IHE Change Proposal

Tracking information:

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| IHE Domain | Patient Care Device (PCD) |
| Change Proposal ID: | CP-PCD-153-00 |
| Change Proposal Status: | Submitted |
| Date of last update: | 2020-12-03 |
| Person assigned: | Monroe Pattillo |

Change Proposal Summary information:

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| --- | --- |
| Change PCD-05 PRT-9 from O or C to CE and occurrences to 0..1 | |
| Submitter’s Name(s) and e-mail address(es): | Monroe Pattillo, monroe.pattillo@gmail.com |
| Submission Date: | 2021-05-06 |
| Integration Profile(s) affected: | Alert Communication Management (ACM) |
| Actor(s) affected: | Alert Reporter (AR) and Alert Manager (AM) |
| IHE Technical Framework or Supplement modified: | ACM profile in PCD TF revision 9.0, dated Dec 12, 2019 |
| Volume(s) and Section(s) affected: | IHE PCD TF Vol 2, Table 3.5.4.1.4-1 in section 3.5.4.1 and add new Appendix B.7.1.2 for PRT in PCD-05, Alert Communication Management transaction [PCD-05] |
| Rationale for Change:  In an ACM PCD-05 transaction the PRT Participation segment is used to communicate location of where the alert notification communication status update or endpoint communication device operator response took place. The PRT-9 Participation Location field within the PRT segment is used to communicate this information. Assuming the AM actor has access to this information, either from the AC actor in PCD-07 transaction content or by the AM actor integrating with a Medical Equipment Management (MEM) Location Service (LS) IHE profile Location Observation Reporter (LOR) actor that location information can be included in the PCD-05 transaction, in the PRT segment, in the PRT-9 field. And since there is a one to one correlation between PCD-07 and PCD-05 transactions there should not be more than one alert notification response location per PCD-05 transaction. And add a new Appendix B.7.1.2 to document use of the PRT segment in PCD-05 transactions. | |

Section 3.5.4.1.4 **Table 3.5.4.1.4-1: ORA^R41^ORA\_R41 station definition**, change usage and cardinality for PRT row of table, after line 1310, on page 51to the following:

[PRT] usage from O to CE, cardinality from [0..n] to [0..1]

Add **Appendix B.7.1.2 PRT Participation Information Segment in ACM Transaction [PCD-05]**, , after line 2703, on page 114:

#### B.7.1.2 PRT Participation Information Segment in ACM Transaction [PCD-05]

A Report Alert Dissemination [PCD-05] transaction can optionally contain at most one occurrence of the Participation Information (PRT) segment to indicate the location associated with an alert notification dissemination status update, for example delivered or read receipt, or the location where an endpoint communication device operator response took place, for example accept or reject. Whether or not the Alert Manager (AM) includes this information in a PCD-05 transaction is dependent upon the AM actor having a source for this information. The source can be either from the Alert Communicator (AC) actor in PCD-07 Report Dissemination Alert Status transaction content or by the AM actor integrating as a Medical Equipment Management (MEM) Location Services (LS) Location Observation Consumer (LOC) profile actor and receiving PCD-16 Report Location Observation (RLO) transactions and copying PRT segment information into the PCD-05. When location information is from a PCD-16 transaction it is the last known location which may not be the same location as would be provided in a PCD-07 transaction.

Use of the PRT segment is an extraction from HL7 v2.8 with field optionality and cardinality specific to the PCD-05 message.

Table B.7.1.2-1: HL7 Attribute Table – PRT – Participation Information

| SEQ | LEN | DT | OPT | RP/# | TBL# | ELEMENT NAME |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | 1..4 | EI | R | N |  | Participation Instance ID |
| 2 | 2..2 | ID | R |  | 0287 | Action Code |
| 3 |  | CWE | R |  |  | Action Reason |
| 4 |  | CEW | R |  | 0912 | Participation |
| 5 |  | XCN | R | N |  | Participation Person |
| 6 |  | CWE | R |  |  | Participation Person Provider Type |
| 7 |  | CWE | O |  | 0406 | Participation Organization Unit Type |
| 8 |  | XON | O | N |  | Participation Organization |
| 9 |  | PL | CE | N |  | Participation Location |
| 10 |  | EI | O | N |  | Participation Device |
| 11 |  | DTM | R |  |  | Participation Begin Date/Time (arrival Time) |
| 12 |  | DTM | O |  |  | Participation End Date/Time (departure time) |
| 13 |  | CWE | O |  |  | Participation Qualitative Duration |
| 14 |  | XAD | O | N |  | Participation Address (postal address) |
| 15 |  | XTN | C | N |  | Participation Telecommunication Address |

PRT-1 Participation Instance ID (EI) 02379

This field contains a unique identifier of the specific participation record.

PRT-2 Action Code (ID) 00816

For the PCD-05 message this field shall contain the value AD indicating Add.

PRT-3 Action Reason (CWE) 02380

For the PCD-05 message the PRT-3.1 Action Reason – Identifier component *shall* be populated with the string RESPONSE.

For the PCD-05 message the PRT-3.2 Action Reason – Text component *shall* be populated with a string value from the following table which correlates with values from the PCD-07 response status and shall be one of the following.

|  |  |
| --- | --- |
| **PRT-3.2 value** | **PCD-07 response status** |
| RECEIVED | PCD-06 received and verified by ACM AC actor |
| UNDELIVERABLE | ACM AC actor unable to deliver notification to endpoint communication device |
| DELIVERED | ACM AC delivered notification to endpoint communication device |
| READ | Application on endpoint communication device has presented the notification to the operator and the operator may have manually indicated read receipt |
| CALLBACKSTART | Endpoint communication device telephony dial back started |
| CALLBACKEND | Endpoint communication device telephony dial back ended |
| ACCEPTED | Endpoint communication device operator has accepted responsibility for the alert |
| ACCEPTEDPOSITIVE | Endpoint communication device operator has accepted responsibility for the alert and has indicated that the alert is actionable |
| ACCEPTEDNOTRELEVANT | Endpoint communication device operator has accepted responsibility for the alert and has indicated it as not actionable |
| ACCEPTEDFALSE | Endpoint communication device operator has accepted responsibility for the alert has indicated that it is not a true alert |
| REJECTED | Endpoint communication device operator has declined responsibility for the alert |
| CANCELLED | [reserved, not implemented] |
| COMPLETED | Endpoint communication device operator has indicated completion of the clinical workflow step associated with the alert notification |
| ACTIONURI | An actionURI provided in the PCD-06 associated with the PCD-07 has been activated (the endpoint device operator clicked on the provided link and therefore activated it) in which case PRT-3.2 *shall* have three repeated occurrences.  The second occurrence – Identifier shall contain the string ACTIONURI. The – Text *shall* contain the actionURL from the PCD-06.  The third occurrence – Identifier shall contain the string ACTIONURIPURPOSE. The – Text *shall* contain the actionURIPurpose from the PCD-07 |

PRT-3.3 Name of Coding System is IHE\_PCD\_ACM.

PRT-4 Participation (CWE) 02381

Identifier = ‘AAP” Alert Acknowledging Provider

Text = “Alert Acknowledging Provider”

PRT-5 Participation Person (XCN) 02382

This is the identification of the person that was the intended recipient of the alert notification as communicated by the values ParticipantName and ParticipantID. This may refer to a specific person or it may refer to a shift changed shared device or a display device or it may refer to a person or device known only to the AC actor. If this field is populated it shall unambiguously resolve to one person. When this field is populated and PRT-15 is not populated it presumes the Alert Manager has internally resolved the person to their currently assigned endpoint communication device or devices.

PRT-6 Participation Person Provider Type (CWE) 02383

For the PCD-05 message this is STF-4 StaffType. For example, to encode a nurse as the type of provider person consider using

NURSE^Nurse^HL70182

If table HL70182 has not been loaded in the verification tool use “HL7nnnn”.

PRT-7 Participation Organization Unit Type (CWE) 02384

For the PCD-05 message this field is optional.

PRT-8 Participation Organization (XON) 02385

For the PCD-05 message this field is optional.

PRT-9 Participation Location (PL) 02386

For the PCD-05 message this field contains the location associated with the alert notification dissemination status update, where the alert dissemination status update took place, for example delivered or read, or where the endpoint communication device operator response took place, for example accept or reject.

PRT-10 Participation Device (EI) 02348

For the PCD-05 this is the world unique identification of the endpoint communication device and not of the alerting medical device.

PRT-11 Participation Begin Date/Time (DTM) 02387

For the PCD-05 this contains the reformatted for conformance timestamp from the underlying WCTP status update message of the PCD-07 transaction.

The syntax of WCTP timestamps and PCD (HL7) timestamps is not identical. Some reformatting is required to map the WCTP timestamp to a PCD timestamp.

PRT-12 Participation End Date/Time (DTM) 02388

For the PCD-05 message this field is not used.

PRT-13 Participation Qualitative Duration (CWE) 02389

For the PCD-05 message this field is not used.

PRT-14 Participation Address (XAD) 02390

For the PCD-05 message this field is optional. A value in this field may be useful if the endpoint communication device operator is accessing the communication device from outside the healthcare facility in which case the AC actor may be able to optionally provide a value for the field in the form of an XAD data type conformant postal service address.

PRT-15 Participation Telecommunication Address (XTN) 02391

This field contains the telecommunication identification of the alert notification recipient’s telecommunication device (phone #, carrier and PIN, etc.) from the WCTP recipientID from the PCD-07 transaction. If this field is populated it shall unambiguously resolve to one endpoint communication device. If this field is not populated then PRT-5 Participation Person shall be populated and it is presumed that the Alert Manager has internally resolved the person to their currently assigned endpoint communication device or devices.

If the field value represents a telecommunications carrier identification and PIN reference, the carrier identification string goes in the fourth component Communication Address and the PIN string goes in the seventh component Local Number. If the field value represents a telephony dial string it can either be split into its XTN data type components or it can be a dial string in the twelfth component Unformatted Telephone number.

Note that XTN.1 was withdrawn as of HL7 v2.6. The field value should be formatted as per the HL7 2.6 form of the XGN datatype and leave XTN.1 empty.