

# **HL7 Draft Standard for Trial Use**

## **Implementation Guide for CDA Release 2: Reporting Death Information from the EHR to Vital Records, Release 1**



### **HL7 DSTU Ballot**

**Sponsored By:  
Public Health and Emergency Response Work Group**

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## Acknowledgments

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This document contains specifications for using HL7's Clinical Document Architecture for reporting birth and fetal death information to vital records.

The content defined within this implementation guide is drawn from the US Standard Certificate of Death as revised November 2003.

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# Chapter 1

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## INTRODUCTION

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### Topics:

- [Overview](#)
- [Approach](#)
- [Scope](#)
- [Audience](#)
- [Organization of This Guide](#)
- [Use of Templates](#)
- [Conventions Used in This Guide](#)
- [HL7 Modeling Conventions](#)



## Overview

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This US Realm implementation guide (IG) specifies a standard for transmitting death related information from a clinical setting to a vital statistics registry

## Approach

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The document focuses on the use case describing the communication of that portion of the death record collected by clinicians to appropriate local, state, and territorial vital statistics agencies using the HL7 Clinical Document Architecture. The goal of the implementation guide is to provide safe, reliable delivery of relevant clinical information to vital records. The use case supported by this implementation guide does not cover the data that is reported by funeral directors.

This use case is not intended to cover reporting to national public health agencies (NCHS).

The following assumption is a precondition for the use of this implementation guide: The data requirements for clinician supplied death information for items to be completed by the medical certifier according to the Edit Specifications for the U.S. Standard Certificate of Death. The jurisdiction may have additional data requirements and edit specifications that will be addressed at the jurisdictional level.

This project supports reusability and ease of data collection through a standard data representation harmonized with work developed through Health Information Technology Expert Panel (HITEP), and balloted through Health Level Seven (HL7).

## Scope

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This specification covers the provision of death reporting data to the applicable jurisdictional vital reporting agency within the United States. This is a US realm specification.

## Audience

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This guide is designed for use by analysts and developers who require guidance on how best to use the HL7 Clinical Document Architecture for providing death related information. Users of this guide must be familiar with the Clinical Document Architecture, and with the HL7 Version 3 models that it relies on. This guide is not intended to be a tutorial on that subject.

## Organization of This Guide

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The requirements as laid out in the body of this document are subject to change per the policy on implementation guides (see section 13.02" Draft Standard for Trial Use Documents" within the HL7 Governance and Operations Manual, [http://www.hl7.org/documentcenter/public/membership/HL7\\_Governance\\_and\\_Operations\\_Manual.pdf](http://www.hl7.org/documentcenter/public/membership/HL7_Governance_and_Operations_Manual.pdf) ).

## Templates

Templates are organized by document (see Document Templates), by section (see Section Templates), and by clinical statements (see Clinical Statement Templates). Within a section, templates are arranged hierarchically, where a more specific template is nested under the more generic template that it conforms to. See Templates by Containment for a listing of the higher level templates by containment; the appendix Templates Used in This Guide includes a table of all of the templates Organized Hierarchically.

## Vocabulary and Value Sets

Vocabularies recommended in this guide are from standard vocabularies. In many cases, these vocabularies are further constrained into value sets for use within this guide. Value set names and OIDs are summarized in the table Summary of Value Sets. Each named value set in this summary table is stored in a template database that will be maintained by CHCA.

## Use of Templates

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When valued in an instance, the template identifier (`templateId`) signals the imposition of a set of template-defined constraints. The value of this attribute provides a unique identifier for the templates in question.

## Originator Responsibilities

An originator can apply a `templateId` to assert conformance with a particular template.

In the most general forms of CDA exchange, an originator need not apply a `templateId` for every template that an object in an instance document conforms to. This implementation guide asserts when `templateIds` are required for conformance.

## Recipient Responsibilities

A recipient may reject an instance that does not contain a particular `templateId` (e.g., a recipient looking to receive only CCD documents can reject an instance without the appropriate `templateId`).

A recipient may process objects in an instance document that do not contain a `templateId` (e.g., a recipient can process entries that contain Observation acts within a Problems section, even if the entries do not have `templateIds`).

## Conventions Used in This Guide

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### Conformance Requirements

Conformance statements are grouped and identified by the name of the template, along with the `templateId` and the context of the template (e.g., ClinicalDocument, section, observation), which specifies the element under constraint. If a template is a specialization of another template, its first constraint indicates the more general template. In all cases where a more specific template conforms to a more general template, asserting the more specific template also implies conformance to the more general template.

An example is shown below.

#### Template name

```
[<type of template>: templateId <XXXX.XX.XXX.XXX>]
```

Description of the template will be here .....

1. Conforms to <The template name> Template (templateId: XXXX<XX>XXX>YYY).
2. **SHALL** contain [1..1] @classCode = <AAA> <code display name> (CodeSystem: 123.456.789 <XXX> Class) **STATIC** (CONF:<number>).
3. ....

#### Figure 1: Template name and "conforms to" appearance

The conformance verb keyword at the start of a constraint ( **SHALL** , **SHOULD** , **MAY** , etc.) indicates business conformance, whereas the cardinality indicator (0..1, 1..1, 1..\*, etc.) specifies the allowable occurrences within an

instance. Thus, "**MAY** contain 0..1" and "**SHOULD** contain 0..1" both allow for a document to omit the particular component, but the latter is a stronger recommendation that the component be included if it is known.

The following cardinality indicators may be interpreted as follows:

- 0..1 as zero to one present
- 1..1 as one and only one present
- 2..2 as two must be present
- 1..\* as one or more present
- 0..\* as zero to many present

Value set bindings adhere to HL7 Vocabulary Working Group best practices, and include both a conformance verb (**SHALL**, **SHOULD**, **MAY**, etc.) and an indication of **DYNAMIC** vs. **STATIC** binding. The use of **SHALL** requires that the component be valued with a member from the cited value set; however, in every case any HL7 "null" value such as other (OTH) or unknown (UNK) may be used.

Each constraint is uniquely identified (e.g., "CONF:605") by an identifier placed at or near the end of the constraint. These identifiers are not sequential as they are based on the order of creation of the constraint.

1. **SHALL** contain [1..1] component/structuredBody (CONF:4082).
  - a. This component/structuredBody **SHOULD** contain [0..1] component (CONF:4130) such that it
    - a. **SHALL** contain [1..1] Reporting Parameters section (templateId:2.16.840.1.113883.10.20.17.2.1) (CONF:4131).
  - b. This component/structuredBody **SHALL** contain [1..1] component (CONF:4132) such that it
    - a. **SHALL** contain [1..1] Patient data section - NCR (templateId:2.16.840.1.113883.10.20.17.2.5) (CONF:4133).

**Figure 2: Template-based conformance statements example**

## Keywords

The keywords **SHALL**, **SHALL NOT**, **SHOULD**, **SHOULD NOT**, **MAY**, and **NEED NOT** in this document are to be interpreted as described in the [HL7 Version 3 Publishing Facilitator's Guide](#):

- **SHALL**: an absolute requirement
- **SHALL NOT**: an absolute prohibition against inclusion
- **SHOULD/SHOULD NOT**: valid reasons to include or ignore a particular item, but must be understood and carefully weighed
- **MAY/NEED NOT**: truly optional; can be included or omitted as the author decides with no implications

## XML Examples

XML samples appear in various figures in this document in a fixed-width font. Portions of the XML content may be omitted from the content for brevity, marked by an ellipsis (...) as shown in the example below. The reader should note that, currently, the examples are based on fixed strings placed within the appropriate location of the XML document. Future releases of this guide are expected to contain a more realistic example.

```
<ClinicalDocument xmlns='urn:h17-org:v3'>
...
</ClinicalDocument>
```

**Figure 3: ClinicalDocument example**

XPath expressions are used in the narrative and conformance requirements to identify elements because they are familiar to many XML implementers.

## HL7 Modeling Conventions

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### Participations, Roles and Entities

Recording information about the person or organization that participates in an act is an important feature of the CDA structure. To cite the most salient examples, the CDA document header has information about the document author, its custodian, and the associated person - the "record target". Some of the other observations or acts within the Implementation Guide, also include participations such as "location". According to the HL7 Reference Information Model, this information is captured in a specific way. For example, a "Person", playing the role of "Assigned Entity", participates in the document as its "Author". In each case, the relevant information is spread across three implementation guide elements: there is a participation, a role, and an entity. In some cases, the names are very similar, so that it looks as if information is being repeated.

### Multiplicity within Act Relationships and Participations

A key task for the implementation guide is to convey information about which items are optional and which are required. You can see this information next to the elements within the document by viewing the statements of multiplicity, e.g., 0..1, and by reviewing the conditional expressions, SHALL, SHOULD, MAY. While reviewing the document it is important to keep in mind that much information is captured as an observation. In the typical case, there will be an observation that is associated, as an entry, with the document body. In each case, there is an act relationship class that associates the observation with the document body. The relevant multiplicity is captured within the document body section, and shows whether the observation is required or not, and whether it repeats. However, within each observation, the multiplicity indicates that, if the observation is present, it must have a value for code, for value, for class code, for mood code.



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# Chapter

# 2

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## DOCUMENT TEMPLATES

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### Topics:

- [\*Reporting Death Information from a clinical setting to Vital Records\*](#)

This section contains the document level constraints for CDA documents that are compliant with this implementation guide.

## Reporting Death Information from a clinical setting to Vital Records

[ClinicalDocument: templateId 2.16.840.1.113883.10.20.26.1]

1. **SHALL** contain exactly one [1..1] **templateId** ( ) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.26.1"
2. **SHALL** contain exactly one [1..1] **@classCode**="DOCCLIN" (CodeSystem: 2.16.840.1.113883.5.6 HL7ActClass)
3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" *Event* (CodeSystem: 2.16.840.1.113883.5.1001 HL7ActMood)
4. **SHALL** contain exactly one [1..1] **code/@code**="69409-1" *U.S. standard certificate of death - 2003 revision* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)
  - *The .code value indicates that the document contains death information.*
5. **SHALL** contain exactly one [1..1] **confidentialityCode**, where the **@code** **SHALL** be selected from (CodeSystem: 2.16.840.1.11.3883.5.25 Confidentiality)
  - *An indication of the level of confidentiality with which the document needs to be managed.*
6. **SHALL** contain exactly one [1..1] **id**
  - *Provide the identifier assigned to the document by the healthcare provider acting as a custodian of the information.*
7. **SHOULD** contain zero or one [0..1] **languageCode**, where the **@code** **SHALL** be selected from (CodeSystem: 2.16.840.1.113883.11.11526 HumanLanguage)
  - *The language used for text within the document.*
8. **SHALL** contain exactly one [1..1] **realmCode/@code**="US" (CodeSystem: 1.0.3166.1 Country (ISO 3166-1))
9. **SHOULD** contain zero or one [0..1] **title**
  - *Provide a title for the death information document.*
10. **SHALL** contain exactly one [1..1] **effectiveTime**
  - *The point in time at which the document was completed.*
11. **SHALL** contain exactly one [1..1] **custodian**

*The custodian represents the organization that is in charge of maintaining the document. The custodian is the steward that is entrusted with the care of the document. Every CDA document has exactly one custodian.*

  - a. This custodian **SHALL** contain exactly one [1..1] **assignedCustodian**
    - a. This assignedCustodian Contains exactly one [1..1] **representedCustodianOrganization**
      - a. This representedCustodianOrganization **SHALL** contain exactly one [1..1] **name**
      - b. This representedCustodianOrganization **SHALL** contain exactly one [1..1] **id**
12. **SHALL** contain exactly one [1..1] **component**
  - a. Contains exactly one [1..1] *Death Report Document Body* (templateId: 2.16.840.1.113883.10.20.26.1.1)
13. **SHALL** contain exactly one [1..1] **author**

*The author participation contains information about the person who authored the document.*

- a. This author **SHALL** contain exactly one [1..1] **@typeCode**="AUT"
- b. This author **SHALL** contain exactly one [1..1] **time**

*The date/time of authorship is required by CDA. It may be set equal to the document creation date/time.*

- c. This author **SHALL** contain exactly one [1..1] **assignedAuthor**

- a. This assignedAuthor **SHALL** contain exactly one [1..1] **@classCode="ASSIGNED"**
- b. This assignedAuthor **SHALL** contain exactly one [1..1] **id**
- c. This assignedAuthor **SHALL** contain exactly one [1..1] **assignedPerson**
  - a. This assignedPerson **SHALL** contain exactly one [1..1] **@classCode="PSN"**
  - b. This assignedPerson **SHALL** contain exactly one [1..1] **@determinerCode="INSTANCE"**
  - c. This assignedPerson **SHALL** contain exactly one [1..1] **name**

*Provide the name of the clinician authoring the report.*

**14. SHALL** contain exactly one [1..1] **recordTarget**

*The recordTarget participation contains information that directly refers to the decedent.*

- a. This recordTarget **SHALL** contain exactly one [1..1] **@typeCode="RCT"**
- b. This recordTarget **SHALL** contain exactly one [1..1] **patientRole**
  - a. This patientRole **SHALL** contain exactly one [1..1] **@classCode="PAT"**
  - b. This patientRole **SHALL** contain at least one [1..\*] **id**

*One or more identifiers may be provided. Social Security Number of the decedent is required, and must be provided if it is available. If SSN is not available, a null flavor must be provided. Additional identifier types are allowed. Note, when including US Social Security Number as the patient identifier, the OID value to be used for the II root is 2.16.840.1.113883.3.184.*

- c. This patientRole **SHALL** contain exactly one [1..1] **addr**

*Street address, city, state and zip code are expected.*

- d. This patientRole **SHALL** contain exactly one [1..1] **patient**
  - a. This patient **SHALL** contain exactly one [1..1] **@classCode="PSN"**
  - b. This patient **SHALL** contain exactly one [1..1] **@determinerCode="INSTANCE"**
  - c. This patient **SHALL** contain exactly one [1..1] **administrativeGenderCode**, where the **@code** **SHALL** be selected from (CodeSystem: 2.16.840.1.113883.5.1 AdministrativeGenderCode)
  - d. This patient **SHALL** contain exactly one [1..1] **name**
- e. This patientRole **SHALL** satisfy: Value patient.id root with 2.16.840.1.113883.4.1 (US Social Security Number)

**Reporting Death Information from a clinical setting to Vital Records example**

```
Error: Missing Runtime Class
```





---

# Chapter

# 3

---

## SECTION TEMPLATES

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### Topics:

- *Death Report Document Body*

## Death Report Document Body

---

[Section: templateId 2.16.840.1.113883.10.20.26.1.1]

1. **SHALL** contain exactly one [1..1] **templateId** ( ) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.26.1.1"
2. **SHALL** contain exactly one [1..1] **code/@code**="69409-1" *U.S. standard certificate of death - 2003 revision* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)
  - *A code to indicate this is the section containing death reporting information.*
3. **SHALL** contain exactly one [1..1] **text**
  - *The text entry is drawn from the structured content contained within the entries of this section. Text is required to provide human readable content.*
4. **SHALL** contain exactly one [1..1] **entry**
  - a. Contains exactly one [1..1] *Date and Time of Death* (templateId: 2.16.840.1.113883.10.20.26.1.13)
5. **SHALL** contain exactly one [1..1] **entry**
  - *The report is expected to capture information about the physical location of death, either as an address or as a description.*
  - a. Contains exactly one [1..1] *Location of Death* (templateId: 2.16.840.1.113883.10.20.26.1.10)
6. **SHOULD** contain zero or one [0..1] **entry**
  - a. Contains exactly one [1..1] *Certifying Death* (templateId: 2.16.840.1.113883.10.20.26.1.7)
7. **SHALL** contain exactly one [1..1] **entry**
  - a. Contains exactly one [1..1] *Manner of Death* (templateId: 2.16.840.1.113883.10.20.26.1.11)
8. **SHALL** contain exactly one [1..1] **entry**
  - *Note, the entry is required if the person is female and in the age range 5 to 75 years. In other cases, e.g., male decedent, the nullFlavor "NA", should be provided.*
  - a. Contains exactly one [1..1] *Pregnancy Status* (templateId: 2.16.840.1.113883.10.20.26.1.12)
9. **SHALL** contain exactly one [1..1] **entry**
  - a. Contains exactly one [1..1] *Tobacco Use* (templateId: 2.16.840.1.113883.10.20.26.1.14)
10. **SHOULD** contain zero or one [0..1] **entry**
  - a. Contains exactly one [1..1] *Injury* (templateId: 2.16.840.1.113883.10.20.26.1.9)
11. **SHALL** contain exactly one [1..1] **entry**
  - a. Contains exactly one [1..1] *Death Causal Information* (templateId: 2.16.840.1.113883.10.20.26.1.6)
12. **SHALL** contain exactly one [1..1] **entry**
  - a. Contains exactly one [1..1] *Autopsy Performance* (templateId: 2.16.840.1.113883.10.20.26.1.2)
13. **MAY** contain zero or one [0..1] **entry**
  - a. Contains exactly one [1..1] *Autopsy Results* (templateId: 2.16.840.1.113883.10.20.26.1.3)
14. **MAY** contain zero or one [0..1] **entry**
  - a. Contains exactly one [1..1] *Coroner Referral* (templateId: 2.16.840.1.113883.10.20.26.1.5)
15. **SHALL** contain exactly one [1..1] **entry**
  - a. Contains exactly one [1..1] *Coroner Case Transfer* (templateId: 2.16.840.1.113883.10.20.26.1.4)
16. **SHALL** contain exactly one [1..1] **entry**
  - a. Contains exactly one [1..1] *Death LocationType* (templateId: 2.16.840.1.113883.10.20.26.1.8)

**17. SHALL** contain exactly one [1..1] **entry**

- a. Contains exactly one [1..1] *Pronouncing Death* (templateId: 2.16.840.1.113883.10.20.26.1.15)

**Death Report Document Body example**

Error: Missing Runtime Class



---

# Chapter

# 4

---

## CLINICAL STATEMENT TEMPLATES

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### Topics:

- *Autopsy Performance*
- *Autopsy Results*
- *Certifying Death*
- *Coroner Case Transfer*
- *Coroner Referral*
- *Date and Time of Death*
- *Death Causal Information*
- *Death Location Type*
- *Injury*
- *Location of Death*
- *Manner of Death*
- *Pregnancy Status*
- *Pronouncing Death*
- *Tobacco Use*

This section of the Implementation Guide details the clinical statement entries referenced in the document section templates. The clinical statement entry templates are arranged alphabetically.

## Autopsy Performance

---

[Observation: templateId 2.16.840.1.113883.10.20.26.1.2]

*Information on the performance of an autopsy. Minimally, information on whether or not an autopsy was performed is recorded.*

1. **SHALL** contain exactly one [1..1] **templateId** ( ) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.26.1.2"
2. **SHALL** contain exactly one [1..1] **@classCode**="OBS" *Observation* (CodeSystem: 2.16.840.1.113883.5.6 HL7ActClass)
3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" *Event* (CodeSystem: 2.16.840.1.113883.5.1001 HL7ActMood)
4. **SHALL** contain exactly one [1..1] **code/@code**="21986-5" *Autopsy Status* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)
  - *The code value notes that autopsy status information is provided.*
5. **SHALL** contain exactly one [1..1] **effectiveTime**
  - *If an autopsy is performed, this field is valued with the date and time the autopsy was begun and completed. Start date/time for the autopsy is recorded using the low property of the interval data type, while the completion date and time are recorded using the high property of the data type. Note, normally only the completion date and time will be provided.*
6. **SHALL** contain exactly one [1..1] **value** with data type BL
  - *An indicator that tells whether an autopsy was performed.*
7. **SHOULD** contain zero or one [0..1] **performer**
  - a. This performer **SHALL** contain exactly one [1..1] **@typeCode**="PRF"
  - b. This performer **SHALL** contain exactly one [1..1] **assignedEntity**
    - a. This assignedEntity **SHALL** contain exactly one [1..1] **@classCode**="ASSIGNED"
    - b. This assignedEntity **SHALL** contain exactly one [1..1] **assignedPerson**
      - a. This assignedPerson **SHALL** contain exactly one [1..1] **@classCode**="PSN"
      - b. This assignedPerson **SHALL** contain exactly one [1..1] **@determinerCode**="INSTANCE"
      - c. This assignedPerson **SHALL** contain exactly one [1..1] **name**

*This field is valued with the name of the person who performed the autopsy.*

### Autopsy Performance example

Error: Missing Runtime Class

## Autopsy Results

---

[Observation: templateId 2.16.840.1.113883.10.20.26.1.3]

*The template contains information regarding the availability of results from an autopsy.*

1. **SHALL** contain exactly one [1..1] **templateId** ( ) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.26.1.3"
2. **SHALL** contain exactly one [1..1] **@classCode**="OBS" *Observation* (CodeSystem: 2.16.840.1.113883.5.6 HL7ActClass)

3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" *Event* (CodeSystem: 2.16.840.1.113883.5.1001 HL7ActMood)
4. **SHALL** contain exactly one [1..1] **code/@code**="69436-4" *Autopsy results available* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)

- *A code that indicates that information about the availability of autopsy results is provided.*

5. **SHALL** contain exactly one [1..1] **value** with data type BL

- *An indicator that tells whether an autopsy report is available for the decedent.*

6. **MAY** contain zero or one [0..1] **entryRelationship**

*The autopsy report may be provided if it is available.*

- a. This entryRelationship **SHALL** contain exactly one [1..1] **@classCode**="OBS" *Observation* (CodeSystem: 2.16.840.1.113883.5.6 HL7ActClass)
- b. This entryRelationship **SHALL** contain exactly one [1..1] **@moodCode**="EVN" *Event* (CodeSystem: 2.16.840.1.113883.5.1001 HL7ActMood)
- c. This entryRelationship **SHALL** contain exactly one [1..1] **code/@code**="18743-5" *Autopsy Report* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)

*The code value indicates that the observation contains the autopsy report.*

- d. This entryRelationship **SHALL** contain exactly one [1..1] **value** with data type ED

*The content of the autopsy report.*

### Autopsy Results example

```
Error: Missing Runtime Class
```

## Certifying Death

[Observation: templateId 2.16.840.1.113883.10.20.26.1.7]

*The template contains information on the certification of the person's death. This information may not be available if a case has been assigned to the coroner or medical examiner.*

*The certifying physician certifies or reports the cause of death. In addition the certifying physician is responsible for including additional items, e.g., pregnancy status, tobacco use. In most cases, a physician will both pronounce death and certify or report the cause of death. A different physician will pronounce death only when the attending physician is unavailable to certify the cause of death at the time of death and if State law provides for this option. If an inquiry is required by a State Post-Mortem Examinations Act, a medical examiner or coroner is responsible for determining cause of death.*

1. **SHALL** contain exactly one [1..1] **templateId** ( ) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.26.1.7"
2. **SHALL** contain exactly one [1..1] **@classCode**
3. **SHALL** contain exactly one [1..1] **@moodCode**
4. **SHALL** contain exactly one [1..1] **code/@code**="69437-2" *Death Certifier* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)
5. **SHALL** contain exactly one [1..1] **effectiveTime**
  - *Provide the date and time at which the death certificate was signed. A value is required if the case has not been assigned to a coroner/medical examiner.*
6. **SHALL** contain exactly one [1..1] **performer**



- a. This performer **SHALL** contain exactly one [1..1] **@typeCode="PRF"**
- b. This performer **SHALL** contain exactly one [1..1] **assignedEntity**
  - a. This assignedEntity **SHALL** contain exactly one [1..1] **@classCode="ASSIGNED"**
  - b. This assignedEntity **SHALL** contain exactly one [1..1] **addr**

*The postal address used to locate the clinician or coroner at the time of death certification.  
The element is required if the death has been certified.*
  - c. This assignedEntity **SHALL** contain exactly one [1..1] **code**, where the **@code** **SHALL** be selected from

*A coded value that indicates the role played by the person certifying the death. E.g., coroner, physician.*
  - d. This assignedEntity **SHALL** contain exactly one [1..1] **assignedPerson**
    - a. This assignedPerson **SHALL** contain exactly one [1..1] **@classCode="PSN"**
    - b. This assignedPerson **SHALL** contain exactly one [1..1] **@determinerCode="INSTANCE"**
    - c. This assignedPerson **SHALL** contain exactly one [1..1] **name**

*This field is valued with the person who signed the death certificate. The full name of the certifier is required.*

*A value is required if the case has not been assigned to a coroner/medical examiner.*
  - e. This assignedEntity **SHALL** contain at least one [1..\*] **id**

*One or more identifiers for the certifying clinician. The state license number is required. Provider NPI may be added as well.*

#### Certifying Death example

```
Error: Missing Runtime Class
```

## Coroner Case Transfer

[Observation: templateId 2.16.840.1.113883.10.20.26.1.4]

*An observation to indicate whether or not the case has been transferred to a coroner or medical examiner for investigative purposes.*

1. **SHALL** contain exactly one [1..1] **templateId ( )** such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.26.1.4"**
2. **SHALL** contain exactly one [1..1] **@classCode="OBS"** *Observation* (CodeSystem: 2.16.840.1.113883.5.6 HL7ActClass)
3. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** *Event* (CodeSystem: 2.16.840.1.113883.5.1001 HL7ActMood)
4. **SHALL** contain exactly one [1..1] **code/@code="LOINC TBD"** *Coroner Assignment* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)
5. **SHALL** contain exactly one [1..1] **value** with data type BL
  - *An indicator that tells whether the case was transferred to a coroner or medical examiner.*
6. **MAY** contain zero or one [0..1] **entryRelationship**

*The coroner case identifier may be provided, if the case has been transferred to the coroner or medical examiner.*

  - a. This entryRelationship **SHALL** contain exactly one [1..1] **@classCode="OBS"** *Observation* (CodeSystem: 2.16.840.1.113883.5.6 HL7ActClass)
  - b. This entryRelationship **SHALL** contain exactly one [1..1] **code/@code="69452-1"** *Coroner-medical examiner case number* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)
  - c. This entryRelationship **SHALL** contain exactly one [1..1] **value** with data type II

*The identifier assigned to a case of death by the coroner or medical examiner.*

### Coroner Case Transfer example

Error: Missing Runtime Class

## Coroner Referral

---

[Observation: templateId 2.16.840.1.113883.10.20.26.1.5]

*The template contains information regarding the referral of a case to the coroner or medical examiner.*

1. **SHALL** contain exactly one [1..1] **templateId** ( ) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.26.1.5"
2. **SHALL** contain exactly one [1..1] **@classCode**="OBS" *Observation* (CodeSystem: 2.16.840.1.113883.5.6 HL7ActClass)
3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" *Event* (CodeSystem: 2.16.840.1.113883.5.1001 HL7ActMood)
4. **SHALL** contain exactly one [1..1] **code/@code**="69438-0" *Forensic medicine Referral note* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)
5. **SHALL** contain exactly one [1..1] **value** with data type ED
  - *A note that is intended to record the reason the case was forwarded to a coroner or medical examiner.*

### Coroner Referral example

Error: Missing Runtime Class

## Date and Time of Death

---

[Observation: templateId 2.16.840.1.113883.10.20.26.1.13]

*The template provides information about the decedent's date and time of death.*

1. **SHALL** contain exactly one [1..1] **templateId** ( 2.16.840.113883.10.20.24.1.3 ) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.26.1.13"
2. **SHALL** contain exactly one [1..1] **@classCode**="OBS" *Observation* (CodeSystem: 2.16.840.1.113883.5.6 HL7ActClass)
3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" *Event* (CodeSystem: 2.16.840.1.113883.5.1001 HL7ActMood)
4. **SHALL** contain exactly one [1..1] **code/@code**="31211-6" *Date of Death* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)
5. **SHALL** contain exactly one [1..1] **effectiveTime** with data type TS
  - *Provide the date and time of death if it is known.*
6. **MAY** contain zero or one [0..1] **text**
  - *Provide information relevant to the date/time of death in cases where the point in time can in no way be established. If needed, supplemental text may be added to indicate that date/time information, while present, is approximate.*

**Date and Time of Death example**

Error: Missing Runtime Class

**Death Causal Information**

[Organizer: templateId 2.16.840.1.113883.10.20.26.1.6]

*The template contains information provided by the clinician to indicate the cause or causes behind the person's death. The information includes the chain of events that directly caused the death, and includes other significant conditions contributing to death. There may be up to four causal elements provided, along with a single statement of the other significant conditions.*

1. **SHALL** contain exactly one [1..1] **templateId** ( ) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.26.1.6"
2. **SHALL** contain exactly one [1..1] **@classCode**="CLUSTER" (CodeSystem: 2.16.840.1.113883.5.6 HL7ActClass)
3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" *Event* (CodeSystem: 2.16.840.1.113883.5.1001 HL7ActMood)
4. **SHALL** contain exactly one [1..1] **code/@code**="69453-9" *Cause Of Death* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)
  - *A code that indicates that death causal information is provided.*
5. **SHALL** contain exactly one [1..1] **statusCode/@code**="Active" (CodeSystem: 2.16.840.1.113883.5.14 ActStatus)
  - *An indication of the status of the death causal information organizer.*
6. **SHALL** contain [1..4] **component**

*Up to four events - diseases, injuries, or complications may be entered to record the cause of death. The immediate cause of death and the underlying cause of death must be reported.*

*Additional causes of death up to two may be recorded. These are entered in a defined sequence, and the order of each is recorded using sequence number. In addition, the approximate time interval from onset until death is captured as well. This information is captured in the related Component Death Cause Interval observation. The act relationship sequence number value is used to associate the time between onset and death with the relevant event.*

- a. Such components **SHALL** contain exactly one [1..1] **@typeCode**="COMP"
- b. Such components **SHALL** contain exactly one [1..1] **sequenceNumber**
- c. Such components **SHALL** contain exactly one [1..1] **observation**
  - a. This observation **SHALL** contain exactly one [1..1] **@classCode**="OBS" *Observation* (CodeSystem: 2.16.840.1.113883.5.6 HL7ActClass)
  - b. This observation **SHALL** contain exactly one [1..1] **@moodCode**="EVN" *Event* (CodeSystem: 2.16.840.1.113883.5.1001 HL7ActMood)
  - c. This observation **SHALL** contain exactly one [1..1] **code/@code**="21984-0" *Cause of Death* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)

*An indication that the observation contains information regarding a specific cause of death.*

- d. This observation **SHALL** contain exactly one [1..1] **value** with data type CD

*In order to comply with NCHS edit specifications, the entry is descriptive text with a maximum length of 120 characters. . Death causes are ordered sequentially with the immediate cause of death given the sequence number "1", and the underlying cause of death being given the highest sequence number among the set of cited causes. Each cause of death is associated with a numeric observation Death Cause Interval*

which captures the approximate interval between the onset of the death cause (condition) and death. This linkage is implemented through the use of *actRelationship.sequenceNumber*.

- e. This observation **SHALL** contain exactly one [1..1] **componentDeathCauseInterval**
  - a. This **componentDeathCauseInterval** **SHALL** contain exactly one [1..1] **@typeCode="COMP"**
  - b. This **componentDeathCauseInterval** **SHALL** contain exactly one [1..1] **sequenceNumber**
  - c. This **componentDeathCauseInterval** **SHALL** contain exactly one [1..1] **observation**
    - a. This observation **SHALL** contain exactly one [1..1] **@classCode="OBS"** *Observation* (CodeSystem: 2.16.840.1.113883.5.6 HL7ActClass)
    - b. This observation **SHALL** contain exactly one [1..1] **@moodCode="EVN"** *Event* (CodeSystem: 2.16.840.1.113883.5.1001 HL7ActMood)
    - c. This observation **SHALL** contain exactly one [1..1] **code/@code="69440-6"** *Disease onset to death interval* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)

*An indication that the observation contains information regarding the interval between disease onset and time of death.*

- d. This observation **SHALL** contain zero or more [0..\*] **value** with data type ED

*A measure of the time interval between the onset of the disease, injury or complication, and the person's death. The data to be included will vary from statements of time intervals to text statements such as "many months", "days", "unknown".*

*Each death cause interval value is associated with a cause of death observation Cause of Death - that identifies the condition associated with the time interval. This linkage is implemented through the use of *actRelationship.sequenceNumber*.*

#### 7. **SHOULD** contain zero or more [0..\*] **component**

- a. Such components **SHALL** contain exactly one [1..1] **@typeCode="COMP"**
- b. Such components **SHALL** contain exactly one [1..1] **observation**
  - a. This observation **SHALL** contain exactly one [1..1] **@classCode="OBS"** *Observation* (CodeSystem: 2.16.840.1.113883.5.6 HL7ActClass)
  - b. This observation **SHALL** contain exactly one [1..1] **@moodCode="EVN"** *Event* (CodeSystem: 2.16.840.1.113883.5.1001 HL7ActMood)
  - c. This observation **SHALL** contain exactly one [1..1] **code/@code="69441-4"** *Other Significant Condition* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)
  - d. This observation **SHALL** contain exactly one [1..1] **value** with data type ED

*Descriptive text that provides information on a significant condition or conditions that contributed to death, but did not result in the underlying cause that is elsewhere described. In order to comply with NCHS edit specifications, the maximum length of the significant condition descriptions, across the set of encapsulated data values, is 240 characters.*

#### Death Causal Information example

```
Error: Missing Runtime Class
```

## Death Location Type

[Observation: templateId 2.16.840.1.113883.10.20.26.1.8]

*This template makes it possible to record the type of location, e.g., hospital inpatient room, at which the person died.*

- 1. **SHALL** contain exactly one [1..1] **templateId ( )** such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.26.1.8"**

2. **SHALL** contain exactly one [1..1] **@classCode**="OBS" *Observation* (CodeSystem: 2.16.840.1.113883.5.6 HL7ActClass)
3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" *Event* (CodeSystem: 2.16.840.1.113883.5.1001 HL7ActMood)
4. **SHALL** contain exactly one [1..1] **code/@code**="58332-8" *Location of Death* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)
5. **SHALL** contain exactly one [1..1] **value** with data type CD, where the **@code** **SHALL** be selected from ValueSet *Death Location Type* **STATIC**
  - *A code value to indicate the type of location where the patient died.*

#### Death Location Type example

Error: Missing Runtime Class

## Injury

[Organizer: templateId 2.16.840.1.113883.10.20.26.1.9]

*The template includes information, only provided if relevant, on an injury that contributed to the person's death.*

1. **SHALL** contain exactly one [1..1] **templateId** ( ) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.26.1.9"
2. **SHALL** contain exactly one [1..1] **@classCode**="CLUSTER" (CodeSystem: 2.16.840.1.113883.5.6 HL7ActClass)
3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" *Event* (CodeSystem: 2.16.840.1.113883.5.1001 HL7ActMood)
4. **SHALL** contain exactly one [1..1] **code/@code**="71481-6" *Did the death of this person involve injury of any kind?* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)
  - *An indication that the person's death resulted from an injury.*
5. **SHALL** contain exactly one [1..1] **statusCode**, where the **@code** **SHALL** be selected from (CodeSystem: 2.16.840.1.113883.5.14 ActStatus)
6. **SHALL** contain exactly one [1..1] **component**
  - a. This component **SHALL** contain exactly one [1..1] **@typeCode**="COMP"
  - b. This component **SHALL** contain exactly one [1..1] **observation**
    - a. This observation **SHALL** contain exactly one [1..1] **@classCode**="OBS" *Observation* (CodeSystem: 2.16.840.1.113883.5.6 HL7ActClass)
    - b. This observation **SHALL** contain exactly one [1..1] **@moodCode**="EVN" *Event* (CodeSystem: 2.16.840.1.113883.5.1001 HL7ActMood)
    - c. This observation **SHALL** contain exactly one [1..1] **code/@code**="11374-6" *Injury incident description* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)
    - d. This observation **SHALL** contain exactly one [1..1] **text**

*A text description of how the injury occurred.*
    - e. This observation **SHALL** contain exactly one [1..1] **value** with data type BL
 

*An indicator that tells whether the death resulted from an injury.*
    - f. This observation **SHALL** contain exactly one [1..1] **participant**
      - a. This participant **SHALL** contain exactly one [1..1] **@typeCode**="LOC"
      - b. This participant **SHALL** contain exactly one [1..1] **participantRole**
        - a. This participantRole **SHALL** contain exactly one [1..1] **@classCode**="ISDLOC"

- b. This participantRole **SHALL** contain exactly one [1..1] **addr**

*The street address for the place where the injury occurred.*

- c. This participantRole **SHALL** contain exactly one [1..1] **scopingEntity**

- a. This scopingEntity **SHALL** contain exactly one [1..1] **@classCode="PLC"**

- b. This scopingEntity **SHALL** contain exactly one [1..1] **@determinerCode="INSTANCE"**

- c. This scopingEntity **SHALL** contain exactly one [1..1] **desc**

*A description of the type of place where the injury occurred. Some possible entries include "at home", "farm", "factory", "office building", "restaurant".*

- g. This observation **SHALL** contain exactly one [1..1] **effectiveTime**

*A record of the date and time that the injury occurred.*

**7. SHALL** contain exactly one [1..1] **component**

- a. This component **SHALL** contain exactly one [1..1] **@typeCode="COMP"**

- b. This component **SHALL** contain exactly one [1..1] **observation**

- a. This observation **SHALL** contain exactly one [1..1] **@classCode="OBS"** *Observation* (CodeSystem: 2.16.840.1.113883.5.6 HL7ActClass)

- b. This observation **SHALL** contain exactly one [1..1] **@moodCode="EVN"** *Event* (CodeSystem: 2.16.840.1.113883.5.1001 HL7ActMood)

- c. This observation **SHALL** contain exactly one [1..1] **code/@code="69444-8"** *Did death result from injury at work* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)

- d. This observation **SHALL** contain exactly one [1..1] **value** with data type BL

*An indicator that tells whether or not the injury occurred while the person was at work.  
Required if the decedent suffered an injury leading to death.*

**8. SHALL** contain exactly one [1..1] **component**

- a. This component **SHALL** contain exactly one [1..1] **@typeCode="COMP"**

- b. This component **SHALL** contain exactly one [1..1] **observation**

- a. This observation **SHALL** contain exactly one [1..1] **@classCode="OBS"** *Observation* (CodeSystem: 2.16.840.1.113883.5.6 HL7ActClass)

- b. This observation **SHALL** contain exactly one [1..1] **@moodCode="EVN"** *Event* (CodeSystem: 2.16.840.1.113883.5.1001 HL7ActMood)

- c. This observation **SHALL** contain exactly one [1..1] **code/@code="69448-9"** *Injury leading to death associated with transportation event* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)

- d. This observation **SHALL** contain exactly one [1..1] **value** with data type BL

*An indicator that tells whether the injury leading to death was associated with a transportation event.  
Required if the decedent suffered an injury leading to death.*

**9. MAY** contain zero or one [0..1] **component**

- a. This component **SHALL** contain exactly one [1..1] **@typeCode="COMP"**

- b. This component **SHALL** contain exactly one [1..1] **observation**

- a. This observation **SHALL** contain exactly one [1..1] **@classCode="OBS"** *Observation* (CodeSystem: 2.16.840.1.113883.5.6 HL7ActClass)

- b. This observation **SHALL** contain exactly one [1..1] **@moodCode="EVN"** *Event* (CodeSystem: 2.16.840.1.113883.5.1001 HL7ActMood)

- c. This observation **SHALL** contain exactly one [1..1] **code/@code="69451-3"** *Transportation role of decedent* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)

- d. This observation **SHALL** contain exactly one [1..1] **value** with data type CD, where the **@code** **SHALL** be selected from ValueSet *Decedent Transportation Relationship* 2.16.840.1.114222.4.11.6005 **STATIC**

*A coded value that states, if the injury was related to transportation, the specific role played by the decedent, e.g. driver, passenger.  
Required if the decedent suffered an injury leading to death.*

### Injury example

Error: Missing Runtime Class

## Location of Death

---

[Observation: templateId 2.16.840.1.113883.10.20.26.1.10]

*This template contains information to document the place (geographic location) where the death occurred.*

1. **SHALL** contain exactly one [1..1] **templateId** ( ) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.26.1.10"
2. **SHALL** contain exactly one [1..1] **@classCode**="OBS" *Observation* (CodeSystem: 2.16.840.1.113883.5.6 HL7ActClass)
3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" *Event* (CodeSystem: 2.16.840.1.113883.5.1001 HL7ActMood)
4. **SHALL** contain exactly one [1..1] **code/@code**="LOINC TBD" *Location of Death* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)
5. **MAY** contain zero or one [0..1] **text**
  - *Information about the place where death occurred. It is provided if no address can be.*
6. **SHALL** contain exactly one [1..1] **value** with data type AD
  - *The mailing address for the place where the person died. This attribute is collected if the person died at a home, a health facility, or other location with a postal address.*

### Location of Death example

Error: Missing Runtime Class

## Manner of Death

---

[Observation: templateId 2.16.840.1.113883.10.20.26.1.11]

*This template contains information on the manner in which the death occurred.*

1. **SHALL** contain exactly one [1..1] **templateId** ( ) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.26.1.11"
2. **SHALL** contain exactly one [1..1] **@classCode**="OBS" *Observation* (CodeSystem: 2.16.840.1.113883.5.6 HL7ActClass)
3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" *Event* (CodeSystem: 2.16.840.1.113883.5.1001 HL7ActMood)
4. **SHALL** contain exactly one [1..1] **code/@code**="69449-7" *Manner of Death* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)
5. **SHALL** contain exactly one [1..1] **value** with data type CD, where the **@code** **SHALL** be selected from
  - *A coded indication of the manner in which the person died.*

**Manner of Death example**

Error: Missing Runtime Class

**Pregnancy Status**

[Observation: templateId 2.16.840.1.113883.10.20.26.1.12]

*This template contains information on the pregnancy status of the decedent.*

1. **SHALL** contain exactly one [1..1] **templateId** ( ) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.26.1.12"
2. **SHALL** contain exactly one [1..1] **@classCode**="OBS" *Observation* (CodeSystem: 2.16.840.1.113883.5.6 HL7ActClass)
3. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" *Event* (CodeSystem: 2.16.840.1.113883.5.1001 HL7ActMood)
4. **SHALL** contain exactly one [1..1] **code/@code**="69442-2" *Timing of recent pregnancy related to death* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)
5. **SHALL** contain exactly one [1..1] **value** with data type CD, where the **@code** **SHALL** be selected from
  - *A code that provides information regarding whether or not the person was pregnant at the time of her death, or whether she was pregnant around the time of death.*  
*Required if the person is female and in the age range 5 to 75 years.*

**Pregnancy Status example**

Error: Missing Runtime Class

**Pronouncing Death**

[Observation: templateId 2.16.840.1.113883.10.20.26.1.15]

*The template contains information on the pronouncing of the person's death.*

*In most cases, a physician will both pronounce death and certify or report the cause of death. A different physician will pronounce death only when the attending physician is unavailable to certify the cause of death at the time of death and if State law provides for this option.*

*Note, information on the pronouncing physician is only provided when the pronouncing physician and the certifying physician are different persons.*

1. **SHALL** contain exactly one [1..1] **templateId** ( ) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.26.1.15"
2. **SHALL** contain exactly one [1..1] **@classCode**
3. **SHALL** contain exactly one [1..1] **@moodCode**
4. **SHALL** contain exactly one [1..1] **code/@code**="LOINC TBD" *Death Pronouncer* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)
5. **SHALL** contain exactly one [1..1] **effectiveTime**
  - *Provide the date and time at which the decedent was pronounced dead.*
6. **MAY** contain zero or one [0..1] **performer**
  - a. This performer **SHALL** contain exactly one [1..1] **@typeCode**="PRF"



- b. This performer **SHALL** contain exactly one [1..1] **assignedEntity**
  - a. This assignedEntity **SHALL** contain exactly one [1..1] **@classCode="ASSIGNED"**
  - b. This assignedEntity **SHALL** contain exactly one [1..1] **addr**

*The postal address used to locate the clinician or coroner at the time of pronouncing death. The element is required if the pronouncing and certifying physicians are different persons.*

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

*One or more identifiers for the pronouncing clinician. The state license number is required. Provider NPI may be added as well. The element is required if the pronouncing and certifying physicians are different persons.*

- d. This assignedEntity **SHALL** contain exactly one [1..1] **assignedPerson**

- a. This assignedPerson **SHALL** contain exactly one [1..1] **@classCode="PSN"**
- b. This assignedPerson **SHALL** contain exactly one [1..1] **@determinerCode="INSTANCE"**
- c. This assignedPerson **SHALL** contain exactly one [1..1] **name**

*This field is valued with the name of the person who pronounced death. The full name is required. The element is required if the pronouncing and certifying physicians are different persons.*

#### Pronouncing Death example

```
Error: Missing Runtime Class
```

## Tobacco Use

[Observation: templateId 2.16.840.1.113883.10.20.26.1.14]

*this template includes information about the decedent's use of tobacco.*

1. **SHALL** contain exactly one [1..1] templateId ( ) such that it
  - a. **SHALL** contain exactly one [1..1] **@root="2.16.840.1.113883.10.20.26.1.14"**
2. **SHALL** contain exactly one [1..1] **@classCode="OBS"** *Observation* (CodeSystem: 2.16.840.1.113883.5.6 HL7ActClass)
3. **SHALL** contain exactly one [1..1] **@moodCode="EVN"** *Event* (CodeSystem: 2.16.840.1.113883.5.1001 HL7ActMood)
4. **SHALL** contain exactly one [1..1] **code/@code="69443-0"** *Tobacco Use* (CodeSystem: 2.16.840.1.113883.6.1 LOINC)
  - *A coded indication of the extent of the person's use of tobacco. The data is captured if tobacco use may have contributed to their death.*
5. **SHALL** contain exactly one [1..1] **value** with data type CD, where the **@code** **SHALL** be selected from

#### Tobacco Use example

```
Error: Missing Runtime Class
```

---

# Chapter

# 5

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## OTHER CLASSES

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This section of the Implementation Guide describes other classes that are not CDA Clinical Documents, Sections, or Clinical Statements.



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# Chapter

# 6

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## VALUE SETS

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### Topics:

- [\*Contributory Tobacco Use\*](#)
- [\*Death CertifierTitles\*](#)
- [\*Death Location Type\*](#)
- [\*Decedent Transportation Relationship\*](#)
- [\*HL70136\*](#)
- [\*LOINC\*](#)
- [\*Manner Of Death\*](#)
- [\*PHIN VS \(CDC Local Coding System\)\*](#)
- [\*Pregnancy Status\*](#)
- [\*SNOMEDCT\*](#)

The following tables summarize the value sets used in this Implementation Guide.

The vocabulary content within this implementation guide is based on the value sets identified in the US national standard. States/jurisdictions can introduce other values such as "hospice" and translate to "Other" prior to reporting.

## Contributory Tobacco Use

Value Set	Contributory Tobacco Use - 2.16.840.1.114222.4.11.6004
Description	The value set contains the set of codes used to describe. Note, the concept "other" is supported using the HL7 null flavor "OTH".

Code	Code System	Print Name
N	HL70136	No
2931005	SNOMEDCT	Probable diagnosis
Y	HL70136	Yes
NOC	PHIN VS (CDC Local Coding System)	Not on Certificate

## Death CertifierTitles

Value Set	Death CertifierTitles - 2.16.840.1.114222.4.11.6001
Code System	PHIN VS (CDC Local Coding System) - 2.16.840.1.114222.4.5.274
Description	The value set collects all the codes defined within the Certifier Types coding system.

Code	Code System	Print Name
MEC	PHIN VS (CDC Local Coding System)	Medical Examiner/Coroner
PCP	PHIN VS (CDC Local Coding System)	Pronouncing and Certifying Physician (MD,DO)
CP	PHIN VS (CDC Local Coding System)	Certifying Physician (MD, DP)

## Death Location Type

Value Set	Death Location Type - (OID not specified)
Code System	PHIN VS (CDC Local Coding System) - 2.16.840.1.114222.4.5.274

Code	Code System	Print Name
H-IN	PHIN VS (CDC Local Coding System)	Hospital Inpatient
H-ER/OP	PHIN VS (CDC Local Coding System)	Hospital Emergency Department or Outpatient
H-DOA	PHIN VS (CDC Local Coding System)	Hospital Dead on Arrival
NH	PHIN VS (CDC Local Coding System)	Nursing Home

Code	Code System	Print Name
RES	PHIN VS (CDC Local Coding System)	Residence
OTH	PHIN VS (CDC Local Coding System)	Other

## Decedent Transportation Relationship

Value Set	Decedent Transportation Relationship - 2.16.840.1.114222.4.11.6005
Code System	SNOMEDCT - 2.16.840.1.113883.6.96
Description	The value set contains the set of codes used to indicate the role played by the decedent with reference to a vehicle involved with a transportation injury. Note, the concept "other" is supported using the HL7 null flavor "OTH".

Code	Code System	Print Name
303980003	SNOMEDCT	Driver of moter vehicle
257500003	SNOMEDCT	Passenger
257518000	SNOMEDCT	Pedestrian

## HL70136

Value Set	HL70136
Description	The HL7 Version 2 code system that supports recording of "Yes" or "No" as vocabulary items.

## LOINC

Value Set	LOINC
Description	A database of universal identifiers for laboratory and other clinical observations. The laboratory portion of the LOINC <sup>®</sup> database contains the usual categories of chemistry, hematology, serology, microbiology (including parasitology and virology), and toxicology; as well as categories for drugs and the cell counts typically reported on a complete blood count or a cerebrospinal fluid cell count. Antibiotic susceptibilities are a separate category. The clinical portion of the LOINC <sup>®</sup> database includes entries for vital signs, hemodynamics, intake/output, EKG, obstetric ultrasound, cardiac echo, urologic imaging, gastroendoscopic procedures, pulmonary ventilator management, selected survey instruments, and other clinical observations. For more information visit <a href="http://www.loinc.org">www.loinc.org</a>

## Manner Of Death

Value Set	Manner Of Death - 2.16.840.1.114222.4.11.6002
Code System	SNOMEDCT - 2.16.840.1.113883.6.96
Description	The value set includes all members of the Manners of Death coding system.

Code	Code System	Print Name
7878000	SNOMEDCT	Accidental death
CNBD	PHIN VS (CDC Local Coding System)	Could not be determined
27935005	SNOMEDCT	Homicide
38605008	SNOMEDCT	Natural death
PI	PHIN VS (CDC Local Coding System)	Pending Investigation
44301001	SNOMEDCT	Suicide

## PHIN VS (CDC Local Coding System)

Value Set	PHIN VS (CDC Local Coding System)
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## Pregnancy Status

Value Set	Pregnancy Status - 2.16.840.1.114222.4.11.6003
Code System	PHIN VS (CDC Local Coding System) - 2.16.840.1.114222.4.5.274
Description	The value set includes all the values from the Prenancy Statuses coding system.

Code	Code System	Print Name
PS1	PHIN VS (CDC Local Coding System)	Not pregnant within the past year
PS2	PHIN VS (CDC Local Coding System)	Pregnant at the time of death
PS3	PHIN VS (CDC Local Coding System)	Not pregnant, but pregnant within 42 days of death
PS4	PHIN VS (CDC Local Coding System)	Not pregnant, but pregnant 43 days to 1 year before death
PS9	PHIN VS (CDC Local Coding System)	Unknown if pregnant within the past year
PS8	PHIN VS (CDC Local Coding System)	Not Applicable: Computer Generated
NOC	PHIN VS (CDC Local Coding System)	Not on Certificate

## SNOMEDCT

Value Set	SNOMEDCT
Description	SNOMED CT <sup>®</sup> consists of a technical design, core content architecture, and Core content. SNOMED CT <sup>®</sup> Core content includes the technical specification of SNOMED CT <sup>®</sup> and fully integrated multi-specialty clinical content. The Core content also includes a concepts

table, description table, relationships table, history table, ICD-9-CM mapping, and Technical Reference Guide. Additionally, SNOMED CT<sup>®</sup> provides a framework to manage language dialects, clinically relevant subsets, qualifiers and extensions, as well as concepts and terms unique to particular organizations or localities. For more information visit [www.ihtsdo.com](http://www.ihtsdo.com)





## REFERENCES

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- Dolin RH, Alschuler L, Boyer S, Beebe C, Behlen FM, Biron PV, Shabo A, (Editors). HL7 Clinical Document Architecture, Release 2.0. ANSI-approved HL7 Standard; May 2005. Ann Arbor, Mich.: Health Level Seven, Inc. Available through [HL7](#) or if an HL7 member with the following link: [CDA Release 2 Normative Web Edition](#).
- [LOINC®](#) : Logical Observation Identifiers Names and Codes, Regenstrief Institute.
- Extensible Markup Language, [www.w3.org/XML](http://www.w3.org/XML)
- Dolin RH, Alschuler L, Boyer S, Beebe C, Behlen FM, Biron PV, Shabo A., HL7 Clinical Document Architecture, Release 2. J Am Med Inform Assoc. 2006;13:30-39. Available at: <http://www.jamia.org/cgi/reprint/13/1/30> .

