a. **SHALL** contain exactly one [1..1] **@typeCode**="SUBJ" (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 **STATIC**) (CONF:1198-14893).

b. **SHALL** contain exactly one [1..1] **Problem Observation (V3)** (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.4:2015-08-01) (CONF:1198-14898).

Figure 144: Encounter Diagnosis (V3) Example

```
<act classCode="ACT" moodCode="EVN">
    <templateId root="2.16.840.1.113883.10.20.22.4.80" extension="2015-08-01" />
    <code code="29308-4" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
displayName=" DIAGNOSIS" />
    <statusCode code="active" />
    <effectiveTime>
        <low value="20903003" />
    </effectiveTime>
    <entryRelationship typeCode="SUBJ">
        <observation classCode="OBS" moodCode="EVN">
            <templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2015-08-01" />
            <!-- Problem Observation -->
          ...



        </observation>
    </entryRelationship>
</act>
```

3.25 Entry Reference

[act: identifier urn:oid:2.16.840.1.113883.10.20.22.4.122 (open)]

Table 275: Entry Reference Contexts

Contained By:	Contains:
Goal Observation (optional)	
Outcome Observation (optional)	
Health Concern Act (V2) (optional)	
Risk Concern Act (V2) (optional)	
Planned Intervention Act (V2) (optional)	
Planned Intervention Act (V2) (required)	
Intervention Act (V2) (optional)	

This template represents the act of referencing another entry in the same CDA document instance. Its purpose is to remove the need to repeat the complete XML representation of the referred entry when relating one entry to another. This template can be used to reference many types of Act class derivations, such as encounters, observations, procedures etc., as it is often necessary when authoring CDA documents to repeatedly reference other Acts of these types. For example, in a Care Plan it is necessary to repeatedly relate Health Concerns, Goals, Interventions and Outcomes.

The id is required and must be the same id as the entry/id it is referencing. The id cannot be a null value. Act/Code is set to nullFlavor="NP" (Not Present). This means the value is not present in the message (in act/Code).

Table 276: Entry Reference Constraints Overview

XPath	Card.	Verb	Data Type	CONF#	Value
act (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.122)					
@classCode	1..1	SHALL		1098-31485	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT
@moodCode	1..1	SHALL		1098-31486	urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN
templateId	1..1	SHALL		1098-31487	
@root	1..1	SHALL		1098-31488	2.16.840.1.113883.10.20.22.4.122
id	1..*	SHALL		1098-31489	
code	1..1	SHALL		1098-31490	
@nullFlavor	1..1	SHALL		1098-31491	urn:oid:2.16.840.1.113883.5.1008 (HL7NullFlavor) = NP
statusCode	1..1	SHALL		1098-31498	
@code	0..1	MAY		1098-31499	urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed

1. **SHALL** contain exactly one [1..1] **@classCode**="ACT" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:1098-31485).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:1098-31486).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-31487) such that it
   a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.122" (CONF:1098-31488).

The ID must equal another entry/id in the same document instance. Application Software must be responsible for resolving the identifier back to its original object and then rendering the information in the correct place in the containing section's narrative text. The ID cannot have Null value (e.g., nullFlavor is not allowed).

4. **SHALL** contain at least one [1..*] **id** (CONF:1098-31489).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1098-31490).
   a. This code **SHALL** contain exactly one [1..1] **@nullFlavor**="NP" Not Present (CodeSystem: HL7NullFlavor urn:oid:2.16.840.1.113883.5.1008) (CONF:1098-31491).
6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-31498).
   a. This statusCode **MAY** contain zero or one [0..1] **@code**="completed" (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:1098-31499).

Figure 145: Entry Reference Example

```
<!--
   ********************************************************
   Health Concern section
   ********************************************************
-->
<act classCode="ACT" moodCode="EVN">
  <!-- Health Concern Act of a pneumonia diagnosis -->
  <templateId root="2.16.840.1.113883.10.20.22.4.132" />
  <id root="4eab0e52-dd7d-4285-99eb-72d32ddb195c" />
  <code code="75310-3" codeSystem="2.16.840.1.113883.6.1" codeSystemName="LOINC"
displayName="Health Concern" />
  <statusCode code="active" />
  <effectiveTime value="20130616" />
  <entryRelationship typeCode="REFR">
    <!-- Problem Observation (V2) -->
    <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.22.4.4" extension="2014-06-09" />
      <id root="8dfacd73-1682-4cc4-9351-e54ccea83612" />
      <code code="29308-4"
            codeSystem="2.16.840.1.113883.6.1"
            codeSystemName="LOINC"
            displayName="Diagnosis"/>
      <statusCode code="completed" />
      <effectiveTime>
        <!-- Date of diagnosis -->
        <low value="20130616" />
      </effectiveTime>
      <value xsi:type="CD" code="233604007"
            codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED"
            displayName="Pneumonia" />
      <!-- This Entry Reference refers to a goal, intervention, actual
           outcome, or some other entry present in the Care Plan
           that the Health Concern is related to-->
      <entryRelationship typeCode="REFR">
        <act classCode="ACT" moodCode="EVN">
          <templateId root="2.16.840.1.113883.10.20.22.4.122" />
          <!-- This ID equals the ID of the goal of a pulse
                     ox greater than 92% -->
          <id root="3700b3b0-fbed-11e2-b778-0800200c9a66" />
          <!-- The code is nulled to "NP" Not Present" -->
          <code nullFlavor="NP" />
          <statusCode code="completed" />
        </act>
      </entryRelationship>
    </observation>
  </entryRelationship>
</act>
...
<!--
   ********************************************************
   Expected Outcomes/Goals section
   ********************************************************
-->
...
<entry>
  <!-- This is an observation about the expected outcome of a pulse ox reading
       of 92 or greater.  The Id is the same as the ID as the ID of the
```

```
          pneumonia problem above  -->
  <observation classCode="OBS" moodCode="GOL">
    <id root="3700b3b0-fbed-11e2-b778-0800200c9a66" />
    <code code="59408-5"
          codeSystem="2.16.840.1.113883.6.1"
          codeSystemName="LOINC"
          displayName="Oxygen saturation in Arterial blood by Pulse oximetry"/>
    <statusCode code="active" />
    <value xsi:type="IVL_PQ">
      <low value="92" unit="%" />
    </value>
    <!-- There could be another Entry Reference here referring to the
            related health concern, actual outcome, or intervention -->
    ...

  </observation>
</entry>
...
```

Figure 146: Diagnosis Reference Example

```
<!-- Show how an encounter can include a discharge diagnosis which references an
       item on the problem list using the Entry Reference template -->
<!-- Problem Section -->
<observation>
    <id root="1234567" />
    <code code="123" codeSystem="1.2.3" displayName="asthma" />
</observation>
<!-- Encounter Section -->
<encounter>
    <entryRelationship typeCode="COMP">
        <act>
            <code code="145" codeSystem="4.5.6" displayName="discharge diagnosis" />
            <templateId root="2.16.840.1.113883.10.20.22.4.33" extension="2014-06-09" />
            <!-- this is for illustrative purposes only. In this particular
                    case, the template requires a nested Problem
                    Observation (V2). In the Health Concern template,
                    we'd need a constraint that says it's allowable to
                    include the Entry Reference template. -->
            <entryRelationship typeCode="SUBJ">
                <act classCode="ACT" moodCode="XXX">
                    <templateId root="2.16.840.1.113883.10.20.22.4.122" />
                    <id root="1234567" />
                    <code nullFlavor="NP" />
                </act>
            </entryRelationship>
        </act>
    </entryRelationship>
</encounter>
```

3.26 Estimated Date of Delivery

[observation: identifier urn:oid:2.16.840.1.113883.10.20.15.3.1 (closed)]

Table 277: Estimated Date of Delivery Contexts

Contained By:	Contains:
Pregnancy Observation (optional)	

This clinical statement represents the anticipated date when a woman will give birth.

Table 278: Estimated Date of Delivery Constraints Overview

XPath	Card.	Verb	Data Type	CONF#	Value
observation (identifier: urn:oid:2.16.840.1.113883.10.20.15.3.1)					
@classCode	1..1	SHALL		81-444	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS
@moodCode	1..1	SHALL		81-445	urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN
templateId	1..1	SHALL		81-16762	
@root	1..1	SHALL		81-16763	2.16.840.1.113883.10.20.15.3.1
code	1..1	SHALL		81-19139	
@code	1..1	SHALL		81-19140	11778-8
@codeSystem	1..1	SHALL		81-26503	urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1
statusCode	1..1	SHALL		81-448	
@code	1..1	SHALL		81-19096	urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed
value	1..1	SHALL	TS	81-450	

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" Observation (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:81-444).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:81-445).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:81-16762) such that it
   a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.15.3.1" (CONF:81-16763).
4. **SHALL** contain exactly one [1..1] **code** (CONF:81-19139).
   a. This code **SHALL** contain exactly one [1..1] **@code**="11778-8" Estimated date of delivery (CONF:81-19140).
   b. This code **SHALL** contain exactly one [1..1] **@codeSystem**="2.16.840.1.113883.6.1" (CodeSystem: LOINC urn:oid:2.16.840.1.113883.6.1) (CONF:81-26503).
5. **SHALL** contain exactly one [1..1] **statusCode** (CONF:81-448).