regional](#_bookmark1692)  [Treatment Modality](#_bookmark1692)  [Procedure](#_bookmark1692) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 25:2014-08-08 |
| [Indication (V2) - Cancer IG](#_bookmark985)  [Specific Constraints](#_bookmark985) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 19:2014-08-08 |
| [Radiation Regional Dose -](#_bookmark1658)  [cGy](#_bookmark1658) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 27:2014-08-08 |

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| [US Realm Person Name](#_bookmark2286)  [(PN.US.FIELDED)](#_bookmark2286) | unspecified | urn:oid:2.16.840.1.113883.10.20.2 2.5.1.1 |
| [Results Section (entries required)](#_bookmark595)  [(V2)](#_bookmark595) | section | urn:hl7ii:2.16.840.1.113883.10.20. 22.2.3.1:2014-06-09 |
| [Result Organizer (V2)](#_bookmark1815) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.1:2014-06-09 |
| [Author Participation](#_bookmark2202) | unspecified | urn:oid:2.16.840.1.113883.10.20.2 2.4.119 |
| [Result Observation (V2)](#_bookmark1784) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.2:2014-06-09 |
| [Author Participation](#_bookmark2202) | unspecified | urn:oid:2.16.840.1.113883.10.20.2 2.4.119 |
| [Social History Section (V2) -](#_bookmark638)  [Cancer IG Specific Constraints](#_bookmark638)  [(V1.1)](#_bookmark638) | section | urn:hl7ii:2.16.840.1.113883.10.13. 11:2015-01-29 |
| [Employment History](#_bookmark878)  [Observation Organizer (V1.1)](#_bookmark878) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 16:2015-01-29 |
| [Usual Industry History](#_bookmark2107) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 33:2015-01-29 |
| [Usual Occupation History](#_bookmark2132) | entry | urn:hl7ii:2.16.840.1.113883.10.13. 34:2015-01-29 |
| [Social History Observation (V2)](#_bookmark1873) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.38:2014-06-09 |
| [Author Participation](#_bookmark2202) | unspecified | urn:oid:2.16.840.1.113883.10.20.2 2.4.119 |
| [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED)](#_bookmark2222) | unspecified | urn:oid:2.16.840.1.113883.10.20.2 2.5.2 |
| [US Realm Address](#_bookmark2237)  [(AD.US.FIELDED) (V2) - Cancer](#_bookmark2237)  [IG Specific Constraints](#_bookmark2237) | unspecified | urn:hl7ii:2.16.840.1.113883.10.13. 17:2014-08-08 |
| [US Realm Patient Name](#_bookmark2274)  [(PTN.US.FIELDED) - Cancer IG](#_bookmark2274)  [Specific Constraints](#_bookmark2274) | unspecified | urn:hl7ii:2.16.840.1.113883.10.13. 18:2014-08-08 |
| [US Realm Person Name](#_bookmark2286)  [(PN.US.FIELDED)](#_bookmark2286) | unspecified | urn:oid:2.16.840.1.113883.10.20.2 2.5.1.1 |
| [Vital Signs Section (entries](#_bookmark658)  [required) (V2)](#_bookmark658) | section | urn:hl7ii:2.16.840.1.113883.10.20. 22.2.4.1:2014-06-09 |
| [Vital Signs Organizer (V2)](#_bookmark2181) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.26:2014-06-09 |
| [Author Participation](#_bookmark2202) | unspecified | urn:oid:2.16.840.1.113883.10.20.2 2.4.119 |
| [Vital Sign Observation (V2)](#_bookmark2157) | entry | urn:hl7ii:2.16.840.1.113883.10.20. 22.4.27:2014-06-09 |
| [Author Participation](#_bookmark2202) | unspecified | urn:oid:2.16.840.1.113883.10.20.2 |

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| [US Realm Header (V2)](#_bookmark141) | document | urn:hl7ii:2.16.840.1.113883.10.20. 22.1.1:2014-06-09 |
| [US Realm Address](#_bookmark2222)  [(AD.US.FIELDED)](#_bookmark2222) | unspecified | urn:oid:2.16.840.1.113883.10.20.2 2.5.2 |
| [US Realm Date and Time](#_bookmark2252)  [(DTM.US.FIELDED)](#_bookmark2252) | unspecified | urn:oid:2.16.840.1.113883.10.20.2 2.5.4 |
| [US Realm Person Name](#_bookmark2286)  [(PN.US.FIELDED)](#_bookmark2286) | unspecified | urn:oid:2.16.840.1.113883.10.20.2 2.5.1.1 |

# V A L U E S E T S I N T H I S G U I D E

***Table 237: Value Sets***

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| [Act Priority](#_bookmark1542) | urn:oid:2.16.840.1.113883.1.11.16 866 | [http://www.hl7.org/documentcent](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm)  [er/public/standards/vocabulary/v](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm)  [ocabulary\_tables/infrastructure/vo](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm)  [cabulary/vocabulary.htm](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm) |
| [ActStatus](#_bookmark1068) | urn:oid:2.16.840.1.113883.1.11.15 9331 | [http://www.hl7.org](http://www.hl7.org/) |
| [AdministrableDrugForm](#_bookmark1066) | urn:oid:2.16.840.1.113883.1.11.14 570 | [http://www.hl7.org/documentcent](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html)  [er/public/standards/vocabulary/v](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html)  [ocabulary\_tables/infrastructure/vo](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html)  [cabulary/vocabulary.html](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html) |
| [Administrative Gender (HL7 V3)](#_bookmark331) | urn:oid:2.16.840.1.113883.1.11.1 | [http://www.hl7.org](http://www.hl7.org/) |
| [Body Site](#_bookmark1062) | urn:oid:2.16.840.1.113883.3.88.12  .3221.8.9 | [https://vsac.nlm.nih.gov](https://vsac.nlm.nih.gov/)  [http://phinvads.cdc.gov/vads/Vie](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.3221.8.9)  [wValueSet.action?oid=2.16.840.1.1](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.3221.8.9)  [13883.3.88.12.3221.8.9](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.3221.8.9) |
| [City](#_bookmark2249) | urn:oid:2.16.840.1.114222.4.11.97 3 | [https://phinvads.cdc.gov/vads/Vie](https://phinvads.cdc.gov/vads/ViewValueSet.action?id=19D34BBC-617F-DD11-B38D-00188B398520)  [wValueSet.action?id=19D34BBC-](https://phinvads.cdc.gov/vads/ViewValueSet.action?id=19D34BBC-617F-DD11-B38D-00188B398520)  [617F-DD11-B38D-00188B398520](https://phinvads.cdc.gov/vads/ViewValueSet.action?id=19D34BBC-617F-DD11-B38D-00188B398520) |
| [Clinical Substance](#_bookmark1098) | urn:oid:2.16.840.1.113762.1.4.101 0.2 | <https://vsac.nlm.nih.gov/> |
| [Country](#_bookmark341) | urn:oid:2.16.840.1.113883.3.88.12  .80.63 | [http://www.iso.org/iso/country\_co](http://www.iso.org/iso/country_codes/iso_3166_code_lists.htm)  [des/iso\_3166\_code\_lists.htm](http://www.iso.org/iso/country_codes/iso_3166_code_lists.htm) |
| [Coverage Role Type](#_bookmark1324) | urn:oid:2.16.840.1.113883.1.11.18 877 | [http://www.hl7.org/documentcent](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html)  [er/public/standards/vocabulary/v](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html)  [ocabulary\_tables/infrastructure/vo](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html)  [cabulary/vocabulary.html](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html) |
| [Current Smoking Status](#_bookmark1870) | urn:oid:2.16.840.1.113883.11.20.9  .38 | [https://vsac.nlm.nih.gov](https://vsac.nlm.nih.gov/) |
| [Encounter Planned](#_bookmark1159) | urn:oid:2.16.840.1.113883.11.20.9  .52 | [http://vtsl.vetmed.vt.edu/Terminol](http://vtsl.vetmed.vt.edu/TerminologyMgt/RF2Browser/ISA.cfm?SCT_ConceptID=308335008)  [ogyMgt/RF2Browser/ISA.cfm?SCT](http://vtsl.vetmed.vt.edu/TerminologyMgt/RF2Browser/ISA.cfm?SCT_ConceptID=308335008)  [\_ConceptID=308335008](http://vtsl.vetmed.vt.edu/TerminologyMgt/RF2Browser/ISA.cfm?SCT_ConceptID=308335008)  [https://phinvads.cdc.gov/vads/Vie](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.11.20.9.52)  [wValueSet.action?oid=2.16.840.1.1](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.11.20.9.52)  [13883.11.20.9.52](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.11.20.9.52) |
| [EntityNameUse](#_bookmark2269) | urn:oid:2.16.840.1.113883.1.11.15 913 | [http://www.hl7.org/documentcent](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm)  [er/public/standards/vocabulary/v](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm)  [ocabulary\_tables/infrastructure/vo](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm)  [cabulary/vocabulary.htm](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm) |
| [EntityPersonNamePartQualifier](#_bookmark2271) | urn:oid:2.16.840.1.113883.11.20.9  .26 | [http://www.hl7.org](http://www.hl7.org/) |
| [Ethnicity](#_bookmark337) | urn:oid:2.16.840.1.114222.4.11.83 | [http://phinvads.cdc.gov/vads/Vie](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=35D34BBC-617F-DD11-B38D-00188B398520)  [wValueSet.action?id=35D34BBC-](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=35D34BBC-617F-DD11-B38D-00188B398520) |

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| **Name** | **OID** | **URL** |
|  | 7 | 617F-DD11-B38D-00188B398520 |
| [Family Member Value Set](#_bookmark947) | urn:oid:2.16.840.1.113883.1.11.19 579 | [http://www.hl7.org/documentcent](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm)  [er/public/standards/vocabulary/v](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm)  [ocabulary\_tables/infrastructure/vo](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm)  [cabulary/vocabulary.htm](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm) |
| [Healthcare Provider Taxonomy](#_bookmark351)  [(HIPAA)](#_bookmark351) | urn:oid:2.16.840.1.114222.4.11.10 66 | [http://www.nucc.org/index.php?o](http://www.nucc.org/index.php?option=com_content&amp;view=article&amp;id=14&amp;Itemid=125)  [ption=com\_content&view=article&i](http://www.nucc.org/index.php?option=com_content&amp;view=article&amp;id=14&amp;Itemid=125)  [d=14&Itemid=125](http://www.nucc.org/index.php?option=com_content&amp;view=article&amp;id=14&amp;Itemid=125) |
| [HealthcareServiceLocation](#_bookmark1848) | urn:oid:2.16.840.1.113883.1.11.20 275 | [http://phinvads.cdc.gov/vads/Sea](http://phinvads.cdc.gov/vads/SearchAllVocab_search.action?searchOptions.searchText=Healthcare%2BService%2BLocation%2B%28NHSN%29)  [rchAllVocab\_search.action?search](http://phinvads.cdc.gov/vads/SearchAllVocab_search.action?searchOptions.searchText=Healthcare%2BService%2BLocation%2B%28NHSN%29)  [Options.searchText=Healthcare+Se](http://phinvads.cdc.gov/vads/SearchAllVocab_search.action?searchOptions.searchText=Healthcare%2BService%2BLocation%2B%28NHSN%29)  [rvice+Location+%28NHSN%29](http://phinvads.cdc.gov/vads/SearchAllVocab_search.action?searchOptions.searchText=Healthcare%2BService%2BLocation%2B%28NHSN%29) |
| [HealthStatus](#_bookmark966) | urn:oid:2.16.840.1.113883.1.11.20  .12 | <https://www.hl7.org/> |
| [HL7 BasicConfidentialityKind](#_bookmark325) | urn:oid:2.16.840.1.113883.1.11.16 926 | [http://www.hl7.org/documentcent](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html)  [er/public/standards/vocabulary/v](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html)  [ocabulary\_tables/infrastructure/vo](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html)  [cabulary/vocabulary.html](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html) |
| [HL7FinanciallyResponsiblePartyTy](#_bookmark1322)  [pe](#_bookmark1322) | urn:oid:2.16.840.1.113883.1.11.10 416 | [http://www.hl7.org](http://www.hl7.org/) |
| [INDRoleclassCodes](#_bookmark353) | urn:oid:2.16.840.1.113883.11.20.9  .33 | [http://www.hl7.org](http://www.hl7.org/) |
| [Language](#_bookmark327) | urn:oid:2.16.840.1.113883.1.11.11 526 | [http://www.loc.gov/standards/iso](http://www.loc.gov/standards/iso639-2/php/code_list.php)  [639-2/php/code\_list.php](http://www.loc.gov/standards/iso639-2/php/code_list.php) |
| [LanguageAbilityMode](#_bookmark347) | urn:oid:2.16.840.1.113883.1.11.12 249 | [http://www.hl7.org](http://www.hl7.org/) |
| [LanguageAbilityProficiency](#_bookmark349) | urn:oid:2.16.840.1.113883.1.11.12 199 | [http://www.hl7.org](http://www.hl7.org/) |
| [Laterality](#_bookmark809) | urn:oid:2.16.840.1.113883.3.520.4  .22 | [http://phinvads.cdc.gov/vads/Vie](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.22)  [wValueSet.action?oid=2.16.840.1.1](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.22)  [13883.3.520.4.22](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.22) |
| [Marital Status](#_bookmark131) | urn:oid:2.16.840.1.113883.1.11.12 212 | [http://www.hl7.org](http://www.hl7.org/) |
| [Medication Clinical Drug](#_bookmark1096) | urn:oid:2.16.840.1.113762.1.4.101 0.4 | [http://phinvads.cdc.gov/vads/Vie](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=239BEF3E-971C-DF11-B334-0015173D1785)  [wValueSet.action?id=239BEF3E-](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=239BEF3E-971C-DF11-B334-0015173D1785)  [971C-DF11-B334-0015173D1785](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=239BEF3E-971C-DF11-B334-0015173D1785) |
| [Medication Route FDA](#_bookmark1060) | urn:oid:2.16.840.1.113883.3.88.12  .3221.8.7 | [https://phinvads.cdc.gov/vads/Vie](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.3221.8.7)  [wValueSet.action?oid=2.16.840.1.1](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.3221.8.7)  [13883.3.88.12.3221.8.7](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.3221.8.7) |
| [MoodCodeEvnInt](#_bookmark1058) | urn:oid:2.16.840.1.113883.11.20.9  .18 | [http://www.hl7.org](http://www.hl7.org/) |
| Morphologic Abnormality of Neoplasm | 2.16.840.1.114222.4.11.7256 | [https://phinvads.cdc.gov/vads/Vie](https://phinvads.cdc.gov/vads/ViewValueSet.action?id=D566BE8F-D525-4273-BE75-EC972CFAC0B8)  [wValueSet.action?id=D566BE8F-](https://phinvads.cdc.gov/vads/ViewValueSet.action?id=D566BE8F-D525-4273-BE75-EC972CFAC0B8)  [D525-4273-BE75-EC972CFAC0B8](https://phinvads.cdc.gov/vads/ViewValueSet.action?id=D566BE8F-D525-4273-BE75-EC972CFAC0B8) |
| [NAACCR Behavior Code](#_bookmark803) | urn:oid:2.16.840.1.113883.3.520.4  .14 | [http://phinvads.cdc.gov/vads/Vie](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=533DA165-1730-E211-8ECF-001A4BE7FA90)  [wValueSet.action?id=533DA165-](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=533DA165-1730-E211-8ECF-001A4BE7FA90)  [1730-E211-8ECF-001A4BE7FA90](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=533DA165-1730-E211-8ECF-001A4BE7FA90) |
| [NAACCR Diagnostic Confirmation](#_bookmark805) | urn:oid:2.16.840.1.113883.3.520.4 | [http://phinvads.cdc.gov/vads/Vie](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=F57C484F-DA04-E011-9273-00188B39829B) |

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| [NAACCR Grade](#_bookmark807) | urn:oid:2.16.840.1.113883.3.520.4  .15 | [http://phinvads.cdc.gov/vads/Vie](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=ED08D650-DD04-E011-9273-00188B39829B)  [wValueSet.action?id=ED08D650-](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=ED08D650-DD04-E011-9273-00188B39829B)  [DD04-E011-9273-00188B39829B](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=ED08D650-DD04-E011-9273-00188B39829B) |
| [NAACCR TNM Clinical Staged By](#_bookmark1912) | urn:oid:2.16.840.1.113883.3.520.4  .4 | [https://phinvads.cdc.gov/vads/Vie](https://phinvads.cdc.gov/vads/ViewValueSet.action?id=6336A7B1-E404-E011-9273-00188B39829B)  [wValueSet.action?id=6336A7B1-](https://phinvads.cdc.gov/vads/ViewValueSet.action?id=6336A7B1-E404-E011-9273-00188B39829B)  [E404-E011-9273-00188B39829B](https://phinvads.cdc.gov/vads/ViewValueSet.action?id=6336A7B1-E404-E011-9273-00188B39829B) |
| [NAACCR TNM Pathologic Staged By](#_bookmark1934) | urn:oid:2.16.840.1.113883.3.520.4  .27 | [https://phinvads.cdc.gov/vads/Vie](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.27)  [wValueSet.action?oid=2.16.840.1.1](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.27)  [13883.3.520.4.27](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.27) |
| [NullValues\_UNK\_NA](#_bookmark135) | urn:oid:2.16.840.1.113883.10.20.5  .9.2 | N/A |
| [Observation Interpretation (HL7)](#_bookmark1810) | urn:oid:2.16.840.1.113883.1.11.78 | [http://www.hl7.org/documentcent](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm)  [er/public/standards/vocabulary/v](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm)  [ocabulary\_tables/infrastructure/vo](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm)  [cabulary/vocabulary.htm](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm) |
| [ParticipationFunction](#_bookmark357) | urn:oid:2.16.840.1.113883.1.11.10 267 | [http://www.hl7.org/documentcent](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm)  [er/public/standards/vocabulary/v](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm)  [ocabulary\_tables/infrastructure/vo](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm)  [cabulary/vocabulary.htm](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.htm) |
| [PatientLanguage](#_bookmark345) | urn:oid:2.16.840.1.113883.11.20.9  .64 | [http://www.loc.gov/standards/iso](http://www.loc.gov/standards/iso639-2/php/code_list.php)  [639-2/php/code\_list.php](http://www.loc.gov/standards/iso639-2/php/code_list.php) |
| [Payer](#_bookmark1320) | urn:oid:2.16.840.1.114222.4.11.35 91 | [http://www.phdsc.org/standards/](http://www.phdsc.org/standards/payer-typology.asp)  [payer-typology.asp](http://www.phdsc.org/standards/payer-typology.asp) |
| [Personal And Legal Relationship](#_bookmark339)  [Role Type](#_bookmark339) | urn:oid:2.16.840.1.113883.11.20.1 2.1 | [http://www.hl7.org/documentcent](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html)  [er/public/standards/vocabulary/v](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html)  [ocabulary\_tables/infrastructure/vo](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html)  [cabulary/vocabulary.html](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html) |
| PHVS\_Industry\_CDC\_Census2010 | urn:oid:2.16.840.1.114222.4.11.71 87 | [http://phinvads.cdc.gov/vads/Vie](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=2E3330DF-CBD5-43E3-A6B7-FF9BFA52680E)  [wValueSet.action?id=2E3330DF-](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=2E3330DF-CBD5-43E3-A6B7-FF9BFA52680E)  [CBD5-43E3-A6B7-FF9BFA52680E](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=2E3330DF-CBD5-43E3-A6B7-FF9BFA52680E) |
| PHVS\_Occupation\_CDC\_Census20 10 | urn:oid:2.16.840.1.114222.4.11.71 86 | [http://phinvads.cdc.gov/vads/Vie](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=1445D71C-F37F-4504-8B6C-BA48C5A3F4CA)  [wValueSet.action?id=1445D71C-](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=1445D71C-F37F-4504-8B6C-BA48C5A3F4CA)  [F37F-4504-8B6C-BA48C5A3F4CA](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=1445D71C-F37F-4504-8B6C-BA48C5A3F4CA) |
| [Planned moodCode](#_bookmark1157)  [(Act/Encounter/Procedure)](#_bookmark1157) | urn:oid:2.16.840.1.113883.11.20.9  .23 | [http://hl7.org/implement/standar](http://hl7.org/implement/standards/fhir/v3/ActMood/)  [ds/fhir/v3/ActMood/](http://hl7.org/implement/standards/fhir/v3/ActMood/) |
| [Planned moodCode](#_bookmark1225)  [(SubstanceAdministration/Supply)](#_bookmark1225) | urn:oid:2.16.840.1.113883.11.20.9  .24 | [http://hl7.org/implement/standar](http://hl7.org/implement/standards/fhir/v3/ActMood/)  [ds/fhir/v3/ActMood/](http://hl7.org/implement/standards/fhir/v3/ActMood/) |
| [PostalAddressUse](#_bookmark2232) | urn:oid:2.16.840.1.113883.1.11.10 637 | [http://www.hl7.org/documentcent](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html)  [er/public/standards/vocabulary/v](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html)  [ocabulary\_tables/infrastructure/vo](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html)  [cabulary/vocabulary.html](http://www.hl7.org/documentcenter/public/standards/vocabulary/vocabulary_tables/infrastructure/vocabulary/vocabulary.html) |
| [PostalCode](#_bookmark343) | urn:oid:2.16.840.1.113883.3.88.12  .80.2 | [http://ushik.ahrq.gov/ViewItemDe](http://ushik.ahrq.gov/ViewItemDetails?system=mdr&amp;itemKey=86671000)  [tails?system=mdr&itemKey=86671](http://ushik.ahrq.gov/ViewItemDetails?system=mdr&amp;itemKey=86671000)  [000](http://ushik.ahrq.gov/ViewItemDetails?system=mdr&amp;itemKey=86671000) |
| [Problem](#_bookmark921) | urn:oid:2.16.840.1.113883.3.88.12  .3221.7.4 | [http://phinvads.cdc.gov/vads/Vie](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.3221.7.4)  [wValueSet.action?oid=2.16.840.1.1](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.3221.7.4)  [13883.3.88.12.3221.7.4](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.88.12.3221.7.4) |

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| **Name** | **OID** | **URL** |
| [Problem Status](#_bookmark1479) | urn:oid:2.16.840.1.113883.3.88.12  .80.68 | [https://vsac.nlm.nih.gov](https://vsac.nlm.nih.gov/) |
| [Problem Type](#_bookmark919) | urn:oid:2.16.840.1.113883.3.88.12  .3221.7.2 | <http://www.loinc.org/> |
| [ProblemAct statusCode](#_bookmark697) | urn:oid:2.16.840.1.113883.11.20.9  .19 | [http://www.hl7.org](http://www.hl7.org/) |
| [ProcedureAct statusCode](#_bookmark1544) | urn:oid:2.16.840.1.113883.11.20.9  .22 | [http://www.hl7.org](http://www.hl7.org/) |
| [Race](#_bookmark133) | urn:oid:2.16.840.1.113883.1.11.14 914 | [http://phinvads.cdc.gov/vads/Vie](http://phinvads.cdc.gov/vads/ViewCodeSystemConcept.action?oid=2.16.840.1.113883.6.238&amp;code=1000-9)  [wCodeSystemConcept.action?oid=2](http://phinvads.cdc.gov/vads/ViewCodeSystemConcept.action?oid=2.16.840.1.113883.6.238&amp;code=1000-9)  [.16.840.1.113883.6.238&code=100](http://phinvads.cdc.gov/vads/ViewCodeSystemConcept.action?oid=2.16.840.1.113883.6.238&amp;code=1000-9)  [0-9](http://phinvads.cdc.gov/vads/ViewCodeSystemConcept.action?oid=2.16.840.1.113883.6.238&amp;code=1000-9) |
| [Race Category Excluding Nulls](#_bookmark335) | urn:oid:2.16.840.1.113883.3.2074. 1.1.3 | N/A |
| [Radiation Regional Treatment and](#_bookmark1655)  [Boost Radiation Grouping](#_bookmark1655) | urn:oid:2.16.840.1.113883.3.520.4  .23 | [https://phinvads.cdc.gov/vads/Vie](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.23)  [wValueSet.action?oid=2.16.840.1.1](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.23)  [13883.3.520.4.23](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.23) |
| Radiation Regional Treatment and Boost Radiation HCPCS codes | 2.16.840.1.113883.3.520.4.24 | [https://phinvads.cdc.gov/vads/Vie](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.24)  [wValueSet.action?oid=2.16.840.1.1](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.24)  [13883.3.520.4.24](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.24) |
| Radiation Regional Treatment and Boost Radiation ICD10-PCS codes | 2.16.840.1.113883.3.520.4.25 | [https://phinvads.cdc.gov/vads/Vie](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.25)  [wValueSet.action?oid=2.16.840.1.1](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.25)  [13883.3.520.4.25](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.25) |
| Radiation Regional Treatment and Boost Radiation SNOMED CT codes | 2.16.840.1.113883.3.520.4.26 | [https://phinvads.cdc.gov/vads/Vie](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.26)  [wValueSet.action?oid=2.16.840.1.1](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.26)  [13883.3.520.4.26](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.26) |
| [Religious Affiliation](#_bookmark333) | urn:oid:2.16.840.1.113883.1.11.19 185 | [http://www.hl7.org/v3ballotarchiv](http://www.hl7.org/v3ballotarchive_temp_16B8D83E-1C23-BA17-0CBFC625BE7BA72F/v3ballot/html/infrastructure/vocabulary/vocabulary.html#voc-sets)  [e\_temp\_16B8D83E-1C23-BA17-](http://www.hl7.org/v3ballotarchive_temp_16B8D83E-1C23-BA17-0CBFC625BE7BA72F/v3ballot/html/infrastructure/vocabulary/vocabulary.html#voc-sets)  [0CBFC625BE7BA72F/v3ballot/ht](http://www.hl7.org/v3ballotarchive_temp_16B8D83E-1C23-BA17-0CBFC625BE7BA72F/v3ballot/html/infrastructure/vocabulary/vocabulary.html#voc-sets)  [ml/infrastructure/vocabulary/voca](http://www.hl7.org/v3ballotarchive_temp_16B8D83E-1C23-BA17-0CBFC625BE7BA72F/v3ballot/html/infrastructure/vocabulary/vocabulary.html#voc-sets)  [bulary.html#voc-sets](http://www.hl7.org/v3ballotarchive_temp_16B8D83E-1C23-BA17-0CBFC625BE7BA72F/v3ballot/html/infrastructure/vocabulary/vocabulary.html#voc-sets) |
| [Result Status](#_bookmark1808) | urn:oid:2.16.840.1.113883.11.20.9  .39 | [http://www.hl7.org](http://www.hl7.org/) |
| [StateValueSet](#_bookmark2234) | urn:oid:2.16.840.1.113883.3.88.12  .80.1 | [http://www.census.gov/geo/refere](http://www.census.gov/geo/reference/ansi_statetables.html)  [nce/ansi\_statetables.html](http://www.census.gov/geo/reference/ansi_statetables.html) |
| [Telecom Use (US Realm Header)](#_bookmark329) | urn:oid:2.16.840.1.113883.11.20.9  .20 | [http://www.hl7.org](http://www.hl7.org/) |
| [TNM Clinical Metastasis](#_bookmark853) | urn:oid:2.16.840.1.113883.3.520.4  .8 | [http://phinvads.cdc.gov/vads/Vie](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.8)  [wValueSet.action?oid=2.16.840.1.1](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.8)  [13883.3.520.4.8](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.8) |
| [TNM Clinical Node](#_bookmark1759) | urn:oid:2.16.840.1.113883.3.520.4  .7 | [http://phinvads.cdc.gov/vads/Vie](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.7)  [wValueSet.action?oid=2.16.840.1.1](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.7)  [13883.3.520.4.7](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.7) |
| [TNM Clinical Stage Descriptor](#_bookmark1984) | urn:oid:2.16.840.1.113883.3.520.4  .10 | [https://phinvads.cdc.gov/vads/Vie](https://phinvads.cdc.gov/vads/ViewValueSet.action?id=37448BA8-3006-E011-9273-00188B39829B)  [wValueSet.action?id=37448BA8-](https://phinvads.cdc.gov/vads/ViewValueSet.action?id=37448BA8-3006-E011-9273-00188B39829B)  [3006-E011-9273-00188B39829B](https://phinvads.cdc.gov/vads/ViewValueSet.action?id=37448BA8-3006-E011-9273-00188B39829B) |
| [TNM Clinical Stage Group](#_bookmark1982) | urn:oid:2.16.840.1.113883.3.520.4  .9 | [http://phinvads.cdc.gov/vads/Vie](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.9)  [wValueSet.action?oid=2.16.840.1.1](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.9) |

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| **Name** | **OID** | **URL** |
|  |  | 13883.3.520.4.9 |
| [TNM Clinical Tumor](#_bookmark1346) | urn:oid:2.16.840.1.113883.3.520.4  .6 | [http://phinvads.cdc.gov/vads/Vie](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.6)  [wValueSet.action?oid=2.16.840.1.1](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.6)  [13883.3.520.4.6](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.6) |
| [TNM Pathologic Metastasis](#_bookmark875) | urn:oid:2.16.840.1.113883.3.520.4  .19 | [http://phinvads.cdc.gov/vads/Vie](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.19)  [wValueSet.action?oid=2.16.840.1.1](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.19)  [13883.3.520.4.19](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.19) |
| [TNM Pathologic Node](#_bookmark1781) | urn:oid:2.16.840.1.113883.3.520.4  .18 | [http://phinvads.cdc.gov/vads/Vie](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.18)  [wValueSet.action?oid=2.16.840.1.1](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.18)  [13883.3.520.4.18](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.18) |
| [TNM Pathologic Stage Descriptor](#_bookmark2057) | urn:oid:2.16.840.1.113883.3.520.4  .21 | [https://phinvads.cdc.gov/vads/Vie](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.21)  [wValueSet.action?oid=2.16.840.1.1](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.21)  [13883.3.520.4.21](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.21) |
| [TNM Pathologic Stage Group](#_bookmark2055) | urn:oid:2.16.840.1.113883.3.520.4  .20 | [http://phinvads.cdc.gov/vads/Vie](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.20)  [wValueSet.action?oid=2.16.840.1.1](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.20)  [13883.3.520.4.20](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.20) |
| [TNM Pathologic Tumor](#_bookmark1368) | urn:oid:2.16.840.1.113883.3.520.4  .17 | [http://phinvads.cdc.gov/vads/Vie](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.17)  [wValueSet.action?oid=2.16.840.1.1](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.17)  [13883.3.520.4.17](http://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.3.520.4.17) |
| [Tobacco Use](#_bookmark2104) | urn:oid:2.16.840.1.113883.11.20.9  .41 | [http://vtsl.vetmed.vt.edu/Terminol](http://vtsl.vetmed.vt.edu/TerminologyMgt/RF2Browser/ISA.cfm?SCT_ConceptID=365980008)  [ogyMgt/RF2Browser/ISA.cfm?SCT](http://vtsl.vetmed.vt.edu/TerminologyMgt/RF2Browser/ISA.cfm?SCT_ConceptID=365980008)  [\_ConceptID=365980008](http://vtsl.vetmed.vt.edu/TerminologyMgt/RF2Browser/ISA.cfm?SCT_ConceptID=365980008)  [https://phinvads.cdc.gov/vads/Vie](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.11.20.9.41)  [wValueSet.action?oid=2.16.840.1.1](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.11.20.9.41)  [13883.11.20.9.41](https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.113883.11.20.9.41) |
| [UnitsOfMeasureCaseSensitive](#_bookmark1064) | urn:oid:2.16.840.1.113883.1.11.12 839 | [http://unitsofmeasure.org/ucum.h](http://unitsofmeasure.org/ucum.html)  [tml](http://unitsofmeasure.org/ucum.html) |
| [Vital Sign Result](#_bookmark2178) | urn:oid:2.16.840.1.113883.3.88.12  .80.62 | <http://www.loinc.org/> |
| [x\_ServiceEventPerformer](#_bookmark355) | urn:oid:2.16.840.1.113883.1.11.19 601 | [http://www.hl7.org](http://www.hl7.org/) |

# C O D E S Y S T E M S I N T H I S G U I D E

***Table 238: Code Systems***

|  |  |
| --- | --- |
| **Name** | **OID** |
| ActMood | urn:oid:2.16.840.1.113883.5.1001 |
| ActPriority | urn:oid:2.16.840.1.113883.5.7 |
| ActStatus | urn:oid:2.16.840.1.113883.5.14 |
| AddressUse | urn:oid:2.16.840.1.113883.5.1119 |
| AdministrativeGender | urn:oid:2.16.840.1.113883.5.1 |
| ConfidentialityCode | urn:oid:2.16.840.1.113883.5.25 |
| Country | urn:oid:2.16.840.1.113883.3.88.12.80.63 |
| EntityClass | urn:oid:2.16.840.1.113883.5.41 |
| EntityNamePartQualifier | urn:oid:2.16.840.1.113883.5.43 |
| EntityNameUse | urn:oid:2.16.840.1.113883.5.45 |
| FDA RouteOfAdministration | urn:oid:2.16.840.1.113883.3.26.1.1 |
| FIPS 5-2 (State) | urn:oid:2.16.840.1.113883.6.92 |
| HCPCS | urn:oid:2.16.840.1.113883.6.14 |
| Healthcare Provider Taxonomy (HIPAA) | urn:oid:2.16.840.1.113883.6.101 |
| HITSP-CS-83 | urn:oid:2.16.840.1.113883.5.83 |
| HL7 HealthcareServiceLocation | urn:oid:2.16.840.1.113883.6.259 |
| HL7ActClass | urn:oid:2.16.840.1.113883.5.6 |
| HL7ActRelationshipType | urn:oid:2.16.840.1.113883.5.1002 |
| HL7EntityCode | urn:oid:2.16.840.1.113883.5.1060 |
| HL7NullFlavor | urn:oid:2.16.840.1.113883.5.1008 |
| HL7ParticipationType | urn:oid:2.16.840.1.113883.5.90 |
| ICD9CM | 2.16.840.1.113883.6.103 |
| ICD10CM | urn:oid:2.16.840.1.113883.6.90 |
| ICD10PCS | urn:oid:2.16.840.1.113883.6.4 |
| ICD-O-3 | 2.16.840.1.113883.6.43.1 |
| Industry CDC Census 2010 | urn:oid:2.16.840.1.114222.4.5.315 |
| Language | urn:oid:2.16.840.1.113883.6.121 |
| LanguageAbilityMode | urn:oid:2.16.840.1.113883.5.60 |
| LanguageAbilityProficiency | urn:oid:2.16.840.1.113883.5.61 |
| LOINC | urn:oid:2.16.840.1.113883.6.1 |
| MaritalStatus | urn:oid:2.16.840.1.113883.5.2 |
| NAACCR Behavior Code | urn:oid:2.16.840.1.113883.3.520.3.14 |
| NAACCR Diagnostic Confirmation | urn:oid:2.16.840.1.113883.3.520.3.3 |
| NAACCR Grade | urn:oid:2.16.840.1.113883.3.520.3.15 |
| NAACCR TNM Clinical Staged By | urn:oid:2.16.840.1.113883.3.520.3.4 |

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| --- | --- |
| **Name** | **OID** |
| NAACCR TNM Pathologic Staged By | urn:oid:2.16.840.1.113883.3.520.3.17 |
| Occupation CDC Census 2010 | urn:oid:2.16.840.1.114222.4.5.314 |
| orderableDrugForm | urn:oid:2.16.840.1.113883.5.85 |
| participationFunction | urn:oid:2.16.840.1.113883.5.88 |
| Participationsignature | urn:oid:2.16.840.1.113883.5.89 |
| Race & Ethnicity - CDC | urn:oid:2.16.840.1.113883.6.238 |
| ReligiousAffiliation | urn:oid:2.16.840.1.113883.5.1076 |
| RoleClass | urn:oid:2.16.840.1.113883.5.110 |
| RoleCode | urn:oid:2.16.840.1.113883.5.111 |
| RxNorm | urn:oid:2.16.840.1.113883.6.88 |
| SNOMED CT | urn:oid:2.16.840.1.113883.6.96 |
| Source of Payment Typology (PHDSC) | urn:oid:2.16.840.1.113883.3.221.5 |
| TNM 7. Edition | urn:oid:2.16.840.1.113883.15.6 |
| U.S. Board on Geographic Names (USGS - GNIS) | urn:oid:2.16.840.1.113883.6.245 |
| UCUM | urn:oid:2.16.840.1.113883.6.8 |
| Unique Ingredient Identifier (UNII) | urn:oid:2.16.840.1.113883.4.9 |
| USPostalCodes | urn:oid:2.16.840.1.113883.6.231 |

# C H A N G E S F R O M P R E V I O U S V E R S I O N

## Cancer Event Report Document (V1.1)

#### [Cancer Event Report Document (V1.1) (urn:hl7ii:2.16.840.1.113883.10.13.1:2015-01-](#_bookmark3) [29)](#_bookmark3)

|  |  |  |
| --- | --- | --- |
| **Change** | **Old** | **New** |
| Name | Cancer Event Report Document | Cancer Event Report Document (V1.1) |
| Oid | urn:hl7ii:2.16.840.1.113883.10.13. 1:2014-08-08 | urn:hl7ii:2.16.840.1.113883.10.13. 1:2015-01-29 |
| Description | The Ambulatory Healthcare Provider Cancer Event Report represents a core data set of relevant administrative, demographic, and clinical information about a patient and the patient's cancer diagnosis and treatment that has been recorded in the patient’s electronic health record.  It provides a mechanism for healthcare practitioners to electronically report their cancer cases to the public health central cancer registry using a standardized structure.  Central cancer registries consolidate the information from these Cancer Event Reports with data from other reporting sources. Public health central cancer registry surveillance data are used for describing the occurrence of cancer in a given population, development of comprehensive cancer control programs, healthcare planning and interventions and research.  The Cancer IG specific constraints for the US Realm Header further tighten some conformance verbs, such as birthplace of the patient and document set ID and version number. It also adds new elements including: patient’s social security number; usable period for patient’s address; patient deceased indicator and deceased time; and physician | The Ambulatory Healthcare Provider Cancer Event Report represents a core data set of relevant administrative, demographic, and clinical information about a patient and the patient's cancer diagnosis and treatment that has been recorded in the patient’s electronic health record.  It provides a mechanism for healthcare practitioners to electronically report their cancer cases to the public health central cancer registry using a standardized structure.  Central cancer registries consolidate the information from these Cancer Event Reports with data from other reporting sources. Public health central cancer registry surveillance data are used for describing the occurrence of cancer in a given population, development of comprehensive cancer control programs, healthcare planning and interventions and research.  The Cancer IG specific constraints for the US Realm Header further tighten some conformance verbs, such as birthplace of the patient and document set ID and version number. It also adds new elements including: patient’s social security number; usable period for patient’s address; patient deceased indicator and deceased time; and physician |

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| **Change** | **Old** | **New** |
|  | who referred patient to the reporting healthcare provider.  This document is a \*Part 2\* of the  \*"HL7 Implementation Guide for CDA© Release 2: Reporting to Public Health Cancer Registries from Ambulatory Healthcare Providers, Release 1"\* Implementation Guide.  The \*Part 2\* of the Implementation Guide describes the structure and content requirements for the Cancer Event Report such as document identification, header information, sections, entries and codes systems/value sets.  \*Document Template ID:\* urn:hl7ii:2.16.840.1.113883.10.13. 1:2014-08-08  \*General Description:\* The Cancer Event Report contains a record of a patient’s encounter for diagnosis and/or treatment of cancer.  \*Document Code:\* 72134-0 (LOINC code for "Cancer Event Report")  \*About id, setId, version\*   1. CDA requires a ClinicalDocument/id element representing a unique identifier for the document. The id may be represented by either @root or   @root plus@extension, so long as the resulting id is globally unique. CDA provides id, setId, versionNumber, and relatedDocument elements to support succession management (document versioning). The id element identifies the CDA document instance (the electronic file). It is independent of the setId and versionNumber elements.   1. Since Cancer Event Reports are sometimes updated, this IG requires setId and versionNumber to ensure that succession management can be easily performed. 2. The setId element identifies the | who referred patient to the reporting healthcare provider.  This document is a \*Part 2\* of the  \*"HL7 Implementation Guide for CDA© Release 2: Reporting to Public Health Cancer Registries from Ambulatory Healthcare Providers, Release 1"\* Implementation Guide.  The \*Part 2\* of the Implementation Guide describes the structure and content requirements for the Cancer Event Report such as document identification, header information, sections, entries and codes systems/value sets.  \*Document Template ID:\* urn:hl7ii:2.16.840.1.113883.10.13. 1:2015-01-09  \*General Description:\* The Cancer Event Report contains a record of a patient’s encounter for diagnosis and/or treatment of cancer.  \*Document Code:\* 72134-0 (LOINC code for "Cancer Event Report")  \*About id, setId, version\*   1. CDA requires a ClinicalDocument/id element representing a unique identifier for the document. The id may be represented by either @root or   @root plus@extension, so long as the resulting id is globally unique. CDA provides id, setId, versionNumber, and relatedDocument elements to support succession management (document versioning). The id element identifies the CDA document instance (the electronic file). It is independent of the setId and versionNumber elements.   1. Since Cancer Event Reports are sometimes updated, this IG requires setId and versionNumber to ensure that succession management can be easily performed. 2. The setId element identifies the |

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| **Change** | **Old** | **New** |
|  | set of documents in a version tree and is consistent across all versions; The versionNumber element stores the version number as an integer (the first version is 1, the second is 2, etc.). The vendor software is responsible for generating the necessary values and for ensuring uniqueness.  4. In a replacement document, the relatedDocument element stores the id of the parent document and the typeCode attribute stores the type of document relationship. CDA supports several document relationship typeCodes. If present in a Cancer Event Report, the value of a document relationship typeCode must be RPLC (replace).  \*COMPONENTS OF CANCER EVENT REPORT DOCUMENT:\*  The table below list components of Cancer Event Report Document such as the header and all sections.  || \*Conformance\* || \*Section Name\* || \*Template Identifier\*  | SHALL [[]1..1[]] | Header Section  | urn:hl7ii:2.16.840.1.113883.10.13. 1:2014-08-08  | SHALL [[]1..1[]] | Cancer Diagnosis Section (entries required)  | urn:hl7ii:2.16.840.1.113883.10.13. 2:2014-08-08  | SHALL [[]1..1[]] | Assessment Section | urn:hl7ii:2.16.840.1.113883.10.20. 22.2.8:2014-06-09  | SHALL [[]1..1[]] | Family History Section (V2) | urn:hl7ii:2.16.840.1.113883.10.20. 22.2.15:2014-06-09  | SHALL [[]1..1[]] | Medications Administered Section (V2) - Cancer IG Specific Constraints | urn:hl7ii:2.16.840.1.113883.10.13. 12:2014-08-08  | SHALL [[]1..1[]] | Medications Section (entries required) (V2) - | set of documents in a version tree and is consistent across all versions; The versionNumber element stores the version number as an integer (the first version is 1, the second is 2, etc.). The vendor software is responsible for generating the necessary values and for ensuring uniqueness.  4. In a replacement document, the relatedDocument element stores the id of the parent document and the typeCode attribute stores the type of document relationship. CDA supports several document relationship typeCodes. If present in a Cancer Event Report, the value of a document relationship typeCode must be RPLC (replace).  \*COMPONENTS OF CANCER EVENT REPORT DOCUMENT:\*  The table below list components of Cancer Event Report Document such as the header and all sections.  || \*Conformance\* || \*Section Name\* || \*Template Identifier\*  | SHALL [[]1..1[]] | Header Section  | urn:hl7ii:2.16.840.1.113883.10.13. 1:2015-01-29  | SHALL [[]1..1[]] | Cancer Diagnosis Section (entries required)  | urn:hl7ii:2.16.840.1.113883.10.13. 2:2015-02-05  | SHALL [[]1..1[]] | Assessment Section | urn:hl7ii:2.16.840.1.113883.10.20. 22.2.8:2014-06-09  | SHALL [[]1..1[]] | Family History Section (V2) | urn:hl7ii:2.16.840.1.113883.10.20. 22.2.15:2014-06-09  | SHALL [[]1..1[]] | Medications Administered Section (V2) - Cancer IG Specific Constraints | urn:hl7ii:2.16.840.1.113883.10.13. 12:2014-08-08  | SHALL [[]1..1[]] | Medications Section (entries required) (V2) - |

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| **Change** | **Old** | **New** |
|  | Cancer IG Specific Constraints | urn:hl7ii:2.16.840.1.113883.10.13. 13:2014-08-08  | SHALL [[]1..1[]] | Payers Section (V2) | urn:hl7ii:2.16.840.1.113883.10.20. 22.2.18:2014-06-09  | SHALL [[]1..1[]] | Plan of Treatment Section (V2) - Cancer IG Specific Constraints | urn:hl7ii:2.16.840.1.113883.10.13. 9:2014-08-08  | SHALL [[]1..1[]] | Problem Section (entries required) (V2) - Cancer IG Specific Constraints | urn:hl7ii:2.16.840.1.113883.10.13. 21:2014-08-08  | SHALL [[]1..1[]] | Procedures Section (entries required) (V2) - Cancer IG Specific Constraints | urn:hl7ii:2.16.840.1.113883.10.13. 10:2014-08-08  | SHALL [[]1..1[]] | Results Section (entries required) (V2) | urn:hl7ii:2.16.840.1.113883.10.20. 22.2.3.1:2014-06-09  | SHALL [[]1..1[]] | Social History Section (V2) - Cancer IG Specific Constraints | urn:hl7ii:2.16.840.1.113883.10.13. 11:2014-08-08  | SHALL [[]1..1[]] | Vital Signs Section (entries required) (V2) | urn:hl7ii:2.16.840.1.113883.10.20. 22.2.4.1.2:2014-06-09 | Cancer IG Specific Constraints | urn:hl7ii:2.16.840.1.113883.10.13. 13:2014-08-08  | SHALL [[]1..1[]] | Payers Section (V2) | urn:hl7ii:2.16.840.1.113883.10.20. 22.2.18:2014-06-09  | SHALL [[]1..1[]] | Plan of Treatment Section (V2) - Cancer IG Specific Constraints | urn:hl7ii:2.16.840.1.113883.10.13. 9:2014-08-08  | SHALL [[]1..1[]] | Problem Section (entries required) (V2) - Cancer IG Specific Constraints | urn:hl7ii:2.16.840.1.113883.10.13. 21:2014-08-08  | SHALL [[]1..1[]] | Procedures Section (entries required) (V2) - Cancer IG Specific Constraints | urn:hl7ii:2.16.840.1.113883.10.13. 10:2014-08-08  | SHALL [[]1..1[]] | Results Section (entries required) (V2) | urn:hl7ii:2.16.840.1.113883.10.20. 22.2.3.1:2014-06-09  | SHALL [[]1..1[]] | Social History Section (V2) - Cancer IG Specific Constraints | urn:hl7ii:2.16.840.1.113883.10.13. 11:2015-01-29  | SHALL [[]1..1[]] | Vital Signs Section (entries required) (V2) | urn:hl7ii:2.16.840.1.113883.10.20. 22.2.4.1.2:2014-06-09 |
| CONF #: 1169-34264 Added |  | Or encompassingEncounter SHALL Contain:  This encompassingEncounter SHALL contain exactly one [1..1] encounterParticipant (CONF:1169- 34264) such that it  Note: This element records the provider that referred the patient to the reporting facility. This element SHALL be provided in the header of the CDA document in the event the patient was referred to this ambulatory healthcare provider. |
| CONF #: 1169-34363 Added |  | This country MAY contain zero or one [0..1] @nullFlavor (CONF:1169- 34363). |
| CONF #: 1169-34364 Added |  | This state MAY contain zero or one |

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| **Change** | **Old** | **New** |
|  |  | [0..1] @nullFlavor (CONF:1169-  34364). |
| CONF #: 1169-34373 Added |  | SHALL contain exactly one [1..1] assignedEntity (CONF:1169- 34373). |
| CONF #: 1169-34374 Added |  | This assignedEntity SHALL contain exactly one [1..1] id (CONF:1169- 34374). |
| CONF #: 1169-34375 Added |  | This assignedEntity SHALL contain exactly one [1..1] @nullFlavor, which SHALL be selected from ValueSet NullValues\_UNK\_NA urn:oid:2.16.840.1.113883.10.20.5  .9.2 DYNAMIC (CONF:1169- 34375). |
| CONF #: 1169-34376 Added |  | This id SHALL contain exactly one [1..1] @nullFlavor="NA" Not applicable (CONF:1169-34376). |
| CONF #: 1126-213 Removed | MAY contain zero or one [0..1]  @nullFlavor (CONF:1126-213). |  |
| CONF #: 1126-224 Removed | This birthplace MAY contain zero or one [0..1] @nullFlavor (CONF:1126-224). |  |
| CONF #: 1126-230 Removed | This addr SHALL NOT contain [0..0] @nullFlavor (CONF:1126-  230). |  |
| CONF #: 1126-233 Removed | This place SHALL NOT contain [0..0] @nullFlavor (CONF:1126-  233). |  |
| CONF #: 1169-212 Modified | This encompassingEncounter SHALL contain exactly one [1..1] encounterParticipant | The encompassingEncounter SHALL Contain Either:  This encompassingEncounter SHALL contain exactly one [1..1] encounterParticipant |
| CONF #: 1169-32650 Modified | SHALL contain exactly one [1..1] Cancer Diagnosis Section (entries required) (identifier: urn:hl7ii:2.16.840.1.113883.10.13. 2:2014-08-08) | SHALL contain exactly one [1..1] Cancer Diagnosis Section (entries required) (V1.1) (identifier: urn:hl7ii:2.16.840.1.113883.10.13. 2:2015-02-05) |
| CONF #: 1169-33050 Modified | SHALL contain exactly one [1..1] Social History Section (V2) - Cancer IG Specific Constraints (identifier: urn:hl7ii:2.16.840.1.113883.10.13. 11:2014-08-08) | SHALL contain exactly one [1..1] Social History Section (V2) - Cancer IG Specific Constraints (V1.1) (identifier: urn:hl7ii:2.16.840.1.113883.10.13. 11:2015-01-29) |
| CONF #: 1169-33183 Modified | This patient \*SHOULD\* 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 | This patient \*SHOULD\* 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 |

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| --- | --- | --- |
| **Change** | **Old** | **New** |
|  | necessary extension to CDA R2 for the use of the deceasedInd element | necessary extension to CDA R2 for the use of the deceasedInd element |
| CONF #: 1169-33184 Modified | This patient \*SHOULD\* 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 | This patient \*SHOULD\* 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 #: 1169-33946 Modified | SHALL contain exactly one [1..1]  @extension="2014-08-08" | SHALL contain exactly one [1..1]  @extension="2015-09-29" |

## Cancer Diagnosis Concern Act (V1.1)

#### [Cancer Diagnosis Concern Act (V1.1) (urn:hl7ii:2.16.840.1.113883.10.13.3:2015-02-](#_bookmark675) [05)](#_bookmark675)

|  |  |  |
| --- | --- | --- |
| **Change** | **Old** | **New** |
| Name | Cancer Diagnosis Concern Act | Cancer Diagnosis Concern Act (V1.1) |
| Oid | urn:hl7ii:2.16.840.1.113883.10.13. 3:2014-08-08 | urn:hl7ii:2.16.840.1.113883.10.13. 3:2015-02-05 |
| CONF #: 1169-32426 Modified | SHALL contain exactly one [1..1] Cancer Diagnosis Observation (identifier: urn:hl7ii:2.16.840.1.113883.10.13. 4:2014-08-08) | SHALL contain exactly one [1..1] Cancer Diagnosis Observation (V1.1) (identifier: urn:hl7ii:2.16.840.1.113883.10.13. 4:2015-02-05) |
| CONF #: 1169-33955 Modified | SHALL contain exactly one [1..1]  @extension="2014-08-08" | SHALL contain exactly one [1..1]  @extension="2015-02-05" |

## Cancer Diagnosis Observation (V1.1)

[**Cancer Diagnosis Observation (V1.1) (urn:hl7ii:2.16.840.1.113883.10.13.4:2015-02-**](#_bookmark700) [**05)**](#_bookmark700)

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| **Change** | **Old** | **New** |
| Name | Cancer Diagnosis Observation | Cancer Diagnosis Observation (V1.1) |
| Oid | urn:hl7ii:2.16.840.1.113883.10.13. 4:2014-08-08 | urn:hl7ii:2.16.840.1.113883.10.13. 4:2015-02-05 |
| CONF #: 1169-34041 Added |  | This name SHALL contain exactly one [1..1] @code="31206-6" Behavior ICD-O-3 Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34041). |
| CONF #: 1169-34042 Added |  | This name SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 6.1" CodeSystem: LOINC  2.16.840.1.113883.6.1 (CONF:1169-34042). |
| CONF #: 1169-34043 Added |  | This name SHALL contain exactly one [1..1] @code="21861-0" Dx confirmed by Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34043). |
| CONF #: 1169-34044 Added |  | This name SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 6.1" CodeSystem: LOINC  2.16.840.1.113883.6.1 (CONF:1169-34044). |
| CONF #: 1169-34045 Added |  | This name SHALL contain exactly one [1..1] @code="21858-6" Grade Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1169-34045). |
| CONF #: 1169-34046 Added |  | This name SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 6.1" CodeSystem: LOINC  2.16.840.1.113883.6.1 (CONF:1169-34046). |
| CONF #: 1169-34365 Added |  | Or  SHALL contain exactly one [1..1] No Known TNM Clinical Stage Observation (V1.1) (identifier: urn:hl7ii:2.16.840.1.113883.10.13. 31:2015-04-02) (CONF:1169-  34365). |

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| **Change** | **Old** | **New** |
| CONF #: 1169-34366 Added |  | OR  SHALL contain exactly one [1..1] No Known TNM Pathologic Stage Observation (V1.1) (identifier: urn:hl7ii:2.16.840.1.113883.10.13. 32:2015-04-02) (CONF:1169-  34366). |
| CONF #: 1169-34370 Added |  | This value MAY contain zero or one [0..1] @nullFlavor (CONF:1169-  34370).  Note: Use @nullFlavor="NA" when a coded value is not available. |
| CONF #: 1126-33190 Removed | This observation SHALL NOT contain [0..0] @nullFlavor (CONF:1126-33190). |  |
| CONF #: 1126-33191 Removed | This observation SHALL NOT contain [0..0] @nullFlavor (CONF:1126-33191). |  |
| CONF #: 1126-33879 Removed | \*SHALL\* have an entry conformant to TNM Clinical Stage Observation (templateId: urn:hl7ii:2.16.840.1.113883.10.13. 5:2014-08-08) \*OR\* No Known  TNM Clinical Stage Observation (templateId: urn:hl7ii:2.16.840.1.113883.10.13. 31:2014-08-08) (CONF:1126-  33879).  Note: Use the TNM Clinical Stage Observation template to record TNM stage when the stage values are known, including situations when, after staging workup, the stage group and/or TNM component(s) are found to be unknown (e.g., Stage Group= 9, and/or TX, and/or NX). Use the No Known TNM Clinical Stage Observation template when the cancer has not yet been staged, the TNM stage is not available, or when no TNM Staging system exists for the cancer. |  |
| CONF #: 1126-33883 Removed | \*SHALL\* have an entry conformant to TNM Pathologic Stage Observation (templateId: urn:hl7ii:2.16.840.1.113883.10.13. 7:2014-08-08) \*OR\* No Known  TNM Pathologic Stage Observation (templateId: urn:hl7ii:2.16.840.1.113883.10.13. 32:2014-08-08) (CONF:1126-  33883). |  |

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| **Change** | **Old** | **New** |
|  | Note: Use the TNM Pathologic Stage Observation template to record TNM stage when the stage values are known, including situations when, after staging workup, the stage group and/or TNM component(s) are found to be unknown (e.g., Stage Group= 9, and/or TX, and/or NX). Use the No Known TNM Pathologic Stage Observation template when the cancer has not yet been staged, the TNM stage is not available, or when no TNM Staging system exists for the cancer. |  |
| CONF #: 1126-34010 Removed | This name SHALL contain exactly one [1..1] @code="31206-6" Behavior ICD-O-3 Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-34010). |  |
| CONF #: 1126-34011 Removed | This name SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 6.1" CodeSystem: LOINC  2.16.840.1.113883.6.1 (CONF:1126-34011). |  |
| CONF #: 1126-34012 Removed | This name SHALL contain exactly one [1..1] @code="21858-6" Grade Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-34012). |  |
| CONF #: 1126-34013 Removed | This name SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 6.1" CodeSystem: LOINC  2.16.840.1.113883.6.1 (CONF:1126-34013). |  |
| CONF #: 1126-34014 Removed | This name SHALL contain exactly one [1..1] @code="21861-0" Dx confirmed by Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-34014). |  |
| CONF #: 1126-34015 Removed | This name SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 6.1" CodeSystem: LOINC  2.16.840.1.113883.6.1 (CONF:1126-34015). |  |
| CONF #: 1169-32451 Modified | SHALL contain exactly one [1..1] observation | This entryRelationship SHALL contain either  SHALL contain exactly one [1..1] |

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| **Change** | **Old** | **New** |
|  |  | TNM Clinical Stage Observation (V1.1) (identifier: urn:hl7ii:2.16.840.1.113883.10.13. 5:2015-02-05) |
| CONF #: 1169-32464 Modified | This value SHALL contain exactly one [1..1] @code | If value/@nullFlavor is not present then  This value SHALL contain exactly one [1..1] @code |
| CONF #: 1169-32473 Modified | The @code for histologic type of tumor SHALL be selected from:   1. ICD-O-3 (CodeSystem: 2.16.840.1.113883.6.43.1) or 2. Morphologic Abnormality of Neoplasms Value Set (ValueSet: 2.16.840.1.114222.4.11.7256) or 3. ICD-9-CM Appendix A- Morphology of Neoplasms (CodeSystem: 2.16.840.1.114222.4.11.6038) or 4. ICD-10-CM (CodeSystem: 2.16.840.1.113883.6.90) | The @code for histologic type of tumor, if present, SHALL be selected from:   1. ICD-O-3 (CodeSystem: 2.16.840.1.113883.6.43.1) or 2. Morphologic Abnormality of Neoplasms Value Set (ValueSet: 2.16.840.1.114222.4.11.7256) or 3. ICD-9-CM Appendix A- Morphology of Neoplasms (CodeSystem: 2.16.840.1.114222.4.11.6038) or 4. ICD-10-CM (CodeSystem: 2.16.840.1.113883.6.90) |
| CONF #: 1169-32537 Modified | This value SHALL contain exactly one [1..1] originalText | If value/@coder not present then This value SHALL contain exactly one [1..1] originalText |
| CONF #: 1169-32618 Modified | This value SHALL contain exactly one [1..1] @displayName | If value/@nullFlavor not present then  This value SHALL contain exactly one [1..1] @displayName |
| CONF #: 1169-32634 Modified | This value SHALL contain exactly one [1..1] @codeSystem | If value/@nullFlavor not present then  This value SHALL contain exactly one [1..1] @codeSystem |
| CONF #: 1169-33180 Modified | SHALL contain exactly one [1..1] observation | This entryRelationship SHALL contain either  SHALL contain exactly one [1..1] TNM Pathologic Stage Observation (V1.1) (identifier: urn:hl7ii:2.16.840.1.113883.10.13. 7:2015-02-06) |
| CONF #: 1169-33956 Modified | SHALL contain exactly one [1..1]  @extension="2014-08-08" | SHALL contain exactly one [1..1]  @extension="2015-02-05" |
| CONF #: 1169-34003 Modified | This value MAY contain zero or one [0..1] @sdtc:valueSet | If value/@nullFlavor not present then  This value MAY contain zero or one [0..1] @sdtc:valueSet |

## Employment History Observation Organizer (V1.1)

#### [Employment History Observation Organizer (V1.1)](#_bookmark878) [(urn:hl7ii:2.16.840.1.113883.10.13.16:2015-01-29)](#_bookmark878)

|  |  |  |
| --- | --- | --- |
| **Change** | **Old** | **New** |
| Name | Employment History Observation Organizer | Employment History Observation Organizer (V1.1) |
| Oid | urn:hl7ii:2.16.840.1.113883.10.13. 16:2014-08-08 | urn:hl7ii:2.16.840.1.113883.10.13. 16:2015-01-29 |
| CONF #: 1169-34250 Added |  | MAY contain zero or one [0..1]  @nullFlavor (CONF:1169-34250). |
| CONF #: 1126-32708 Removed | This observation SHALL contain exactly one [1..1]  @classCode="OBS" (CONF:1126- 32708). |  |
| CONF #: 1126-32709 Removed | This observation SHALL contain exactly one [1..1]  @moodCode="EVN" (CONF:1126- 32709). |  |
| CONF #: 1126-32710 Removed | This observation SHALL contain exactly one [1..1] code (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-32710). |  |
| CONF #: 1126-32711 Removed | This observation SHALL contain exactly one [1..1] value with  @xsi:type="CD" (CONF:1126- 32711). |  |
| CONF #: 1126-32716 Removed | This observation SHALL contain exactly one [1..1]  @classCode="OBS" (CONF:1126- 32716). |  |
| CONF #: 1126-32717 Removed | This observation SHALL contain exactly one [1..1]  @moodCode="EVN" (CONF:1126- 32717). |  |
| CONF #: 1126-32718 Removed | This observation SHALL contain exactly one [1..1] code (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-32718). |  |
| CONF #: 1126-32719 Removed | This observation SHALL contain exactly one [1..1] value with  @xsi:type="CD" (CONF:1126- 32719). |  |
| CONF #: 1126-33196 Removed | This observation SHALL contain exactly one [1..1] effectiveTime (CONF:1126-33196).  Note: If current industry information is provided, the effectiveTime/low SHALL be |  |

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| **Change** | **Old** | **New** |
|  | specified and effectiveTime/high SHALL NOT be specified. If historical industry information is provided, both effectiveTime/low and effectiveTime/high SHALL be specified. |  |
| CONF #: 1126-33197 Removed | This effectiveTime SHOULD contain zero or one [0..1] low (CONF:1126- 33197). |  |
| CONF #: 1126-33198 Removed | This effectiveTime MAY contain zero or one [0..1] high (CONF:1126- 33198). |  |
| CONF #: 1126-33199 Removed | This observation SHALL contain exactly one [1..1] effectiveTime (CONF:1126-33199).  Note: If current occupation information is provided, the effectiveTime/low SHALL be specified and effectiveTime/high SHALL NOT be specified. If historical occupation information is provided, both effectiveTime/low and effectiveTime/high SHALL be specified. |  |
| CONF #: 1126-33200 Removed | This effectiveTime SHOULD contain zero or one [0..1] low (CONF:1126- 33200). |  |
| CONF #: 1126-33201 Removed | This effectiveTime MAY contain zero or one [0..1] high (CONF:1126- 33201). |  |
| CONF #: 1126-33675 Removed | This value SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet PHVS\_Industry\_CDC\_Census2010 urn:oid:2.16.840.1.114222.4.11.71 87 STATIC (CONF:1126-33675). |  |
| CONF #: 1126-33677 Removed | This value SHALL contain exactly one [1..1] @displayName, which SHALL be selected from ValueSet PHVS\_Industry\_CDC\_Census2010 urn:oid:2.16.840.1.114222.4.11.71 87 STATIC (CONF:1126-33677). |  |
| CONF #: 1126-33678 Removed | This value SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet PHVS\_Occupation\_CDC\_Census20 10 urn:oid:2.16.840.1.114222.4.11.71 86 STATIC (CONF:1126-33678). |  |
| CONF #: 1126-33679 Removed | This value SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.114222. |  |

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| **Change** | **Old** | **New** |
|  | 4.5.314" Occupation CDC Census 2010 (CodeSystem: Occupation  CDC Census 2010 urn:oid:2.16.840.1.114222.4.5.314  ) (CONF:1126-33679). |  |
| CONF #: 1126-33680 Removed | This value SHALL contain exactly one [1..1] @displayName, which SHALL be selected from ValueSet PHVS\_Occupation\_CDC\_Census20 10 urn:oid:2.16.840.1.114222.4.11.71 86 STATIC (CONF:1126-33680). |  |
| CONF #: 1126-33681 Removed | This code SHALL contain exactly one [1..1] @code="21844-6" Usual Industry Hx (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33681). |  |
| CONF #: 1126-33682 Removed | This code SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33682). |  |
| CONF #: 1126-33683 Removed | This code SHALL contain exactly one [1..1] @code="21843-8" Usual occupation Hx (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33683). |  |
| CONF #: 1126-33684 Removed | This code MAY contain zero or one [0..1]  @codeSystem="2.16.840.1.113883. 6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33684). |  |
| CONF #: 1126-33693 Removed | This value SHOULD contain exactly one [1..1] originalText (CONF:1126-33693). |  |
| CONF #: 1126-33694 Removed | This originalText SHOULD contain exactly one [1..1] reference (CONF:1126-33694).  Note: 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 #: 1126-33695 Removed | This reference SHOULD contain exactly one [1..1] @value (CONF:1126-33695). |  |
| CONF #: 1126-33696 Removed | This value SHOULD contain exactly one [1..1] originalText (CONF:1126-33696). |  |

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| **Change** | **Old** | **New** |
| CONF #: 1126-33697 Removed | This originalText SHOULD contain exactly one [1..1] reference (CONF:1126-33697).  Note: 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 #: 1126-33698 Removed | This reference SHOULD contain exactly one [1..1] @value (CONF:1126-33698). |  |
| CONF #: 1126-33699 Removed | 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:1126-33699). |  |
| CONF #: 1126-33700 Removed | 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:1126-33700). |  |
| CONF #: 1126-33719 Removed | This value SHALL contain exactly one [1..1]  @sdtc:valueSet="2.16.840.1.11422 2.4.11.7187" (CodeSystem: Industry CDC Census 2010 urn:oid:2.16.840.1.114222.4.5.315  ) (CONF:1126-33719). |  |
| CONF #: 1126-33720 Removed | This value SHALL contain exactly one [1..1]  @sdtc:valueSet="2.16.840.1.11422 2.4.11.7186" (CodeSystem: Occupation CDC Census 2010 urn:oid:2.16.840.1.114222.4.5.314  ) (CONF:1126-33720). |  |
| CONF #: 1126-34004 Removed | This value SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.114222. 4.5.315" Industry CDC Census 2010 (CodeSystem: Industry CDC Census 2010 urn:oid:2.16.840.1.114222.4.5.315  ) (CONF:1126-34004). |  |
| CONF #: 1169-32704 Modified | SHALL contain exactly one [1..1] component | If organizer/@nullFlavor is not present:  SHALL contain exactly one [1..1] component |
| CONF #: 1169-32707 Modified | SHALL contain exactly one [1..1] observation | SHALL contain exactly one [1..1] Usual Industry History (identifier: urn:hl7ii:2.16.840.1.113883.10.13. |

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| **Change** | **Old** | **New** |
|  |  | 33:2015-01-29) |
| CONF #: 1169-32712 Modified | SHALL contain exactly one [1..1] component | If organizer/@nullFlavor is not present:  SHALL contain exactly one [1..1] component |
| CONF #: 1169-32715 Modified | SHALL contain exactly one [1..1] observation | SHALL contain exactly one [1..1] Usual Occupation History (identifier: urn:hl7ii:2.16.840.1.113883.10.13. 34:2015-01-29) |
| CONF #: 1169-33957 Modified | This templateId SHALL contain exactly one [1..1]  @extension="2014-08-08" | This templateId SHALL contain exactly one [1..1]  @extension="2015-01-29" |

## No Known TNM Clinical Stage Observation (V1.1)

[**No Known TNM Clinical Stage Observation (V1.1)**](#_bookmark1101)[**(urn:hl7ii:2.16.840.1.113883.10.13.31:2015-04-02)**](#_bookmark1101)

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| --- | --- | --- |
| **Change** | **Old** | **New** |
| Name | No Known TNM Clinical Stage Observation | No Known TNM Clinical Stage Observation (V1.1) |
| Oid | urn:hl7ii:2.16.840.1.113883.10.13. 31:2014-08-08 | urn:hl7ii:2.16.840.1.113883.10.13. 31:2015-04-02 |
| CONF #: 1169-34367 Added |  | SHALL contain exactly one [1..1]  @extension="2015-04-02" (CONF:1169-34367). |
| CONF #: 1126-33960 Removed | SHALL contain exactly one [1..1]  @extension="2014-08-08" (CONF:1126-33960). |  |
| CONF #: 1169-33777 Modified | MAY contain zero or one [0..1]  @nullFlavor | SHALL NOT contain [0..0]  @nullFlavor |

## No Known TNM Pathologic Stage Observation (V1.1)

#### [No Known TNM Pathologic Stage Observation (V1.1)](#_bookmark1116) [(urn:hl7ii:2.16.840.1.113883.10.13.32:2015-04-02)](#_bookmark1116)

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| --- | --- | --- |
| **Change** | **Old** | **New** |
| Name | No Known TNM Pathologic Stage Observation | No Known TNM Pathologic Stage Observation (V1.1) |
| Oid | urn:hl7ii:2.16.840.1.113883.10.13. 32:2014-08-08 | urn:hl7ii:2.16.840.1.113883.10.13. 32:2015-04-02 |
| CONF #: 1169-34368 Added |  | SHALL contain exactly one [1..1]  @extension="2015-04-02" (CONF:1169-34368). |
| CONF #: 1169-34369 Added |  | SHALL NOT contain [0..0]  @nullFlavor (CONF:1169-34369). |
| CONF #: 1126-33857 Removed | MAY contain zero or one [0..1]  @nullFlavor (CONF:1126-33857). |  |
| CONF #: 1126-33961 Removed | SHALL contain exactly one [1..1]  @extension="2014-08-08" (CONF:1126-33961). |  |

## TNM Clinical Stage Observation (V1.1)

[**TNM Clinical Stage Observation (V1.1) (urn:hl7ii:2.16.840.1.113883.10.13.5:2015-02-**](#_bookmark1987) [**05)**](#_bookmark1987)

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| **Change** | **Old** | **New** |
| Name | TNM Clinical Stage Observation | TNM Clinical Stage Observation (V1.1) |
| Oid | urn:hl7ii:2.16.840.1.113883.10.13. 5:2014-08-08 | urn:hl7ii:2.16.840.1.113883.10.13. 5:2015-02-05 |
| CONF #: 1126-33401 Removed | This observation SHALL contain exactly one [1..1] code (CONF:1126-33401). |  |
| CONF #: 1126-33402 Removed | This code SHALL contain exactly one [1..1] @code="21908-9" Stage group.clinical (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33402). |  |
| CONF #: 1126-33403 Removed | This code SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33403). |  |
| CONF #: 1126-33404 Removed | This observation SHALL contain exactly one [1..1] statusCode (CONF:1126-33404). |  |
| CONF #: 1126-33405 Removed | This statusCode SHALL contain exactly one [1..1]  @code="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1126-33405). |  |
| CONF #: 1126-33406 Removed | This observation SHALL contain exactly one [1..1] value with  @xsi:type="CD" (CONF:1126- 33406). |  |
| CONF #: 1126-33407 Removed | This value SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet TNM Clinical Stage Group urn:oid:2.16.840.1.113883.3.520.4  .9 DYNAMIC (CONF:1126-33407). |  |
| CONF #: 1126-33409 Removed | This value SHOULD contain zero or one [0..1] originalText (CONF:1126- 33409). |  |
| CONF #: 1126-33410 Removed | The originalText, if present, SHOULD contain zero or one [0..1] reference (CONF:1126-33410). |  |
| CONF #: 1126-33411 Removed | The reference, if present, SHOULD contain zero or one [0..1] @value (CONF:1126-33411). |  |

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| **Change** | **Old** | **New** |
| CONF #: 1126-33412 Removed | 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:1126-33412). |  |
| CONF #: 1126-33413 Removed | This value SHALL contain exactly one [1..1] qualifier (CONF:1126- 33413). |  |
| CONF #: 1126-33414 Removed | This qualifier SHALL contain exactly one [1..1] name (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33414). |  |
| CONF #: 1126-33415 Removed | This qualifier SHALL contain exactly one [1..1] value (CONF:1126-33415). |  |
| CONF #: 1126-33416 Removed | This value SHOULD contain zero or one [0..1] originalText (CONF:1126- 33416). |  |
| CONF #: 1126-33417 Removed | The originalText, if present, SHOULD contain zero or one [0..1] reference (CONF:1126-33417). |  |
| CONF #: 1126-33418 Removed | This value SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet TNM Clinical Stage Descriptor urn:oid:2.16.840.1.113883.3.520.4  .10 DYNAMIC (CONF:1126-33418). |  |
| CONF #: 1126-33419 Removed | This value SHOULD contain zero or one [0..1] @displayName (CONF:1126-33419). |  |
| CONF #: 1126-33420 Removed | The reference, if present, SHOULD contain zero or one [0..1] @value (CONF:1126-33420). |  |
| CONF #: 1126-33421 Removed | 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:1126-33421). |  |
| CONF #: 1126-33431 Removed | This observation SHALL contain exactly one [1..1] entryRelationship (CONF:1126-33431) such that it Note: This entryRelationship provides information on the TNM Clinical Stage Tumor (T). |  |
| CONF #: 1126-33432 Removed | This observation SHALL contain exactly one [1..1] entryRelationship (CONF:1126-33432) such that it Note: This entryRelationship |  |

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| **Change** | **Old** | **New** |
|  | provides information on the TNM Clinical Stage Node (N). |  |
| CONF #: 1126-33433 Removed | This observation SHALL contain exactly one [1..1] entryRelationship (CONF:1126-33433) such that it Note: This entryRelationship provides information on the TNM Clinical Stage Metastasis (M). |  |
| CONF #: 1126-33434 Removed | SHALL contain exactly one [1..1]  @typeCode="COMP" Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1126-33434). |  |
| CONF #: 1126-33435 Removed | SHALL contain exactly one [1..1] observation (CONF:1126-33435). |  |
| CONF #: 1126-33436 Removed | This observation SHALL contain exactly one [1..1]  @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1126-33436). |  |
| CONF #: 1126-33437 Removed | This observation SHALL contain exactly one [1..1]  @moodCode="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1126-33437). |  |
| CONF #: 1126-33438 Removed | This observation SHALL contain exactly one [1..1] code (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33438). |  |
| CONF #: 1126-33439 Removed | This observation SHALL contain exactly one [1..1] value with  @xsi:type="CD" (CONF:1126- 33439). |  |
| CONF #: 1126-33440 Removed | This value SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet TNM Clinical Tumor urn:oid:2.16.840.1.113883.3.520.4  .6 (CONF:1126-33440). |  |
| CONF #: 1126-33441 Removed | This value SHOULD contain zero or one [0..1] originalText (CONF:1126- 33441). |  |
| CONF #: 1126-33442 Removed | The originalText, if present, SHOULD contain zero or one [0..1] reference (CONF:1126-33442). |  |
| CONF #: 1126-33443 Removed | The reference, if present, SHOULD contain zero or one [0..1] @value |  |

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| **Change** | **Old** | **New** |
|  | (CONF:1126-33443). |  |
| CONF #: 1126-33444 Removed | 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:1126-33444). |  |
| CONF #: 1126-33445 Removed | SHALL contain exactly one [1..1]  @typeCode="COMP" Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1126-33445). |  |
| CONF #: 1126-33446 Removed | SHALL contain exactly one [1..1] observation (CONF:1126-33446). |  |
| CONF #: 1126-33447 Removed | This observation SHALL contain exactly one [1..1]  @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1126-33447). |  |
| CONF #: 1126-33448 Removed | This observation SHALL contain exactly one [1..1]  @moodCode="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1126-33448). |  |
| CONF #: 1126-33449 Removed | This observation SHALL contain exactly one [1..1] code (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33449). |  |
| CONF #: 1126-33450 Removed | This observation SHALL contain exactly one [1..1] value with  @xsi:type="CD" (CONF:1126- 33450). |  |
| CONF #: 1126-33451 Removed | This value SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet TNM Clinical Node urn:oid:2.16.840.1.113883.3.520.4  .7 (CONF:1126-33451). |  |
| CONF #: 1126-33452 Removed | This value SHOULD contain zero or one [0..1] originalText (CONF:1126- 33452). |  |
| CONF #: 1126-33453 Removed | The originalText, if present, SHOULD contain zero or one [0..1] reference (CONF:1126-33453). |  |
| CONF #: 1126-33454 Removed | The reference, if present, SHOULD contain zero or one [0..1] @value (CONF:1126-33454). |  |

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| **Change** | **Old** | **New** |
| CONF #: 1126-33455 Removed | 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:1126-33455). |  |
| CONF #: 1126-33456 Removed | SHALL contain exactly one [1..1] observation (CONF:1126-33456). |  |
| CONF #: 1126-33457 Removed | SHALL contain exactly one [1..1]  @typeCode="COMP" Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1126-33457). |  |
| CONF #: 1126-33458 Removed | This observation SHALL contain exactly one [1..1]  @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1126-33458). |  |
| CONF #: 1126-33459 Removed | This observation SHALL contain exactly one [1..1]  @moodCode="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1126-33459). |  |
| CONF #: 1126-33460 Removed | This observation SHALL contain exactly one [1..1] code (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33460). |  |
| CONF #: 1126-33462 Removed | This observation SHALL contain exactly one [1..1] value with  @xsi:type="CD" (CONF:1126- 33462). |  |
| CONF #: 1126-33463 Removed | This value SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet TNM Clinical Metastasis urn:oid:2.16.840.1.113883.3.520.4  .8 (CONF:1126-33463). |  |
| CONF #: 1126-33464 Removed | This value SHOULD contain zero or one [0..1] originalText (CONF:1126- 33464). |  |
| CONF #: 1126-33465 Removed | The originalText, if present, SHOULD contain zero or one [0..1] reference (CONF:1126-33465). |  |
| CONF #: 1126-33466 Removed | The reference, if present, SHOULD contain zero or one [0..1] @value (CONF:1126-33466). |  |
| CONF #: 1126-33467 Removed | This reference/@value SHALL |  |

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| **Change** | **Old** | **New** |
|  | begin with a '#' and SHALL point to its corresponding narrative (using the approach defined in CDA Release 2, section 4.3.5.1) (CONF:1126-33467). |  |
| CONF #: 1126-33474 Removed | This observation SHALL contain exactly one [1..1]  @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1126-33474). |  |
| CONF #: 1126-33475 Removed | This observation SHALL contain exactly one [1..1]  @moodCode="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1126-33475). |  |
| CONF #: 1126-33559 Removed | This value SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 15.6" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1126-33559). |  |
| CONF #: 1126-33561 Removed | This value SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 15.6" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1126-33561). |  |
| CONF #: 1126-33564 Removed | This value SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 15.6" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1126-33564). |  |
| CONF #: 1126-33566 Removed | This value SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 15.6" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1126-33566). |  |
| CONF #: 1126-33568 Removed | This value SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 15.6" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1126-33568). |  |
| CONF #: 1126-33663 Removed | This code SHALL contain exactly one [1..1] @code="21905-5" Primary tumor.clinical [Class] Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) |  |

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| **Change** | **Old** | **New** |
|  | (CONF:1126-33663). |  |
| CONF #: 1126-33664 Removed | This code SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33664). |  |
| CONF #: 1126-33665 Removed | This code SHALL contain exactly one [1..1] @code="21906-3" Regional lymph nodes.clinical [Class] Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33665). |  |
| CONF #: 1126-33666 Removed | This code SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33666). |  |
| CONF #: 1126-33667 Removed | This code SHALL contain exactly one [1..1] @code="21907-1" Distant metastases.clinical [Class] Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33667). |  |
| CONF #: 1126-33668 Removed | This code SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33668). |  |
| CONF #: 1126-33709 Removed | This value SHALL contain exactly one [1..1]  @sdtc:valueSet="2.16.840.1.11388 3.3.520.4.9" (CodeSystem: TNM 7.  Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1126-33709). |  |
| CONF #: 1126-33710 Removed | This value SHALL contain exactly one [1..1]  @sdtc:valueSet="2.16.840.1.11388 3.3.520.4.10" (CodeSystem: TNM 7.  Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1126-33710). |  |
| CONF #: 1126-33711 Removed | This value SHALL contain exactly one [1..1]  @sdtc:valueSet="2.16.840.1.11388 3.3.520.4.6" (CodeSystem: TNM 7.  Edition urn:oid:2.16.840.1.113883.15.6) |  |

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| **Change** | **Old** | **New** |
|  | (CONF:1126-33711). |  |
| CONF #: 1126-33712 Removed | This value SHALL contain exactly one [1..1]  @sdtc:valueSet="2.16.840.1.11388 3.3.520.4.7" (CodeSystem: TNM 7.  Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1126-33712). |  |
| CONF #: 1126-33713 Removed | This value SHALL contain exactly one [1..1]  @sdtc:valueSet="2.16.840.1.11388 3.3.520.4.8" (CodeSystem: TNM 7.  Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1126-33713). |  |
| CONF #: 1126-33781 Removed | This observation SHALL contain exactly one [1..1] entryRelationship (CONF:1126-33781) such that it Note: Identifies the role of the person who recorded the staging elements. |  |
| CONF #: 1126-33782 Removed | SHALL contain exactly one [1..1] observation (CONF:1126-33782). |  |
| CONF #: 1126-33783 Removed | This observation SHALL contain exactly one [1..1] code (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33783). |  |
| CONF #: 1126-33785 Removed | SHALL contain exactly one [1..1]  @typeCode="COMP" Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1126-33785). |  |
| CONF #: 1126-33786 Removed | This observation SHALL contain exactly one [1..1]  @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1126-33786). |  |
| CONF #: 1126-33787 Removed | This observation SHALL contain exactly one [1..1]  @moodCode="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1126-33787). |  |
| CONF #: 1126-33788 Removed | This code SHALL contain exactly one [1..1] @code="21910-5" Stager.clinical Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33788). |  |

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| **Change** | **Old** | **New** |
| CONF #: 1126-33789 Removed | This code SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33789). |  |
| CONF #: 1126-33985 Removed | This observation SHALL contain exactly one [1..1] value with  @xsi:type="CD" (CONF:1126- 33985). |  |
| CONF #: 1126-33986 Removed | This value SHOULD contain zero or one [0..1] originalText (CONF:1126- 33986). |  |
| CONF #: 1126-33987 Removed | The originalText, if present, SHOULD contain zero or one [0..1] reference (CONF:1126-33987). |  |
| CONF #: 1126-33988 Removed | The reference, if present, SHOULD contain zero or one [0..1] @value (CONF:1126-33988). |  |
| CONF #: 1126-33989 Removed | This value SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet NAACCR TNM Clinical Staged By urn:oid:2.16.840.1.113883.3.520.4  .4 DYNAMIC (CONF:1126-33989). |  |
| CONF #: 1126-33990 Removed | This value SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 3.520.3.4" NAACCR TNM Clinical Staged By (CONF:1126-33990). |  |
| CONF #: 1126-33991 Removed | This value SHALL contain exactly one [1..1]  @sdtc:valueSet="2.16.840.1.11388 3.3.520.4.4" NAACCR TNM Clinical Staged By (CONF:1126-33991). |  |
| CONF #: 1126-33992 Removed | 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:1126-33992). |  |
| CONF #: 1126-34006 Removed | This name SHALL contain exactly one [1..1] @code="21909-7" Descriptor.clinical Cancer Narrative (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-34006). |  |
| CONF #: 1126-34007 Removed | This name SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 6.1" CodeSystem: LOINC |  |

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| **Change** | **Old** | **New** |
|  | 2.16.840.1.113883.6.1 (CONF:1126-34007). |  |
| CONF #: 1169-33188 Modified | MAY contain zero or one [0..1]  @nullFlavor | SHALL NOT contain [0..0]  @nullFlavor |
| CONF #: 1169-33400 Modified | This entryRelationship SHALL contain exactly one [1..1] observation | This entryRelationship SHALL contain exactly one [1..1] TNM Clinical Stage Group (identifier: urn:hl7ii:2.16.840.1.113883.10.13. 35:2015-02-05) |
| CONF #: 1169-33976 Modified | SHALL contain exactly one [1..1]  @extension="2014-08-08" | SHALL contain exactly one [1..1]  @extension="2015-02-05" |

## TNM Pathologic Stage Observation (V1.1)

#### [TNM Pathologic Stage Observation (V1.1) (urn:hl7ii:2.16.840.1.113883.10.13.7:2015-](#_bookmark2060) [02-06)](#_bookmark2060)

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| **Change** | **Old** | **New** |
| Name | TNM Pathologic Stage Observation | TNM Pathologic Stage Observation (V1.1) |
| Oid | urn:hl7ii:2.16.840.1.113883.10.13. 7:2014-08-08 | urn:hl7ii:2.16.840.1.113883.10.13. 7:2015-02-06 |
| CONF #: 1126-33472 Removed | This observation SHALL contain exactly one [1..1]  @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1126-33472). |  |
| CONF #: 1126-33473 Removed | This observation SHALL contain exactly one [1..1]  @moodCode="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1126-33473). |  |
| CONF #: 1126-33476 Removed | This observation SHALL contain exactly one [1..1] code (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33476). |  |
| CONF #: 1126-33477 Removed | This code SHALL contain exactly one [1..1] @code="21902-2" Stage group.pathology Cancer (CONF:1126-33477). |  |
| CONF #: 1126-33478 Removed | This code SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1 STATIC) (CONF:1126-33478). |  |
| CONF #: 1126-33479 Removed | This observation SHALL contain exactly one [1..1] statusCode (CONF:1126-33479). |  |
| CONF #: 1126-33480 Removed | This statusCode SHALL contain exactly one [1..1]  @code="completed" Completed (CodeSystem: ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1126-33480). |  |
| CONF #: 1126-33481 Removed | This observation SHALL contain exactly one [1..1] value with  @xsi:type="CD" (CONF:1126- 33481). |  |
| CONF #: 1126-33482 Removed | This value SHALL contain exactly one [1..1] @code, which SHALL be |  |

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| **Change** | **Old** | **New** |
|  | selected from ValueSet TNM Pathologic Stage Group urn:oid:2.16.840.1.113883.3.520.4  .20 DYNAMIC (CONF:1126-33482). |  |
| CONF #: 1126-33484 Removed | This value SHOULD contain zero or one [0..1] originalText (CONF:1126- 33484). |  |
| CONF #: 1126-33485 Removed | The originalText, if present, SHOULD contain zero or one [0..1] reference (CONF:1126-33485). |  |
| CONF #: 1126-33486 Removed | The reference, if present, SHOULD contain zero or one [0..1] @value (CONF:1126-33486). |  |
| CONF #: 1126-33487 Removed | 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:1126-33487). |  |
| CONF #: 1126-33488 Removed | This value SHALL contain exactly one [1..1] qualifier (CONF:1126- 33488). |  |
| CONF #: 1126-33489 Removed | This qualifier SHALL contain exactly one [1..1] name (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33489). |  |
| CONF #: 1126-33490 Removed | This qualifier SHALL contain exactly one [1..1] value (CONF:1126-33490). |  |
| CONF #: 1126-33491 Removed | This value SHOULD contain zero or one [0..1] originalText (CONF:1126- 33491). |  |
| CONF #: 1126-33492 Removed | The originalText, if present, SHOULD contain zero or one [0..1] reference (CONF:1126-33492). |  |
| CONF #: 1126-33493 Removed | The reference, if present, SHOULD contain zero or one [0..1] @value (CONF:1126-33493). |  |
| CONF #: 1126-33494 Removed | This value SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet TNM Pathologic Stage Descriptor urn:oid:2.16.840.1.113883.3.520.4  .21 (CONF:1126-33494). |  |
| CONF #: 1126-33495 Removed | This value SHOULD contain zero or one [0..1] @displayName (CONF:1126-33495). |  |
| CONF #: 1126-33496 Removed | This reference/@value SHALL begin with a '#' and SHALL point to |  |

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| **Change** | **Old** | **New** |
|  | its corresponding narrative (using the approach defined in CDA Release 2, section 4.3.5.1) (CONF:1126-33496). |  |
| CONF #: 1126-33506 Removed | This observation SHALL contain exactly one [1..1] entryRelationship (CONF:1126-33506) such that it Note: This entryRelationship provides information on the TNM Clinical Stage Tumor (T). |  |
| CONF #: 1126-33507 Removed | SHALL contain exactly one [1..1] observation (CONF:1126-33507). |  |
| CONF #: 1126-33508 Removed | SHALL contain exactly one [1..1]  @typeCode="COMP" Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1126-33508). |  |
| CONF #: 1126-33509 Removed | This observation SHALL contain exactly one [1..1]  @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1126-33509). |  |
| CONF #: 1126-33510 Removed | This observation SHALL contain exactly one [1..1]  @moodCode="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1126-33510). |  |
| CONF #: 1126-33511 Removed | This observation SHALL contain exactly one [1..1] value with  @xsi:type="CD" (CONF:1126- 33511). |  |
| CONF #: 1126-33512 Removed | This value SHOULD contain zero or one [0..1] originalText (CONF:1126- 33512). |  |
| CONF #: 1126-33513 Removed | The originalText, if present, SHOULD contain zero or one [0..1] reference (CONF:1126-33513). |  |
| CONF #: 1126-33514 Removed | The reference, if present, SHOULD contain zero or one [0..1] @value (CONF:1126-33514). |  |
| CONF #: 1126-33515 Removed | This observation SHALL contain exactly one [1..1] code (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33515). |  |
| CONF #: 1126-33516 Removed | This value SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet TNM |  |

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| **Change** | **Old** | **New** |
|  | Pathologic Tumor urn:oid:2.16.840.1.113883.3.520.4  .17 (CONF:1126-33516). |  |
| CONF #: 1126-33517 Removed | 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:1126-33517). |  |
| CONF #: 1126-33518 Removed | This observation SHALL contain exactly one [1..1] entryRelationship (CONF:1126-33518) such that it Note: This entryRelationship provides information on the TNM Clinical Stage Node (N). |  |
| CONF #: 1126-33519 Removed | SHALL contain exactly one [1..1]  @typeCode="COMP" Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1126-33519). |  |
| CONF #: 1126-33520 Removed | SHALL contain exactly one [1..1] observation (CONF:1126-33520). |  |
| CONF #: 1126-33521 Removed | This observation SHALL contain exactly one [1..1]  @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1126-33521). |  |
| CONF #: 1126-33522 Removed | This observation SHALL contain exactly one [1..1]  @moodCode="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1126-33522). |  |
| CONF #: 1126-33523 Removed | This observation SHALL contain exactly one [1..1] code (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33523). |  |
| CONF #: 1126-33524 Removed | This observation SHALL contain exactly one [1..1] value with  @xsi:type="CD" (CONF:1126- 33524). |  |
| CONF #: 1126-33525 Removed | This value SHOULD contain zero or one [0..1] originalText (CONF:1126- 33525). |  |
| CONF #: 1126-33526 Removed | The originalText, if present, SHOULD contain zero or one [0..1] reference (CONF:1126-33526). |  |
| CONF #: 1126-33527 Removed | The reference, if present, SHOULD |  |

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| **Change** | **Old** | **New** |
|  | contain zero or one [0..1] @value (CONF:1126-33527). |  |
| CONF #: 1126-33528 Removed | This value SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet TNM Pathologic Node urn:oid:2.16.840.1.113883.3.520.4  .18 (CONF:1126-33528). |  |
| CONF #: 1126-33529 Removed | 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:1126-33529). |  |
| CONF #: 1126-33530 Removed | This observation SHALL contain exactly one [1..1] entryRelationship (CONF:1126-33530) such that it Note: This entryRelationship provides information on the TNM Clinical Stage Metastasis (M). |  |
| CONF #: 1126-33531 Removed | SHALL contain exactly one [1..1] observation (CONF:1126-33531). |  |
| CONF #: 1126-33532 Removed | SHALL contain exactly one [1..1]  @typeCode="COMP" Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1126-33532). |  |
| CONF #: 1126-33533 Removed | This observation SHALL contain exactly one [1..1]  @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1126-33533). |  |
| CONF #: 1126-33534 Removed | This observation SHALL contain exactly one [1..1]  @moodCode="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1126-33534). |  |
| CONF #: 1126-33535 Removed | This observation SHALL contain exactly one [1..1] code (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33535). |  |
| CONF #: 1126-33536 Removed | This observation SHALL contain exactly one [1..1] value with  @xsi:type="CD" (CONF:1126- 33536). |  |
| CONF #: 1126-33537 Removed | This value SHOULD contain zero or one [0..1] originalText (CONF:1126- |  |

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| **Change** | **Old** | **New** |
|  | 33537). |  |
| CONF #: 1126-33538 Removed | The originalText, if present, SHOULD contain zero or one [0..1] reference (CONF:1126-33538). |  |
| CONF #: 1126-33539 Removed | The reference, if present, SHOULD contain zero or one [0..1] @value (CONF:1126-33539). |  |
| CONF #: 1126-33540 Removed | This value SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet TNM Pathologic Metastasis urn:oid:2.16.840.1.113883.3.520.4  .19 (CONF:1126-33540). |  |
| CONF #: 1126-33541 Removed | 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:1126-33541). |  |
| CONF #: 1126-33558 Removed | This value SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 15.6" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1126-33558). |  |
| CONF #: 1126-33560 Removed | This value SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 15.6" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1126-33560). |  |
| CONF #: 1126-33570 Removed | This value SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 15.6" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1126-33570). |  |
| CONF #: 1126-33572 Removed | This value SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 15.6" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1126-33572). |  |
| CONF #: 1126-33574 Removed | This value SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 15.6" (CodeSystem: TNM 7. Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1126-33574). |  |
| CONF #: 1126-33669 Removed | This code SHALL contain exactly one [1..1] @code="21899-0" |  |

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| **Change** | **Old** | **New** |
|  | Primary tumor.pathology Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33669). |  |
| CONF #: 1126-33670 Removed | This code MAY contain zero or one [0..1]  @codeSystem="2.16.840.1.113883. 6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33670). |  |
| CONF #: 1126-33671 Removed | This code SHALL contain exactly one [1..1] @code="21900-6" Regional lymph nodes.pathology [Class] Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33671). |  |
| CONF #: 1126-33672 Removed | This code SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33672). |  |
| CONF #: 1126-33673 Removed | This code MAY contain zero or one [0..1] @code="21901-4" Distant metastases.pathology [Class] Cancer (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33673). |  |
| CONF #: 1126-33674 Removed | This code MAY contain zero or one [0..1]  @codeSystem="2.16.840.1.113883. 6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33674). |  |
| CONF #: 1126-33714 Removed | This value SHALL contain exactly one [1..1]  @sdtc:valueSet="2.16.840.1.11388 3.3.520.4.20" (CodeSystem: TNM 7.  Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1126-33714). |  |
| CONF #: 1126-33715 Removed | This value SHALL contain exactly one [1..1]  @sdtc:valueSet="2.16.840.1.11388 3.3.520.4.21" (CodeSystem: TNM 7.  Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1126-33715). |  |
| CONF #: 1126-33716 Removed | This value SHALL contain exactly one [1..1]  @sdtc:valueSet="2.16.840.1.11388 |  |

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| --- | --- | --- |
| **Change** | **Old** | **New** |
|  | 3.3.520.4.17" (CodeSystem: TNM 7.  Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1126-33716). |  |
| CONF #: 1126-33717 Removed | This value SHALL contain exactly one [1..1]  @sdtc:valueSet="2.16.840.1.11388 3.3.520.4.18" (CodeSystem: TNM 7.  Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1126-33717). |  |
| CONF #: 1126-33718 Removed | This value SHALL contain exactly one [1..1]  @sdtc:valueSet="2.16.840.1.11388 3.3.520.4.19" (CodeSystem: TNM 7.  Edition urn:oid:2.16.840.1.113883.15.6) (CONF:1126-33718). |  |
| CONF #: 1126-33793 Removed | This observation SHALL contain exactly one [1..1] entryRelationship (CONF:1126-33793) such that it Note: Identifies the role of the person who recorded the staging elements. |  |
| CONF #: 1126-33794 Removed | SHALL contain exactly one [1..1]  @typeCode="COMP" Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002) (CONF:1126-33794). |  |
| CONF #: 1126-33795 Removed | SHALL contain exactly one [1..1] observation (CONF:1126-33795). |  |
| CONF #: 1126-33796 Removed | This observation SHALL contain exactly one [1..1] code (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33796). |  |
| CONF #: 1126-33799 Removed | This observation SHALL contain exactly one [1..1]  @classCode="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1126-33799). |  |
| CONF #: 1126-33800 Removed | This observation SHALL contain exactly one [1..1]  @moodCode="EVN" Event (CodeSystem: ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1126-33800). |  |
| CONF #: 1126-33801 Removed | This code SHALL contain exactly one [1..1] @code="21904-8" Stager.pathology Cancer |  |

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| --- | --- | --- |
| **Change** | **Old** | **New** |
|  | (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33801). |  |
| CONF #: 1126-33802 Removed | This code SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:1126-33802). |  |
| CONF #: 1126-33993 Removed | This observation SHALL contain exactly one [1..1] value with  @xsi:type="CD" (CONF:1126- 33993). |  |
| CONF #: 1126-33994 Removed | This value SHOULD contain zero or one [0..1] originalText (CONF:1126- 33994). |  |
| CONF #: 1126-33995 Removed | The originalText, if present, SHOULD contain zero or one [0..1] reference (CONF:1126-33995). |  |
| CONF #: 1126-33996 Removed | The reference, if present, SHOULD contain zero or one [0..1] @value (CONF:1126-33996). |  |
| CONF #: 1126-33997 Removed | This value SHALL contain exactly one [1..1] @code, which SHALL be selected from ValueSet NAACCR TNM Pathologic Staged By urn:oid:2.16.840.1.113883.3.520.4  .27 DYNAMIC (CONF:1126-33997). |  |
| CONF #: 1126-33998 Removed | This value SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 3.520.3.17" NAACCR TNM  Pathologic Staged By (CONF:1126- 33998). |  |
| CONF #: 1126-33999 Removed | This value SHALL contain exactly one [1..1]  @sdtc:valueSet="2.16.840.1.11388 3.3.520.4.27" NAACCR TNM  Pathologic Staged By (CONF:1126- 33999). |  |
| CONF #: 1126-34000 Removed | 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:1126-34000). |  |
| CONF #: 1126-34008 Removed | This name SHALL contain exactly one [1..1] @code="21903-0" Descriptor.pathology Cancer Narrative (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) |  |

|  |  |  |
| --- | --- | --- |
| **Change** | **Old** | **New** |
|  | (CONF:1126-34008). |  |
| CONF #: 1126-34009 Removed | This name SHALL contain exactly one [1..1]  @codeSystem="2.16.840.1.113883. 6.1" CodeSystem: LOINC  2.16.840.1.113883.6.1 (CONF:1126-34009). |  |
| CONF #: 1169-33189 Modified | MAY contain zero or one [0..1]  @nullFlavor | SHALL NOT contain [0..0]  @nullFlavor |
| CONF #: 1169-33469 Modified | This entryRelationship SHALL contain exactly one [1..1] observation | This entryRelationship SHALL contain exactly one [1..1] TNM Pathologic Stage Group (identifier: urn:hl7ii:2.16.840.1.113883.10.13. 40:2015-02-05) |
| CONF #: 1169-33977 Modified | SHALL contain exactly one [1..1]  @extension="2014-08-08" | SHALL contain exactly one [1..1]  @extension="2015-02-06" |

## Cancer Diagnosis Section (entries required) (V1.1)

#### [Cancer Diagnosis Section (entries required) (V1.1)](#_bookmark372) [(urn:hl7ii:2.16.840.1.113883.10.13.2:2015-02-05)](#_bookmark372)

|  |  |  |
| --- | --- | --- |
| **Change** | **Old** | **New** |
| Name | Cancer Diagnosis Section (entries required) | Cancer Diagnosis Section (entries required) (V1.1) |
| Oid | urn:hl7ii:2.16.840.1.113883.10.13. 2:2014-08-08 | urn:hl7ii:2.16.840.1.113883.10.13. 2:2015-02-05 |
| CONF #: 1169-257 Modified | SHALL contain exactly one [1..1] Cancer Diagnosis Concern Act (identifier: urn:hl7ii:2.16.840.1.113883.10.13. 3:2014-08-08) | SHALL contain exactly one [1..1] Cancer Diagnosis Concern Act (V1.1) (identifier: urn:hl7ii:2.16.840.1.113883.10.13. 3:2015-02-05) |
| CONF #: 1169-33947 Modified | SHALL contain exactly one [1..1]  @extension="2014-08-08" | SHALL contain exactly one [1..1]  @extension="2015-02-05" |

## Social History Section (V2) - Cancer IG Specific Constraints (V1.1)

[**Social History Section (V2) - Cancer IG Specific Constraints (V1.1)**](#_bookmark638)[**(urn:hl7ii:2.16.840.1.113883.10.13.11:2015-01-29)**](#_bookmark638)

|  |  |  |
| --- | --- | --- |
| **Change** | **Old** | **New** |
| Name | Social History Section (V2) - Cancer IG Specific Constraints | Social History Section (V2) - Cancer IG Specific Constraints (V1.1) |
| Oid | urn:hl7ii:2.16.840.1.113883.10.13. 11:2014-08-08 | urn:hl7ii:2.16.840.1.113883.10.13. 11:2015-01-29 |
| CONF #: 1126-33685 Removed | This organizer MAY contain zero or one [0..1] @nullFlavor (CONF:1126- 33685). |  |
| CONF #: 1169-32700 Modified | SHALL contain exactly one [1..1] Employment History Observation Organizer (identifier: urn:hl7ii:2.16.840.1.113883.10.13. 16:2014-08-08) | SHALL contain exactly one [1..1] Employment History Observation Organizer (V1.1) (identifier: urn:hl7ii:2.16.840.1.113883.10.13. 16:2015-01-29) |
| CONF #: 1169-33954 Modified | SHALL contain exactly one [1..1]  @extension="2014-08-08" | SHALL contain exactly one [1..1]  @extension="2015-01-29" |

# A P P E N D I X A : D A T A E L E M E N T S A N D C D A E L E M E N T S R E L A T I O N S H I P T A B L E ( N O N - N O R M A T I V E )

The following table provides the data elements, template ID and optionality for the Ambulatory Healthcare Provider Cancer Event Report.

***Table 239: Data Elements Cross Reference***

|  |  |
| --- | --- |
| **DATA ELEMENTS CROSS REFERENCE** | |
| **Column** | **Definition** |
| NAACCR ID Number (1) | Data Item number reference assigned to data elements by the North American Association of Central Cancer Registries (NAACCR) and used by hospital, state, provincial and national cancer registries in North America.  NAACCR ID Number can be used to find data element definition in [NAACCR](http://www.naaccr.org/LinkClick.aspx?fileticket=H7hn-uneaGc%3d&amp;tabid=133&amp;mid=473)  [Standards for Cancer Registries, Volume II: Data Standards and Data](http://www.naaccr.org/LinkClick.aspx?fileticket=H7hn-uneaGc%3d&amp;tabid=133&amp;mid=473)  [Dictionary, Sixteenth Edition](http://www.naaccr.org/LinkClick.aspx?fileticket=H7hn-uneaGc%3d&amp;tabid=133&amp;mid=473) |
| Data Element (2) | This is the concept that may be present or a formal data element name corresponding to a standard representation of this concept. |
| Opt (Optionality) (6) | Indicates optionality of the data element. |
| templateID (3) | OID for the templateID |

***Table 240: Ambulatory Healthcare Provider Cancer Event Report — Data Elements***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **NAACCR**  **ID** | **Data Element** | **Opt** | **Code System/**  **Value Set** | **Template Identifier** |
|  | **CDA Header** | **SHALL** |  |  |
| 2110 | Date Case Report Exported | **SHALL**  (NO NULL) |  | General Header Constraints for CDA R2  urn:hl7ii:2.16.840.1.113883.10.20.22.1.1  :2014-06-09 |
|  | SetID1 | **SHALL** |  | US Realm Header – Cancer Specific Constraints  urn:hl7ii:2.16.840.1.113883.10.13.1:2015  -01-29 |
|  | VersionNumber | **SHALL** |  | US Realm Header – Cancer Specific Constraints  urn:hl7ii:2.16.840.1.113883.10.13.1:2015  -01-29 |
| 2170 | Vendor Name | **SHALL** |  | US Realm Header – Cancer Specific Constraints  urn:hl7ii:2.16.840.1.113883.10.13.1:2015  -01-29 |

1 When combined with Version Number, will indicate whether a CDA document is a replacement of a previously transmitted Cancer Event Report.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **NAACCR**  **ID** | **Data Element** | **Opt** | **Code System/**  **Value Set** | **Template Identifier** |
| 2230 | Patient Name – Last | **SHALL**  (NO NULL) |  | US Realm Patient Name (PTN.US.FIELDED) - Cancer IG Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.18:20 14-08-08) |
| 2270 | Patient Name – Suffix | **SHOULD** |  | US Realm Patient Name (PTN.US.FIELDED) - Cancer IG Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.18:20 14-08-08) |
| 2240 | Patient Name – First | **SHALL**  (NO NULL) |  | US Realm Patient Name (PTN.US.FIELDED) - Cancer IG Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.18:20 14-08-08) |
| 2250 | Patient Name - Middle | **SHALL** |  | US Realm Patient Name (PTN.US.FIELDED) - Cancer IG Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.18:20 14-08-08) |
| 2390 | Patient Name - Maiden | **SHOULD** |  | US Realm Patient Name (PTN.US.FIELDED) - Cancer IG Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.18:20 14-08-08) |
| 2280 | Patient Name – Alias | **SHOULD** |  | US Realm Patient Name (PTN.US.FIELDED) - Cancer IG Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.18:20 14-08-08) |
| 2330, 2530 | Patient Address – No & Street | **SHALL** |  | US Realm Address (AD.US.FIELDED) (V2) - Cancer IG Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.17:20 14-08-08) |
| 2335, 2355 | Patient Address - Supplemental | **SHALL** |  | US Realm Address (AD.US.FIELDED) (V2) - Cancer IG Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.17:20 14-08-08) |
| 70, 1810 | Patient Address - City | **SHALL** | Value Set: City urn:oid:2.16.840.1.114222.4.11.973  Table 225: City | US Realm Address (AD.US.FIELDED) (V2) - Cancer IG Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.17:20 14-08-08) |
| 80 - 1820 | Patient Address - State | **SHALL** | Value Set: StateValueSet urn:oid:2.16.840.1.113883.3.88.12.80.1  [Table 222: StateValueSet](#Table_222) | US Realm Address (AD.US.FIELDED) (V2) - Cancer IG Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.17:20 14-08-08) |
| 100, 1830 | Patient Address – Postal Code | **SHALL** | Value Set: PostalCode urn:oid:2.16.840.1.113883.3.88.12.80.2  [Table 17: PostalCode](#Table_17) | US Realm Address (AD.US.FIELDED) (V2) - Cancer IG Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.17:20 14-08-08) |
| 102, 1832 | Patient Address - Country | **SHALL** | Value Set: Country urn:oid:2.16.840.1.113883.3.88.12.80.63  [Table 16: Country](#Table_16) | US Realm Address (AD.US.FIELDED) (V2) - Cancer IG Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.17:20 14-08-08) |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **NAACCR**  **ID** | **Data Element** | **Opt** | **Code System/**  **Value Set** | **Template Identifier** |
|  | Address History (Useable Period) | **SHALL** |  | US Realm Address (AD.US.FIELDED) (V2) - Cancer IG Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.17:20 14-08-08) |
|  | Address Use | **SHOULD** |  | US Realm Address (AD.US.FIELDED) (V2) - Cancer IG Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.17:20 14-08-08) |
| 2360 | Patient Telephone | **SHALL** |  | US Realm Address (AD.US.FIELDED) (V2) - Cancer IG Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.17:20 14-08-08) |
| 220 | Patient Sex/Gender | **SHALL**  (NO NULL) | Value Set: Administrative Gender (HL7 V3) urn:oid:2.16.840.1.113883.1.11.1  [Table 11: Administrative Gender (HL7 V3)](#Table_11) | US Realm Header – Cancer Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.1:201 5-01-29) |
| 240 | Patient Date of Birth | **SHALL**  (NO NULL) |  | US Realm Header – Cancer Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.1:201 5-01-29) |
| 1750 | Date of Last Contact | **SHALL** |  | General Header Constraints for CDA R2 (urn:hl7ii:2.16.840.1.113883.10.20.22.1.1  :2014-06-09) |
|  | Date of Death | **SHOULD** |  | US Realm Header – Cancer Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.1:201 5-01-29) |
| 2300 | Patient Medical Record Number | **SHALL** |  | US Realm Header – Cancer Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.1:201 5-01-29) |
| 2320 | Patient Social Security Number | **SHALL** |  | US Realm Header – Cancer Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.1:201 5-01-29) |
| 160 | Patient Race 1 | **SHALL** | Value Set: Race Category Excluding Nulls urn:oid:2.16.840.1.113883.3.2074.1.1.3  [Table 13: Race Category Excluding Nulls](#Table_13) | US Realm Header – Cancer Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.1:201 5-01-29) |
| 161,162,  163, 164 | Patient Race 2 - 5 | **SHALL** | Value Set: Race urn:oid:2.16.840.1.113883.1.11.14914  [Table 4: Race](#Table_4) | General Header Constraints for CDA R2 (urn:hl7ii:2.16.840.1.113883.10.20.22.1.1  :2014-06-09) |
| 170 | Race Coding System Current | **SHALL** |  | US Realm Address (AD.US.FIELDED) (V2) - Cancer IG Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.17:20 14-08-08) |
| 190 | Patient Ethnicity | **SHALL** | Value Set: Ethnicity urn:oid:2.16.840.1.114222.4.11.837  [Table 14: Ethnicity](#Table_14) | General Header Constraints for CDA R2 (urn:hl7ii:2.16.840.1.113883.10.20.22.1.1  :2014-06-09) |
|  | Language Communication | **SHALL** | Value Set: Language urn:oid:2.16.840.1.113883.1.11.11526  [Table 9: Language](#Table_9) | General Header Constraints for CDA R2 (urn:hl7ii:2.16.840.1.113883.10.20.22.1.1  :2014-06-09) |

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| **NAACCR**  **ID** | **Data Element** | **Opt** | **Code System/**  **Value Set** | **Template Identifier** |
| 252 | Birthplace – State | **SHALL** | Value Set: StateValueSet urn:oid:2.16.840.1.113883.3.88.12.80.1  [Table 222: StateValueSet](#Table_222) | US Realm Address (AD.US.FIELDED) (V2) - Cancer IG Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.17:20 14-08-08) |
| 254 | Birthplace – Country | **SHALL** | Value Set: Country urn:oid:2.16.840.1.113883.3.88.12.80.63  [Table 16: Country](#Table_16) | US Realm Address (AD.US.FIELDED) (V2) - Cancer IG Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.17:20 14-08-08) |
| 150 | Patient Marital Status | **SHALL** | Value Set: Marital Status urn:oid:2.16.840.1.113883.1.11.12212  [Table 3: Marital Status](#Table_3) | US Realm Header – Cancer Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.1:201 5-01-29) |
|  | Physician Name  (Last, Suffix, First, Middle) | **SHALL** |  | General Header Constraints for CDA R2 (urn:hl7ii:2.16.840.1.113883.10.20.22.1.1  :2014-06-09)  [serviceEvent/performer] |
| 2465, 2475 | Physician ID – NPI | **SHALL** |  | General Header Constraints for CDA R2 (urn:hl7ii:2.16.840.1.113883.10.20.22.1.1  :2014-06-09)  [serviceEvent/performer] |
| 2460, 2470 | Physician – Local ID | **SHOULD** |  | General Header Constraints for CDA R2 (urn:hl7ii:2.16.840.1.113883.10.20.22.1.1  :2014-06-09)  [serviceEvent/performer] |
|  | Physician Address  (Street Address, City, State, Zip Code, Country, Telephone, email) | **SHALL** |  | US Realm Address (AD.US.FIELDED) (V2) - Cancer IG Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.17:20 14-08-08)  [serviceEvent/performer] |
|  | Physician Specialty | **SHOULD** | Value Set: Healthcare Provider Taxonomy (HIPAA) urn:oid:2.16.840.1.114222.4.11.1066  [Table 21: Healthcare Provider Taxonomy](#Table_21) (HIPAA) | General Header Constraints for CDA R2 (urn:hl7ii:2.16.840.1.113883.10.20.22.1.1  :2014-06-09)  [serviceEvent/performer] |
| 545 | Provider Organization ID | **SHALL** |  | General Header Constraints for CDA R2 (urn:hl7ii:2.16.840.1.113883.10.20.22.1.1  :2014-06-09)  [encompassingEncounter/healthcareFacility |
|  | Provider Organization (Street Address, City, State,  Zip Code, Country, Telephone) | **SHALL** |  | US Realm Address (AD.US.FIELDED) (V2) - Cancer IG Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.17:20 14-08-08)  [encompassingEncounter/healthcareFacility |
| 2415 | Provider Referred From – NPI | **SHALL** |  | US Realm Header – Cancer Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.1:201 5-01-29)  [Encompassing Encounter] |
| 2410 | Provider Referred From – Local ID | **SHOULD** |  | US Realm Header – Cancer Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.1:201 5-01-29)  Encompassing Encounter] |

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| **NAACCR**  **ID** | **Data Element** | **Opt** | **Code System/**  **Value Set** | **Template Identifier** |
|  | Provider Referred From Address (Street Address, City, State, Zip Code, Country, Telephone) | **SHALL** |  | US Realm Address (AD.US.FIELDED) (V2) - Cancer IG Specific Constraints (urn:hl7ii:2.16.840.1.113883.10.13.17:20 14-08-08)  [Encompassing Encounter] |
|  | **Social History Section (V2) - Cancer IG Specific Constraints** | **SHALL** |  | section: identifier  (urn:hl7ii:2.16.840.1.113883.10.13.11:20 15-01-29) |
|  | Social History Narrative | **SHALL** |  |  |
| 272 | Occupation | **SHALL** | ValueSet [PHVS\_Occupation\_CDC\_Census2010](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=1445D71C-F37F-4504-8B6C-BA48C5A3F4CA) urn:oid:2.16.840.1.114222.4.11.7186 | Employment History Observation Organizer organizer: identifier (urn:hl7ii:2.16.840.1.113883.10.13.16:20 15-01-29) |
| 310 | Text--Usual Occupation | **SHALL** |  | Employment History Observation Organizer organizer: identifier (urn:hl7ii:2.16.840.1.113883.10.13.16:20 15-01-29) |
| 282 | Industry | **SHALL** | ValueSet [PHVS\_Industry\_CDC\_Census2010](http://phinvads.cdc.gov/vads/ViewValueSet.action?id=2E3330DF-CBD5-43E3-A6B7-FF9BFA52680E) urn:oid:2.16.840.1.114222.4.11.7187 | Employment History Observation Organizer organizer: identifier (urn:hl7ii:2.16.840.1.113883.10.13.16:20 15-01-29) |
| 320 | Text--Usual Industry | **SHALL** |  | Employment History Observation Organizer organizer: identifier (urn:hl7ii:2.16.840.1.113883.10.13.16:20 15-01-29) |
| 330 | Occ/Ind Coding System | **SHALL** |  | Employment History Observation Organizer organizer: identifier (urn:hl7ii:2.16.840.1.113883.10.13.16:20 15-01-29) |
|  | Smoking Status – Meaningful Use | **SHALL** | Value Set: Current Smoking Status urn:oid:2.16.840.1.113883.11.20.9.38  [Table 184: Current Smoking Status](#Table_184) | Smoking Status - Meaningful Use (V2) observation: identifier (urn:hl7ii:2.16.840.1.113883.10.20.22.4. 78:2014-06-09) |
|  | Tobacco Use | **MAY** | Value Set: Tobacco Use urn:oid:2.16.840.1.113883.11.20.9.41  [Table 207: Tobacco Use](#Table_207) | Tobacco Use - V2  observation: identifier (urn:hl7ii:2.16.840.1.113883.10.20.22.4. 85:2014-06-09) |
|  | **Payers Section** | **SHALL** |  | section: identifier  (urn:hl7ii:2.16.840.1.113883.10.20.22.2. 18:2014-06-09) |

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| **NAACCR**  **ID** | **Data Element** | **Opt** | **Code System/**  **Value Set** | **Template Identifier** |
| 630 | Payer Type | **SHOULD** | Value Set: Payer urn:oid:2.16.840.1.114222.4.11.3591  [Table 128: Payer](#Table_128) | Policy Activity (V2)  act: identifier (urn:hl7ii:2.16.840.1.113883.10.20.22.4.  61:2014-06-09) |
|  | **Cancer Diagnosis Section** | **SHALL** (NO NULL) |  | section: identifier (urn:hl7ii:2.16.840.1.113883.10.13.2:2015-02-05) |
| 390 | Diagnosis Date | **SHALL**  (NO NULL) |  | Cancer Diagnosis Observation  observation: identifier (urn:hl7ii:2.16.840.1.113883.10.13.4:201 5-02-05) |
| 522 | [Histologic type](#HistologicType)  Note: The value records the histologic type (or cell type) of a malignant tumor (e.g.,  carcinoma, melanoma, sarcoma, lymphoma, leukemia). | **SHALL** | (a) ICD-O-3 (CodeSystem: 2.16.840.1.113883.6.43.1) **OR**  (b) [Morphologic Abnormality of Neoplasms Value Set (ValueSet: 2.16.840.1.114222.4.11.7256)](#Table_72) **OR**  (c) ICD-9-CM Appendix A-Morphology of Neoplasms (CodeSystem: 2.16.840.1.114222.4.11.6038) **OR**  (d) ICD-10-CM (CodeSystem: 2.16.840.1.113883.6.90) (CONF:1169-32473). | Cancer Diagnosis Observation  observation: identifier (urn:hl7ii:2.16.840.1.113883.10.13.4:201 5-02-05) |
| 523 | [Behavior](#Behavior)  Note: This qualifier provides Behavior information, indicating whether the tumor has a benign, uncertain, in situ, malignant or metastatic behavior. | **SHALL** | Value Set: NAACCR Behavior Code urn:oid:2.16.840.1.113883.3.520.4.14  [Table 68: NAACCR Behavior Code](#Table_68) | Cancer Diagnosis Observation  observation: identifier (urn:hl7ii:2.16.840.1.113883.10.13.4:201 5-02-05) |
| 440 | [Grade](#Grade)  Note: This qualifier is used to indicate the Grade (or degree of differentiation) of tumor. | **SHALL** | Value Set: NAACCR Grade urn:oid:2.16.840.1.113883.3.520.4.15  [Table 70: NAACCR Grade](#Table_70) | Cancer Diagnosis Observation  observation: identifier (urn:hl7ii:2.16.840.1.113883.10.13.4:201 5-02-05) |
| 490 | [Diagnostic confirmation](#Diagnostic_Conf)  Note: This qualifier provides Diagnostic Confirmation information, indicating the best method used to confirm the presence of the cancer being reported | **SHALL** | Value Set: NAACCR Diagnostic Confirmation urn:oid:2.16.840.1.113883.3.520.4.3  [Table 69: NAACCR Diagnostic Confirmation](#Table_69) | Cancer Diagnosis Observation  observation: identifier (urn:hl7ii:2.16.840.1.113883.10.13.4:201 5-02-05) |
| 400 | [Primary Site](#Primary_Site)  Note: targetSiteCode indicates the anatomic location where the primary tumor originated (referred to as primary site) | **SHALL**  (NO NULL) | (a) ICD-9-CM Volume 1 & 2 (CodeSystem: 2.16.840.1.113883.6.103) **OR**  (b) ICD-10-CM (CodeSystem: 2.16.840.1.113883.6.90) **OR**  (c) Value Set: "Body Site" (ValueSet: 2.16.840.1.113883.3.88.12.3221.8.9) -  SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96) **OR**  (d) ICD-O-3 (CodeSystem: 2.16.840.1.113883.6.43.1) | Cancer Diagnosis Observation  observation: identifier (urn:hl7ii:2.16.840.1.113883.10.13.4:201 5-02-05) |
| 410 | Laterality | **SHALL** | Value Set: Laterality urn:oid:2.16.840.1.113883.3.520.4.22  [Table 71: Laterality](#Laterality) | Cancer Diagnosis Observation  observation: identifier (urn:hl7ii:2.16.840.1.113883.10.13.4:201 5-02-05) |
| 970 | TNM Clinical Stage Group | **SHALL** | Value Set: TNM Clinical Stage Group urn:oid:2.16.840.1.113883.3.520.4.9  [Table 195: TNM Clinical Stage Group](#TNMClinGrp) | TNM Clinical Stage Group Observation observation: identifier (urn:hl7ii:2.16.840.1.113883.10.13.35:20 15-02-05) |

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| **NAACCR**  **ID** | **Data Element** | **Opt** | **Code System/**  **Value Set** | **Template Identifier** |
| 980 | TNM Clinical Stage Descriptor | **SHALL** | TNM Clinical Stage Descriptor urn:oid:2.16.840.1.113883.3.520.4.10  [Table 196: TNM Clinical Stage Descriptor](#TNMClinDesc) | TNM Clinical Stage Group Observation observation: identifier (urn:hl7ii:2.16.840.1.113883.10.13.35:20 15-02-05) |
| 990 | TNM Clinical Staged By (Provider who recorded stage information) | **SHALL** | Value Set: NAACCR TNM Clinical Staged By urn:oid:2.16.840.1.113883.3.520.4.4  [Table 189: NAACCR TNM Clinical Staged By](#TNMClinStagedBy) | Stager Clinical Cancer  observation: identifier (urn:hl7ii:2.16.840.1.113883.10.13.39:20 15-02-05) |
| 1060 | TNM Edition Number | **SHALL** |  | TNM Clinical Stage Group Observation observation: identifier (urn:hl7ii:2.16.840.1.113883.10.13.35:20 15-02-05) |
| 940 | TNM Clinical T | **SHALL** | Value Set: TNM Clinical Tumor urn:oid:2.16.840.1.113883.3.520.4.6  [Table 133: TNM Clinical Tumor](#TNMClinT) | Primary Tumor Clinical (urn:hl7ii:2.16.840.1.113883.10.13.36:2015-02-05) |
| 950 | TNM Clinical N | **SHALL** | Value Set: TNM Clinical Node urn:oid:2.16.840.1.113883.3.520.4.7  [Table 169: TNM Clinical Node](#TNMClinN) | Regional Lymph Nodes Clinical (urn:hl7ii:2.16.840.1.113883.10.13.37:2015-02-05) |
| 960 | TNM Clinical M | **SHALL** | Value Set: TNM Clinical Metastasis urn:oid:2.16.840.1.113883.3.520.4.8  [Table 77: TNM Clinical Metastasis](#TNMClinM) | Distant Metastases Clinical (urn:hl7ii:2.16.840.1.113883.10.13.38:2015-02-05) |
| 910 | TNM Pathologic Stage Group | **SHALL** | Value Set: TNM Pathologic Stage Group urn:oid:2.16.840.1.113883.3.520.4.20  [Table 201: TNM Pathologic Stage Group](#TNMPathGrp) | TNM Pathologic Stage Group Observation observation: (urn:hl7ii:2.16.840.1.113883.10.13.40:20 15-02-05) |
| 920 | TNM Pathologic Stage Descriptor | **SHALL** | Value Set: TNM Pathologic Stage Descriptor urn:oid:2.16.840.1.113883.3.520.4.21  [Table 202: TNM Pathologic Stage Descriptor](#TNMPathDesc) | TNM Pathologic Stage Group Observation observation: (urn:hl7ii:2.16.840.1.113883.10.13.40:20 15-02-05) |
| 930 | TNM Pathologic Staged By (Provider who recorded stage information) | **SHALL** | Value Set: NAACCR TNM Pathologic Staged By urn:oid:2.16.840.1.113883.3.520.4.27  [Table 192: NAACCR TNM Pathologic Staged By](#TNMPathStagedBy) | Stager Pathologic Cancer (urn:hl7ii:2.16.840.1.113883.10.13.44:2015-02-05) |
| 1060 | TNM Edition Number | **SHALL** |  | TNM Pathologic Stage Observation  observation: (urn:hl7ii:2.16.840.1.113883.10.13.40:20 15-02-05) |
| 880 | TNM Pathologic T | **SHALL** | Value Set: TNM Pathologic Tumor urn:oid:2.16.840.1.113883.3.520.4.17  [Table 136: TNM Pathologic Tumor](#TNMPathT) | Primary Tumor Pathologic (urn:hl7ii:2.16.840.1.113883.10.13.41:2015-02-05) |
| 890 | TNM Pathologic N | **SHALL** | Value Set: TNM Pathologic Node urn:oid:2.16.840.1.113883.3.520.4.18  [Table 172: TNM Pathologic Node](#TNMPathN) | Regional Lymph Nodes Pathologic (urn:hl7ii:2.16.840.1.113883.10.13.42:2015-02-05) |
| 900 | TNM Pathologic M | **SHALL** | Value Set: TNM Pathologic Metastasis urn:oid:2.16.840.1.113883.3.520.4.19  [Table 80: TNM Pathologic Metastasis](#TNMPathM) | Distant Metastases Pathologic (urn:hl7ii:2.16.840.1.113883.10.13.43:2015-02-05) |

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| **NAACCR**  **ID** | **Data Element** | **Opt** | **Code System/**  **Value Set** | **Template Identifier** |
| 1770 | Cancer Status | **MAY** | Value Set: HealthStatus urn:oid:2.16.840.1.113883.1.11.20.12  [Table 92: HealthStatus](#Table_92) | Health Status Observation (V2)  observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.5  :2014-06-09 |
|  | **Problem Section (entries required) (V2) - Cancer IG Specific Constraints** | **SHALL** |  | section: identifier oid:2.16.840.1.113883.10.13.21 |
|  | Start date of problem | **SHALL** |  | Problem Observation (V2)  observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.4  :2014-06-09 |
|  | Stop date of problem | **SHALL** |  | Problem Observation (V2)  observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.4  :2014-06-09 |
| 3110 –  3164 | Comorbidity/complications 1 -  10  Note: this data element is for a list of the patient’s problems/conditions/diagnoses) | **SHALL** | [Problem Value Set (Value Set OID: 2.16.840.1.113883.3.88.12.3221.7.4)](#Table_86)  **OR**  ICD-10-CM (CodeSystem: 2.16.840.1.113883.6.90) **OR**  ICD-9-CM (CodeSystem: 2.16.840.1.113883.6.103) (CONF:1126-33268). | Problem Observation (V2)  observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.4  :2014-06-09 |
| 3780 -  3798 | Secondary Diagnosis 1 – 10  Note: For purposes of mapping, this data element is the same as one above (comorbidity/complications) | **SHALL** |  | Problem Observation (V2)  observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.4  :2014-06-09 |
| 3165 | ICD Revision (Comorbidities) Note: For purposes of mapping, this data element is the same as one above (comorbidity/complications) | **SHALL** |  | Problem Observation (V2)  observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.4  :2014-06-09 |
|  | **Results Section (entries required) (V2)** | **SHALL** |  | section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.3  .1:2014-06-09 |
|  | Result DateTime | **SHALL** |  | Result Observation (V2)  observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.2  :2014-06-09 |
|  | Result Value | **SHALL** |  | Result Observation (V2)  observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.2  :2014-06-09 |
|  | Result Text | **SHALL** |  | Result Observation (V2)  observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.2  :2014-06-09 |

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| **NAACCR**  **ID** | **Data Element** | **Opt** | **Code System/**  **Value Set** | **Template Identifier** |
|  | Facility | **MAY** |  | Result Observation (V2)  observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.2  :2014-06-09 |
|  | Facility ID | **MAY** |  | Result Observation (V2)  observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.2  :2014-06-09 |
|  | **Procedures Section (entries required) (V2) - Cancer IG Specific Constraints** | **SHALL** |  | section: identifier oid:2.16.840.1.113883.10.13.10 |
| 1200,1210 | Procedure DateTime | **SHALL** |  | Procedure Activity Procedure (V2) - Cancer IG Specific Constraints  procedure: identifier oid:2.16.840.1.113883.10.13.15 |
| 670, 1290,  730, 1294 | Procedure Type | **SHALL** | LOINC (CodeSystem: 2.16.840.1.113883.6.1) **OR**  SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96)  **OR**  CPT-4 (CodeSystem: 2.16.840.1.113883.6.12) **OR**  ICD10 PCS (CodeSystem: 2.16.840.1.113883.6.4) | Procedure Activity Procedure (V2) - Cancer IG Specific Constraints  procedure: identifier oid:2.16.840.1.113883.10.13.15 |
|  | Body Site of procedure | **MAY** | Value Set: Body Site urn:oid:2.16.840.1.113883.3.88.12.3221.8.9  [Table 101: Body Site](#Table_101) | Procedure Activity Procedure (V2) - Cancer IG Specific Constraints  procedure: identifier oid:2.16.840.1.113883.10.13.15 |
|  | Physical Location (where procedure was performed) | **SHALL** |  | Procedure Activity Procedure (V2) - Cancer IG Specific Constraints  procedure: identifier oid:2.16.840.1.113883.10.13.15 |
| 2480 | Physician ID (who performed the procedure) | **SHOULD** |  | Procedure Activity Procedure (V2) - Cancer IG Specific Constraints  procedure: identifier oid:2.16.840.1.113883.10.13.15 |
|  | Indication  (provides a link/pointer to relevant Problem) | **SHALL** |  | Indication (V2) - Cancer IG Specific Constraints  observation: identifier oid:2.16.840.1.113883.10.13.19 |
|  | **Radiation Oncology Section** | **SHALL** |  | section: identifier oid:2.16.840.1.113883.10.13.24 |
| 1210 | Date of Radiation | **SHOULD** |  | section: identifier oid:2.16.840.1.113883.10.13.24 |
| 2495 | NPI Physician 3 (Radiation Oncologist) | **SHALL** |  | Radiation Regional Treatment Modality organizer: identifier oid:2.16.840.1.113883.10.13.29 |

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| **NAACCR**  **ID** | **Data Element** | **Opt** | **Code System/**  **Value Set** | **Template Identifier** |
| 1570 | Radiation Regional Treatment Modality | **SHALL** | Value Set: Radiation Regional Treatment and Boost Radiation Grouping urn:oid:2.16.840.1.113883.3.520.4.23  [Table 160: Radiation Regional Treatment and Boost Radiation Grouping](#Table_160) | Radiation Regional Treatment Modality organizer: identifier oid:2.16.840.1.113883.10.13.29 |
| 110 | Radiation Regional Dose cGy | **MAY** |  | Radiation Regional Treatment Modality organizer: identifier oid:2.16.840.1.113883.10.13.29 |
| 3200 | Radiation Boost Treatment Modality | **SHALL** | Value Set: Radiation Regional Treatment and Boost Radiation Grouping urn:oid:2.16.840.1.113883.3.520.4.23  [Table 160: Radiation Regional Treatment and Boost Radiation Grouping](#Table_160) | Radiation Boost Modality Organizer organizer: identifier oid:2.16.840.1.113883.10.13.30 |
| 3210 | Radiation Boost Dose cGy | **MAY** |  | Radiation Boost Modality Organizer organizer: identifier oid:2.16.840.1.113883.10.13.30 |
|  | Indication  (links/points to relevant Problem) | **SHALL** |  | Indication (V2) - Cancer IG Specific Constraints  observation: identifier oid:2.16.840.1.113883.10.13.19 |
|  | **Medications Administered Section (V2) - Cancer IG Specific Constraints** (medications that are administered during the encounter)  **Medications Section (entries required) (V2) - Cancer IG Specific Constraints** | **SHALL** |  | section: identifier oid:2.16.840.1.113883.10.13.13  section: identifier oid:2.16.840.1.113883.10.13.12 |
|  | (Chemotherapy, Hormone Therapy, Immunotherapy) | **SHALL** |  |  |
| 1220,  1230,1240 | Start Date | **SHALL** |  | Medication Activity (V2) substanceAdministration: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.1 6:2014-06-09 |
|  | Stop Date | **SHALL** |  | Medication Activity (V2)  substanceAdministration: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.1 6:2014-06-09 |
|  | Frequency | **SHOULD** |  | Medication Activity (V2) substanceAdministration: identifier  urn:hl7ii:2.16.840.1.113883.10.20.22.4.1  6:2014-06-09 |
|  | Dose | **SHOULD** |  | Medication Activity (V2) substanceAdministration: identifier  urn:hl7ii:2.16.840.1.113883.10.20.22.4.1  6:2014-06-09 |
| 700, 1390,  710, 1400,  720, 1410 | Coded medication name | **SHALL** | Value Set: Medication Clinical Drug urn:oid:2.16.840.1.113762.1.4.1010.4  [Table 109: Medication Clinical Drug](#Table_109) | Medication Information (V2) manufacturedProduct: identifier  urn:hl7ii:2.16.840.1.113883.10.20.22.4.2  3:2014-06-09 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **NAACCR**  **ID** | **Data Element** | **Opt** | **Code System/**  **Value Set** | **Template Identifier** |
|  | Indication  (provides a link/pointer to relevant Problem) | **SHALL** |  | Indication (V2) - Cancer IG Specific Constraints observation: identifier oid:2.16.840.1.113883.10.13.19 |
|  | **Assessment Section** | **SHALL** |  | section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.9  :2014-06-09 |
|  | Assessment Narrative | **SHALL** |  | section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.9  :2014-06-09 |
|  | **Plan of Treatment Section (V2) - Cancer IG Specific Constraints** | **SHALL** |  | section: identifier oid:2.16.840.1.113883.10.13.9 |
|  | Medication Entry | **MAY** |  | Planned Medication Activity substanceAdministration: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.4 2:2014-06-09 |
|  | Procedure Entry | **MAY** |  | Planned Procedure (V2)  procedure: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.4 1:2014-06-09 |
|  | Encounters Entry | **SHALL** |  | Planned Encounter (V2) - Cancer IG Specific Constraints  encounter: identifier oid:2.16.840.1.113883.10.13.20 |
| 2425 | Provider Referred To - NPI | **SHALL** |  | Planned Encounter (V2) - Cancer IG Specific Constraints  encounter: identifier oid:2.16.840.1.113883.10.13.20 |
| 2420 | Provider Referred To - Local ID | **SHOULD** |  | Planned Encounter (V2) - Cancer IG Specific Constraints  encounter: identifier oid:2.16.840.1.113883.10.13.20 |
|  | Provider Referred To Address and Telephone | **SHOULD** |  | Planned Encounter (V2) - Cancer IG Specific Constraints  encounter: identifier oid:2.16.840.1.113883.10.13.20 |
|  | **Vital Signs Section (entries required) (V2)** | **SHALL** |  | section (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.2.4  .1:2014-06-09) |
|  | Height | **SHALL** |  | Vital Sign Observation (V2  observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.2 7:2014-06-09 |

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| --- | --- | --- | --- | --- |
| **NAACCR**  **ID** | **Data Element** | **Opt** | **Code System/**  **Value Set** | **Template Identifier** |
|  | Weight | **SHALL** |  | Vital Sign Observation (V2)  observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.2 7:2014-06-09 |
|  | Body Mass Index | **SHALL** |  | Vital Sign Observation (V2)  observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.2 7:2014-06-09 |
|  | **Family History Section** | **SHALL** |  | section: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.2.1 5:2014-06-09 |
| 360 | Family History of Cancer | **SHALL** | [Problem Value Set (Value Set OID: 2.16.840.1.113883.3.88.12.3221.7.4)](#Table_86) | Family History Observation (V2)  observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.4 6:2014-06-09 |

# A P P E N D I X B : C O N S O L I D A T E C D A R 2 ( C - C D A R 2 ) T E M P L A T E S

The following table lists all C-CDA R2 templates that are either included in this guide or are inferred but not included. See Volume I – Introductory Material, Section 2.1 - Design principle of Cancer IG for full information on how the templates below are utilized by the Guide.

***Table 241: C-CDA R2 Templates***

|  |  |  |
| --- | --- | --- |
| **C-CDA R2 Template Title** | **templateId** | **Included In This Guide** |
| US Realm Header (V2) | urn:hl7ii:2.16.840.1.113883.10.20.22.1.1:2014-06-09 | Yes |
| [Assessment Section](#_bookmark360) | urn:oid:2.16.840.1.113883.10.20.22.2.8 | Yes |
| [Family History Section (V2)](#_bookmark390) | urn:hl7ii:2.16.840.1.113883.10.20.22.2.15:2014-06-09 | Yes |
| [Medications Administered Section](#_bookmark405) [(V2)](#_bookmark405) | urn:hl7ii:2.16.840.1.113883.10.20.22.2.38:2014-06-09 | Yes |
| [Medications Section (entries](#_bookmark430) [required) (V2)](#_bookmark430) | urn:hl7ii:2.16.840.1.113883.10.20.22.2.1.1:2014-06-09 | Yes |
| [Payers Section (V2)](#_bookmark456) | urn:hl7ii:2.16.840.1.113883.10.20.22.2.18:2014-06-09 | Yes |
| [Plan of Treatment Section (V2)](#_bookmark471) | urn:hl7ii:2.16.840.1.113883.10.20.22.2.10:2014-06-09 | Yes |
| [Problem Section (entries required)](#_bookmark520) [(V2)](#_bookmark520) | urn:hl7ii:2.16.840.1.113883.10.20.22.2.5.1:2014-06-09 | Yes |
| [Procedures Section (entries](#_bookmark549) [required) (V2)](#_bookmark549) | urn:hl7ii:2.16.840.1.113883.10.20.22.2.7.1:2014-06-09 | Yes |
| [Results Section (entries required)](#_bookmark595) [(V2)](#_bookmark595) | urn:hl7ii:2.16.840.1.113883.10.20.22.2.3.1:2014-06-09 | Yes |
| [Social History Section (V2)](#_bookmark611) | urn:hl7ii:2.16.840.1.113883.10.20.22.2.17:2014-06-09 | Yes |
| [Vital Signs Section (entries required)](#_bookmark658) [(V2)](#_bookmark658) | urn:hl7ii:2.16.840.1.113883.10.20.22.2.4.1:2014-06-09 | Yes |
| [Coverage Activity (V2)](#_bookmark813) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.60:2014-06-09 | Yes |
| [Family History Observation (V2)](#_bookmark897) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.46:2014-06-09 | Yes |
| [Family History Organizer (V2)](#_bookmark924) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.45:2014-06-09 | Yes |
| [Health Status Observation (V2)](#_bookmark950) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.5:2014-06-09 | Yes |
| [Indication (V2)](#_bookmark969) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09 | Yes |
| [Medication Activity (V2)](#_bookmark996) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09 | Yes |
| [Medication Information (V2)](#_bookmark1083) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.23:2014-06-09 | Yes |
| [Planned Encounter (V2)](#_bookmark1131) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.40:2014-06-09 | Yes |
| [Planned Medication Activity (V2)](#_bookmark1187) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.42:2014-06-09 | Yes |
| [Planned Procedure (V2)](#_bookmark1228) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.41:2014-06-09 | Yes |
| [Policy Activity (V2)](#_bookmark1260) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.61:2014-06-09 | Yes |
| [Problem Concern Act (V2)](#_bookmark1371) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.3:2014-06-09 | Yes |
| [Problem Observation (V2)](#_bookmark1410) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2014-06-09 | Yes |
| [Problem Status (DEPRECATED)](#_bookmark1465) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.6:2014-06-09 | Yes |
| [Procedure Activity Procedure (V2)](#_bookmark1481) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09 | Yes |

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| --- | --- | --- |
| **C-CDA R2 Template Title** | **templateId** | **Included In This Guide** |
| [Result Observation (V2)](#_bookmark1784) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.2:2014-06-09 | Yes |
| [Result Organizer (V2)](#_bookmark1815) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.1:2014-06-09 | Yes |
| [Service Delivery Location](#_bookmark1835) | urn:oid:2.16.840.1.113883.10.20.22.4.32 | Yes |
| [Smoking Status - Meaningful Use](#_bookmark1851) [(V2)](#_bookmark1851) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.78:2014-06-09 | Yes |
| [Social History Observation (V2)](#_bookmark1873) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.38:2014-06-09 | Yes |
| [Tobacco Use (V2)](#_bookmark2083) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.85:2014-06-09 | Yes |
| [Vital Sign Observation (V2)](#_bookmark2157) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.27:2014-06-09 | Yes |
| [Vital Signs Organizer (V2)](#_bookmark2181) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.26:2014-06-09 | Yes |
| [Author Participation](#_bookmark2202) | urn:oid:2.16.840.1.113883.10.20.22.4.119 | Yes |
| [US Realm Address](#_bookmark2222) [(AD.US.FIELDED)](#_bookmark2222) | urn:oid:2.16.840.1.113883.10.20.22.5.2 | Yes |
| [US Realm Date and Time](#_bookmark2252) [(DTM.US.FIELDED)](#_bookmark2252) | urn:oid:2.16.840.1.113883.10.20.22.5.4 | Yes |
| [US Realm Patient Name](#_bookmark2257) [(PTN.US.FIELDED)](#_bookmark2257) | urn:oid:2.16.840.1.113883.10.20.22.5.1 | Yes |
| [US Realm Person Name](#_bookmark2286) [(PN.US.FIELDED)](#_bookmark2286) | urn:oid:2.16.840.1.113883.10.20.22.5.1.1 | Yes |
| Age Observation | urn:oid:2.16.840.1.113883.10.20.22.4.31 | No |
| Caregiver Characteristics | urn:oid:2.16.840.1.113883.10.20.22.4.72 | No |
| Characteristics of Home Environment | urn:oid:2.16.840.1.113883.10.20.22.4.109 | No |
| Cultural and Religious Observation | urn:oid:2.16.840.1.113883.10.20.22.4.111 | No |
| Drug Monitoring Act | urn:oid:2.16.840.1.113883.10.20.22.4.123 | No |
| Drug Vehicle | urn:oid:2.16.840.1.113883.10.20.22.4.24 | No |
| Entry Reference | urn:oid:2.16.840.1.113883.10.20.22.4.122 | No |
| Estimated Date of Delivery | urn:oid:2.16.840.1.113883.10.20.15.3.1 | No |
| External Document Reference | urn:hl7ii:2.16.840.1.113883.10.20.22.4.115:2014-06-09 | No |
| Family History Death Observation | urn:oid:2.16.840.1.113883.10.20.22.4.47 | No |
| Goal Observation | urn:oid:2.16.840.1.113883.10.20.22.4.121 | No |
| Handoff Communication Participants | urn:oid:2.16.840.1.113883.10.20.22.4.141 | No |
| Immunization Medication Information (V2) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.54:2014-06-09 | No |
| Instruction (V2) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09 | No |
| Medication Dispense (V2) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.18:2014-06-09 | No |
| Medication Supply Order (V2) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.17:2014-06-09 | No |
| Nutrition Recommendations | urn:oid:2.16.840.1.113883.10.20.22.4.130 | No |
| Planned Act (V2) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.39:2014-06-09 | No |
| Planned Coverage | urn:oid:2.16.840.1.113883.10.20.22.4.129 | No |
| Planned Immunization Activity | urn:oid:2.16.840.1.113883.10.20.22.4.120 | No |

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| **C-CDA R2 Template Title** | **templateId** | **Included In This Guide** |
| Planned Observation (V2) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.44:2014-06-09 | No |
| Planned Supply (V2) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.43:2014-06-09 | No |
| Precondition for Substance Administration (V2) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.25:2014-06-09 | No |
| Pregnancy Observation | urn:oid:2.16.840.1.113883.10.20.15.3.8 | No |
| Priority Preference | urn:oid:2.16.840.1.113883.10.20.22.4.143 | No |
| Procedure Activity Act (V2) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.12:2014-06-09 | No |
| Procedure Activity Observation (V2) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.13:2014-06-09 | No |
| Product Instance | urn:oid:2.16.840.1.113883.10.20.22.4.37 | No |
| Prognosis Observation | urn:oid:2.16.840.1.113883.10.20.22.4.113 | No |
| Reaction Observation (V2) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.9:2014-06-09 | No |
| Severity Observation (V2) | urn:hl7ii:2.16.840.1.113883.10.20.22.4.8:2014-06-09 | No |
| Substance Administered Act | urn:oid:2.16.840.1.113883.10.20.22.4.118 | No |
| Medication Section (entries optional) | urn:hl7ii:2.16.840.1.113883.10.20.22.2.1:2014-06-09 | No |
| Problem Section (entries optional) (V2) | urn:hl7ii:2.16.840.1.113883.10.20.22.2.5:2014-06-09 | No |
| Procedures Section (entries optional) (V2) | urn:hl7ii:2.16.840.1.113883.10.20.22.2.7:2014-06-09 | No |
| Results Section (entries optional) (V2) | urn:hl7ii:2.16.840.1.113883.10.20.22.2.3:2014-06-09 | No |
| Vital Signs Section (entries optional) (V2) | urn:hl7ii:2.16.840.1.113883.10.20.22.2.4:2014-06-09 | No |