2019-06-03 DoF PoCD Subgroup

Agenda

- Discuss proposed new resource for device alert

Attendance

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Questions:

- Q: Lifecycle of the Alarm Condition?

o Effective time for completed Alarm Conditions.

- Q: Single Instance of a present Alarm or also the possible Alarm Conditions that can be monitored?

o Single Instance with versions for history, the possible Alarm Conditions and the configuration of the Alarm System are modelled in another resource

§ Duplicate the alarm limits in both

- Q: Do we need the DeviceMetric to be referenced?

o Open

Current Draft


```
{

 "resourceType" : "Alert",

 "identifier" : [{ Identifier }], // Unique identifier

 "code" : [{ CodeableConcept }], // 11703 Code for AlertCondition

 "status" : "<code>", // in-progress | completed ß Suspended, see AudibleSignal and VisualSignal

 "priority" : "<code>", //Low, Medium, High  ß Low, Medium, High, None (for information signals)

 "subject" : { Reference(Patient|Device) }, // Patient for physiological and Device if it is a technical Alarm.

 "effective" : "<dateTime|PeriodOfTime>", // The Time of presence of the Alarm Condition aka Determination Time of onset of Alarm Condition and if applicable the offset of the Alarm Condition

 "device" : { Reference(Device| DeviceMetric)}, // Device Reference for MDS, VMD, Channel and DeviceMetric for indiv. Metric (e.g. HR in a HR HIGH Alarm).

 "DerivedFrom" : [{ Reference(Observation|Device|DeviceMetric) }], // evidentiary data that is needed to interpret the condition or that is the reason why the condition is present

  {"alarmLabel" : "<string>"}   //AlertString: Display Text that may combine the alarm  concept code as well as the measurement type and potentially also bodysites

 "AudibleSignal":" <code>" // Current state of the local audible AlertSignal that relates to the Alarm Condition with a value-set of: On, Latched, Ack, Off

 "VisualSignal": "<code>" // Current state of the local visual AlertSignal that relates to the Alarm Condition with a value-set of: On, Latched, Ack, Off

 "remoteAudible": {boolean}, //condition can be audible at at least one remote location (i.e., not suppressed)

 "limits": {ReferenceRange}, //Current Alert Limits that are applied in the determination of the alarm condition if applicable.

}
```

Here are the details from the discussion.

First iteration:

Removes: code, uses audible and latching flags

Removes: part of because FHIR supports back-referencing

Sender => renamed to Device.

```
{
  "resourceType" : "Alert",

  "identifier" : [{ Identifier }], // Unique identifier

  "code" : [{ CodeableConcept }], // 11703 Code for AlertCondition

  "status" : "<code>", // in-progress | completed ß Suspended, see AudibleSignal and VisualSignal

  "priority" : "<code>", //Low, Medium, High  ß Code ??? Low, Medium, High, None (for information signals)

  "rank":  [{ CodeableConcept }],  // Absolute rank of the alarm with reference to alarm system. ß Number

  "subject" : { Reference(Patient|Device) }, // Patient for physiological and Device if it is a technical Alarm.

  "effective" : "<dateTime|PeriodOfTime>", // The Time of presence of the Alarm Condition aka Determination Time of onset of Alarm Condition and if applicable the offset of the Alarm Condition

  "device" : { Reference(Device| DeviceMetric)}, // Device Reference for MDS, VMD, Channel and DeviceMetric for indiv. Metric (e.g. HR in a HR HIGH Alarm).

  "delegationReference": {Reference(Device)},

  "DerivedFrom" : [{ Reference(Observation|Device|DeviceMetric) }], // evidentiary data that is needed to interpret the condition or that is the reason why the condition is present

  "payload" : [{ // Message payload

    {"alarmLabel" : "<string>"}   //AlertString: Display Text that may combine the alarm  concept code as well as the measurement type and potentially also bodysites

  }],

  conditionMonitored: {CodeableConcept}, //on, off, monitored  //single instance of a alarm only

  conditionPresent: {boolean}, // see Status

  "EffectiveAcknowledgeTimes": "<dateTime|PeriodOfTime>", //Acknowledged timespan


"Signal" : [{

        Kind= Aud/Vis

        State= On, Latched, Ack, Off

}]
```

AudibleSignal: <code> // Current state of the local audible AlertSignal that relates to the Alarm Condition with a value-set of: On, Latched, Ack, Off

VisualSignal: <code> // Current state of the local visual AlertSignal that relates to the Alarm Condition with a value-set of: On, Latched, Ack, Off

```
  localAudible: {boolean}, //indicates that the condition is audible at the local system

  remoteAudible: {boolean}, //condition can be audible at at least one remote location (i.e., not suppressed)

  isLatching:{boolean}, //visible latching of the condition is allowed
```

```
  audibleLatching:{boolean}, //audio latching of the condition is allowed

 "component" : [{ // Component results: Activation, SignalGenerationDelay, Presence, Local/Remote, Slot

   "code" : { CodeableConcept }, // R!  Type of component observation (code / type)

  // value[x]: Actual component result. One of these 11:

   "valueString" : "<string>",

   "valueInteger" : <integer>,

   "valueTime" : "<time>"

 }],

 "limits": {ReferenceRange}, //Current Alert Limits that are applied in the determination of the alarm condition if applicable.

}
```