3.47 Medical Equipment Organizer

[organizer: identifier urn:oid:2.16.840.1.113883.10.20.22.4.135 (open)]

Table 333: Medical Equipment Organizer Contexts

Contained By:	Contains:
Medical Equipment Section (V2) (optional)	Procedure Activity Procedure (V2) (optional)
	Non-Medicinal Supply Activity (V2) (optional)

This template represents a set of current or historical medical devices, supplies, aids and equipment used by the patient. Examples are hearing aids, orthotic devices, ostomy supplies, visual aids, diabetic supplies such as syringes and pumps, and wheelchairs.

Devices that are applied during a procedure (e.g., cardiac pacemaker, gastrosomy tube, port catheter), whether permanent or temporary, are represented within the Procedure Activity Procedure (V2) template (templateId: 2.16.840.1.113883.10.20.22.4.14.2).

Table 334: Medical Equipment Organizer Constraints Overview

XPath	Card.	Verb	Data Type	CONF#	Value	
organizer (identifier: urn:oid:2.16.840.1.113883.10.20.22.4.135)						
@classCode	11	SHALL		<u>1098-</u> <u>31020</u>	urn:oid:2.16.840.1.113883.5.6 (HL7ActClass) = CLUSTER	
@moodCode	11	SHALL		<u>1098-</u> <u>31021</u>	urn:oid:2.16.840.1.113883.5.1 001 (HL7ActMood) = EVN	
templateId	11	SHALL		<u>1098-</u> <u>31022</u>		
@root	11	SHALL		<u>1098-</u> <u>31023</u>	2.16.840.1.113883.10.20.22.4 .135	
id	1*	SHALL		<u>1098-</u> <u>31024</u>		
code	01	MAY		<u>1098-</u> <u>31025</u>		
statusCode	11	SHALL		<u>1098-</u> <u>31026</u>		
@code	11	SHALL		<u>1098-</u> <u>31029</u>	urn:oid:2.16.840.1.113883.11. 20.9.39 (Result Status)	
effectiveTime	11	SHALL		<u>1098-</u> <u>32136</u>		
low	11	SHALL		<u>1098-</u> <u>32378</u>		
high	11	SHALL		<u>1098-</u> <u>32379</u>		
component	0*	MAY		<u>1098-</u> <u>31027</u>		
supply	11	SHALL		1098- 31862	Non-Medicinal Supply Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.1 0.20.22.4.50:2014-06-09	
component	0*	MAY		<u>1098-</u> <u>31887</u>		
procedure	11	SHALL		1098- 31888	Procedure Activity Procedure [V2] (identifier: urn:hl7ii:2.16.840.1.113883.1 0.20.22.4.14:2014-06-09	

- 1. **SHALL** contain exactly one [1..1] **@classCode="**CLUSTER" (CodeSystem: HL7ActClass urn:oid:2.16.840.1.113883.5.6 **STATIC**) (CONF:1098-31020).
- 2. **SHALL** contain exactly one [1..1] **@moodCode="**EVN" Event (CodeSystem: HL7ActMood urn:oid:2.16.840.1.113883.5.1001 **STATIC**) (CONF:1098-31021).
- 3. SHALL contain exactly one [1..1] templateId (CONF:1098-31022) such that it
 - a. **SHALL** contain exactly one [1..1] **@root="**2.16.840.1.113883.10.20.22.4.135" (CONF:1098-31023).
- 4. **SHALL** contain at least one [1..*] **id** (CONF:1098-31024).

This code can represent a category of devices. The code is strictly optional, and is not currently limited to any value set or code system. Implementers may use it if they wish to provide optional coded information about this grouping of medical equipment.

5. **MAY** contain zero or one [0..1] **code** (CONF:1098-31025).

The organizer is a collection of statuses for contained entries. The organizer remains active until all contained entries are done.

- 6. SHALL contain exactly one [1..1] statusCode (CONF:1098-31026).
 - a. This statusCode **SHALL** contain exactly one [1..1] **@code**, which **SHALL** be selected from ValueSet **Result Status** urn:oid:2.16.840.1.113883.11.20.9.39 **STATIC** 2014-09-01 (CONF:1098-31029).

The effectiveTime can be used to show the time period over which the patient will be using the set of equipment. The organizer would probably not be used with devices applied in or on the patient.

- 7. SHALL contain exactly one [1..1] effectiveTime (CONF:1098-32136).
 - a. This effective Time **SHALL** contain exactly one [1..1] **low** (CONF:1098-32378).
 - b. This effectiveTime **SHALL** contain exactly one [1..1] **high** (CONF:1098-32379).
- 8. MAY contain zero or more [0..*] component (CONF:1098-31027) such that it
 - a. **SHALL** contain exactly one [1..1] Non-Medicinal Supply Activity (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.50:2014-06-09) (CONF:1098-31862).
- 9. MAY contain zero or more [0..*] component (CONF:1098-31887) such that it
 - a. SHALL contain exactly one [1..1] Procedure Activity Procedure (V2) (identifier: urn:hl7ii:2.16.840.1.113883.10.20.22.4.14:2014-06-09) (CONF:1098-31888).
- 10. Either Non-Medicinal Supply Activity (V2) (templateId:2.16.840.1.113883.10.20.22.4.50:2014-06-09) **OR** Procedure Activity Procedure (V2) (templateId:2.16.840.1.113883.10.20.22.4.14:2014-06-09) **SHALL** be present (CONF:1098-32380).

Table 335: Result Status

Value Set: Result Status urn:oid:2.16.840.1.113883.11.20.9.39

(Clinical Focus: The processing status of a laboratory test or panel),(Data Element Scope:),(Inclusion Criteria:),(Exclusion Criteria:)

This value set was imported on 4/24/2019 with a version of 20190103.

Value Set Source:

https://vsac.nlm.nih.gov/valueset/2.16.840.1.113883.11.20.9.39/expansion

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
held	HL7ActStatus	urn:oid:2.16.840.1.113883.5.14	held
suspended	HL7ActStatus	urn:oid:2.16.840.1.113883.5.14	suspended

Figure 167: Medical Equipment Organizer Example

```
<organizer classCode="CLUSTER" moodCode="EVN">
    <templateId root="2.16.840.1.113883.10.20.22.4.135" />
    <!-- Medical Equipment Organizer template -->
    <id root="3e414708-0e61-4d48-8863-484a2d473a02" />
    <code code="337588003" codeSystem="2.16.840.1.113883.6.96" codeSystemName="SNOMED CT"</pre>
displayName="Incontinence appliances">
        <originalText>Incontinence appliances</originalText>
    <statusCode code="completed" />
    <effectiveTime xsi:type="IVL_TS">
        <low value="20070103" />
        <high nullFlavor="UNK" />
    </effectiveTime>
    <component>
        <supply classCode="SPLY" moodCode="EVN">
            <templateId root="2.16.840.1.113883.10.20.22.4.50" extension="2014-06-09" />
            <!-- Non-medicinal supply activity V2 template ****** -->
            . . .
        </supply>
    </component>
    <component>
        <supply classCode="SPLY" moodCode="EVN">
        <templateId root="2.16.840.1.113883.10.20.22.4.50" extension="2014-06-09" />
                <!-- Non-medicinal supply activity V2 template ****** -->
        </supply>
    </component>
</organizer>
```

3.48 Medication Activity (V2)

[substanceAdministration: identifier urn:hl7ii:2.16.840.1.113883.10.20.22.4.16:2014-06-09 (open)]

Table 336: Medication Activity (V2) Contexts

Contained By:	Contains:
Medications Section (entries required) (V2) (required)	<u>Drug Vehicle</u> (optional)
Medications Section (entries optional) (V2) (optional)	Drug Monitoring Act (optional)
Reaction Observation (V2) (optional)	Reaction Observation (V2) (optional)
Procedure Activity Act (V2) (optional)	Indication (V2) (optional)
Procedure Activity Procedure (V2) (optional)	Medication Supply Order (V2) (optional)
Procedure Activity Observation (V2) (optional)	Medication Information (V2) (required)
Admission Medication (V2) (required)	Medication Dispense (V2) (optional)
Medications Administered Section (V2) (optional)	Instruction (V2) (optional)
Anesthesia Section (V2) (optional)	Author Participation (optional)
Planned Intervention Act (V2) (optional)	Substance Administered Act (optional)
Intervention Act (V2) (optional)	Precondition for Substance Administration (V2)
Discharge Medication (V3) (required)	(optional)
	Medication Free Text Sig (optional)

A Medication Activity describes substance administrations that have actually occurred (e.g., pills ingested or injections given) or are intended to occur (e.g., "take 2 tablets twice a day for the next 10 days"). Medication activities in "INT" mood are reflections of what a clinician intends a patient to be taking. For example, a clinician may intend that a patient be administered Lisinopril 20 mg PO for blood pressure control. If what was actually administered was Lisinopril 10 mg., then the Medication activities in the "EVN" mood would reflect actual use.

A moodCode of INT is allowed, but it is recommended that the Planned Medication Activity (V2) template be used for moodCodes other than EVN if the document type contains a section that includes Planned Medication Activity (V2) (for example a Care Plan document with Plan of Treatment, Intervention, or Goal sections).

At a minimum, a Medication Activity shall include an effectiveTime indicating the duration of the administration (or single-administration timestamp). Ambulatory medication lists generally provide a summary of use for a given medication over time - a medication activity in event mood with the duration reflecting when the medication started and stopped. Ongoing medications will not have a stop date (or will have a stop date with a suitable NULL value). Ambulatory medication lists will generally also have a frequency (e.g., a medication is being taken twice a day). Inpatient medications generally record each administration as a separate act.

The dose (doseQuantity) represents how many of the consumables are to be administered at each administration event. As a result, the dose is always relative to the consumable and the interval of administration. Thus, a patient consuming a single "metoprolol 25mg tablet" per administration will have a doseQuantity of "1", whereas a patient consuming "metoprolol" will have a dose of "25 mg".