



CDA XML Sample

ANESTHESIA

AHRQ Common Formats for Event Reporting –
Hospital Version 2.0a

1. Purpose

The purpose of the AHRQ Common Formats for Event Reporting – Hospital Version 2.0a 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 AHRQ Common Formats for Event Reporting – Hospital Version 2.0a 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.

2. Scenario

A 68-year old white non-Hispanic male was admitted to the hospital for placement of an implantable cardioverter-defibrillator and was given a local anesthetic and a sedative. On admission to the postanesthesia care unit following the procedure, the postanesthesia care unit nurse noted the patient remained heavily sedated. During the administration of anesthesia, the patient had received the incorrect dose of sedative medication. The patient had been originally prescribed midazolam 0.5 mL of 1 mg/mL injectable solution but instead received 0.5 mL of midazolam 5 mg/mL injectable solution. Although the patient received the wrong dose of the sedative, no harm occurred and the patient recovered with no complications.

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)
	DE1106	Patient sex	M	Male
Generic	DE9	Event discovery date/time	N/A	201607011645 (Format: YYYYMMDDhhmm)

Section	Data Element ID	Data Element Name	Answer Code	Answer Value
	DE15	Description of event or unsafe condition	N/A	The postanesthesia care unit nurse noted the patient remained heavily sedated after procedure. During the administration of anesthesia, the patient had received the incorrect dose of sedative medication. The patient had been originally prescribed midazolam 0.5 mL of 1 mg/mL injectable solution but instead received 0.5 mL of midazolam 5 mg/mL injectable solution.
	DE78	Location (area of occurrence) of event or unsafe condition	A258	Operating room or procedure area (e.g., cardiac catheter lab, endoscopy area), including PACU or recovery area
	DE105	Contributing factor(s) for event	A3036	No known contributing factors
	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 A54	Anesthesia Medication or Other Substance
	DE47	Patient date of birth	N/A	19480605 (Format: YYYYMMDD)
	DE45	Patient age range	A117	Mature adult (65-74 years)
	DE48	Hispanic or Latino ethnicity	2186-5	Not Hispanic or Latino
	DE51	Patient race	2106-3	White
	DE55	Degree of harm	A180	No harm: Event reached patient, but no harm was evident.
Anesthesia	DE2006	Type(s) of anesthesia and/or sedation	A1971 A1972	Local or topical anesthesia Sedation
	DE522	Characterization of anesthesia event	A2250	Problem with anesthetic, medical gas, medication, or other substance
Medication or Other Substance	DE270	Type of substance involved	A1197	Medications
	DE273	Type of medication involved	A1218	Prescription or over-the-counter
	DE291	Process(es) involving a substance	A1275	Incorrect dose
	DE315	Stage event originated	A1398	Administering
	DE1151	RXCUI Semantic Clinical Drug (SCD)	311702	Midazolam 5 MG/ML injectable solution
	DE322	RXCUI brand name (BN)	NI	No Information
	DE333	Medication/substance prescribed	A15	Yes

Section	Data Element ID	Data Element Name	Answer Code	Answer Value
	DE336	Medication/substance given	A15	Yes

*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.

3. CDA XML File Based on the Sample Scenario

The sample CDA XML file provided below conforms to the AHRQ Common Formats for Event Reporting – Hospital Version 2.0a 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.

Users requiring additional assistance in viewing examples may contact the PSOPPC Help Desk at 866-571-7712 or email at support@psoppc.org. Hours of operation are 9 am to 5:30 pm Eastern Time.

```
<?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 for Event Reporting - Hospital Version 2.0a 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 for Event Reporting - Hospital Version 2.0a 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 non 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"/>
</ClinicalDocument>
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<!--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>
</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>
        <!-- Generic Event section -->
        <templateId root="2.16.840.1.113883.3.263.1.11.2.14"/>
        <title>Generic</title>

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<text>
  Text block for 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">
        <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">The postanesthesia care unit nurse noted the
          patient remained heavily sedated after procedure. During the administration of anesthesia,
          the patient had received the incorrect dose of sedative medication. The patient had been
          originally prescribed midazolam 0.5 mL of 1 mg/mL injectable solution but instead received
          0.5 mL of midazolam 5 mg/mL injectable solution.</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="A258" displayName="Operating room or procedure area (e.g.,
          cardiac catheter lab, endoscopy area), including PACU or recovery area"
          codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
      </observation>
    </component>
  </component>
</entry>

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<!--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="A3036" displayName="No known contributing factors"
    codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
</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"/>
    <value xsi:type="CD" code="A54" displayName="Medication or Other Substance"
      codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
  </observation>

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</component>
<component>
  <!-- DE47 format: YYYYMMDD -->
  <observation classCode="OBS" moodCode="EVN">
    <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
    <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="19480605"/>
  </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 -->

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        <observation classCode="OBS" moodCode="EVN">
          <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="A180" displayName="No harm: Event reached patient, but no harm
            was evident." codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common
            Formats"/>
        </observation>
      </component>
    </organizer>
  </entry>
</section>
</component>
<component>
  <section>
    <!-- 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 -->
        <component>
          <!--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="A1971" displayName="Local or topical anesthesia"
              codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
            <value xsi:type="CD" code="A1972" displayName="Sedation"
              codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
          </observation>
        </component>
        <component>
          <!-- DE522 -->

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    <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="A2250" displayName="Problem with anesthetic, medical gas,
medication, or other substance" codeSystem="2.16.840.1.113883.3.263.1.12"
codeSystemName="AHRQ Common Formats"/>
    </observation>
  </component>
</organizer>
</entry>
</section>
</component>
<component>
  <section>
    <!-- Medication or Other Substance section -->
    <templateId root="2.16.840.1.113883.3.263.1.11.2.8"/>
    <title>Medication or Other Substance</title>
    <text>
      This is the text block for Medication or Other substance Section.
    </text>
    <entry>
      <organizer classCode="CLUSTER" moodCode="EVN">
        <id nullFlavor="NA"/>
        <statusCode code="completed"/>
        <!-- Data Elements For Medication or other substance -->
        <component>
          <!-- DE270 -->
          <observation classCode="OBS" moodCode="EVN">
            <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
            <code code="DE270" displayName="What type of medication/substance was involved?"
codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
            <value xsi:type="CD" code="A1197" displayName="Medications"
codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
          </observation>
        </component>
        <component>
          <!-- DE273 -->
          <observation classCode="OBS" moodCode="EVN">
            <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
            <code code="DE273" displayName="What type of medication was involved in the event or unsafe
condition?" codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common

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        Formats"/>
        <value xsi:type="CD" code="A1218" displayName="Prescription or over-the-counter"
        codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
    </observation>
</component>
<component>
    <!-- DE291 -->
    <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
        <code code="DE291" displayName="What was the process-related event(s) involving the
        medication/substance?" codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ
        Common Formats"/>
        <value xsi:type="CD" code="A1275" displayName="Incorrect dose"
        codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
    </observation>
</component>
<component>
    <!-- DE315 -->
    <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
        <code code="DE315" displayName="At what stage in the process did the event originate,
        regardless of the stage at which it was discovered?"
        codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
        <value xsi:type="CD" code="A1398" displayName="Administering"
        codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
    </observation>
</component>
<!-- Medication 1: Data Elements Specific to Each Medication or Other Substance -->
<component>
    <!-- component for medication 1 organizer -->
    <organizer classCode="CLUSTER" moodCode="EVN">
        <!-- Medication 1 organizer -->
        <id root="2.16.840.1.113883.3.263.1.5.0.15" extension="1"/>
        <!-- Medication or other substance 1 id -->
        <statusCode code="completed"/>
        <component>
            <!-- DE1151 -->
            <observation classCode="OBS" moodCode="EVN">
                <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
                <code code="DE1151" displayName="What is the RXCUI Semantic Clinical Drug (SCD) of
                the medication?" codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ
                Common Formats"/>
            </observation>
        </component>
    </organizer>
</component>

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        <value xsi:type="CD" code="311702" displayName="Midazolam 5 MG/ML injectable
        solution" codeSystem="2.16.840.1.113883.6.88" codeSystemName="RxNorm"/>
    </observation>
</component>
<component>
    <!-- DE322 -->
    <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
        <code code="DE322" displayName="If appropriate, what is the RXCUI brand name (BN)
        of the medication?" codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ
        Common Formats"/>
        <value xsi:type="CD" nullFlavor="NI" displayName="No Information"/>
    </observation>
</component>
<component>
    <!-- DE333 -->
    <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
        <code code="DE333" displayName="Was this medication/substance prescribed for this
        patient?" codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common
        Formats"/>
        <value xsi:type="CD" code="A15" displayName="Yes"
        codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
    </observation>
</component>
<component>
    <!-- DE336 -->
    <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.3.263.1.11.3.100"/>
        <code code="DE336" displayName="Was this medication/substance given to this
        patient?" codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common
        Formats"/>
        <value xsi:type="CD" code="A15" displayName="Yes"
        codeSystem="2.16.840.1.113883.3.263.1.12" codeSystemName="AHRQ Common Formats"/>
    </observation>
</component>
</organizer>
</component>
</organizer>
</entry>
</section>
</component>

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</structuredBody>  
</component>  
</ClinicalDocument>
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