

### 3.81 Procedure Activity Act (V2)

[act: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.12:2014-06-09 (open)]

**Table 431: Procedure Activity Act (V2) Contexts**

Contained By:	Contains:
<a href="#">Procedures Section (entries optional) (V2)</a> (optional) <a href="#">Procedures Section (entries required) (V2)</a> (optional) <a href="#">Planned Intervention Act (V2)</a> (optional) <a href="#">Intervention Act (V2)</a> (optional)	<a href="#">Service Delivery Location</a> (optional) <a href="#">Medication Activity (V2)</a> (optional) <a href="#">Indication (V2)</a> (optional) <a href="#">Instruction (V2)</a> (optional) <a href="#">Author Participation</a> (optional)

This template represents any act that cannot be classified as an observation or procedure according to the HL7 RIM. Examples of these acts are a dressing change, teaching or feeding a patient, or providing comfort measures.

The common notion of "procedure" is broader than that specified by the HL7 Version 3 Reference Information Model (RIM). Procedure templates can be represented with various RIM classes: act (e.g., dressing change), observation (e.g., EEG), procedure (e.g., splenectomy).

**Table 432: Procedure Activity Act (V2) Constraints Overview**

XPath	Card.	Verb	Data Type	CONF#	Value
act (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.12:2014-06-09)					
@classCode	1..1	SHALL		<a href="#">1098-8289</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ACT
@moodCode	1..1	SHALL		<a href="#">1098-8290</a>	urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN
templateId	1..1	SHALL		<a href="#">1098-8291</a>	
@root	1..1	SHALL		<a href="#">1098-10519</a>	2.16.840.1.113883.10.20.22.4.12
@extension	1..1	SHALL		<a href="#">1098-32505</a>	2014-06-09
id	1..*	SHALL		<a href="#">1098-8292</a>	
code	1..1	SHALL		<a href="#">1098-8293</a>	
originalText	0..1	SHOULD		<a href="#">1098-19186</a>	
reference	0..1	MAY		<a href="#">1098-19187</a>	
@value	0..1	MAY		<a href="#">1098-19188</a>	
statusCode	1..1	SHALL		<a href="#">1098-8298</a>	
@code	1..1	SHALL		<a href="#">1098-32364</a>	urn:oid:2.16.840.1.113883.11.20.9.22 (ProcedureAct statusCode)
effectiveTime	1..1	SHALL		<a href="#">1098-8299</a>	
priorityCode	0..1	MAY		<a href="#">1098-8300</a>	urn:oid:2.16.840.1.113883.1.11.16866 (ActPriority)
performer	0..*	SHOULD		<a href="#">1098-8301</a>	
assignedEntity	1..1	SHALL		<a href="#">1098-8302</a>	
id	1..*	SHALL		<a href="#">1098-8303</a>	
addr	1..*	SHALL		<a href="#">1098-8304</a>	
telecom	1..*	SHALL		<a href="#">1098-8305</a>	
representedOrganization	0..1	SHOULD		<a href="#">1098-8306</a>	
id	0..*	SHOULD		<a href="#">1098-8307</a>	
name	0..*	MAY		<a href="#">1098-</a>	

XPath	Card.	Verb	Data Type	CONF#	Value
				<a href="#">8308</a>	
telecom	1..*	SHALL		<a href="#">1098-8310</a>	
addr	1..*	SHALL		<a href="#">1098-8309</a>	
author	0..*	SHOULD		<a href="#">1098-32477</a>	<a href="#">Author Participation (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119)</a>
participant	0..*	MAY		<a href="#">1098-8311</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8312</a>	urn:oid:2.16.840.1.113883.5.90 (HL7ParticipationType) = LOC
participantRole	1..1	SHALL		<a href="#">1098-15599</a>	<a href="#">Service Delivery Location (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32)</a>
entryRelationship	0..*	MAY		<a href="#">1098-8314</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8315</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
@inversionInd	1..1	SHALL		<a href="#">1098-8316</a>	true
encounter	1..1	SHALL		<a href="#">1098-8317</a>	
@classCode	1..1	SHALL		<a href="#">1098-8318</a>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = ENC
@moodCode	1..1	SHALL		<a href="#">1098-8319</a>	urn:oid:2.16.840.1.113883.5.1001 (HL7ActMood) = EVN
id	1..1	SHALL		<a href="#">1098-8320</a>	
entryRelationship	0..1	MAY		<a href="#">1098-8322</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8323</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = SUBJ
@inversionInd	1..1	SHALL		<a href="#">1098-8324</a>	true
act	1..1	SHALL		<a href="#">1098-31396</a>	<a href="#">Instruction (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09)</a>
entryRelationship	0..*	MAY		<a href="#">1098-8326</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8327</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = RSON

XPath	Card.	Verb	Data Type	CONF#	Value
observation	1..1	SHALL		<a href="#">1098-15601</a>	<a href="#">Indication (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09)</a>
entryRelationship	0..*	MAY		<a href="#">1098-8329</a>	
@typeCode	1..1	SHALL		<a href="#">1098-8330</a>	urn:oid:2.16.840.1.113883.5.1002 (HL7ActRelationshipType) = COMP
substanceAdministration	1..1	SHALL		<a href="#">1098-15602</a>	<a href="#">Medication Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09)</a>

1. **SHALL** contain exactly one [1..1] **@classCode**="ACT" Act (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-8289).
2. **SHALL** contain exactly one [1..1] **@moodCode**="EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-8290).
3. **SHALL** contain exactly one [1..1] **templateId** (CONF:1098-8291) such that it
  - a. **SHALL** contain exactly one [1..1] **@root**="2.16.840.1.113883.10.20.22.4.12" (CONF:1098-10519).
  - b. **SHALL** contain exactly one [1..1] **@extension**="2014-06-09" (CONF:1098-32505).
4. **SHALL** contain at least one [1..\*] **id** (CONF:1098-8292).
5. **SHALL** contain exactly one [1..1] **code** (CONF:1098-8293).
  - a. This code **SHOULD** contain zero or one [0..1] **originalText** (CONF:1098-19186).
    - i. The originalText, if present, **MAY** contain zero or one [0..1] **reference** (CONF:1098-19187).
      1. The reference, if present, **MAY** contain zero or one [0..1] **@value** (CONF:1098-19188).
        - a. This reference/**@value** **SHALL** begin with a '#' and **SHALL** point to its corresponding narrative (using the approach defined in CDA Release 2, section 4.3.5.1) (CONF:1098-19189).
    - b. This **@code** **SHOULD** be selected from LOINC (CodeSystem: 2.16.840.1.113883.6.1) or SNOMED CT (CodeSystem: 2.16.840.1.113883.6.96), and **MAY** be selected from CPT-4 (CodeSystem: 2.16.840.1.113883.6.12) or ICD10 PCS (CodeSystem: 2.16.840.1.113883.6.4) or CDT-2 (Code System: 2.16.840.1.113883.6.13) (CONF:1098-19190).
  6. **SHALL** contain exactly one [1..1] **statusCode** (CONF:1098-8298).
    - a. This statusCode **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet [ProcedureAct statusCode](#) urn:oid:2.16.840.1.113883.11.20.9.22 **STATIC** 2014-04-23 (CONF:1098-32364).
  7. **SHALL** contain exactly one [1..1] **effectiveTime** (CONF:1098-8299).
  8. **MAY** contain zero or one [0..1] **priorityCode**, which **SHALL** be selected from ValueSet [ActPriority](#) urn:oid:2.16.840.1.113883.1.11.16866 **DYNAMIC** (CONF:1098-8300).
  9. **SHOULD** contain zero or more [0..\*] **performer** (CONF:1098-8301).

- a. The performer, if present, **SHALL** contain exactly one [1..1] **assignedEntity** (CONF:1098-8302).
  - i. This assignedEntity **SHALL** contain at least one [1..\*] **id** (CONF:1098-8303).
  - ii. This assignedEntity **SHALL** contain at least one [1..\*] **addr** (CONF:1098-8304).
  - iii. This assignedEntity **SHALL** contain at least one [1..\*] **telecom** (CONF:1098-8305).
  - iv. This assignedEntity **SHOULD** contain zero or one [0..1] **representedOrganization** (CONF:1098-8306).
    - 1. The representedOrganization, if present, **SHOULD** contain zero or more [0..\*] **id** (CONF:1098-8307).
    - 2. The representedOrganization, if present, **MAY** contain zero or more [0..\*] **name** (CONF:1098-8308).
    - 3. The representedOrganization, if present, **SHALL** contain at least one [1..\*] **telecom** (CONF:1098-8310).
    - 4. The representedOrganization, if present, **SHALL** contain at least one [1..\*] **addr** (CONF:1098-8309).
- 10. **SHOULD** contain zero or more [0..\*] **Author Participation** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.119) (CONF:1098-32477).
- 11. **MAY** contain zero or more [0..\*] **participant** (CONF:1098-8311) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="LOC"** Location (CodeSystem: HL7ParticipationType urn:oid:2.16.840.1.113883.5.90 **STATIC**) (CONF:1098-8312).
  - b. **SHALL** contain exactly one [1..1] **Service Delivery Location** (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.32) (CONF:1098-15599).
- 12. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-8314) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="COMP"** Has Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 **STATIC**) (CONF:1098-8315).
  - b. **SHALL** contain exactly one [1..1] **@inversionInd="true"** true (CONF:1098-8316).
  - c. **SHALL** contain exactly one [1..1] **encounter** (CONF:1098-8317).
    - i. This encounter **SHALL** contain exactly one [1..1] **@classCode="ENC"** Encounter (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-8318).
    - ii. This encounter **SHALL** contain exactly one [1..1] **@moodCode="EVN"** Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-8319).
    - iii. This encounter **SHALL** contain exactly one [1..1] **id** (CONF:1098-8320).
      - 1. Set the encounter ID to the ID of an encounter in another section to signify they are the same encounter (CONF:1098-16849).
- 13. **MAY** contain zero or one [0..1] **entryRelationship** (CONF:1098-8322) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="SUBJ"** Has Subject (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 **STATIC**) (CONF:1098-8323).
  - b. **SHALL** contain exactly one [1..1] **@inversionInd="true"** true (CONF:1098-8324).

- c. **SHALL** contain exactly one [1..1] [Instruction \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.20:2014-06-09) (CONF:1098-31396).
- 14. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-8326) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="RSON"** Has Reason (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 **STATIC**) (CONF:1098-8327).
  - b. **SHALL** contain exactly one [1..1] [Indication \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.19:2014-06-09) (CONF:1098-15601).
- 15. **MAY** contain zero or more [0..\*] **entryRelationship** (CONF:1098-8329) such that it
  - a. **SHALL** contain exactly one [1..1] **@typeCode="COMP"** Has Component (CodeSystem: HL7ActRelationshipType urn:oid:2.16.840.1.113883.5.1002 **STATIC**) (CONF:1098-8330).
  - b. **SHALL** contain exactly one [1..1] [Medication Activity \(V2\)](#) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09) (CONF:1098-15602).

**Table 433: ProcedureAct statusCode**

Value Set: ProcedureAct statusCode urn:oid:2.16.840.1.113883.11.20.9.22 (Clinical Focus: Status of a procedure activity),(Data Element Scope: ),(Inclusion Criteria: ),(Exclusion Criteria: )  This value set was imported on 4/24/2019 with a version of 20190103. Value Set Source: <a href="https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.22/expansion">https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.22/expansion</a>			
Code	Code System	Code System OID	Print Name
aborted	HL7ActStatus	urn:oid:2.16.840.1.113883.5.14	aborted
active	HL7ActStatus	urn:oid:2.16.840.1.113883.5.14	active
cancelled	HL7ActStatus	urn:oid:2.16.840.1.113883.5.14	cancelled
completed	HL7ActStatus	urn:oid:2.16.840.1.113883.5.14	completed

**Figure 200: Procedure Activity Act Example**

```

<act classCode="ACT" moodCode="EVN">
  <templateId root="2.16.840.1.113883.10.20.22.4.12" extension="2014-06-09" />
  <id root="1.2.3.4.5.6.7.8" extension="1234567" />
  <code code="274025005" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"
displayName="Colonic polypectomy">
    <originalText>
      <reference value="#Proc1" />
    </originalText>
  </code>
  <statusCode code="completed" />
  <effectiveTime value="20110203" />
  <priorityCode code="CR" codeSystem="2.16.840.1.113883.5.7" codeSystemName="ActPriority"
displayName="Callback results" />
  <performer>
    <assignedEntity>
      <id root="2.16.840.1.113883.19" extension="1234" />
      <addr>
        <streetAddressLine>1001 Village Avenue</streetAddressLine>
        <city>Portland</city>
        <state>OR</state>
        <postalCode>99123</postalCode>
        <country>US</country>
      </addr>
      <telecom use="WP" value="tel: +1(555)-555-5000" />
      <representedOrganization>
        <id root="2.16.840.1.113883.19.5" />
        <name>Community Health and Hospitals</name>
        <telecom use="WP" value="tel:+1(555)-555-5000" />
        <addr>
          <streetAddressLine>1001 Village Avenue</streetAddressLine>
          <city>Portland</city>
          <state>OR</state>
          <postalCode>99123</postalCode>
          <country>US</country>
        </addr>
      </representedOrganization>
    </assignedEntity>
  </performer>
  <participant typeCode="LOC">
    <participantRole classCode="SDLOC">
      <templateId root="2.16.840.1.113883.10.20.22.4.32" />
      . . .
    </participantRole>
  </participant>
  <entryRelationship typeCode="RSON">
    <observation classCode="OBS" moodCode="EVN">
      <templateId root="2.16.840.1.113883.10.20.22.4.19" extension="2014-06-09" />
      . . .
    </observation>
  </entryRelationship>
  <entryRelationship typeCode="SUBJ" inversionInd="true">
    <act classCode="ACT" moodCode="INT">
      <templateId root="2.16.840.1.113883.10.20.22.4.20" extension="2014-06-09" />
      . . .
    </act>
  </entryRelationship>

```

</act>

### 3.82 Procedure Activity Observation (V2)

[observation: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.13:2014-06-09  
(open) ]

**Table 434: Procedure Activity Observation (V2) Contexts**

Contained By:	Contains:
<a href="#">Procedures Section (entries optional) (V2)</a> (optional) <a href="#">Procedures Section (entries required) (V2)</a> (optional) <a href="#">Planned Intervention Act (V2)</a> (optional) <a href="#">Intervention Act (V2)</a> (optional)	<a href="#">Service Delivery Location</a> (optional) <a href="#">Medication Activity (V2)</a> (optional) <a href="#">Reaction Observation (V2)</a> (optional) <a href="#">Indication (V2)</a> (optional) <a href="#">Instruction (V2)</a> (optional) <a href="#">Author Participation</a> (optional)

The common notion of procedure is broader than that specified by the HL7 Version 3 Reference Information Model (RIM). Therefore procedure templates can be represented with various RIM classes: act (e.g., dressing change), observation (e.g., EEG), procedure (e.g., splenectomy).

This template represents procedures that result in new information about the patient that cannot be classified as a procedure according to the HL7 RIM. Examples of these procedures are diagnostic imaging procedures, EEGs, and EKGs.