HL7 Draft Standard for Trial Use
Implementation Guide for CDA Release 2:
Birth and Fetal Death Report, Release 1

Implementation guide: US Realm

Public Health and Emergency Response Work Group

Contents

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Chapter 1

INTRODUCTION

Topics:

Overview

This implementation guide provides a format for using HL7's Clinical Document Architecture to transmit medical/ health information on live births and fetal deaths from birthing facilities and centers to a jurisdictional vital records electronic registration system. Vital Records birth certificates and fetal death reports include important demographic, medical and key information about the antepartum period, the labor and delivery process and the newborn or fetus. Medical and health information collected from Electronic Health Record (EHR) and data for the birth certificate and fetal death report once gathered, can be provided to public health agencies to track maternal and infant health populations of interest.

The document has been generated through creation of a UML model created to support CDA Release 2. The model exists within the environment created by the Open Health Tools (OHT) Model-Driven Health Tools (MDHT) project. This document was generated from the model using the features of the toolkit.

Approach

The document focuses on the use case describing the communication of that portion of the birth record or fetal death report 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 in Electronic Birth Registration Systems (EDRS). For fetal death reporting, the use case does not preclude medical examiners from using EHRs as a primary source for some of the clinical data that may be transmitted to an EDRS.

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 live birth or fetal death information are to be completed by the medical certifier according to the Edit Specifications for the U.S. Standard Certificate of Live Birth, or the US Standard Report of Fetal Death.. The applicable jurisdiction may have additional data requirements and edit specifications that will be addressed at the jurisdictional level.

The implementation guide has been developed with a primary reference to documentation created by the National Center for Health Statistics (CDC-NCHS). Content has been drawn from:

- US Standard Certification of Live Birth, Revised 11/2003
- US Standard Report of Fetal Death, Revised 11/2003
- Facility Worksheet for the Live Birth Certificate, Final 2/5/04
- Facility Worksheet for the Report of Fetal Death, Final 2/5/04
- Birth Edit Specifications for the 2003 Proposed Revision of the US Standard Certificate of Birth, (5/2004)
- Guide to Completing the Facility Worksheets for the Certificate of Live Birth and Report of Fetal Death, 2003 revision (Updated March 2012)

It is expected that electronic health record systems that provide data for inclusion within clinical documents conformant to this implementation guide, may use the IHE (Interconnecting the Healthcare Enterprise) Birth and Fetal Death Reporting (BFDR) technical framework supplement as a guide to extracting the data. Therefore, we have sought to organize sections within this document, both to reflect the organization of the Facility Worksheets, and to correspond to the BFDR document. References to the corresponding IHE data structure will be provided where relevant.

Relationship to C-CDA

We have also used HL7's consolidated CDA (C-CDA) as a point of reference for developing the templates used within this guide. However, the focus of the reporting is rather different from that in the C-CDA documents: those provide an open structure to allow clininians to record relevant data for patient care across a wide range of institutional settings, while birth and fetal death reporting address a constrained data set whose content is tailord to the

specific needs of vital statistics. As a result, it was only possible to draw upon a few of the templates created for C-CDA. The descriptions of individual templates touch on their relationship to C-CDA where appropriate.

Standard Vocabulary

This guide calls for specific vocabulary standards for managing live birth and fetal death reporting information. Use of standard vocabularies is important for a number of reasons. Use of standard vocabularies allows broad distribution of healthcare information without the need for individual institutions to exchange master files for data such as test codes, result codes, etc. Each institution maps its own local vocabularies to the standard code, allowing information to be shared broadly, rather than remaining isolated as a single island of information.

Scope

This specification covers the provision of live birth and fetal death reporting data to the applicable jurisdictional Vital Records Office. The guide focuses on the use case describing the form and content of that portion of the record collected by electronic health record systems for transmission to state/jurisdictional vital record offices. The goal of the use case is to provide safe, reliable delivery of relevant clinical information to vital records. The use case does not cover the data that is reported by the mother, or in the case of fetal death, by the funeral director. The use case covers events that are recorded by a birthing facility in an EHR. Planned or unplanned home births are generally not recorded by the hospital unless the mother is taken there immediately after birth for emergency medical care, and even in these cases, the home birth is usually filed by the home birth attendant. This use case is not intended to cover reporting to national public health agencies such as NCHS."

The following use case provides a common scenario for the recording of birth and fetal death events in a birthing hospital. For the birth record, prenatal care and pregnancy history information, such as the mother's last menstrual period (LMP), are obtained from the mother's prenatal records which are sent to the hospital by the prenatal care provider prior to the mother's estimated delivery date. Information about the labor and delivery and the infant (e.g., a spontaneous vaginal delivery of a girl weighing 3,242 grams) is documented by the nurse in the hospital's labor and delivery (L&D) log. Information about the labor and delivery and the newborn to be collected for the birth record is also documented by the nurse in the Facility Worksheet for the Child's Birth Certificate. The pediatrician documents the physical assessment in the newborn's medical record and the nurse then completes the newborn information sections of the Facility Worksheet.

The birth information specialist (BIS), the hospital staff person responsible for gathering and entering information for the birth certificate, checks the hospital's information system for a list of all new births. The staff person prints a copy of the list and takes it to the L&D unit where they pick up the Facility Worksheet completed by the nurse. The BIS then goes to the mother's room and presents her with a packet of information and several forms to complete. One of the forms, called the Mother's Worksheet for the Child's Birth Certificate, collects important demographic information on the mother and father. The BIS helps the mother complete the Mother's Worksheet. The BIS reviews the Facility Worksheet for completeness. If a section has not been completed, the L&D log, mother's prenatal care and other medical records are reviewed for the required information. If necessary, the the prenatal care provider is called in order to supply more information.

The BIS may enter the information from the Mother's and Facility worksheets into the State's web-based Electronic Birth Registration System (EBRS). At the time of data entry, the EBRS performs field edits and cross-field edits that are pre-programmed into the system. Once the record "passes" all validations, the BIS submits the record to the state for registration. The birth record is then automatically transmitted over a secure Internet connection to the State Office of Vital Records.

The vital records registrar reviews a list of newly transmitted birth records received from birthing facilities around his state. If there are records that have not passed all edits, the registrar contacts the hospital and requests that they correct and retransmit the birth record. The hospital corrects the birth record and retransmits. Once the birth record has passed all edits, the vital records registrar registers the baby's birth and the mother is provided with a certified copy of the birth certificate on request.

The process of collecting information at the hospital for the fetal death report is similar to that for birth. The labor and delivery nurse enters information in the medical records and completes the Facility Worksheet. The BIS is responsible for gathering and entering information into the Electronic Fetal Death Registration System (EFDRS) for the fetal

death report. The nurse first checks the hospital's information system and learns about the mother's loss. The BIS obtains the completed Facility Worksheet from the nurse and helps the mother complete the Patient's Worksheet. The BIS may also contact the prenatal care provider to obtain the Mother's prenatal care information and the obstetrician to enter the cause of death in the system.

The hospital of birth will serve as the source for information drawn from the mother's and infant's electronic medical record. This data may be directly entered by the responsible person. Data items may also be extracted from the electronic record system used to support patient medical records. In such cases, we expect the IHE (Interconnecting the Health Enterprise) specifications for Labor and Delivery Profiles to be useful.

Audience

The audience for this document includes software developers and implementers who wish to develop specifications for reporting the vital records birth and fetal death information defined within this document.

Organization of This Guide

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*).

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

The Implementation Guide provides definition for the vocabulary items that are needed as content for those elements using coded data types. The use of coded types, and the precise expression of the valid content of code sets is essential to enable efficient processing of subject data report content, and to allow the proper use of the contained data. Within this guide, the vocabulary section documents the various act code values used to define structural elements - to identify particular acts or observations. It also defines the several value sets needed to constrain the semantic content of coded items. In principle, all the vocabulary needed to support subject data reporting would draw on a common set of concepts. This has been done wherever possible, and the Public Health Information Network (PHIN) Vocabulary Access and Distribution System (VADS) is used as the repository and source for the commonly agreed upon vocabulary items.

In a nunber of cases, the NCVS edit specifications for data collection allow the entry of "UNKNOWN" to represent the case in which desired information is not available. This concept is captured, within this implementation guide, through use of the nullFlavor - UNK".

Throughout this Implementation Guide, the bindings between coded attributes and the cited value sets are static, and the value sets are versioned as of the date of guide publication. If it proves necessary to make changes to these value sets, this will be recorded, either through published erata, or through issuing an updated version of the document.

Use of Templates

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 `templateId`s 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 `templateId`s).

Extending CDA R2

Where there is a need to communicate information for which there is no suitable representation in CDA R2, extensions to CDA R2 have been developed. This section serves to summarize the extensions to provide implementation guidance. Elements containing extensions are documented within the template where they are used. Note, it has not been necessary to define extensions beyond those already created by the HL7 Structured Documents Work Group. In order to take advantage of these features, it is helpful to use the schemas, SDTC.xsd, CDA_SDTC.xsd, and POCD_MT000040_SDTC, that have been distributed as part of the Consolidated CDA distribution. It will also be necessary to declare the "sdtc" namespace that is used for this extension.

Extensions used within this implmentation guide include:

- **sdtc:id** CDA R2 does not include an identifier for the subject of a section. The identifier has been added to allow the medicl record number assigned to a newborn to be recorded.

Conventions Used in This Guide

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 (templateId:2.16.840.1.113883.10.20.17.2.5) (CONF:4133).

Figure 2: Template-based conformance statements example

CCD templates are included within this implementation guide for ease of reference. CCD templates contained within this implementation guide are formatted WITHOUT typical **KEYWORD** and **XML** element styles. A WIKI site is available if you would like to make a comment to be considered for the next release of CCD: *http://wiki.hl7.org/index.php?title=CCD_Suggested_Enhancements* The user name and password are: wiki/wikiwiki. You will need to create an account to edit the page and add your suggestion.

1. The value for "Observation / @moodCode" in a problem observation SHALL be "EVN" 2.16.840.1.113883.5.1001 ActMood STATIC. (CONF: 814).
2. A problem observation SHALL include exactly one Observation / statusCode. (CONF: 815).
3. The value for "Observation / statusCode" in a problem observation SHALL be "completed" 2.16.840.1.113883.5.14 ActStatus STATIC. (CONF: 816).
4. A problem observation SHOULD contain exactly one Observation / effectiveTime, to indicate the biological timing of condition (e.g. the time the condition started, the onset of the illness or symptom, the duration of a condition). (CONF: 817).

Figure 3: CCD 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

Chapter 2

DOCUMENT TEMPLATES

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

Chapter 3

SECTION TEMPLATES

Chapter 4

CLINICAL STATEMENT TEMPLATES

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.

Chapter 5

OTHER CLASSES

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

Chapter 6

VALUE SETS

Topics:

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

- *Source of Payment Typology (PHDSC)*
- *Source of Payment Typology (PHDSC) Code System*

Apgar Assessment (NCHS)

Value Set	Apgar Assessment (NCHS) - 2.16.840.1.114222.4.11.7210
Code System	LOINC - 2.16.840.1.113883.6.1
Version	Dynamic
Source URL	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7210
Definition	The value set contains systematic measures as to the question for evaluating the physical condition of the infant at specific intervals following birth.

Code	Code System	Print Name
9274-2	LOINC	Score 5M post birth
9271-8	LOINC	Score 10M post birth

Autopsy Examination (NCHS)

Value Set	Autopsy Examination (NCHS) - 2.16.840.1.114222.4.11.7137
Code System	SNOMEDCT - 2.16.840.1.113883.6.96
Version	Dynamic
Source URL	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7137
Definition	The value set contains the list of values used to indicate whether or not an autopsy was performed.

Code	Code System	Print Name
29240004	SNOMEDCT	Autopsy Examination
44551000009109	SNOMEDCT	Autopsy not performed
434661000124109	SNOMEDCT	Autopsy Planned

Birth and Fetal Death Financial Class (NCHS)

Value Set	Birth and Fetal Death Financial Class (NCHS) - 2.16.840.1.114222.4.11.7163
Code System	Source of Payment Typology (PHDSC) Code System - 2.16.840.1.113883.221.5
Version	Dynamic
Source URL	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7163
Definition	The value set contains the list of values used to indicate the principle source of payment for the labor and delivery. Note, the Public Health Data Consortium Source of Payment Typology is being used as the primary source for codes within the value set.

Code	Code System	Print Name
33	Source of Payment Typology (PHDSC) Code System	Indian Health Service or Tribe

Code	Code System	Print Name
2	Source of Payment Typology (PHDSC) Code System	MEDICAID
99	Source of Payment Typology (PHDSC) Code System	No Typology Code available for payment source
38	Source of Payment Typology (PHDSC) Code System	Other Government (Federal, State, Local not specified)
5	Source of Payment Typology (PHDSC) Code System	PRIVATE HEALTH INSURANCE
81	Source of Payment Typology (PHDSC) Code System	Self-pay
311	Source of Payment Typology (PHDSC) Code System	TRICARE (CHAMPUS)
9999	Source of Payment Typology (PHDSC) Code System	Unavailable / Unknown

Birth Attendant Titles (NCHS)

Value Set	Birth Attendant Titles (NCHS) - 2.16.840.1.114222.4.11.7111
Code System	SNOMEDCT - 2.16.840.1.113883.6.96
Version	Dynamic
Source URL	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7111
Definition	The value set contains the list of titles used by persons (attendant) responsible for delivering a child/fetus. The attendant at birth/delivery is defined as the individual physically present at the delivery who is responsible for the delivery.

Code	Code System	Print Name
76231001	SNOMEDCT	DO (Doctor of Osteopathy)
394841004	SNOMEDCT	Other (Specify)
309343006	SNOMEDCT	MD (Medical Doctor)
75271001	SNOMEDCT	Other Midwife
309453006	SNOMEDCT	CNM/CM (Certified Nurse Midwife/Certified Midwife)
261665006	SNOMEDCT	Unknown

Birth or Delivery Occurred (NCHS)

Value Set	Birth or Delivery Occurred (NCHS) - 2.16.840.1.114222.4.11.7124
Code System	SNOMEDCT - 2.16.840.1.113883.6.96
Version	Dynamic
Source URL	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7124
Definition	The value set contains the list of values used to indicate the type of place where birth or delivery occurred.

Code	Code System	Print Name
22232009	SNOMEDCT	Hospital
91154008	SNOMEDCT	Freestanding birthing center
169813005	SNOMEDCT	Home birth
67190003	SNOMEDCT	Clinic/Doctor office
394841004	SNOMEDCT	Other (Specify)
261665006	SNOMEDCT	Unknown

Certifier Titles (NCHS)

Value Set	Certifier Titles (NCHS) - 2.16.840.1.114222.4.11.7212
Code System	SNOMEDCT - 2.16.840.1.113883.6.96
Version	Dynamic
Source URL	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7212
Definition	To reflect the title used by death certifier to denote professional role.

Code	Code System	Print Name
309343006	SNOMEDCT	Physician
449161006	SNOMEDCT	Physician assistant
224571005	SNOMEDCT	Nurse Practitioner
6868009	SNOMEDCT	Hospital administrator
OTH	NullFlavor	Other (Specify)

Delivery Routes (NCHS)

Value Set	Delivery Routes (NCHS) - 2.16.840.1.114222.4.11.7118
Code System	SNOMEDCT - 2.16.840.1.113883.6.96
Version	Dynamic
Source URL	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7118

Definition	The value set contains the list of the possible routes by which the infant or fetus may be delivered.

Code	Code System	Print Name
48782003	SNOMEDCT	Vaginal/Spontaneous
302383004	SNOMEDCT	Vaginal/Forceps
61586001	SNOMEDCT	Vaginal/Vacuum
11466000	SNOMEDCT	Cesarean
261665006	SNOMEDCT	Unknown

Fetal Death Time Point (NCHS)

Value Set	Fetal Death Time Point (NCHS) - 2.16.840.1.114222.4.11.7112
Code System	SNOMEDCT - 2.16.840.1.113883.6.96
Version	Dynamic
Source URL	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7112
Description	A list of time points during the delivery process at which the fetal death is thought to have occured. Note, SNOMED is being used as the primary source for codes within the value set.

Code	Code System	Print Name
434681000124104	SNOMEDCT	Death at time of first assessment, no labor ongoing
434671000124102	SNOMEDCT	Dead at time of first assessment, labor ongoing
434631000124100	SNOMEDCT	Died during labor, after first assessment
261665006	SNOMEDCT	Unknown

Fetal Presentations (NCHS)

Value Set	Fetal Presentations (NCHS) - 2.16.840.1.114222.4.11.7113
Code System	SNOMEDCT - 2.16.840.1.113883.6.96
Version	Dynamic
Source URL	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7113
Definition	The value set contains the list of the different presentations (orientations within the mother's womb) that a fetus may be in prior to delivery

Code	Code System	Print Name
6096002	SNOMEDCT	Breech presentation
394841004	SNOMEDCT	Other category
261665006	SNOMEDCT	Unknown
70028003	SNOMEDCT	Vertex presentation

Histological Placental Examination (NCHS)

Value Set	Histological Placental Examination (NCHS) - 2.16.840.1.114222.4.11.7138
Code System	SNOMEDCT - 2.16.840.1.113883.6.96
Version	Dynamic
Source URL	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7138
Definition	The value set contains the list of values used to indicate whether or not a histological placental examination was performed.

Code	Code System	Print Name
398166005	SNOMEDCT	Was an histological placental examination performed? Yes
262008008	SNOMEDCT	Was an histological placental examination performed? No
397943006	SNOMEDCT	Was an histological placental examination performed? Planned

Infections During Pregnancy Fetal Death (NCHS)

Value Set	Infections During Pregnancy Fetal Death (NCHS) - 2.16.840.1.114222.4.11.7135
Code System	SNOMEDCT - 2.16.840.1.113883.6.96
Version	Dynamic
Source URL	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7135
Definition	The value set contains the list of selected infections that the mother had or was treated for during the course of this pregnancy for fetal death.

Code	Code System	Print Name
15628003	SNOMEDCT	Gonorrhea
76272004	SNOMEDCT	Syphilis
105629000	SNOMEDCT	Chlamydia
4241002	SNOMEDCT	Listeria
426933007	SNOMEDCT	Group B Streptococcus
28944009	SNOMEDCT	Cytomegalovirus
186748004	SNOMEDCT	Parvovirus
187192000	SNOMEDCT	Toxoplasmosis
260413007	SNOMEDCT	None of the specified items in this value set (including concept codes: 15628003, 76272004, 105629000, 4241002, 426933007, 28944009, 186748004, 187192000) were present and/or treated during this pregnancy
394841004	SNOMEDCT	Other (Specify)

Infections During Pregnancy - Live Birth (NCHS)

Value Set	Infections During Pregnancy - Live Birth (NCHS) - 2.16.840.1.114222.4.11.6070
Code System	SNOMEDCT - 2.16.840.1.113883.6.96
Version	Dynamic
Source URL	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.6070
Definition	The value set contains the list of selected infections that the mother had or was treated for during the course of this pregnancy for live birth.

Code	Code System	Print Name
15628003	SNOMEDCT	Gonorrhea
76272004	SNOMEDCT	Syphilis
105629000	SNOMEDCT	Chlamydia
66071002	SNOMEDCT	Hepatitis B
50711007	SNOMEDCT	Hepatitis C
260413007	SNOMEDCT	None of the specified items in this value set (including concept codes: 15628003, 76272004, 105629000, 240589008, 66071002, 50711007) were present and/or treated during this pregnancy for live birth
394841004	SNOMEDCT	Other (Specify)

Karyotype Down Syndrome (NCHS)

Value Set	Karyotype Down Syndrome (NCHS) - 2.16.840.1.114222.4.11.7116
Code System	SNOMEDCT - 2.16.840.1.113883.6.96
Version	Dynamic
Source URL	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7116
Definition	The value set contains the list of values that indicate whether the newborn/fetus is confirmed or pending if there is a diagnosis of Down syndrome, Trisomy 21.

Code	Code System	Print Name
442124003	SNOMEDCT	Down Syndrome / Karyotype confirmed
312948004	SNOMEDCT	Down Syndrome / Karyotype pending

Karyotype Suspected Chromosomal Disorder (NCHS)

Value Set	Karyotype Suspected Chromosomal Disorder (NCHS) - 2.16.840.1.114222.4.11.7115
Code System	SNOMEDCT - 2.16.840.1.113883.6.96
Version	Dynamic
Source URL	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7115

Definition	The value set contains the list of values that indicate whether the newborn/fetus is confirmed or pending if there is a diagnosis of suspected chromosomal disorder (may include Trisomy 21).

Code	Code System	Print Name
442124003	SNOMEDCT	Suspected chromosomal disorder / Karyotype confirmed
312948004	SNOMEDCT	Suspected chromosomal disorder / Karyotype pending

Labor and Delivery Characteristics (NCHS)

Value Set	Labor and Delivery Characteristics (NCHS) - 2.16.840.1.114222.4.11.7117
Code System	SNOMEDCT - 2.16.840.1.113883.6.96
Version	Dynamic
Source URL	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7117
Definition	The value set contains the list of options to indicate information about the course of labor and delivery.

Code	Code System	Print Name
15028002	SNOMEDCT	Non-vertex presentation
237001001	SNOMEDCT	Augmentation of labor
11612004	SNOMEDCT	Clinical chorioamnionitis
130955003	SNOMEDCT	Fetal intolerance
236958009	SNOMEDCT	Induction of labor
231064003	SNOMEDCT	Epidural or spinal anesthesia
249135009	SNOMEDCT	Moderate/heavy meconium staining
260413007	SNOMEDCT	None of the specified items

Maternal Morbidities (NCHS)

Value Set	Maternal Morbidities (NCHS) - 2.16.840.1.114222.4.11.7119
Code System	SNOMEDCT - 2.16.840.1.113883.6.96
Version	Dynamic
Source URL	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7119
Definition	The value set contains the list of possible maternal morbidity values when serious complications were experienced by the mother associated with labor and delivery.

Code	Code System	Print Name
236987005	SNOMEDCT	Unplanned hysterectomy
177217006	SNOMEDCT	Unplanned operating room procedure
309904001	SNOMEDCT	Admission to intensive care unit

Code	Code System	Print Name
260413007	SNOMEDCT	None of the specified items
398019008	SNOMEDCT	Third or fourth degree perineal laceration
34430009	SNOMEDCT	Ruptured uterus
116859006	SNOMEDCT	Blood transfusion

Maternal Vital Signs (NCHS)

Value Set	Maternal Vital Signs (NCHS) - 2.16.840.1.114222.4.11.7209
Code System	LOINC - 2.16.840.1.113883.6.1
Version	Dynamic
Source URL	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7209
Definition	The value set contains the list as to the question of vital sign items captured for a mother. Note, LOINC is being used as the primary source for codes within the value set.

Code	Code System	Print Name
69461-2	LOINC	Body weight mother -- at delivery
56077-1	LOINC	Body weight -- pre current pregnancy
3137-7	LOINC	Body height

Newborn Abnormal Conditions (NCHS)

Value Set	Newborn Abnormal Conditions (NCHS) - 2.16.840.1.114222.4.11.7121
Code System	PHIN VS (CDC Local Coding System) - 2.16.840.1.114222.4.5.274
Version	Dynamic
Source URL	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7121
Definition	The value set contains the list of values used to indicate specific disorders or significant morbidity experienced by the newborn infant.

Code	Code System	Print Name
PHC1251	PHIN VS (CDC Local Coding System)	Assisted ventilation required for more than six hours
PHC1250	PHIN VS (CDC Local Coding System)	Assisted ventilation required immediately following delivery
56110009	SNOMEDCT	Significant birth injury (skeletal fracture(s), peripheral nerve injury, and/or soft tissue/solid organ hemorrhage)
405269005	SNOMEDCT	NICU admission
260413007	SNOMEDCT	None of the specified items
91175000	SNOMEDCT	Seizure or serious neurologic dysfunction

Newborn Congenital Anomalies (NCHS)

Value Set	Newborn Congenital Anomalies (NCHS) - 2.16.840.1.114222.4.11.7122
Code System	SNOMEDCT - 2.16.840.1.113883.6.96
Version	Dynamic
Source URL	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7122
Definition	The value set contain the list of values use to specify malformations of the newborn diagnosed prenatally or after delivery.

Code	Code System	Print Name
89369001	SNOMEDCT	Anencephaly
67531005	SNOMEDCT	Meningomyelocele/Spina bifida
12770006	SNOMEDCT	Cyanotic congenital heart disease
17190001	SNOMEDCT	Congenital diaphragmatic hernia
18735004	SNOMEDCT	Omphalocele
72951007	SNOMEDCT	Gastroschisis
67341007	SNOMEDCT	Limb reduction defect (excluding congenital amputation and dwarfing syndromes)
80281008	SNOMEDCT	Cleft Lip with or without Cleft Palate
87979003	SNOMEDCT	Cleft Palate alone
70156005	SNOMEDCT	Down Syndrome
409709004	SNOMEDCT	Suspected chromosomal disorder
416010008	SNOMEDCT	Hypospadias
260413007	SNOMEDCT	None of the specified items in this value set (including concept codes: 89369001, 67531005, 12770006, 17190001, 18735004, 72951007, 67341007, 67341007, 80281008, 87979003, 70156005, 409709004, 416010008) for Newborn Congenital Anomalies

Newborn Vital Signs (NCHS)

Value Set	Newborn Vital Signs (NCHS) - 2.16.840.1.114222.4.11.7208
Code System	LOINC - 2.16.840.1.113883.6.1
Version	Dynamic
Source URL	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7208
Definition	The value set contains the list of vital sign information captured for a newborn or delivered fetus.

Code	Code System	Print Name
8339-4	LOINC	Birth weight Measured

Null Flavor

Value Set	NullFlavor
Description	HL7 V3 coding system with codes to indicate the null responses (e.g. unknown, other, not present).

Obstetric Procedures (NCHS)

Value Set	Obstetric Procedures (NCHS) - 2.16.840.1.114222.4.11.7136
Code System	SNOMEDCT - 2.16.840.1.113883.6.96
Version	Dynamic
Source URL	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7136
Definition	The value set contains the list of values used to specify selected medical treatments or invasive / manipulative procedures performed during this pregnancy specifically for management of labor and / or delivery.

Code	Code System	Print Name
265636007	SNOMEDCT	Cervical cerclage
240278000	SNOMEDCT	External cephalic version
260413007	SNOMEDCT	None of the specified items in this value set (including concept codes: 265636007, 103747003, 240278000) for Obstetric Procedures
103747003	SNOMEDCT	Tocolysis

PHIN VS (CDC Local Coding System)

Value Set	PHIN VS (CDC Local Coding System)
Description	CDC Public Health Information Network local coding system used for creating the concepts that are not available in the Standard Development Organization(SDO) Vocabulary like SNOMED CT, LOINC, ICD-9, etc.

Pregnancy Risk Factors (NCHS)

Value Set	Pregnancy Risk Factors (NCHS) - 2.16.840.1.114222.4.11.7126
Code System	SNOMEDCT - 2.16.840.1.113883.6.96
Version	Dynamic
Source URL	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.7126
Definition	The value set contains the list of values used to indicate selected medical risk factors of the mother during this pregnancy.

Code	Code System	Print Name
58533008	SNOMEDCT	Fertility enhancing drugs, artificial insemination or intrauterine insemination
63487001	SNOMEDCT	Assisted reproductive technology (e.g. in vitro fertilization (IVF), gamete intrafallopian transfer (GIFT)
200144004	SNOMEDCT	Mother had a previous cesarean delivery
73211009	SNOMEDCT	Diabetes / Prepregnancy (Diagnosis prior to pregnancy)
15938005	SNOMEDCT	Hypertension / Eclampsia
11687002	SNOMEDCT	Diabetes / Gestational (Diagnosis in pregnancy)
271903000	SNOMEDCT	Other previous poor pregnancy outcome (includes perinatal death, small-for-gestational age/intrauterine growth restricted birth)
161765003	SNOMEDCT	Previous preterm birth
38341003	SNOMEDCT	Hypertension / Prepregnancy (chronic)
65046005	SNOMEDCT	Pregnancy resulted from infertility treatment
260413007	SNOMEDCT	None of the specified items in this value set (including concept codes: 73211009, 11687002, 8762007, 48194001, 15938005, 161765003, 271903000, 63487001, 58533008, 63487001, 200144004) were risks factors noted for this pregnancy.
48194001	SNOMEDCT	Hypertension / Gestational (PIH, preeclampsia)

Source of Payment Typology (PHDSC)

Value Set	Source of Payment Typology (PHDSC) - 2.16.840.1.114222.4.11.3591
Code System	Source of Payment Typology (PHDSC) Code System - 2.16.840.1.113883.221.5
Version	Dynamic
Source URL	https://phinvads.cdc.gov/vads/ViewValueSet.action?oid=2.16.840.1.114222.4.11.3591
Definition	The development of a standard source of payment classification system is a high priority for public health and can be used for a wide variety of public health activities such as monitoring healthcare access and documenting disparities.

Code	Code System	Print Name
96	Source of Payment Typology (PHDSC) Code System	Auto Insurance (no fault)
69	Source of Payment Typology (PHDSC) Code System	BC (Indemnity or Managed Care) - Other
63	Source of Payment Typology (PHDSC) Code System	BC (Indemnity or Managed Care) - Out of State

Code	Code System	Print Name
64	Source of Payment Typology (PHDSC) Code System	BC (Indemnity or Managed Care) - Unspecified
62	Source of Payment Typology (PHDSC) Code System	BC Indemnity
61	Source of Payment Typology (PHDSC) Code System	BC Managed Care
611	Source of Payment Typology (PHDSC) Code System	BC Managed Care - HMO
619	Source of Payment Typology (PHDSC) Code System	BC Managed Care - Other
613	Source of Payment Typology (PHDSC) Code System	BC Managed Care - POS
612	Source of Payment Typology (PHDSC) Code System	BC Managed Care - PPO
35	Source of Payment Typology (PHDSC) Code System	Black Lung
6	Source of Payment Typology (PHDSC) Code System	BLUE CROSS/BLUE SHIELD
821	Source of Payment Typology (PHDSC) Code System	Charity
3223	Source of Payment Typology (PHDSC) Code System	Children of Women Vietnam Veterans (CWVV)
3221	Source of Payment Typology (PHDSC) Code System	Civilian Health and Medical Program for the VA (CHAMPVA)
521	Source of Payment Typology (PHDSC) Code System	Commercial Indemnity
511	Source of Payment Typology (PHDSC) Code System	Commercial Managed Care - HMO
513	Source of Payment Typology (PHDSC) Code System	Commercial Managed Care - POS

Code	Code System	Print Name
512	Source of Payment Typology (PHDSC) Code System	Commercial Managed Care - PPO
32123	Source of Payment Typology (PHDSC) Code System	Contract Nursing Home/Community Nursing Home
41	Source of Payment Typology (PHDSC) Code System	Corrections Federal
43	Source of Payment Typology (PHDSC) Code System	Corrections Local
42	Source of Payment Typology (PHDSC) Code System	Corrections State
44	Source of Payment Typology (PHDSC) Code System	Corrections Unknown Level
313	Source of Payment Typology (PHDSC) Code System	Dental --Stand Alone
31	Source of Payment Typology (PHDSC) Code System	Department of Defense
3119	Source of Payment Typology (PHDSC) Code System	Department of Defense - (other)
32	Source of Payment Typology (PHDSC) Code System	Department of Veterans Affairs
4	Source of Payment Typology (PHDSC) Code System	DEPARTMENTS OF CORRECTIONS
3211	Source of Payment Typology (PHDSC) Code System	Direct Care--Care provided in VA facilities
93	Source of Payment Typology (PHDSC) Code System	Disability Insurance
3121	Source of Payment Typology (PHDSC) Code System	Enrolled Prime--HMO
514	Source of Payment Typology (PHDSC) Code System	Exclusive Provider Organization

Code	Code System	Print Name
382	Source of Payment Typology (PHDSC) Code System	Federal, State, Local not specified - FFS
3811	Source of Payment Typology (PHDSC) Code System	Federal, State, Local not specified - HMO
3819	Source of Payment Typology (PHDSC) Code System	Federal, State, Local not specified - not specified managed care
389	Source of Payment Typology (PHDSC) Code System	Federal, State, Local not specified - Other
3813	Source of Payment Typology (PHDSC) Code System	Federal, State, Local not specified - POS
3812	Source of Payment Typology (PHDSC) Code System	Federal, State, Local not specified - PPO
381	Source of Payment Typology (PHDSC) Code System	Federal, State, Local not specified managed care
32121	Source of Payment Typology (PHDSC) Code System	Fee Basis
372	Source of Payment Typology (PHDSC) Code System	FFS/Indemnity
32122	Source of Payment Typology (PHDSC) Code System	Foreign Fee/Foreign Medical Program(FMP)
91	Source of Payment Typology (PHDSC) Code System	Foreign National
515	Source of Payment Typology (PHDSC) Code System	Gatekeeper PPO (GPPO)
84	Source of Payment Typology (PHDSC) Code System	Hill Burton Free Care
3711	Source of Payment Typology (PHDSC) Code System	HMO
71	Source of Payment Typology (PHDSC) Code System	HMO

Code	Code System	Print Name
34	Source of Payment Typology (PHDSC) Code System	HRSA Program
332	Source of Payment Typology (PHDSC) Code System	Indian Health Service - Contract
333	Source of Payment Typology (PHDSC) Code System	Indian Health Service - Managed Care
331	Source of Payment Typology (PHDSC) Code System	Indian Health Service - Regular
33	Source of Payment Typology (PHDSC) Code System	Indian Health Service or Tribe
334	Source of Payment Typology (PHDSC) Code System	Indian Tribe - Sponsored Coverage
3212	Source of Payment Typology (PHDSC) Code System	Indirect Care--Care provided outside VA facilities
371	Source of Payment Typology (PHDSC) Code System	Local - Managed care
37	Source of Payment Typology (PHDSC) Code System	Local Government
379	Source of Payment Typology (PHDSC) Code System	Local, not otherwise specified (other local, county)
94	Source of Payment Typology (PHDSC) Code System	Long-term Care Insurance
51	Source of Payment Typology (PHDSC) Code System	Managed Care (Private)
53	Source of Payment Typology (PHDSC) Code System	Managed Care (private) or private health insurance (indemnity), not otherwise specified
519	Source of Payment Typology (PHDSC) Code System	Managed Care, Other (non HMO)
7	Source of Payment Typology (PHDSC) Code System	MANAGED CARE, UNSPECIFIED (to be used only if one can't distinguish public from private)

Code	Code System	Print Name
2	Source of Payment Typology (PHDSC) Code System	MEDICAID
25	Source of Payment Typology (PHDSC) Code System	Medicaid - Out of State
21	Source of Payment Typology (PHDSC) Code System	Medicaid (Managed Care)
22	Source of Payment Typology (PHDSC) Code System	Medicaid (Non-managed Care Plan)
24	Source of Payment Typology (PHDSC) Code System	Medicaid Applicant
211	Source of Payment Typology (PHDSC) Code System	Medicaid HMO
219	Source of Payment Typology (PHDSC) Code System	Medicaid Managed Care Other
29	Source of Payment Typology (PHDSC) Code System	Medicaid Other
213	Source of Payment Typology (PHDSC) Code System	Medicaid PCCM (Primary Care Case Management)
212	Source of Payment Typology (PHDSC) Code System	Medicaid PPO
23	Source of Payment Typology (PHDSC) Code System	Medicaid/SCHIP
1	Source of Payment Typology (PHDSC) Code System	MEDICARE
11	Source of Payment Typology (PHDSC) Code System	Medicare (Managed Care)
12	Source of Payment Typology (PHDSC) Code System	Medicare (Non-managed Care)
122	Source of Payment Typology (PHDSC) Code System	Medicare Drug Benefit

Code	Code System	Print Name
121	Source of Payment Typology (PHDSC) Code System	Medicare FFS
111	Source of Payment Typology (PHDSC) Code System	Medicare HMO
119	Source of Payment Typology (PHDSC) Code System	Medicare Managed Care Other
123	Source of Payment Typology (PHDSC) Code System	Medicare Medical Savings Account (MSA)
129	Source of Payment Typology (PHDSC) Code System	Medicare Non-managed Care Other
19	Source of Payment Typology (PHDSC) Code System	Medicare Other
113	Source of Payment Typology (PHDSC) Code System	Medicare POS
112	Source of Payment Typology (PHDSC) Code System	Medicare PPO
523	Source of Payment Typology (PHDSC) Code System	Medicare supplemental policy (as second payer)
342	Source of Payment Typology (PHDSC) Code System	Migrant Health Program
312	Source of Payment Typology (PHDSC) Code System	Military Treatment Facility
9	Source of Payment Typology (PHDSC) Code System	MISCELLANEOUS/OTHER
82	Source of Payment Typology (PHDSC) Code System	No Charge
8	Source of Payment Typology (PHDSC) Code System	NO PAYMENT from an Organization/Agency/Program/ Private Payer Listed
89	Source of Payment Typology (PHDSC) Code System	No Payment, Other

Code	Code System	Print Name
99	Source of Payment Typology (PHDSC) Code System	No Typology Code available for payment source
3122	Source of Payment Typology (PHDSC) Code System	Non-enrolled Space Available
322	Source of Payment Typology (PHDSC) Code System	Non-veteran care
54	Source of Payment Typology (PHDSC) Code System	Organized Delivery System
349	Source of Payment Typology (PHDSC) Code System	Other
92	Source of Payment Typology (PHDSC) Code System	Other (Non-government)
39	Source of Payment Typology (PHDSC) Code System	Other Federal
32126	Source of Payment Typology (PHDSC) Code System	Other Federal Agency
38	Source of Payment Typology (PHDSC) Code System	Other Government (Federal, State, Local not specified)
3	Source of Payment Typology (PHDSC) Code System	OTHER GOVERNMENT (Federal/State/Local) (excluding Department of Corrections)
79	Source of Payment Typology (PHDSC) Code System	Other Managed Care, Unknown if public or private
3229	Source of Payment Typology (PHDSC) Code System	Other non-veteran care
59	Source of Payment Typology (PHDSC) Code System	Other Private Insurance
98	Source of Payment Typology (PHDSC) Code System	Other specified (includes Hospice - Unspecified plan)
3713	Source of Payment Typology (PHDSC) Code System	POS

Code	Code System	Print Name
73	Source of Payment Typology (PHDSC) Code System	POS
3712	Source of Payment Typology (PHDSC) Code System	PPO
72	Source of Payment Typology (PHDSC) Code System	PPO
5	Source of Payment Typology (PHDSC) Code System	PRIVATE HEALTH INSURANCE
52	Source of Payment Typology (PHDSC) Code System	Private Health Insurance - Indemnity
529	Source of Payment Typology (PHDSC) Code System	Private health insurance-other commercial Indemnity
822	Source of Payment Typology (PHDSC) Code System	Professional Courtesy
83	Source of Payment Typology (PHDSC) Code System	Refusal to Pay/Bad Debt
823	Source of Payment Typology (PHDSC) Code System	Research/Clinical Trial
85	Source of Payment Typology (PHDSC) Code System	Research/Donor
343	Source of Payment Typology (PHDSC) Code System	Ryan White Act
522	Source of Payment Typology (PHDSC) Code System	Self-insured (ERISA) Administrative Services Only (ASO) plan
81	Source of Payment Typology (PHDSC) Code System	Self-pay
32125	Source of Payment Typology (PHDSC) Code System	Sharing Agreements
55	Source of Payment Typology (PHDSC) Code System	Small Employer Purchasing Group

Code	Code System	Print Name
362	Source of Payment Typology (PHDSC) Code System	Specific state programs (list/ local code)
3222	Source of Payment Typology (PHDSC) Code System	Spina Bifida Health Care Program (SB)
36	Source of Payment Typology (PHDSC) Code System	State Government
361	Source of Payment Typology (PHDSC) Code System	State SCHIP program (codes for individual states)
32124	Source of Payment Typology (PHDSC) Code System	State Veterans Home
369	Source of Payment Typology (PHDSC) Code System	State, not otherwise specified (other state)
341	Source of Payment Typology (PHDSC) Code System	Title V (MCH Block Grant)
311	Source of Payment Typology (PHDSC) Code System	TRICARE (CHAMPUS)
3112	Source of Payment Typology (PHDSC) Code System	TRICARE Extra--PPO
3123	Source of Payment Typology (PHDSC) Code System	TRICARE For Life (TFL)
3114	Source of Payment Typology (PHDSC) Code System	TRICARE For Life--Medicare Supplement
3111	Source of Payment Typology (PHDSC) Code System	TRICARE Prime--HMO
3115	Source of Payment Typology (PHDSC) Code System	TRICARE Reserve Select
3113	Source of Payment Typology (PHDSC) Code System	TRICARE Standard - Fee For Service
9999	Source of Payment Typology (PHDSC) Code System	Unavailable / Unknown

Code	Code System	Print Name
3116	Source of Payment Typology (PHDSC) Code System	Uniformed Services Family Health Plan (USFHP) -- HMO
321	Source of Payment Typology (PHDSC) Code System	Veteran care--Care provided to Veterans
953	Source of Payment Typology (PHDSC) Code System	Worker's Comp Fee-for-Service
951	Source of Payment Typology (PHDSC) Code System	Worker's Comp HMO
954	Source of Payment Typology (PHDSC) Code System	Worker's Comp Other Managed Care
959	Source of Payment Typology (PHDSC) Code System	Worker's Comp, Other unspecified
95	Source of Payment Typology (PHDSC) Code System	Worker's Compensation

Source of Payment Typology (PHDSC) Code System

Value Set	Source of Payment Typology (PHDSC) Code System
Description	The Source of Payment Typology was developed to create a standard for reporting payer type data that will enhance the payer data classification; it is also intended for use by those collecting data, or analyzing healthcare claims information. The typology identifies broad Payer categories with related subcategories that are more specific. This format provides analysts with flexibility to either use payer codes at a highly detailed level or to roll up codes to broader hierarchical categories for comparative analyses across payers and locations. The Source of Payment Typology code system is used as a source for categorizing the payment sources for birth and fetal death related hospitalization

Chapter 7

Example Messages

Topics:

Birth Report Sample

The sample message has been constructed to illustrate the use of this implementation guide to constrain CDA in the representation of a fetal death report.

```
  <?xml version="1.0"?>
<?xml-stylesheet type="text/xsl" href="CDA.xsl"?>
<ClinicalDocument xmlns="urn:hl7-org:v3" xmlns:voc="urn:hl7-org:v3/
voc" xmlns:sdtc="urn:hl7-org:sdtc" xmlns:xsi="http://www.w3.org/2001/
XMLSchema-instance" xsi:schemaLocation="urn:hl7-org:v3 CDA_SDTC.xsd"
 classCode="DOCCLIN" moodCode="EVN">
 <!--
*******************************************************
  CDA Header
*******************************************************
-->
 <realmCode code="US"/>
 <typeId root="2.16.840.1.113883.1.3" extension="POCD_HD000040"/>
 <templateId root="2.16.840.1.113883.10.20.26.1"/>
 <!-- conforms to the guidance of the IG -->
 <id root="1.22.33" extension="0810USA04591"/>
 <!-- Vital Records document identifier.  Root = OID chosen by the sender.
 -->
 <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
 code="68998-4" displayName="US standard certificate of live birth"/>
 <title>Birth Report</title>
 <!-- Title of the report-->
 <effectiveTime value="20121010"/>
 <!-- Date the report was prepared -->
 <confidentialityCode code="N" codeSystem="2.16.840.1.113883.5.25"/>
 <!--Confidentiality is a contextual component of CDA, where the value
 expressed in the header holds true for the entire document, unless
 overridden by a nested value and 2.16.840.1.113883.5.25 is the OID for
 HL7-->
 <languageCode code="en-US"/>
 <!--LanguageCode example with language and country-->
 <!--
 *******************************************************
    CDA Header: Participants
    *******************************************************
-->
 <recordTarget typeCode="RCT">
  <!--The record target includes information regarding the mother.-->
  <patientRole classCode="PAT">
   <id root="2.33.44" extension="V000-013-0001-0002"/>
   <!-- Mother's Medical Record Number.  The root OID for the identifier
 indicates the name space the identifier value is drawn from. -->
   <addr>
    <streetAddressLine>23 Anywhere Lane</streetAddressLine>
    <city>Metropolis</city>
    <state>Empire State</state>
    <postalCode>893442</postalCode>
   </addr>
   <patient classCode="PSN" determinerCode="INSTANCE">
    <name>
     <family>Mother's family name</family>
     <given>Mother's given Name</given>
    </name>
   </patient>
  </patientRole>
 </recordTarget>
```

```
 <!--
 ************************************************************************
    CDA Header: The Author of the Patient Narrative Document
    ************************************************************************
  -->
 <author typeCode="AUT">
  <time nullFlavor="NI"/>
  <assignedAuthor classCode="ASSIGNED">
   <id extension="300-23"/>
   <!-- Document Author identifier.  The root OID for the document author
 identifier indicates the name space the identifier value is drawn from. -->
  </assignedAuthor>
 </author>
 <custodian typeCode="CST">
  <assignedCustodian classCode="ASSIGNED">
   <representedCustodianOrganization classCode="ORG"
 determinerCode="INSTANCE">
    <id root="2.77.38.4" extension="ABX_44445USA"/>
    <!-- Document Custodian identifier.  The root OID for the custodian
 identifier indicates the name space the identifier value is drawn from. -->
   </representedCustodianOrganization>
  </assignedCustodian>
 </custodian>
 <!--
*********************************************************
Birth Report Content (CDA BODY)
*********************************************************
-->
 <component>
  <structuredBody>
   <!--
  *********************************************************
Prenatal Testing and Surveillance Section
*********************************************************
-->
   <component>
    <section classCode="DOCSECT" moodCode="EVN">
     <templateId root="2.16.840.1.113883.10.20.26.3"/>
     <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
 code="57078-8" displayName="Antenatal Testing and Surveillance Section"/>
     <text>
      <list>
       <item ID="AntenatalTesting.1">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Prenatal Care Received</
caption>
        <content>Yes</content>
       </item>
       <item ID="AntenatalTesting.2">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">First Visit Date</caption>
        <content>20120521</content>
       </item>
       <item ID="AntenatalTesting.3">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Last Visit Date</caption>
        <content>20121218</content>
       </item>
       <item ID="AntenatalTesting.4">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Number of Visits</caption>
        <content>8</content>
       </item>
      </list>
```

```
     </text>
     <entry>
      <act classCode="ACT" moodCode="EVN" negationInd="true">
       <templateId root="2.16.840.1.113883.10.20.26.42"/>
       <code code="73776-7" displayName="No Prenatal Care"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
       <effectiveTime>
        <low value="20120521"/>
        <high value="20121218"/>
       </effectiveTime>
       <entryRelationship typeCode="COMP">
        <observation classCode="OBS" moodCode="EVN">
         <code code="68493-6" displayName="Prenatal visits for this
 pregnancy" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
         <value xsi:type="INT" value="8"/>
        </observation>
       </entryRelationship>
      </act>
     </entry>
    </section>
   </component>
   <!--
  ********************************************************
Prior Pregnancy History Section
********************************************************
-->
   <component>
    <section classCode="DOCSECT" moodCode="EVN">
     <templateId root="2.16.840.1.113883.10.20.26.12"/>
     <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
 code="57073-9" displayName="Prenatal events"/>
     <text>
      <list>
       <item ID="PriorPregnancyHistorySection.1">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Date of Last Live Birth</
caption>
        <content>20101125</content>
       </item>
      </list>
      <list>
       <item ID="PriorPregnancyHistorySection.2">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Last Menstrual Period Date</
caption>
        <content>20120401</content>
       </item>
      </list>
      <list>
       <item ID="PriorPregnancyHistorySection.3">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Number of Births Now Living</
caption>
        <content>3</content>
       </item>
      </list>
      <list>
       <item ID="PriorPregnancyHistorySection.4">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Number of Births Now Dead</
caption>
        <content>0</content>
       </item>
      </list>
```

```
      <list>
       <item ID="PriorPregnancyHistorySection.5">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Other Pregnancy Outcomes</
caption>
        <content>0</content>
       </item>
      </list>
      <list>
       <item ID="PriorPregnancyHistorySection.6">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Date of Last Other Pregnancy
 Outcome</caption>
        <content>Not Applicable</content>
       </item>
      </list>
      <list>
       <item ID="PriorPregnancyHistorySection.7">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Estimate of Gestation</caption>
        <content>39 weeks</content>
       </item>
      </list>
     </text>
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.26.20"/>
       <code code="68499-3" displayName="Date last live birth"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
       <value xsi:type="TS" value="20101125"/>
      </observation>
     </entry>
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.26.33"/>
       <code code="8665-2" displayName="Last menstrual period date"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
       <value xsi:type="TS" value="20120401"/>
      </observation>
     </entry>
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.26.36"/>
       <code code="11638-4" displayName="Number of births now living"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
       <value xsi:type="INT" value="2"/>
      </observation>
     </entry>
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.26.38"/>
       <code code="68496-9" displayName="Number of live births now dead"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
       <value xsi:type="INT" value="0"/>
      </observation>
     </entry>
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.26.40"/>
       <code code="69043-8" displayName="Other pregnancy outcomes"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
       <effectiveTime nullFlavor="NA"/>
       <value xsi:type="INT" value="0"/>
      </observation>
```

```
     </entry>
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.26.21"/>
       <code code="11884-4" displayName="Gestational age"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
       <value xsi:type="PQ" value="39" unit="wk"/>
      </observation>
     </entry>
    </section>
   </component>
   <!--
  ********************************************************
History of Infection Section
********************************************************
-->
   <component>
    <section classCode="DOCSECT" moodCode="EVN">
     <templateId root="2.16.840.1.113883.10.20.26.5"/>
     <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
 code="71459-2" displayName="Infection Panel"/>
     <text>
      <list>
       <item ID="HistoryOfInfectionSection.1">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Infection Present</caption>
        <content>None</content>
       </item>
      </list>
     </text>
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.26.30"/>
       <code code="72519-2" displayName="Infections present and or treated
 during this pregnancy for live birth" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC"/>
       <value xsi:type="CD" code="260413007" displayName="None"
 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/>
      </observation>
     </entry>
    </section>
   </component>
   <!--
  ********************************************************
Labor and Delivery Section
********************************************************
-->
   <component>
    <section classCode="DOCSECT" moodCode="EVN">
     <templateId root="2.16.840.1.113883.10.20.26.8"/>
     <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
 code="34079-4" displayName="Labor and delivery section"/>
     <text>
      <list>
       <item ID="LaborAndDeliverySection.1">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Attender Name</caption>
        <content>Jane Smith</content>
       </item>
       <item ID="LaborAndDeliverySection.2">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Attender NPI</caption>
        <content>8044590773</content>
       </item>
```

```
       <item ID="LaborAndDelivery Section.3">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Attender Title</caption>
        <content>Physician</content>
       </item>
       <item ID="LaborAndDelivery Section.7">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Facility ID</caption>
        <content>X</content>
       </item>
       <item ID="LaborAndDelivery Section.8">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Place of Birth</caption>
        <content>Hospital</content>
       </item>
       <item ID="LaborAndDelivery Section.9">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">City, Town, or Location of
 Birth</caption>
        <content>X</content>
       </item>
       <item ID="LaborAndDelivery Section.10">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Country of Birth</caption>
        <content>X</content>
       </item>
       <item ID="LaborAndDelivery Section.11">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Facility Name</caption>
        <content>Include the name of Facility where birth occurred</content>
       </item>
       <item ID="LaborAndDelivery Section.12">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Other Birth Place Specified</
caption>
        <content>No Information</content>
       </item>
       <item ID="LaborAndDelivery Section.13">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Maternal Transfer</caption>
        <content>No</content>
       </item>
       <item ID="LaborAndDelivery Section.14">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Characteristics of Labor and
 Delivery</caption>
        <content>Epidural or Spinal Anesthesia during Labor</content>
       </item>
       <item ID="LaborAndDelivery Section.15">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Maternal Morbidity</caption>
        <content>Unplanned Hysterectomy</content>
       </item>
       <item ID="LaborAndDelivery Section.16">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Pregnancy Risk Factor</caption>
        <content>Prepregnancy Diabetes</content>
       </item>
       <item ID="LaborAndDelivery Section.17">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Pregnancy Risk Factor</caption>
        <content>Prepregnancy Hypertension</content>
       </item>
       <item ID="LaborAndDelivery Section.18">
```

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        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Pregnancy Risk Factor</caption>
        <content>Pregnancy Resulted from Infertility Treatment</content>
       </item>
       <item ID="LaborAndDeliverySection.19">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Pregnancy Risk Factor</caption>
        <content>Assisted Reproductive Technology</content>
       </item>
       <item ID="LaborAndDeliverySection.20">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Source of Payment</caption>
        <content>Private Insurance</content>
       </item>
       <item ID="LaborAndDeliverySection.21">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Onset of Labor</caption>
        <content>None of the Cited Options</content>
       </item>
      </list>
     </text>
     <entry>
      <act classCode="SPCTRT" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.26.31"/>
       <code code="57074-7" displayName="Labor and delivery process"
codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
       <performer typeCode="PRF">
        <assignedEntity>
         <id root="2.16.840.1.113883.4.6" extension="8044590773"/>
         <!-- Attender's NPI  It is possible to provide a local state ID as
well. -->
         <code code="309343006" displayName="Physician"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/>
         <assignedPerson classCode="PSN" determinerCode="INSTANCE">
          <name>
           <prefix>Dr.</prefix>
           <family>Smith</family>
           <given>Jane</given>
          </name>
         </assignedPerson>
        </assignedEntity>
       </performer>
       <participant typeCode="LOC">
        <participantRole classCode="BIRTHPL">
         <id root="2.16.840.1.113883.4.6" extension="1244497890"/>
         <!-- Birth Facility NPI.  -->
         <code code="22232009" displayName="Hospital"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/>
         <addr nullFlavor="NP"/>
         <!-- Address is not provided if birth takes place within a known
facility.  -->
         <playingEntity classCode="PLC" determinerCode="INSTANCE">
          <name>Metropolitan Memorial Hospital</name>
          <desc nullFlavor="NP"/>
         </playingEntity>
        </participantRole>
       </participant>
       <entryRelationship typeCode="COMP">
        <observation classCode="OBS" moodCode="EVN">
         <templateId root="2.16.840.1.113883.10.20.26.35"/>
         <code code="73763-5" displayName="Mother was transferred
for maternal medical or fetal indications for delivery"
codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
         <value xsi:type="BL" value="false"/>
```

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        </observation>
       </entryRelationship>
       <entryRelationship typeCode="COMP">
        <observation classCode="OBS" moodCode="EVN">
         <templateId root="2.16.840.1.113883.10.20.26.18"/>
         <code code="73813-8" displayName="Characteristics of labor and
 delivery" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
         <value xsi:type="CD" code="231064003" displayName="Intrathecal
 injection of local anesthetic agent" codeSystem="2.16.840.1.113883.6.96"
 codeSystemName="SNOMED"/>
        </observation>
       </entryRelationship>
       <entryRelationship typeCode="COMP">
        <observation classCode="OBS" moodCode="EVN">
         <templateId root="2.16.840.1.113883.10.20.26.34"/>
         <code code="73781-7" displayName="Maternal morbidity"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
         <value xsi:type="CD" code="625654015" displayName="Emergency
 cesarean hysterectomy" codeSystem="2.16.840.1.113883.6.96"
 codeSystemName="SNOMED"/>
        </observation>
       </entryRelationship>
       <entryRelationship typeCode="COMP">
        <observation classCode="OBS" moodCode="EVN">
         <templateId root="2.16.840.1.113883.10.20.26.44"/>
         <code code="73775-9" displayName="Risk factors in this pregnancy"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
         <value xsi:type="CD" code="73211009" displayName="Diabetes
 mellitus" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/>
        </observation>
       </entryRelationship>
       <entryRelationship typeCode="COMP">
        <observation classCode="OBS" moodCode="EVN">
         <templateId root="2.16.840.1.113883.10.20.26.44"/>
         <code code="73775-9" displayName="Risk factors in this pregnancy"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
         <value xsi:type="CD" code="38341003" displayName="Hypertensive
 disorder" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/>
        </observation>
       </entryRelationship>
       <entryRelationship typeCode="COMP">
        <observation classCode="OBS" moodCode="EVN">
         <templateId root="2.16.840.1.113883.10.20.26.44"/>
         <code code="73775-9" displayName="Risk factors in this pregnancy"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
         <value xsi:type="CD" code="65046005" displayName="Infertility
 therapy" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/>
        </observation>
       </entryRelationship>
       <entryRelationship typeCode="COMP">
        <observation classCode="OBS" moodCode="EVN">
         <templateId root="2.16.840.1.113883.10.20.26.44"/>
         <code code="73775-9" displayName="Risk factors in this pregnancy"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
         <value xsi:type="CD" code="63487001" displayName="Assisted
 fertilization" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/
>
        </observation>
       </entryRelationship>
       <entryRelationship typeCode="COMP">
        <observation classCode="OBS" moodCode="EVN">
         <code code="68461-3" displayName="Source of Payment"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
```

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          <value xsi:type="CD" code="5" displayName="Private Insurance"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
        </observation>
       </entryRelationship>
      </act>
     </entry>
     <entry typeCode="COMP">
      <observation classCode="OBS" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.26.32"/>
       <code code="73774-2" displayName="Onset of Labor"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
       <value xsi:type="CD" code="260413007" displayName="None"
 codeSystem="2.16.840.1.113883.221.5" codeSystemName="HL70064"/>
      </observation>
     </entry>
     <!--
*********************************************************
Labor and Delivery Procedure Section
*********************************************************
-->
     <component>
      <section classCode="DOCSECT" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.26.7"/>
       <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
 code="xxxxxx" displayName="Labor and Delivery Procedure Section"/>
       <text>
        <list>
         <item ID="LaborDeliveryProcedureSection.1">
          <!-- (Narrative Block: Unstructured)-->
          <caption xsi:type="StrucDoc.Caption">Obstetric Procedure</caption>
          <content>External Cephalic Version - Successful</content>
         </item>
         <item ID="LaborDeliveryProcedureSection.2">
          <!-- (Narrative Block: Unstructured)-->
          <caption xsi:type="StrucDoc.Caption">Unsucessful Forceps Delivery
 Attempt</caption>
          <content>No Information</content>
         </item>
         <item ID="LaborDeliveryProcedureSection.3">
          <!-- (Narrative Block: Unstructured)-->
          <caption xsi:type="StrucDoc.Caption">Unsucessful Vacuum Extraction
 Attempt</caption>
          <content>No Information</content>
         </item>
         <item ID="LaborDeliveryProcedureSection.4">
          <!-- (Narrative Block: Unstructured)-->
          <caption xsi:type="StrucDoc.Caption">Fetal Presentation at birth</
caption>
          <content>Breech</content>
         </item>
         <item ID="LaborDeliveryProcedureSection.5">
          <!-- (Narrative Block: Unstructured)-->
          <caption xsi:type="StrucDoc.Caption">Final Route and Method of
 Delivery</caption>
          <content>Cesarean</content>
         </item>
         <item ID="LaborDeliveryProcedureSection.6">
          <!-- (Narrative Block: Unstructured)-->
          <caption xsi:type="StrucDoc.Caption">Trial of Labor Attempted</
caption>
          <content>Yes</content>
         </item>
        </list>
       </text>
```

```
       <entry>
        <procedure classCode="PROC" moodCode="EVN" negationInd="false">
         <templateId root="2.16.840.1.113883.10.20.26.39"/>
         <code code="240278000" displayName="External cephalic version"
 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/>
        </procedure>
       </entry>
       <entry>
        <procedure classCode="PROC" moodCode="EVN" negationInd="false">
         <templateId root="2.16.840.1.113883.10.20.26.45"/>
         <code code="72149-8" displayName="Delivery method"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
         <entryRelationship typeCode="COMP">
          <observation classCode="OBS" moodCode="EVN">
           <templateId root="2.16.840.1.113883.10.20.26.44"/>
           <code code="73761-9" displayName="Fetal presentation at birth"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
           <value xsi:type="CD" code="70028003" displayName="Vertex
 presentation" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/>
          </observation>
         </entryRelationship>
         <entryRelationship typeCode="COMP">
          <observation classCode="OBS" moodCode="EVN">
           <templateId root="2.16.840.1.113883.10.20.26.44"/>
           <code code="73762-7" displayName="Final route and method of
 delivery" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
           <value xsi:type="CD" code="200144004" displayName="Deliveries by
 cesarean" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/>
           <entryRelationship typeCode="COMP">
            <observation classCode="OBS" moodCode="EVN">
             <templateId root="2.16.840.1.113883.10.20.26.44"/>
             <code code="73760-1" displayName="If cesarean, a trial of labor
 was attempted" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
              <value xsi:type="BL" value="true"/>
            </observation>
           </entryRelationship>
          </observation>
         </entryRelationship>
        </procedure>
       </entry>
      </section>
     </component>
     <!--
*******************************************************
Mother's Vital Signs Section
*******************************************************
-->
      <component>
       <section classCode="DOCSECT" moodCode="EVN">
        <templateId root="2.16.840.1.113883.10.20.26.9"/>
        <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
 code="8716-3" displayName="Vital Signs"/>
        <text>
         <list>
          <item ID="MotherVitalSignsSection.1">
           <!-- (Narrative Block: Unstructured)-->
           <caption xsi:type="StrucDoc.Caption">Body Weight at Delivery</
caption>
           <content>175 lbs.</content>
          </item>
          <item ID="MotherVitalSignsSection.2">
           <!-- (Narrative Block: Unstructured)-->
           <caption xsi:type="StrucDoc.Caption">Height</caption>
           <content>66 inches</content>
```

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         </item>
         <item ID="MotherVitalSignsSection.3">
          <!-- (Narrative Block: Unstructured)-->
          <caption xsi:type="StrucDoc.Caption">Prepregnancy Body Weight</
caption>
          <content>145 lbs.</content>
         </item>
        </list>
       </text>
       <entry>
        <observation classCode="OBS" moodCode="EVN">
         <templateId root="2.16.840.1.113883.10.20.26.46"/>
         <code code="69461-2" displayName="Body weight -- pre current
 pregnancy" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
         <value xsi:type="PQ" value="145" unit="lb"/>
        </observation>
       </entry>
       <entry>
        <observation classCode="OBS" moodCode="EVN">
         <templateId root="2.16.840.1.113883.10.20.26.46"/>
         <code code="3137-7" displayName="Body height"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
         <value xsi:type="PQ" value="66" unit="in"/>
        </observation>
       </entry>
       <entry>
        <observation classCode="OBS" moodCode="EVN">
         <templateId root="2.16.840.1.113883.10.20.26.46"/>
         <code code="69461-2" displayName="Body weight mother -- at
 delivery" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
         <value xsi:type="PQ" value="175" unit="lb"/>
        </observation>
       </entry>
      </section>
     </component>
    </section>
   </component>
   <!--
  ********************************************************
Newborn Delivery Section
********************************************************
-->
   <component>
    <section classCode="DOCSECT" moodCode="EVN">
     <templateId root="2.16.840.1.113883.10.20.26.10"/>
     <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
 code="57075-4" displayName="Newborn delivery information from newborn
 Narrative"/>
     <text>
      <list>
       <item ID="NewbornDeliverySection.1">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Newborn Name</caption>
        <content>No Information</content>
       </item>
       <item ID="NewbornDeliverySection.2">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Newborn Sex</caption>
        <content>Female</content>
       </item>
       <item ID="NewbornDeliverySection.3">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Birth Time</caption>
        <content>201301211300</content>
```

```
       </item>
       <item ID="NewbornDeliverySection.4">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Plurality</caption>
        <content>1</content>
       </item>
       <item ID="NewbornDeliverySection.5">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Number of Infants Born Alive</
caption>
        <content>1</content>
       </item>
       <item ID="NewbornDeliverySection.6">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Abnormal Conditions of the
 Newborn</caption>
        <content>NICU Admission</content>
       </item>
       <item ID="NewbornDeliverySection.7">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Abnormal Conditions of the
 Newborn</caption>
        <content>Antibiotics Received by the Newborn for Suspected Neonatal
 Sepsis</content>
       </item>
       <item ID="NewbornDeliverySection.8">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Congenital Anomaly</caption>
        <content>Congenital Diaphragmatic Hernia</content>
       </item>
       <item ID="NewbornDeliverySection.9">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Infant Transferred</caption>
        <content>No</content>
       </item>
       <item ID="NewbornDeliverySection.10">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Infant Living</caption>
        <content>Yes</content>
       </item>
       <item ID="NewbornDeliverySection.11">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Infant Breastfed at Discharge</
caption>
        <content>Yes</content>
       </item>
      </list>
     </text>
     <subject typeCode="SBJ">
      <relatedSubject classCode="PRS">
       <subject classCode="PSN" determinerCode="INSTANCE">
        <sdtc:id root="2.1.33" extension="123-MR-8233"/>
        <!-- The root OID for the newborn identifier indicates the name
 space the identifier value is drawn from.  -->
        <name>
         <family>Johnson</family>
         <given>Baby Girl</given>
        </name>
        <administrativeGenderCode code="F"
 codeSystem="2.16.840.1.113883.5.1"/>
        <birthTime value="201301211300"/>
       </subject>
      </relatedSubject>
     </subject>
```

```
    <entry>
     <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.26.41"/>
      <code code="57722-1" displayName="Birth plurality"
codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
      <value xsi:type="INT" value="1"/>
     </observation>
    </entry>
    <entry>
     <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.26.13"/>
      <code code="73812-0" displayName="Abnormal conditions of the newborn"
codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
      <value xsi:type="CD" code="405269005" displayName="Neonatal intensive
care unit" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/>
     </observation>
    </entry>
    <entry>
     <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.26.13"/>
      <code code="73812-0" displayName="Abnormal conditions of the newborn"
codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
      <value xsi:type="CD" code="634641000124112" displayName="Antibiotics
for suspected neonatal sepsis" codeSystem="2.16.840.1.113883.6.96"
codeSystemName="SNOMED"/>
     </observation>
    </entry>
    <entry>
     <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.26.19"/>
      <code code="73780-9" displayName="Congenital anomalies of the
newborn" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
      <value xsi:type="CD" code="17190001" displayName="Congenital
diaphragmatic hernia" codeSystem="2.16.840.1.113883.6.96"
codeSystemName="SNOMED"/>
     </observation>
    </entry>
    <entry>
     <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.26.29"/>
      <code code="73758-5" displayName="Infant was transferred
within 24 hours of delivery" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC"/>
      <value xsi:type="BL" value="false"/>
     </observation>
    </entry>
    <entry>
     <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.26.28"/>
      <code code="73757-7" displayName="Infant living at time of report"
codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
      <value xsi:type="BL" value="true"/>
     </observation>
    </entry>
    <entry>
     <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.26.27"/>
      <code code="73756-9" displayName="Infant is being breastfed at
discharge" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
      <value xsi:type="BL" value="true"/>
     </observation>
    </entry>
    <!--
*******************************************************
```

```
Newborn's Vital Signs Section
*****************************************************
-->
     <component>
      <section classCode="DOCSECT" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.26.11"/>
       <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
 code="8716-3" displayName="Vital Signs"/>
       <text>
        <list>
         <item ID="InfantVitalSignsSection.1">
          <!-- (Narrative Block: Unstructured)-->
          <caption xsi:type="StrucDoc.Caption">Body Weight at Birth</
caption>
          <content>2980 Grams</content>
         </item>
        </list>
       </text>
       <entry>
        <observation classCode="OBS" moodCode="EVN">
         <templateId root="2.16.840.1.113883.10.20.26.46"/>
         <code code="8339-4" displayName="Body weight at birth"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
         <value xsi:type="PQ" value="2980" unit="g"/>
        </observation>
       </entry>
      </section>
     </component>
     <!--
*****************************************************
Assessment Section
*****************************************************
-->
     <component>
      <section classCode="DOCSECT" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.26.47"/>
       <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
 code="51848-0" displayName="Assessment Note"/>
       <text>
        <list>
         <item ID="AssessmentSection.1">
          <!-- (Narrative Block: Unstructured)-->
          <caption xsi:type="StrucDoc.Caption">Apgar Score - 5 minutes</
caption>
          <content>5</content>
         </item>
         <item ID="AssessmentSection.2">
          <!-- (Narrative Block: Unstructured)-->
          <caption xsi:type="StrucDoc.Caption">Apgar Score - 10 minutes</
caption>
          <content>8</content>
         </item>
        </list>
       </text>
       <entry>
        <observation classCode="OBS" moodCode="EVN">
         <templateId root="2.16.840.1.113883.10.20.26.46"/>
         <code code="9274-2" displayName="Score^5M post birth"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
         <value xsi:type="INT" value="5"/>
        </observation>
       </entry>
       <entry>
        <observation classCode="OBS" moodCode="EVN">
```

```
         <templateId root="2.16.840.1.113883.10.20.26.14"/>
         <code code="9271-8" displayName="Score^10M post birth"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
         <effectiveTime>
          <width value="10" unit="min"/>
         </effectiveTime>
         <value xsi:type="INT" value="8"/>
        </observation>
       </entry>
      </section>
     </component>
    </section>
   </component>
  </structuredBody>
 </component>
</ClinicalDocument>
```

Fetal Death Report Sample

The sample message has been constructed to illustrate the use of this implementation guide to constrain CDA in the representation of a fetal death report.

```
  <?xml version="1.0"?>
<?xml-stylesheet type="text/xsl" href="CDA.xsl"?>
<ClinicalDocument xmlns="urn:hl7-org:v3" xmlns:voc="urn:hl7-org:v3/
voc" xmlns:sdtc="urn:hl7-org:sdtc" xmlns:xsi="http://www.w3.org/2001/
XMLSchema-instance" xsi:schemaLocation="urn:hl7-org:v3 CDA_SDTC.xsd"
 classCode="DOCCLIN" moodCode="EVN">
 <!--
******************************************************
  CDA Header
******************************************************
-->
 <realmCode code="US"/>
 <typeId root="2.16.840.1.113883.1.3" extension="POCD_HD000040"/>
 <templateId root="2.16.840.1.113883.10.20.26.2"/>
 <!-- conforms to the guidance of the IG -->
 <id root="1.22.33" extension="0810USA6363"/>
 <!-- Vital Records document identifier.  We need to supply instruction
 regarding use of object identifiers (OIDs) or Globally Unique Identifiers
 (GUIDs). -->
 <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
 code="69045-3" displayName="US standard report of fetal death"/>
 <title>Fetal Death Report</title>
 <!-- Title of the report-->
 <effectiveTime value="20121023"/>
 <!-- Date the report was prepared -->
 <confidentialityCode code="N" codeSystem="2.16.840.1.113883.5.25"/>
 <!--Confidentiality is a contextual component of CDA, where the value
 expressed in the header holds true for the entire document, unless
 overridden by a nested value and 2.16.840.1.113883.5.25 is the OID for
 HL7-->
 <languageCode code="en-US"/>
 <!--LanguageCode example with language and country-->
 <!--
 ******************************************************
    CDA Header: Participants
    ******************************************************
```

```
-->
 <recordTarget typeCode="RCT">
  <!--The record target includes information regarding the mother.-->
  <patientRole classCode="PAT">
   <id root="2.3.44.55" extension="V000-013-0001-0003"/>
   <!-- Mother's Medical Record Number.  The root OID for the identifier
 indicates the name space the identifier value is drawn from. -->
   <addr>
    <streetAddressLine>99 Somewhere Lane</streetAddressLine>
    <city>Metropolis</city>
    <state>Empire State</state>
    <postalCode>893444</postalCode>
   </addr>
   <patient classCode="PSN" determinerCode="INSTANCE">
    <name>
     <family>Mother's family name</family>
     <given>Mother's given Name</given>
    </name>
   </patient>
  </patientRole>
 </recordTarget>
 <!--
 ********************************************************************
    CDA Header: The Author of the Patient Narrative Document
    ********************************************************************
  -->
 <author typeCode="AUT">
  <time nullFlavor="NI"/>
  <assignedAuthor classCode="ASSIGNED">
   <id root="2.44.998" extension="300-23"/>
   <!-- Document Author identifier.  The root OID for the document author
 identifier indicates the name space the identifier value is drawn from. -->
  </assignedAuthor>
 </author>
 <custodian typeCode="CST">
  <assignedCustodian classCode="ASSIGNED">
   <representedCustodianOrganization classCode="ORG"
 determinerCode="INSTANCE">
    <id root="2.889.3.55.2" extension="ABX_44445USA"/>
    <!-- Document Custodian identifier.  The root OID for the custodian
 identifier indicates the name space the identifier value is drawn from. -->
   </representedCustodianOrganization>
  </assignedCustodian>
 </custodian>
 <!--
*****************************************************
Feta Death Report Content (CDA BODY)
*****************************************************
-->
 <component>
  <structuredBody>
   <!--
  *****************************************************
Prenatal Testing and Surveillance Section
*****************************************************
-->
   <component>
    <section classCode="DOCSECT" moodCode="EVN">
     <templateId root="2.16.840.1.113883.10.20.26.3"/>
     <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
 code="57078-8" displayName="Antenatal Testing and Surveillance Section"/>
     <text>
      <list>
       <item ID="AntenatalTesting.1">
```

```
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Prenatal Care Received</
caption>
        <content>Yes</content>
       </item>
       <item ID="AntenatalTesting.2">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">First Visit Date</caption>
        <content>20120624</content>
       </item>
       <item ID="AntenatalTesting.3">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Last Visit Date</caption>
        <content>20121101</content>
       </item>
       <item ID="AntenatalTesting.4">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Prenatal visits for this
 pregnancy</caption>
        <content>6</content>
       </item>
      </list>
     </text>
     <entry>
      <act classCode="ACT" moodCode="EVN" negationInd="true">
       <templateId root="2.16.840.1.113883.10.20.26.42"/>
       <code code="73776-7" displayName="No Prenatal Care"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
       <effectiveTime>
        <low value="20120624"/>
        <high value="20121101"/>
       </effectiveTime>
       <entryRelationship typeCode="COMP">
        <observation classCode="OBS" moodCode="EVN">
         <code code="68493-6" displayName="Prenatal visits for this
 pregnancy" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
         <value xsi:type="INT" value="6"/>
        </observation>
       </entryRelationship>
      </act>
     </entry>
    </section>
   </component>
   <!--
  ********************************************************
Prior Pregnancy History Section
********************************************************
-->
   <component>
    <section classCode="DOCSECT" moodCode="EVN">
     <templateId root="2.16.840.1.113883.10.20.26.12"/>
     <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
 code="57073-9" displayName="Prenatal events"/>
     <text>
      <list>
       <item ID="PriorPregnancyHistorySection.1">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Date last live birth</caption>
        <content>20101125</content>
       </item>
       <item ID="PriorPregnancyHistorySection.2">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Date last menstrual period</
caption>
```

```
        <content>20120401</content>
       </item>
       <item ID="PriorPregnancyHistorySection.3">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Births still living</caption>
        <content>3</content>
       </item>
       <item ID="PriorPregnancyHistorySection.4">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Live births now dead</caption>
        <content>0</content>
       </item>
       <item ID="PriorPregnancyHistorySection.5">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Other pregnancy outcomes</
caption>
        <content>0</content>
       </item>
       <item ID="PriorPregnancyHistorySection.6">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Date of Last Other Pregnancy
 Outcome</caption>
        <content>Not Applicable</content>
       </item>
       <item ID="PriorPregnancyHistorySection.7">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Gestational age</caption>
        <content>39 weeks</content>
       </item>
      </list>
     </text>
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.26.20"/>
       <code code="68499-3" displayName="Date last live birth"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
       <value xsi:type="TS" value="20101125"/>
      </observation>
     </entry>
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.26.33"/>
       <code code="8665-2" displayName="Date last menstrual period"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
       <value xsi:type="TS" value="20120401"/>
      </observation>
     </entry>
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.26.36"/>
       <code code="11638-4" displayName="Number of births still living"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
       <value xsi:type="INT" value="2"/>
      </observation>
     </entry>
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.26.38"/>
       <code code="68496-9" displayName="Number of live births now dead"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
       <value xsi:type="INT" value="0"/>
      </observation>
     </entry>
     <entry>
```

```
      <observation classCode="OBS" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.26.40"/>
       <code code="69043-8" displayName="Other pregnancy outcomes"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
       <effectiveTime nullFlavor="NA"/>
       <value xsi:type="INT" value="0"/>
      </observation>
     </entry>
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.26.21"/>
       <code code="11884-4" displayName="Gestational age"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
       <value xsi:type="PQ" value="39" unit="wk"/>
      </observation>
     </entry>
    </section>
   </component>
   <!--
  ********************************************************
History of Infection Section
********************************************************
-->
   <component>
    <section classCode="DOCSECT" moodCode="EVN">
     <templateId root="2.16.840.1.113883.10.20.26.48"/>
     <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
 code="71459-2" displayName="Infection Panel"/>
     <text>
      <list>
       <item ID="HistoryOfInfectionSection.1">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Infections present and or
 treated during this pregnancy for fetal death</caption>
        <content>Listeriosis</content>
       </item>
       <item ID="HistoryOfInfectionSection.2">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Infections present and or
 treated during this pregnancy for fetal death</caption>
        <content>Toxoplasmosis</content>
       </item>
      </list>
     </text>
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.26.49"/>
       <code code="73769-2" displayName="Infections present and or treated
 during this pregnancy for fetal death" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC"/>
       <value xsi:type="CD" code="4241002" displayName="Listeriosis"
 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/>
      </observation>
     </entry>
     <entry>
      <observation classCode="OBS" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.26.49"/>
       <code code="73769-2" displayName="Infections present and or treated
 during this pregnancy for fetal death" codeSystem="2.16.840.1.113883.6.1"
 codeSystemName="LOINC"/>
       <value xsi:type="CD" code="187192000" displayName="Toxoplasmosis"
 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/>
      </observation>
     </entry>
```

```
    </section>
   </component>
   <!--
  ********************************************************
Labor and Delivery Section
********************************************************
-->
   <component>
    <section classCode="DOCSECT" moodCode="EVN">
     <templateId root="2.16.840.1.113883.10.20.26.8"/>
     <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
 code="34079-4" displayName="Labor and delivery section"/>
     <text>
      <list>
       <item ID="LaborAndDeliverySection.1">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Attender Name</caption>
        <content>Dr. Josepth Smith</content>
       </item>
       <item ID="LaborAndDeliverySection.2">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Attender NPI</caption>
        <content>8044590788</content>
       </item>
       <item ID="LaborAndDeliverySection.3">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Attender Title</caption>
        <content>Osteopath</content>
       </item>
       <item ID="LaborAndDeliverySection.4">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Facility ID</caption>
        <content>22232009</content>
       </item>
       <item ID="LaborAndDeliverySection.5">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Place of Birth</caption>
        <content>Hospital</content>
       </item>
       <item ID="LaborAndDeliverySection.6">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Facility Name</caption>
        <content>Metropolitan Memorial Hospital</content>
       </item>
       <item ID="LaborAndDeliverySection.7">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Maternal Transfer</caption>
        <content>No</content>
       </item>
       <item ID="LaborAndDeliverySection.8">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Characteristics of Labor and
 Delivery</caption>
        <content>Augmentation of labor</content>
       </item>
       <item ID="LaborAndDeliverySection.9">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Characteristics of Labor and
 Delivery</caption>
        <content>Fetal distress</content>
       </item>
       <item ID="LaborAndDeliverySection.10">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Maternal Morbidity</caption>
```

```
        <content>None</content>
       </item>
       <item ID="LaborAndDeliverySection.11">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Pregnancy Risk Factor</caption>
        <content>Diabetes mellitus</content>
       </item>
       <item ID="LaborAndDeliverySection.12">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Pregnancy Risk Factor</caption>
        <content>Hypertensive disorder</content>
       </item>
       <item ID="LaborAndDeliverySection.13">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Pregnancy Risk Factor</caption>
        <content>Infertility therapy</content>
       </item>
       <item ID="LaborAndDeliverySection.14">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Pregnancy Risk Factor</caption>
        <content>Assisted fertilization</content>
       </item>
       <item ID="LaborAndDeliverySection.15">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Source of Payment</caption>
        <content>Unknown</content>
       </item>
      </list>
     </text>
     <entry>
      <act classCode="SPCTRT" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.26.31"/>
       <code code="57074-7" displayName="Labor and delivery process"
codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
       <performer typeCode="PRF">
        <assignedEntity>
         <id root="2.16.840.1.113883.4.6" extension="8044590788"/>
         <!-- Attender's NPI.  It is possible to provide a local state ID as
well. -->
         <code code="76231001" displayName="Osteopath"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/>
         <assignedPerson classCode="PSN" determinerCode="INSTANCE">
          <name>
           <prefix>Dr.</prefix>
           <family>Smith</family>
           <given>Joseph</given>
          </name>
         </assignedPerson>
        </assignedEntity>
       </performer>
       <participant typeCode="LOC">
        <participantRole classCode="BIRTHPL">
         <id root="2.16.840.1.113883.4.6" extension="1244497890"/>
         <!-- Delivery Facility NPI.  -->
         <code code="22232009" displayName="Hospital"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/>
         <addr>
          <city>Metropolis</city>
          <!--"City, Town or Location of birth".  -->
          <county>Metropolitan</county>
         </addr>
         <playingEntity classCode="PLC" determinerCode="INSTANCE">
          <name>Include the name of Facility where delivery occurred</name>
          <desc nullFlavor="NI"/>
```

```
        </playingEntity>
       </participantRole>
      </participant>
      <entryRelationship typeCode="COMP">
       <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.10.20.26.35"/>
        <code code="73763-5" displayName="Mother was transferred
for maternal medical or fetal indications for delivery"
codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
        <value xsi:type="BL" value="false"/>
       </observation>
      </entryRelationship>
      <entryRelationship typeCode="COMP">
       <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.10.20.26.18"/>
        <code code="73813-8" displayName="Characteristics of labor and
delivery" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
        <value xsi:type="CD" code="237001001" displayName="Augmentation of
labor" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/>
       </observation>
      </entryRelationship>
      <entryRelationship typeCode="COMP">
       <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.10.20.26.18"/>
        <code code="73813-8" displayName="Characteristics of labor and
delivery" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
        <value xsi:type="CD" code="130955003" displayName="Fetal distress"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/>
       </observation>
      </entryRelationship>
      <entryRelationship typeCode="COMP">
       <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.10.20.26.34"/>
        <code code="73781-7" displayName="Maternal morbidity"
codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
        <value xsi:type="CD" code="260413007" displayName="None"
codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/>
       </observation>
      </entryRelationship>
      <entryRelationship typeCode="COMP">
       <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.10.20.26.44"/>
        <code code="73775-9" displayName="Risk factors in this pregnancy"
codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
        <value xsi:type="CD" code="73211009" displayName="Diabetes
mellitus" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/>
       </observation>
      </entryRelationship>
      <entryRelationship typeCode="COMP">
       <observation classCode="OBS" moodCode="EVN">
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        <code code="73775-9" displayName="Risk factors in this pregnancy"
codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
        <value xsi:type="CD" code="38341003" displayName="Hypertensive
disorder, systemic arterial" codeSystem="2.16.840.1.113883.6.96"
codeSystemName="SNOMED"/>
       </observation>
      </entryRelationship>
      <entryRelationship typeCode="COMP">
       <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.10.20.26.44"/>
        <code code="73775-9" displayName="Risk factors in this pregnancy"
codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
```

```
         <value xsi:type="CD" code="65046005" displayName="Pregnancy
 resulted from infertility treatment" codeSystem="2.16.840.1.113883.6.96"
 codeSystemName="SNOMED"/>
        </observation>
       </entryRelationship>
       <entryRelationship typeCode="COMP">
        <observation classCode="OBS" moodCode="EVN">
         <templateId root="2.16.840.1.113883.10.20.26.44"/>
         <code code="73775-9" displayName="Risk factors in this pregnancy"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
         <value xsi:type="CD" code="63487001" displayName="Assisted
 fertilization" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/
>
        </observation>
       </entryRelationship>
       <entryRelationship typeCode="COMP">
        <observation classCode="OBS" moodCode="EVN">
         <code code="68461-3" displayName="Source of Payment"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
         <value xsi:type="CD" code="ZZZ" displayName="Unknown"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
        </observation>
       </entryRelationship>
      </act>
     </entry>
     <!--
*********************************************************
Labor and Delivery Procedure Section
*********************************************************
-->
     <component>
      <section classCode="DOCSECT" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.26.7"/>
       <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
 code="xxxxxx" displayName="Labor and Delivery Procedure Section"/>
       <text>
        <list>
         <item ID="LaborDeliveryProcedureSection.1">
          <!-- (Narrative Block: Unstructured)-->
          <caption xsi:type="StrucDoc.Caption">Fetal Presentation at birth</
caption>
          <content>Breech presentation</content>
         </item>
         <item ID="LaborDeliveryProcedureSection.2">
          <!-- (Narrative Block: Unstructured)-->
          <caption xsi:type="StrucDoc.Caption">Final Route and Method of
 Delivery</caption>
          <content>Forceps delivery</content>
         </item>
        </list>
       </text>
       <entry>
        <procedure classCode="PROC" moodCode="EVN" negationInd="false">
         <templateId root="2.16.840.1.113883.10.20.26.45"/>
         <code code="72149-8" displayName="Delivery method"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
         <entryRelationship typeCode="COMP">
          <observation classCode="OBS" moodCode="EVN">
           <templateId root="2.16.840.1.113883.10.20.26.44"/>
           <code code="73761-9" displayName="Fetal presentation at birth"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
           <value xsi:type="CD" code="6096002" displayName="Breech
 presentation" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/>
          </observation>
```

```
         </entryRelationship>
         <entryRelationship typeCode="COMP">
          <observation classCode="OBS" moodCode="EVN">
           <templateId root="2.16.840.1.113883.10.20.26.44"/>
           <code code="73762-7" displayName="Final route and method of
 delivery" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
           <value xsi:type="CD" code="302383004" displayName="Forceps
 delivery" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/>
          </observation>
         </entryRelationship>
        </procedure>
       </entry>
      </section>
     </component>
     <!--
*********************************************************
Mother's Vital Signs Section
*********************************************************
-->
     <component>
      <section classCode="DOCSECT" moodCode="EVN">
       <templateId root="2.16.840.1.113883.10.20.26.9"/>
       <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
 code="8716-3" displayName="Vital Signs"/>
       <text>
        <list>
         <item ID="MotherVitalSignsSection.1">
          <!-- (Narrative Block: Unstructured)-->
          <caption xsi:type="StrucDoc.Caption">Body weight -- pre current
 pregnancy</caption>
          <content>145 lbs.</content>
         </item>
         <item ID="MotherVitalSignsSection.2">
          <!-- (Narrative Block: Unstructured)-->
          <caption xsi:type="StrucDoc.Caption">Body height</caption>
          <content>66 inches</content>
         </item>
         <item ID="MotherVitalSignsSection.3">
          <!-- (Narrative Block: Unstructured)-->
          <caption xsi:type="StrucDoc.Caption">Body weight mother -- at
 delivery</caption>
          <content>175 lbs.</content>
         </item>
        </list>
       </text>
       <entry>
        <observation classCode="OBS" moodCode="EVN">
         <templateId root="2.16.840.1.113883.10.20.26.46"/>
         <code code="69461-2" displayName="Body weight -- pre current
 pregnancy" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
         <value xsi:type="PQ" value="145" unit="lb"/>
        </observation>
       </entry>
       <entry>
        <observation classCode="OBS" moodCode="EVN">
         <templateId root="2.16.840.1.113883.10.20.26.46"/>
         <code code="3137-7" displayName="Body height"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
         <value xsi:type="PQ" value="66" unit="in"/>
        </observation>
       </entry>
       <entry>
        <observation classCode="OBS" moodCode="EVN">
         <templateId root="2.16.840.1.113883.10.20.26.46"/>
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```
         <code code="69461-2" displayName="Body weight mother -- at
 delivery" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
         <value xsi:type="PQ" value="175" unit="lb"/>
        </observation>
       </entry>
      </section>
     </component>
    </section>
   </component>
   <!--
  ********************************************************
Fetal Delivery Section
********************************************************
-->
   <component>
    <section classCode="DOCSECT" moodCode="EVN">
     <templateId root="2.16.840.1.113883.10.20.26.4"/>
     <code codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
 code="xxxx" displayName="Fetal delivery"/>
     <text>
      <list>
       <item ID="FetusDeliverySection.1">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Fetus Name</caption>
        <content>Ronald McGovern</content>
       </item>
       <item ID="FetusDeliverySection.2">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Fetus Sex</caption>
        <content>Male</content>
       </item>
       <item ID="FetusDeliverySection.3">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Birth Time</caption>
        <content>201301312359</content>
       </item>
       <item ID="FetusDeliverySection.4">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Autopsy was performed</caption>
        <content>Autopsy Examination</content>
       </item>
       <item ID="FetusDeliverySection.5">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Histological placental
 examination was performed</caption>
        <content>Planned</content>
       </item>
       <item ID="FetusDeliverySection.6">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Autopsy histological placental
 examinationand was used in determining cause of death</caption>
        <content>Trure</content>
       </item>
       <item ID="FetusDeliverySection.7">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Estimated time of fetal death</
caption>
        <content>Died during labor, after first assessment</content>
       </item>
       <item ID="FetusDeliverySection.8">
        <!-- (Narrative Block: Unstructured)-->
        <caption xsi:type="StrucDoc.Caption">Congenital Anomaly</caption>
        <content>None</content>
       </item>
```

```
      <item ID="FetusDeliverySection.9">
       <!-- (Narrative Block: Unstructured)-->
       <caption xsi:type="StrucDoc.Caption">Delivery date for patient
selected by practitioner using all pertinent information</caption>
       <content>201301312330</content>
      </item>
     </list>
    </text>
    <subject typeCode="SBJ">
     <relatedSubject classCode="PRS">
      <subject classCode="PSN" determinerCode="INSTANCE">
       <name>
        <family>Ronald</family>
        <given>MGovern</given>
       </name>
       <administrativeGenderCode code="M"
codeSystem="2.16.840.1.113883.5.1"/>
      </subject>
     </relatedSubject>
    </subject>
    <entry>
     <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.26.41"/>
      <code code="57722-1" displayName="Birth plurality"
codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
      <value xsi:type="INT" value="1"/>
     </observation>
    </entry>
    <entry>
     <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.26.15"/>
      <code code="73768-4" displayName="Autopsy was performed"
codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
      <value xsi:type="BL" value="true"/>
      <entryRelationship typeCode="COMP">
       <observation classCode="OBS" moodCode="EVN">
        <code code="73767-6" displayName="Histological placental
examination was performed" codeSystem="2.16.840.1.113883.6.1"
codeSystemName="LOINC"/>
        <value xsi:type="BL" value="true"/>
        <entryRelationship typeCode="COMP">
         <observation classCode="OBS" moodCode="EVN">
          <code code="LOINC_TBD" displayName="Autopsy and histological
placental examination was used in determining cause of death"
codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
          <value xsi:type="BL" value="true"/>
         </observation>
        </entryRelationship>
       </observation>
      </entryRelationship>
     </observation>
    </entry>
    <entry>
     <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.26.22"/>
      <code code="73811-2" displayName="Estimated time of fetal death"
codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
      <value xsi:type="CD" code="634661000124111" displayName="Died
during labor, after first assessment" codeSystem="2.16.840.1.113883.6.96"
codeSystemName="SNOMED"/>
     </observation>
    </entry>
    <entry>
     <observation classCode="OBS" moodCode="EVN">
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      <templateId root="2.16.840.1.113883.10.20.26.19"/>
      <code code="73780-9" displayName="Congenital anomalies of the
 newborn" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
      <value xsi:type="CD" code="260413007" displayName="None"
 codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"/>
     </observation>
    </entry>
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     <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.26.23"/>
      <code code="11778-8" displayName="Delivery date for
 patient selected by practitioner using all pertinent information"
 codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"/>
      <value xsi:type="TS" value="201301312330"/>
     </observation>
    </entry>
   </section>
  </component>
 </structuredBody>
</component>
</ClinicalDocument>
```

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- *SNOMED CT®* : SNOMED Clinical Terms SNOMED International Organization.
- Extensible Markup Language, *www.w3.org/XML* .
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