*Figure 49: Procedure Activity Procedure Social Determinant of Health Intervention Example*

```
<procedure classCode="PROC" moodCode="EVN">
    <templateId root="2.16.840.1.113883.10.20.22.4.14"/>
    <templateId root="2.16.840.1.113883.10.20.22.4.14"
          extension="2014-06-09"/>
    <templateId root="2.16.840.1.113883.10.20.22.4.14"
          extension="2022-06-01"/>
    <id extension="2448483" root="1.2.840.114350.1.13.5552.1.7.2.798268"/>
    <code code="61310001" codeSystem="2.16.840.1.113883.6.96"
          displayName="Nutrition education" codeSystemName="SNOMED-CT">
        <originalText>
            <reference value="#ProcedureDesc3"/>
        </originalText>
        <translation code="97802" codeSystem="2.16.840.1.113883.6.12"
            displayName="Medical nutrition therapy; initial"
            codeSystemName="CPT"/>
        <translation code="S9470" codeSystem="2.16.840.1.113883.6.13"
            displayName="Nutritional counseling, diet"
            codeSystemName="HCPCS"/>
    </code>
    <text>
        <reference value="#Procedure1"/>
    </text>
    <statusCode code="completed"/>
    <effectiveTime value="20160413"/>
</procedure>
```

## 3.21 Reason (V4)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.24.3.88:2023-05-01 (open)]

This template describes the thought process or justification for an action or for not performing an action. Examples include patient, system, or non-problem/diagnosis medical-related reasons for declining to perform specific actions, or any reason for performing an action. Note that the parent template that calls this template can be asserted to have occurred or to not have occurred. Therefore, this template simply adds a reason to some other (possibly negated) act. As such, there is nothing in this template that says whether the parent act did or did not occur. It is expected that the primary use of this template within C-CDA is to provide the rationale for why something was not done. If this template is called by a template that is not negated, the Reason template should contain something other than a problem or a diagnosis, such as a patient preference.
The Indication (V3) observation: 2.16.840.1.113883.10.20.22.4.19 should be used to represent a diagnosis or problem to indicate the diagnosis or problem is the rationale for an action.
Immunization Refusal Reason: 2.16.840.1.113883.10.20.22.4.53 should be used to represent the rationale for the patient declining an immunization as the value set is crafted for the immunization use case.

**Table 73: Reason (V4) Constraints Overview**

| XPath | Card. | Verb | Data Type | CONF# | Value |
|---|---|---|---|---|---|
| observation (identifier: urn:hl7ii:2.16.840.1.113883.10.20.24.3.88:2023-05-01) | | | | | |
| @classCode | 1..1 | SHALL | | 4537-11357 | urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = OBS |
| @moodCode | 1..1 | SHALL | | 4537-11358 | urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN |
| templateId | 1..1 | SHALL | | 4537-11359 | |
| @root | 1..1 | SHALL | | 4537-11360 | 2.16.840.1.113883.10.20.24.3.88 |
| @extension | 1..1 | SHALL | | 4537-27027 | 2023-05-01 |
| id | 1..* | SHALL | | 4537-26998 | |
| code | 1..1 | SHALL | | 4537-11361 | |
| @code | 1..1 | SHALL | | 4537-11362 | 77301-0 |
| @codeSystem | 1..1 | SHALL | | 4537-27028 | urn:oid:2.16.840.1.113883.6.1 (LOINC) = 2.16.840.1.113883.6.1 |
| statusCode | 1..1 | SHALL | | 4537-11364 | |
| @code | 1..1 | SHALL | | 4537-11365 | urn:oid:2.16.840.1.113883.5.14 (HL7ActStatus) = completed |
| effectiveTime | 1..1 | SHALL | | 4537-11366 | |
| low | 1..1 | SHALL | | 4537-27551 | |
| high | 0..1 | MAY | | 4537-27552 | |
| value | 1..1 | SHALL | CD | 4537-11367 | |

1. **SHALL** contain exactly one [1..1] **@classCode**="OBS" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6) (CONF:4537-11357).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001) (CONF:4537-11358).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:4537-11359) such that it
   a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.24.3.88" (CONF:4537-11360).
   b. **SHALL** contain exactly one [1..1] **@extension**="2023-05-01" (CONF:4537-27027).
4. **SHALL** contain at least one [1..*] **id** (CONF:4537-26998).
5. **SHALL** contain exactly one [1..1] **code** (CONF:4537-11361).

a. This code **SHALL** contain exactly one [1..1] **@code**="77301-0" Reason care action performed or not (CONF:4537-11362).

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:4537-27028).

6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:4537-11364).

a. This statusCode **SHALL** contain exactly one [1..1] **@code**="completed" (CodeSystem: HL7ActStatus urn:oid:2.16.840.1.113883.5.14) (CONF:4537-11365).

7. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:4537-11366).

a. This effectiveTime **SHALL** contain exactly one [1..1] **low** (CONF:4537-27551).

b. This effectiveTime **MAY** contain zero or one [0..1] **high** (CONF:4537-27552).

8. **SHALL** contain exactly one [1..1] **value** with @xsi:type="CD" (CONF:4537-11367).

*Figure 50: Reason (V4) Example (Reason for something that did not occur)*

```
<!--  Contained in a Procedure that was not performed (example) -->
<entryRelationship typeCode="RSON">
    <!-- ** Reason (V4) ** -->
    <observation classCode="OBS" moodCode="EVN">
        <templateId root="2.16.840.1.113883.10.20.24.3.88" extension="2023-05-01" />
        <id root="5750a5bb-6a01-4b99-9b1c-cda56b1dce0c" />
        <code code="77301-0"
                codeSystem="2.16.840.1.113883.6.1"
                displayName="Reason care action performed or not"
                codeSystemName="LOINC" />
        <statusCode code="completed" />
        <effectiveTime>
            <low value="20230926"/>
        </effectiveTime>
        <value xsi:type="CD"
                code="57054005"
                codeSystem="2.16.840.1.113883.6.96"
                codeSystemName="SNOMED CT"
                displayName="Acute myocardial infarction" />
    </observation>
</entryRelationship>
```

## 3.22 Result Observation (V4)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.2:2023-05-01 (open)]

This template represents the results of a laboratory, radiology, or other study performed on a patient.

The result observation includes a statusCode to allow recording the status of an observation. "Pending" results (e.g., a test has been run but results have not been reported yet) should be represented as "active" ActStatus.

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