



## COMMON FORMATS HOSPITAL VERSION 2.0 CDA XML FILE SAMPLE ANESTHESIA

### Purpose:

The purpose of the Common Formats Version 2.0 File Sample is to provide a sample patient safety event and the associated Clinical Document Architecture (CDA) Extensible Markup Language (XML) file output. The sample CDA XML file contains all recommended data elements for the patient safety event report and conforms to the Common Formats Version 2.0 Technical Specifications.

**Disclaimer: The patient safety event scenario and CDA XML file output samples are based on a fictitious patient safety event. Any similarity to an actual patient safety event is entirely coincidental.**

### Scenario:

A 70-year-old white non-Hispanic male underwent a colon resection under general anesthesia. Twenty-six hours after anesthesia patient developed rapid, shallow breathing, severe sepsis hypoxemia, and was diagnosed with acute respiratory distress syndrome (ARDS). The patient was treated in intensive care with mechanical ventilation.

### Common Formats Data Elements to be Answered Based on the Sample Scenario:

Section	Data Element ID	Data Element Name	Answer Code	Answer Value
Header	DE1	Provider ID	n/a	providerID
	DE2	Event ID	n/a	eventID
	DE3	Report type	A3	Incident: A patient safety event that reached the patient, whether or not the patient was harmed.
	DE4	PSO OID	n/a	2.16.840.1.113883.3.263.1.5.23 (P0023)
	DE30	Initial report date	n/a	20160701 (Format: YYYYMMDD)

Section	Data Element ID	Data Element Name	Answer Code	Answer Value
	DE1106	Patient Sex	M	Male
Generic	DE9	Event discovery date/time	n/a	201607011645 (Format: YYYYMMDDhhmm)
	DE15	Description of event or unsafe condition	n/a	Twenty-six hours after anesthesia patient developed rapid, shallow breathing, severe sepsis hypoxemia and was diagnosed with acute respiratory distress syndrome (ARDS). The patient was treated in intensive care with mechanical ventilation.
	DE78	Location (area of occurrence) of event or unsafe condition	A252	Special care area (e.g., ICU, CCU, NICU)
	DE105	Contributing factor(s) for event	A3027	Staff qualifications (e.g., competence, training)
	DE81	Reporter job or position	A288	Healthcare professional
	DE84	Type of healthcare professional reporter	A306	Nurse, nurse practitioner, physician assistant (including student or trainee)
	DE21	Category(s) associated with event or unsafe condition	A41	Anesthesia
	DE47	Patient date of birth	n/a	19460605 (Format: YYYYMMDD)

Section	Data Element ID	Data Element Name	Answer Code	Answer Value
	DE45	Patient age range	A117	Mature adult (65-74)
	DE48	Hispanic or Latino ethnicity	2186-5	Not Hispanic or Latino
	DE51	Patient race	2106-3	White
	DE55	Degree of harm	A166	Severe harm: Bodily or psychological injury (including pain or disfigurement) that interferes substantially with functional ability or quality of life.
	DE59	Anticipated harm duration	UNK	Unknown
Anesthesia	DE2006	Type(s) of anesthesia and/or sedation	A1965	General anesthesia
	DE522	Characterization of anesthesia event	A2248	Physiologic complication not present prior to anesthesia
	DE2000	Physiologic complication of anesthesia	A2095	Respiratory failure
	DE2003	Manifestation of respiratory failure	A2106	Re-institution of ventilator support after discontinuance following anesthesia

\*n/a is listed as the answer code for data elements where the HL7 data type for the answer value is not a Concept Descriptor (CD) (i.e., Encapsulated Data (ED), Point In Time (TS), or Integer Number (INT)). Answer codes are not assigned to these data elements.

#### CDA XML File Based on the Sample Scenario:

The sample CDA XML file provided below conforms to the Common Formats Hospital Version 2.0 Technical Specifications.

Text within <!--! --> characters is included within the CDA XML file to provide instructional information and to assist the user with identifying sections of the CDA XML document.

```
<?xml version="1.0" encoding="UTF-8"?>
<!--Initial CDA XML Elements-->
<ClinicalDocument xmlns="urn:hl7-org:v3" xmlns:voc="urn:hl7-org:v3/voc"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="urn:hl7-org:v3 CDA.xsd">
  <!--CDA Header Elements-->
    <typeId root="2.16.840.1.113883.1.3" extension="POCD_HD000040"/>
    <!--Template ID indicating conformance to AHRQ Common Formats Version 2.0 Patient Safety Report generic
    constraints-->
    <templateId root="2.16.840.1.113883.3.263.1.11.1.21"/>
    <!--Template ID indicating conformance to AHRQ Common Formats Version 2.0 Incident Report specific
    constraints-->
    <templateId root="2.16.840.1.113883.3.263.1.11.1.22"/>
    <!--PSO OID here is 2.16.840.1.113883.3.263.1.5.23 and the root is a .1 branch-->
    <id root="2.16.840.1.113883.3.263.1.5.23.1" extension="uniqueID"/>
    <!--ClinicalDocument/code indicating a Patient Safety Incident Report (DE3)-->
    <code code="A3" displayName="Incident: A patient safety event that reached the patient, whether or not the
    patient was harmed." codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
    <!--ClinicalDocument/title indicating a Patient Safety Incident Report-->
    <title>Patient Safety Incident Report</title>
    <!--ClinicalDocument/effectiveTime indicating the Initial Report Date (DE30) format: YYYYMMDD -->
    <effectiveTime value="20160701"/>
    <confidentialityCode code="N" codeSystem="2.16.840.1.113883.5.25"/>
    <!--root is the .13 branch of the PSO OID (2.16.840.1.113883.3.263.1.5.23)-->
    <!--extension shall be the event identifier (DE2) within each provider (author) which shall be constant across
    all revisions of the report-->
    <setId root="2.16.840.1.113883.3.263.1.5.23.13" extension="eventID"/>
    <versionNumber value="1"/>
    <!--recordTarget and administrativeGenderCode for an Incident Report involving a single patient -->
    <!--administrativeGenderCode shall be the sex (DE1106) of the patient-->
    <recordTarget>
      <patientRole>
        <id root="2.16.840.1.113883.3.263.1.5.23.2" extension="1"/>
        <patient>
          <administrativeGenderCode code="M" codeSystem="2.16.840.1.113883.5.1"/>
        </patient>
      </patientRole>
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</recordTarget>
<!--root is the .4 branch of the PSO OID (2.16.840.1.113883.3.263.1.5.23)-->
<!--extension shall be the Provider ID (DE1) assigned by the PSO for the provider-->
<author>
  <time nullFlavor="NA"/>
  <assignedAuthor>
    <id nullFlavor="NA"/>
    <representedOrganization>
      <id root="2.16.840.1.113883.3.263.1.5.23.4" extension="providerID"/>
    </representedOrganization>
  </assignedAuthor>
</author>
<custodian>
  <assignedCustodian>
    <representedCustodianOrganization>
      <id root="2.16.840.1.113883.3.263.1.5.23"/>
    </representedCustodianOrganization>
  </assignedCustodian>
</custodian>
<!--End of Header-->
<!--Start of structuredBody-->
<component>
  <structuredBody>
    <component>
      <section>
        <!-- Common Format 2.0 Generic Event -->
        <templateId root="2.16.840.1.113883.3.263.1.11.2.14"/>
        <title>Generic</title>
        <text>
          Text block for the Common format 2.0 Generic section
        </text>
        <entry>
          <organizer classCode="CLUSTER" moodCode="EVN">
            <id nullFlavor="NA"/>
            <statusCode code="completed"/>
            <!-- Data Elements For Generic -->
            <component>
              <!-- DE9 format: YYYYMMDDhhmm -->
              <observation classCode="OBS" moodCode="EVN">

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        <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
        <code code="DE9" displayName="What is the event discovery date/time?"
            codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
        <value xsi:type="TS" value="201607011645"/>
    </observation>
</component>
<component>
    <!--DE15-->
    <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
        <code code="DE15" displayName="Briefly describe the event that occurred or unsafe
            condition." codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common
            Formats"/>
        <value xsi:type="ED" mediaType="text/plain">Twenty-six hours after anesthesia
            patient developed rapid, shallow breathing, severe sepsis hypoxemia and was diagnosed
            with acute respiratory distress syndrome (ARDS). The patient was treated in intensive
            care with mechanical ventilation.</value>
    </observation>
</component>
<component>
    <!--DE78-->
    <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
        <code code="DE78" displayName="Where did the event or unsafe condition occur?"
            codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
        <value xsi:type="CD" code="A252" displayName="Special care area (e.g., ICU, CCU,
            NICU)" codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common
            Formats"/>
    </observation>
</component>
<component>
    <!--DE105-->
    <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
        <code code="DE105" displayName="What factor(s) contributed to the event?"
            codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
        <value xsi:type="CD" code="A3027" displayName="Staff qualifications (e.g.,
            competence, training)" codeSystem="2.16.840.1.113883.3.263.1.12"
            codeSystemName="AHRQ Common Formats"/>
    </observation>
</component>

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    </observation>
  </component>
  <component>
    <!--DE81-->
    <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
      <code code="DE81" displayName="Who first reported the event or unsafe condition?"
        codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
      <value xsi:type="CD" code="A288" displayName="Healthcare professional"
        codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
    </observation>
  </component>
  <component>
    <!--DE84-->
    <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
      <code code="DE84" displayName="What type of healthcare professional made the initial
        report?" codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common
        Formats"/>
      <value xsi:type="CD" code="A306" displayName="Nurse, nurse practitioner, physician
        assistant (including student or trainee)" codeSystem="2.16.840.1.113883.3.263.1.12"
        codeSystemName="AHRQ Common Formats"/>
    </observation>
  </component>
  <component>
    <!--DE21-->
    <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
      <code code="DE21" displayName="Which of the following categories are associated with
        the event or unsafe condition?" codeSystem="2.16.840.1.113883.3.263.1.12"
        codeSystemName="AHRQ Common Formats"/>
      <value xsi:type="CD" code="A41" displayName="Anesthesia"
        codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
    </observation>
  </component>
  <component>
    <!-- DE47 format: YYYYMMDD -->
    <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>

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        <code code="DE47" displayName="What is the patient's date of birth?"
          codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
        <value xsi:type="TS" value="19460605"/>
      </observation>
    </component>
    <component>
      <!--DE45 -->
      <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
        <code code="DE45" displayName="At the time of the incident, what was the patient's
          age?" codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common
          Formats"/>
        <value xsi:type="CD" code="A117" displayName="Mature adult (65-74)"
          codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
      </observation>
    </component>
    <component>
      <!--DE48 -->
      <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
        <code code="DE48" displayName="Is the patient's ethnicity Hispanic or Latino?"
          codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
        <value xsi:type="CD" code="2186-5" displayName="Not Hispanic or Latino"
          codeSystem="2.16.840.1.113883.6.238" codeSystemName="CDC Race and Ethnicity"/>
      </observation>
    </component>
    <component>
      <!--DE51 -->
      <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
        <code code="DE51" displayName="What is the patient's race?"
          codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
        <value xsi:type="CD" code="2106-3" displayName="White"
          codeSystem="2.16.840.1.113883.6.238" codeSystemName="CDC Race and Ethnicity"/>
      </observation>
    </component>
    <component>
      <!-- DE55 -->
      <observation classCode="OBS" moodCode="EVN">

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        <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
        <code code="DE55" displayName="After any intervention to reduce harm, what was the
        degree of residual harm to the patient from the incident (and subsequent
        intervention(s))?" codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ
        Common Formats"/>
        <value xsi:type="CD" code="A166" displayName="Severe harm: Bodily or psychological
        injury (including pain or disfigurement) that interferes substantially with
        functional ability or quality of life." codeSystem="2.16.840.1.113883.3.263.1.12"
        codeSystemName="AHRQ Common Formats"/>
    </observation>
</component>
<component>
    <!-- DE59 -->
    <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
        <code code="DE59" displayName="What is the anticipated duration of the harm to the
        patient?" codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common
        Formats"/>
        <value xsi:type="CD" nullFlavor="UNK"/>
    </observation>
</component>
</organizer>
</entry>
</section>
</component>
<component>
    <section>
        <!-- Common Format 2.0 Anesthesia Event -->
        <templateId root="2.16.840.1.113883.3.263.1.11.2.15"/>
        <title>Anesthesia</title>
        <text>
            This is the text block for Anesthesia section.
        </text>
        <entry>
            <organizer classCode="CLUSTER" moodCode="EVN">
                <id nullFlavor="NA"/>
                <statusCode code="completed"/>
                <!-- Data Elements For Anesthesia -->
            </organizer>
        </entry>
    </section>
</component>

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<!--DE2006-->
<observation classCode="OBS" moodCode="EVN">
  <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
  <code code="DE2006" displayName="What type(s) of anesthesia and/or sedation was used?"
    codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
  <value xsi:type="CD" code="A1965" displayName="General anesthesia"
    codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
</observation>
</component>
<component>
  <!-- DE522 -->
  <observation classCode="OBS" moodCode="EVN">
    <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
    <code code="DE522" displayName="Which of the following best characterizes the
      anesthesia event?" codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ
      Common Formats"/>
    <value xsi:type="CD" code="A2248" displayName="Physiologic complication not present
      prior to anesthesia" codeSystem="2.16.840.1.113883.3.263.1.12"
      codeSystemName="AHRQ Common Formats"/>
  </observation>
</component>
<component>
  <!--DE2000-->
  <observation classCode="OBS" moodCode="EVN">
    <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
    <code code="DE2000" displayName="Which of the following physiologic complication(s)
      occurred that was not present prior to anesthesia?"
      codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
    <value xsi:type="CD" code="A2095" displayName="Respiratory failure"
      codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
  </observation>
</component>
<component>
  <!--DE2003-->
  <observation classCode="OBS" moodCode="EVN">
    <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
    <code code="DE2003" displayName="Which of the following best describes how the
      respiratory failure was manifested?" codeSystem="2.16.840.1.113883.3.263.1.12"
      codeSystemName="AHRQ Common Formats"/>
  </observation>
</component>

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        <value xsi:type="CD" code="A2106" displayName="Re-institution of ventilator support
        after discontinuance following anesthesia"
        codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
    </observation>
</component>
</organizer>
</entry>
</section>
</component>
</structuredBody>
</component>
</ClinicalDocument>
```