PRT segment use to support Unique Device Identifiers in the PCD Profiles

Contents

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Because of the importance of the recently defined Unique Device Identifier from the US FDA, which was developed with extensive international consultation and is thus likely to be of international importance as well, the IHE PCD Technical Committee is preparing to enable the use of this device identification in addition to the IEEE EUI-64 it has previously prescribed for device identification. This relies on changes and additions to the PRT segment added in HL7® version 2.8.2.

In versions of the IHE PCD Technical Framework after Version 5.0 (2015), the PRT segment will be used to convey device identification information formerly in the OBX-18 field of the OBX segment, which from V2.7 of HL7® is retained for backward compatibility only. The material discussed under PRT-10 and PRT-16-20 below covers semantics to support inclusion of the FDA Universal Device Identifier (UDI). The use of UDI is not yet required in this version of the Technical Framework but are expected to be required when the requirement is considered timely by the IHE PCD Technical and Planning Committees. In this revision, this information is informative only and this use of the PRI segment is not required in order to make a valid message in the current version of this Technical Framework. Implementers should take note and prepare to support this segment.. Implementers should consider supporting this optional usage as soon as is practicable for them, to prepare for early testing. For a Device Observation Consumer, it is advisable as a first step to check at a minimum that the PRT segments are accepted without causing unexpected behavior or error messages even if they are not yet semantically processed.

HL7® Attribute Table - PRT – Participation Information

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

16	EI	O	Participant Device Identifier
17	DTM	O	Participant Device Manufacture Date
18	DTM	O	Participant Device Expiry Date
19	ST	O	Participant Device Lot Number
20	ST	O	Participant Device Serial Number
21	EI	O	Participant Device Donation Identification
22	CNE	C	Participation Device Type

PRT-1 Participation Instance ID (EI) 02379

Components:<Entity Identifier (ST)> ^ <Namespace ID (IS)> ^ <Universal ID (ST)> ^ <Universal ID Type (ID)>

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

In the case of waypoints tracked for a shipment, it identifies the waypoint.

Condition: The identifier is required for traceability

For the Report Alert Status [PCD-05] transaction this is the unique ID of the disseminated message and all status updates on the dissemination should use the same ID value.

PRT-2 Action code (ID) 00816

Definition: This field reveals the intent of the message. Refer to HL7® Table 0287 – Problem/goal action code HL7® Table 0287 – Problem/goal action code for valid values.

For the Report Alert [PCD-04] transaction the PRT-2 Action code is always AD indicating Add.

For the Report Alert Status [PCD-05] transaction the PRT-2 Action Code is AD indicating Add for the first status update and UP indicating Update for all others.

PRT-3 Action Reason (CWE) 02380

Components:<Identifier (ST)> ^ <Text (ST)> ^ <Name of Coding System (ID)> ^ <Alternate Identifier (ST)> ^ <Alternate Text (ST)> ^ <Name of Alternate Coding System (ID)> ^ <Coding System Version ID (ST)> ^ <Alternate Coding System Version ID (ST)> ^ <Original Text (ST)> ^ <Second Alternate Identifier (ST)> ^ <Second Alternate Text (ST)> ^ <Name of Second Alternate Coding System (ID)> ^ <Second Alternate Coding System Version ID (ST)> ^ <Coding System OID (ST)> ^ <Value Set OID (ST)> ^ <Value Set Version ID (DTM)> ^ <Alternate Coding System OID (ST)> ^ <Alternate Value Set OID (ST)> ^ <Alternate Value Set Version ID (DTM)> ^ <Second Alternate Coding System OID (ST)> ^ <Second Alternate Value Set OID (ST)> ^ <Second Alternate Value Set Version ID (DTM)>

Definition: This field indicates the reason why the person, organization, location, or device is assuming (or changing) the role (e.g., shift change, new primary nurse, etc.).

For the Report Alert [PCD-04] transaction the PRT-3 Action Reason, Text, is not populated.

For the Report Alert Status [PCD-05] transaction the PRT-3 Action Reason, Text, is the Report Dissemination Alert Status [PCD-07] status text value, and the Coding System is IHE_PCD_ACM.

Alert Communicator (AC) status values correlated from the Report Dissemination Alert Status [PCD-07] status values to be returned to the Alert Manager (AM) resulting from Disseminate Alert [PCD-06] from Alert Manager (AM) to Alert Communicator (AC) and transcribed into PRT-3-2 Text.

Communication Status Enumeration from Report Dissemination Alert Status [PCD-07]

Req.	Value for PRT-3-2	Description
R	Received	Received by Alert Communicator (AC)
R	Undeliverable	Undeliverable to endpoint
R	Delivered	Delivered to endpoint
R	Read	Read at endpoint
R	Accepted	Accepted by endpoint
O	AcceptedPositive	Accepted by endpoint as true positive
O	AcceptedNotRelevant	Accepted by endpoint as true positive however not clinically relevant
O	AcceptedFalse	Accepted by endpoint as false positive
R	Rejected	Rejected by endpoint
O	Cancelled	Cancelled by endpoint (does not cancel at alert source)
O	CancelledOther	Cancelled by other than endpoint (does not cancel alert at source)
O	CallbackStart	Callback start at endpoint (start of telephony call to alert indicated destination)
O	CallbackEnd	Callback end at endpoint (end of telephony call to alert indicated destination)

PRT-4 Participation (CWE) 02381

Components:<Identifier (ST)> ^ <Text (ST)> ^ <Name of Coding System (ID)> ^ <Alternate Identifier (ST)> ^ <Alternate Text (ST)> ^ <Name of Alternate Coding System (ID)> ^ <Coding System Version ID (ST)> ^ <Alternate Coding System Version ID (ST)> ^ <Original Text (ST)> ^ <Second Alternate Identifier (ST)> ^ <Second Alternate Text (ST)> ^ <Name of Second Alternate Coding System (ID)> ^ <Second Alternate Coding System Version ID (ST)> ^ <Coding System OID (ST)> ^ <Value Set OID (ST)> ^ <Value Set Version ID (DTM)> ^ <Alternate Coding System OID (ST)> ^ <Alternate Value Set OID (ST)> ^ <Alternate Value Set Version ID (DTM)> ^ <Second Alternate Coding System OID (ST)> ^ <Second Alternate Value Set OID (ST)> ^ <Second Alternate Value Set Version ID (DTM)>

Definition: This field indicates the functional involvement with the activity being transmitted (e.g., Case Manager, Evaluator, Transcriber, Nurse Care Practitioner, Midwife, Physician Assistant, etc.). Refer toHL7® Table 917 for valid values.

For the Report Alert [PCD-04] transaction the presence of one or more PRT segments containing PRT-4 Participation Identifier, Text is RCT (indicating Result Copies To) indicates AR direct indication of additional recipients.

For the Report Alert [PCD-04] transaction the PRT-4 Participation Identifier, Text is RO (indicating Responsible Observer).

For the Report Alert Status [PCD-05] transaction the PRT-4 Participation Identifier, Text is RO (indicating Responsible Observer), and Alternative Identifier is AAP for Alert Acknowledging Provider.

Table B.10.2-3: HL7® Table 0912 - Participation

Value	Description	Used with
AD	Admitting Provider	PV1-17 Admitting doctor
AI	Assistant/Alternate Interpreter	

Value	Description	Used with
AAP	Alert Acknowledging Provider	PCD ACM Report Alert Status [PCD-05]
AP	Administering Provider	RXA-10 Administering Provider
ARI	Assistant Result Interpreter	
AT	Attending Provider	PV1-7 Attending doctor
AUT	AUT Author/Event Initiator	ORC-19 Action By
CP	Consulting Provider	
DP	Dispensing Provider	RXD-10 Dispensing Provider
EP	Entering Provider (probably not the same as transcriptionist?)	ORC-10 Entered By
EQUIP	Equipment	
FHCP	Family Health Care Professional	
MDIR	Medical Director	OBX-25 Performing Organization Medical Director
OP	Ordering Provider	ORC-12 Ordering Provider, OBR-16 Ordering Provider, RXO-14 Ordering Provider's DEA Number, RXE-13 Ordering Provider's DEA Number, ORC-24 Ordering Provider Address
PB	Packed by	
PH	Pharmacist (not sure how to dissect Pharmacist/Treatment Supplier's Verifier ID)	RXE-14 Pharmacist/Treatment Supplier's Verifier ID
PI	Primary Interpreter	
PO	Performing Organization	
POMD	Performing Organization Medical Director	
PP	Primary Care Provider	
PRI	Principal Result Interpreter	
RCT	Results Copies To	
RO	Responsible Observer	OBX-16 Responsible Observer
RP	Referring Provider	PV1-8 Referring doctor
RT	Referred to Provider	
SB	Send by	
SC	Specimen Collector	OBR-10 Collector Identifier
TN	Technician	
TR	Transcriptionist	
VP	Verifying Provider	ORC-11 Verified By
VPS	Verifying Pharmaceutical Supplier (not sure how to dissect Pharmacist/Treatment Supplier's Verifier ID)	RXE-14 Pharmacist/Treatment Supplier's Verifier ID

Value	Description	Used with
VTS	Verifying Treatment Supplier (not sure how to dissect Pharmacist/Treatment Supplier's Verifier ID)	RXE-14 Pharmacist/Treatment Supplier's Verifier ID
WAY	Waypoint	
WAYR	Waypoint Recipient	

PRT-5 Participation Person (XCN) 02382

Components:<Person Identifier (ST)> ^ <Family Name (FN)> ^ <Given Name (ST)> ^ <Second and Further Given Names or Initials Thereof (ST)> ^ <Suffix (e.g., JR or III) (ST)> ^ <Prefix (e.g., DR) (ST)> ^ <WITHDRAWN Constituent> ^ <DEPRECATED-Source Table (CWE)> ^ <Assigning Authority (HD)> ^ <Name Type Code (ID)> ^ <Identifier Check Digit (ST)> ^ <Check Digit Scheme (ID)> ^ <Identifier Type Code (ID)> ^ <Assigning Facility (HD)> ^ <Name Representation Code (ID)> ^ <Name Context (CWE)> ^ <WITHDRAWN Constituent> ^ <Name Assembly Order (ID)> ^ <Effective Date (DTM)> ^ <Expiration Date (DTM)> ^ <Professional Suffix (ST)> ^ <Assigning Jurisdiction (CWE)> ^ <Assigning Agency or Department (CWE)> ^ <Security Check (ST)> ^ <Security Check Scheme (ID)>

Subcomponents for Family Name (FN): <Surname (ST)> & <Own Surname Prefix (ST)> & <Own Surname (ST)> & <Surname Prefix from Partner/Spouse (ST)> & <Surname from Partner/Spouse (ST)>

Subcomponents for Source Table (CWE): <Identifier (ST)> & <Text (ST)> & <Name of Coding System (ID)> & <Alternate Identifier (ST)> & <Alternate Text (ST)> & <Name of Alternate Coding System (ID)> & <Coding System Version ID (ST)> & <Alternate Coding System Version ID (ST)> & <Original Text (ST)> & <Second Alternate Identifier (ST)> & <Second Alternate Text (ST)> & <Name of Second Alternate Coding System (ID)> & <Second Alternate Coding System Version ID (ST)> & <Coding System OID (ST)> & <Value Set OID (ST)> & <Value Set Version ID (DTM)> & <Alternate Coding System OID (ST)> & <Alternate Value Set OID (ST)> & <Alternate Value Set Version ID (DTM)> & <Second Alternate Coding System OID (ST)> & <Second Alternate Value Set OID (ST)> & <Second Alternate Value Set Version ID (DTM)>

Subcomponents for Assigning Authority (HD): <Namespace ID (CWE)> & <Universal ID (ST)> & <Universal ID Type (ID)>

Subcomponents for Namespace ID (CWE): <Identifier (ST)> & <Text (ST)> & <Name of Coding System (ID)> & <Alternate Identifier (ST)> & <Alternate Text (ST)> & <Name of Alternate Coding System (ID)> & <Coding System Version ID (ST)> & <Alternate Coding System Version ID (ST)> & <Original Text (ST)> & <Second Alternate Identifier (ST)> & <Second Alternate Text (ST)> & <Name of Second Alternate Coding System (ID)> & <Second Alternate Coding System Version ID (ST)> & <Coding System OID (ST)> & <Value Set OID (ST)> & <Value Set Version ID (DTM)> & <Alternate Coding System OID (ST)> & <Alternate Value Set OID (ST)> & <Alternate Value Set Version ID (DTM)> & <Second Alternate Coding System OID (ST)> & <Second Alternate Value Set OID (ST)> & <Second Alternate Value Set Version ID (DTM)>

Subcomponents for Assigning Facility (HD): <Namespace ID (CWE)> & <Universal ID (ST)> & <Universal ID Type (ID)>

Subcomponents for Namespace ID (CWE): <Identifier (ST)> & <Text (ST)> & <Name of Coding System (ID)> & <Alternate Identifier (ST)> & <Alternate Text (ST)> & <Name of Alternate Coding System (ID)> & <Coding System Version ID (ST)> & <Alternate Coding System Version ID (ST)> & <Original Text (ST)> & <Second Alternate Identifier (ST)> & <Second Alternate Text (ST)> & <Name of Second Alternate Coding System (ID)> & <Second Alternate Coding System Version ID (ST)> & <Coding System OID (ST)> & <Value Set OID (ST)> & <Value Set Version ID (DTM)> & <Alternate Coding System OID (ST)> & <Alternate Value Set OID (ST)> & <Alternate Value Set Version ID (DTM)> & <Second Alternate Coding System OID (ST)> & <Second Alternate Value Set OID (ST)> & <Second Alternate Value Set Version ID (DTM)>

Subcomponents for Name Context (CWE): <Identifier (ST)> & <Text (ST)> & <Name of Coding System (ID)> & <Alternate Identifier (ST)> & <Alternate Text (ST)> & <Name of Alternate Coding System (ID)> & <Coding System Version ID (ST)> & <Alternate Coding System Version ID (ST)> & <Original Text (ST)> & <Second Alternate Identifier (ST)> & <Second Alternate Text (ST)> & <Name of Second Alternate Coding System (ID)> & <Second Alternate Coding System Version ID (ST)> & <Coding System OID (ST)> & <Value Set OID (ST)> & <Value Set

Version ID (DTM)> & <Alternate Coding System OID (ST)> & <Alternate Value Set OID (ST)> & <Alternate Value Set Version ID (DTM)> & <Second Alternate Coding System OID (ST)> & <Second Alternate Value Set OID (ST)> & <Second Alternate Value Set Version ID (DTM)>

Subcomponents for Assigning Jurisdiction (CWE): <Identifier (ST)> & <Text (ST)> & <Name of Coding System (ID)> & <Alternate Identifier (ST)> & <Alternate Text (ST)> & <Name of Alternate Coding System (ID)> & <Coding System Version ID (ST)> & <Alternate Coding System Version ID (ST)> & <Original Text (ST)> & <Second Alternate Identifier (ST)> & <Second Alternate Text (ST)> & <Name of Second Alternate Coding System (ID)> & <Second Alternate Coding System Version ID (ST)> & <Coding System OID (ST)> & <Value Set OID (ST)> & <Value Set Version ID (DTM)> & <Alternate Coding System OID (ST)> & <Alternate Value Set OID (ST)> & <Alternate Value Set Version ID (DTM)> & <Second Alternate Coding System OID (ST)> & <Second Alternate Value Set OID (ST)> & <Second Alternate Value Set Version ID (DTM)>

Subcomponents for Assigning Agency or Department (CWE): <Identifier (ST)> & <Text (ST)> & <Name of Coding System (ID)> & <Alternate Identifier (ST)> & <Alternate Text (ST)> & <Name of Alternate Coding System (ID)> & <Coding System Version ID (ST)> & <Alternate Coding System Version ID (ST)> & <Original Text (ST)> & <Second Alternate Identifier (ST)> & <Second Alternate Text (ST)> & <Name of Second Alternate Coding System (ID)> & <Second Alternate Coding System Version ID (ST)> & <Coding System OID (ST)> & <Value Set OID (ST)> & <Value Set Version ID (DTM)> & <Alternate Coding System OID (ST)> & <Alternate Value Set OID (ST)> & <Alternate Value Set Version ID (DTM)> & <Second Alternate Coding System OID (ST)> & <Second Alternate Value Set OID (ST)> & <Second Alternate Value Set Version ID (DTM)>

Definition: This field contains the identity of the person who is represented in the participation that is being transmitted.

If this attribute repeats, all instances must represent the same person.

Condition: At least one of the Participation Person, Participation Organization, Participation Location, or Participation Device fields must be valued.

For the Report Alert [PCD-04] transaction the PRT-5 participation Person is the identification of an additional recipient of the dissemination of the alert. The PRT-15 Participation Telecommunication Address may also be used if only a PIN/Carrier destination is known.

For the Report Alert Status [PCD-05] transaction the PRT-5 Participation Person is the identification of the person that was the participating recipient of the message.

PRT-6 Participation Person Provider Type (CWE) 02383

Components:<Identifier (ST)> ^ <Text (ST)> ^ <Name of Coding System (ID)> ^ <Alternate Identifier (ST)> ^ <Alternate Text (ST)> ^ <Name of Alternate Coding System (ID)> ^ <Coding System Version ID (ST)> ^ <Alternate Coding System Version ID (ST)> ^ <Original Text (ST)> ^ <Second Alternate Identifier (ST)> ^ <Second Alternate Text (ST)> ^ <Name of Second Alternate Coding System (ID)> ^ <Second Alternate Coding System Version ID (ST)> ^ <Coding System OID (ST)> ^ <Value Set OID (ST)> ^ <Value Set Version ID (DTM)> ^ <Alternate Coding System OID (ST)> ^ <Alternate Value Set OID (ST)> ^ <Alternate Value Set Version ID (DTM)> ^ <Second Alternate Coding System OID (ST)> ^ <Second Alternate Value Set OID (ST)> ^ <Second Alternate Value Set Version ID (DTM)>

Definition: This field contains a code identifying the provider type for the participating person. This attribute correlates to the following master file attribute: STF-4 Staff Type. Coded values from the correlated master file table are used; the user defined master file table is used as the coding system for this attribute. For example, if you are using values from STF-2 Staff Type, the coding system would be HL70182 which is the table number for the user defined Staff Type table. This field is included in this segment to support international requirements. When ROL is used in an encounter message, it is not intended as a master file update.

Condition: This field may only be valued if PRT-5 Participation Person is valued.

For the Report Alert Status [PCD-05] transaction this field is not populated.

PRT-7 Participation Organization Unit Type (CWE) 02384

Components:<Identifier (ST)> ^ <Text (ST)> ^ <Name of Coding System (ID)> ^ <Alternate Identifier (ST)> ^ <Alternate Text (ST)> ^ <Name of Alternate Coding System (ID)> ^ <Coding System Version ID (ST)> ^ <Alternate

Coding System Version ID (ST)> ^ <Original Text (ST)> ^ <Second Alternate Identifier (ST)> ^ <Second Alternate Text (ST)> ^ <Name of Second Alternate Coding System (ID)> ^ <Second Alternate Coding System Version ID (ST)> ^ <Coding System OID (ST)> ^ <Value Set OID (ST)> ^ <Value Set Version ID (DTM)> ^ <Alternate Coding System OID (ST)> ^ <Alternate Value Set OID (ST)> ^ <Alternate Value Set Version ID (DTM)> ^ <Second Alternate Coding System OID (ST)> ^ <Second Alternate Value Set OID (ST)> ^ <Second Alternate Value Set Version ID (DTM)>

Definition: This field identifies the environment in which the participant acts in the role specified in PRT-3 Action Reason. In the case of a person, the environment is not the specialty for the provider. The specialty information for the provider is defined in the PRA segment.

This attribute is included in the PRT segment to allow communication of this data when the participant information may not have been communicated previously in a master file or to provide better context. Refer to *User-defined table 0406 - Organization unit type*. This field is included in this segment to support international requirements, and is not intended as a master file update.

Condition: This field may only be valued if PRT-5 Participation Person is valued.

For the Report Alert Status [PCD-05] transaction this field is not populated.

PRT-8 Participation Organization (XON) 02385

Components:<Organization Name (ST)> ^ <Organization Name Type Code (CWE)> ^ <WITHDRAWN Constituent> ^ <Identifier Check Digit (NM)> ^ <Check Digit Scheme (ID)> ^ <Assigning Authority (HD)> ^ <Identifier Type Code (ID)> ^ <Assigning Facility (HD)> ^ <Name Representation Code (ID)> ^ <Organization Identifier (ST)>

Subcomponents for Organization Name Type Code (CWE): <Identifier (ST)> & <Text (ST)> & <Name of Coding System (ID)> & <Alternate Identifier (ST)> & <Alternate Text (ST)> & <Name of Alternate Coding System (ID)> & <Coding System Version ID (ST)> & <Alternate Coding System Version ID (ST)> & <Original Text (ST)> & <Second Alternate Identifier (ST)> & <Second Alternate Text (ST)> & <Name of Second Alternate Coding System (ID)> & <Second Alternate Coding System Version ID (ST)> & <Coding System OID (ST)> & <Value Set OID (ST)> & <Value Set Version ID (DTM)> & <Alternate Coding System OID (ST)> & <Alternate Value Set OID (ST)> & <Alternate Value Set Version ID (DTM)> & <Second Alternate Coding System OID (ST)> & <Second Alternate Value Set OID (ST)> & <Second Alternate Value Set Version ID (DTM)>

Subcomponents for Assigning Authority (HD): <Namespace ID (CWE)> & <Universal ID (ST)> & <Universal ID Type (ID)>

Subcomponents for Namespace ID (CWE): <Identifier (ST)> & <Text (ST)> & <Name of Coding System (ID)> & <Alternate Identifier (ST)> & <Alternate Text (ST)> & <Name of Alternate Coding System (ID)> & <Coding System Version ID (ST)> & <Alternate Coding System Version ID (ST)> & <Original Text (ST)> & <Second Alternate Identifier (ST)> & <Second Alternate Text (ST)> & <Name of Second Alternate Coding System (ID)> & <Second Alternate Coding System Version ID (ST)> & <Coding System OID (ST)> & <Value Set OID (ST)> & <Value Set Version ID (DTM)> & <Alternate Coding System OID (ST)> & <Alternate Value Set OID (ST)> & <Alternate Value Set Version ID (DTM)> & <Second Alternate Coding System OID (ST)> & <Second Alternate Value Set OID (ST)> & <Second Alternate Value Set Version ID (DTM)>

Subcomponents for Assigning Facility (HD): <Namespace ID (CWE)> & <Universal ID (ST)> & <Universal ID Type (ID)>

Subcomponents for Namespace ID (CWE): <Identifier (ST)> & <Text (ST)> & <Name of Coding System (ID)> & <Alternate Identifier (ST)> & <Alternate Text (ST)> & <Name of Alternate Coding System (ID)> & <Coding System Version ID (ST)> & <Alternate Coding System Version ID (ST)> & <Original Text (ST)> & <Second Alternate Identifier (ST)> & <Second Alternate Text (ST)> & <Name of Second Alternate Coding System (ID)> & <Second Alternate Coding System Version ID (ST)> & <Coding System OID (ST)> & <Value Set OID (ST)> & <Value Set Version ID (DTM)> & <Alternate Coding System OID (ST)> & <Alternate Value Set OID (ST)> & <Alternate Value Set Version ID (DTM)> & <Second Alternate Coding System OID (ST)> & <Second Alternate Value Set OID (ST)> & <Second Alternate Value Set Version ID (DTM)>

Definition: The organization that is involved in the participation. If PRT-5 Participation Person is valued, it reflects the affiliation of the individual participating as identified in PRT-4 Participation. Otherwise the organization is directly participating as identified in PRT-4 Participation.

If this attribute repeats, all instances must represent the same organization.

Condition: At least one of the Participation Person, Participation Organization, Participation Location, or Participation Device fields must be valued.

For the Report Alert Status [PCD-05] transaction this field is not populated.

PRT-9 Participation Location (PL) 02386

Components:<Point of Care (HD)> ^ <Room (HD)> ^ <Bed (HD)> ^ <Facility (HD)> ^ <Location Status (IS)> ^ <Person Location Type (IS)> ^ <Building (HD)> ^ <Floor (HD)> ^ <Location Description (ST)> ^ <Comprehensive Location Identifier (EI)> ^ <Assigning Authority for Location (HD)>

Subcomponents for Point of Care (HD): <Namespace ID (CWE)> & <Universal ID (ST)> & <Universal ID Type (ID)>

Subcomponents for Namespace ID (CWE): <Identifier (ST)> & <Text (ST)> & <Name of Coding System (ID)> & <Alternate Identifier (ST)> & <Alternate Text (ST)> & <Name of Alternate Coding System (ID)> & <Coding System Version ID (ST)> & <Alternate Coding System Version ID (ST)> & <Original Text (ST)> & <Second Alternate Identifier (ST)> & <Second Alternate Text (ST)> & <Name of Second Alternate Coding System (ID)> & <Second Alternate Coding System Version ID (ST)> & <Coding System OID (ST)> & <Value Set OID (ST)> & <Value Set Version ID (DTM)> & <Alternate Coding System OID (ST)> & <Alternate Value Set OID (ST)> & <Alternate Value Set Version ID (DTM)> & <Second Alternate Coding System OID (ST)> & <Second Alternate Value Set OID (ST)> & <Second Alternate Value Set Version ID (DTM)>

Subcomponents for Room (HD): <Namespace ID (CWE)> & <Universal ID (ST)> & <Universal ID Type (ID)>

Subcomponents for Namespace ID (CWE): <Identifier (ST)> & <Text (ST)> & <Name of Coding System (ID)> & <Alternate Identifier (ST)> & <Alternate Text (ST)> & <Name of Alternate Coding System (ID)> & <Coding System Version ID (ST)> & <Alternate Coding System Version ID (ST)> & <Original Text (ST)> & <Second Alternate Identifier (ST)> & <Second Alternate Text (ST)> & <Name of Second Alternate Coding System (ID)> & <Second Alternate Coding System Version ID (ST)> & <Coding System OID (ST)> & <Value Set OID (ST)> & <Value Set Version ID (DTM)> & <Alternate Coding System OID (ST)> & <Alternate Value Set OID (ST)> & <Alternate Value Set Version ID (DTM)> & <Second Alternate Coding System OID (ST)> & <Second Alternate Value Set OID (ST)> & <Second Alternate Value Set Version ID (DTM)>

Subcomponents for Bed (HD): <Namespace ID (CWE)> & <Universal ID (ST)> & <Universal ID Type (ID)>

Subcomponents for Namespace ID (CWE): <Identifier (ST)> & <Text (ST)> & <Name of Coding System (ID)> & <Alternate Identifier (ST)> & <Alternate Text (ST)> & <Name of Alternate Coding System (ID)> & <Coding System Version ID (ST)> & <Alternate Coding System Version ID (ST)> & <Original Text (ST)> & <Second Alternate Identifier (ST)> & <Second Alternate Text (ST)> & <Name of Second Alternate Coding System (ID)> & <Second Alternate Coding System Version ID (ST)> & <Coding System OID (ST)> & <Value Set OID (ST)> & <Value Set Version ID (DTM)> & <Alternate Coding System OID (ST)> & <Alternate Value Set OID (ST)> & <Alternate Value Set Version ID (DTM)> & <Second Alternate Coding System OID (ST)> & <Second Alternate Value Set OID (ST)> & <Second Alternate Value Set Version ID (DTM)>

Subcomponents for Facility (HD): <Namespace ID (CWE)> & <Universal ID (ST)> & <Universal ID Type (ID)>

Subcomponents for Namespace ID (CWE): <Identifier (ST)> & <Text (ST)> & <Name of Coding System (ID)> & <Alternate Identifier (ST)> & <Alternate Text (ST)> & <Name of Alternate Coding System (ID)> & <Coding System Version ID (ST)> & <Alternate Coding System Version ID (ST)> & <Original Text (ST)> & <Second Alternate Identifier (ST)> & <Second Alternate Text (ST)> & <Name of Second Alternate Coding System (ID)> & <Second Alternate Coding System Version ID (ST)> & <Coding System OID (ST)> & <Value Set OID (ST)> & <Value Set Version ID (DTM)> & <Alternate Coding System OID (ST)> & <Alternate Value Set OID (ST)> & <Alternate Value Set Version ID (DTM)> & <Second Alternate Coding System OID (ST)> & <Second Alternate Value Set OID (ST)> & <Second Alternate Value Set Version ID (DTM)>

Subcomponents for Building (HD): <Namespace ID (CWE)> & <Universal ID (ST)> & <Universal ID Type (ID)>

Subcomponents for Namespace ID (CWE): <Identifier (ST)> & <Text (ST)> & <Name of Coding System (ID)> & <Alternate Identifier (ST)> & <Alternate Text (ST)> & <Name of Alternate Coding System (ID)> & <Coding System Version ID (ST)> & <Alternate Coding System Version ID (ST)> & <Original Text (ST)> & <Second Alternate Identifier (ST)> & <Second Alternate Text (ST)> & <Name of Second Alternate Coding System (ID)> & <Second Alternate Coding System Version ID (ST)> & <Coding System OID (ST)> & <Value Set OID (ST)> & <Value Set Version ID (DTM)> & <Alternate Coding System OID (ST)> & <Alternate Value Set OID (ST)> & <Alternate Value Set Version ID (DTM)> & <Second Alternate Coding System OID (ST)> & <Second Alternate Value Set OID (ST)> & <Second Alternate Value Set Version ID (DTM)>

Subcomponents for Floor (HD): <Namespace ID (CWE)> & <Universal ID (ST)> & <Universal ID Type (ID)>

Subcomponents for Namespace ID (CWE): <Identifier (ST)> & <Text (ST)> & <Name of Coding System (ID)> & <Alternate Identifier (ST)> & <Alternate Text (ST)> & <Name of Alternate Coding System (ID)> & <Coding System Version ID (ST)> & <Alternate Coding System Version ID (ST)> & <Original Text (ST)> & <Second Alternate Identifier (ST)> & <Second Alternate Text (ST)> & <Name of Second Alternate Coding System (ID)> & <Second Alternate Coding System Version ID (ST)> & <Coding System OID (ST)> & <Value Set OID (ST)> & <Value Set Version ID (DTM)> & <Alternate Coding System OID (ST)> & <Alternate Value Set OID (ST)> & <Alternate Value Set Version ID (DTM)> & <Second Alternate Coding System OID (ST)> & <Second Alternate Value Set OID (ST)> & <Second Alternate Value Set Version ID (DTM)>

Subcomponents for Comprehensive Location Identifier (EI): <Entity Identifier (ST)> & <Namespace ID (IS)> & <Universal ID (ST)> & <Universal ID Type (ID)>

Subcomponents for Assigning Authority for Location (HD): <Namespace ID (CWE)> & <Universal ID (ST)> & <Universal ID Type (ID)>

Subcomponents for Namespace ID (CWE): <Identifier (ST)> & <Text (ST)> & <Name of Coding System (ID)> & <Alternate Identifier (ST)> & <Alternate Text (ST)> & <Name of Alternate Coding System (ID)> & <Coding System Version ID (ST)> & <Alternate Coding System Version ID (ST)> & <Original Text (ST)> & <Second Alternate Identifier (ST)> & <Second Alternate Text (ST)> & <Name of Second Alternate Coding System (ID)> & <Second Alternate Coding System Version ID (ST)> & <Coding System OID (ST)> & <Value Set OID (ST)> & <Value Set Version ID (DTM)> & <Alternate Coding System OID (ST)> & <Alternate Value Set OID (ST)> & <Alternate Value Set Version ID (DTM)> & <Second Alternate Coding System OID (ST)> & <Second Alternate Value Set OID (ST)> & <Second Alternate Value Set Version ID (DTM)>

Definition: This field specifies the physical location (e.g., nurse station, ancillary service location, clinic, or floor) that is participating. If either PRT-5 Participation Person or PRT-8 Participation Organization is valued, it reflects the location of the individual or organization participating as identified in PRT-4 Participation. Otherwise the location is directly participating as identified in PRT-4 Participation.

If this attribute repeats, all instances must represent the same organization.

Condition: At least one of the Participation Person, Participation Organization, Participation Location, or Participation Device fields must be valued.

For the Report Alert Status [PCD-05] transaction this field is optional.

PRT-10 Participation Device (EI) 02348

Components:<Entity Identifier (ST)> ^ <Namespace ID (IS)> ^ <Universal ID (ST)> ^ <Universal ID Type (ID)>

Definition: Identifier for the device participating. This may reflect an unstructured or a structured identifier such as FDA UDI, RFID, IEEE EUI-64 identifiers, or bar codes.

If this attribute repeats, all instances must represent the same device.

Condition: At least one of the Participation Person, Participation Organization, Participation Location, or Participation Device fields must be valued.

For the Report Alert Status [PCD-05] transaction the Entity Identifier is the PIN/Carrier or device communication ID and namespace ID is the Alert Communicator (AC) or Alert Manager (AM) ID.

Future implementation notes: as of HL7® V2.7, identifying devices in the OBX-18 field of the OBX segment is retained for backward compatibility only. This field will be represented through the PRT segment. Future versions

of the IHE PCD Technical Framework will require the use of this segment, which will also provide for including the Unique Device Identification adopted by the U.S. F.D.A. and being considered by regulatory agencies in other jurisdictions.

If this field contains an FDA UDI, it shall contain the entire Human Readable Form of the UDI. For example, a GS1-based UDI would be represented as follows:

|(01)00643169001763(17)160712(21)21A11F4855^^2.16.840.1.113883.3.3719^ISO|

A HIBCC-based example would be represented as follows:

|+H123PARTNO1234567890120/$$420020216LOT123456789012345/SXYZ4567890123
45678/16D20130202C^^2.16.840.1.113883.3.3719^ISO

An ICCBBA-based example would be represented as follows:

|=/A9999XYZ100T0944=,000025=A99971312345600=>014032=}013032\T
\,1000000000000XYZ123^^2.16.840.1.113883.3.3719^ISO|

Or for ICCBBA for blood bags only an example would be represented as follows:

|=)1TE123456A\T\)RZ12345678^^2.16.840.1.113883.3.3719^ISO|

The identifier root shall be the OID assigned to UDI. For example, for FDA UDIs the root shall be 2.16.840.1.113883.3.3719, and the extension shall be the Human Readable Form appropriate for the style of content. When captured as a simple string, the string shall be the Human Readable Form appropriate for the style of content. The content style can be determined from the leading characters of the content:

UDIs beginning with:

'(' are in the GS1 Human Readable style;

'0-9' are a GS1 DI (containing only the DI value, no PI or GS1 AI);

'+' are in the HIBCC Human Readable style;

'=' or '&' are in the ICCBBA Human Readable style.

Note: If "&" is used in the UDI while one of the delimiters in MSH.2 includes "&" as well, it must be properly escaped per Chapter 2.7.

The exchange of UDI sub-elements in PRT-16 through PRT-21 is not required when the full UDI string is provided in PRT.10. Whether to include some or all these fields as well when PRT-10 is present with a UDI that the rules are subject to specific implementation guides that will have to consider the patient safety implications of potentially conflicting data.

When a UDI is provided and sub-elements are also provided, then for those sub-elements that are valued, the content must match the content encoded in the UDI if it is encoded within the UDI.

Caution: The UDI may contain personally identifying information in the form of the device serial number which may be used to link to other information on a patient. Standard practice for exchanging potentially identifying content should be exercised when exchanging UDIs which contain a serial number.

Note: PRT.10 is a repeating field. Additional device identifiers, such as an IEEE EUI-64 may also be contained in this field.

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

Definition: This field contains the date/time when the participation began.

In the case of waypoints, this reflects the time a shipment arrives at the waypoint.

For the Report Alert Status [PCD-05] transaction this field contains the time of the dissemination status or response update.

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

Definition: This field contains the date/time when the participation ended.

In the case of waypoints, this reflects the time a shipment departs from the waypoint.

For the Report Alert Status [PCD-05] transaction this field is not populated.

PRT-13 Participation Qualitative Duration (CWE) 02389

Components:<Identifier (ST)> ^ <Text (ST)> ^ <Name of Coding System (ID)> ^ <Alternate Identifier (ST)> ^ <Alternate Text (ST)> ^ <Name of Alternate Coding System (ID)> ^ <Coding System Version ID (ST)> ^ <Alternate Coding System Version ID (ST)> ^ <Original Text (ST)> ^ <Second Alternate Identifier (ST)> ^ <Second Alternate Text (ST)> ^ <Name of Second Alternate Coding System (ID)> ^ <Second Alternate Coding System Version ID (ST)> ^ <Coding System OID (ST)> ^ <Value Set OID (ST)> ^ <Value Set Version ID (DTM)> ^ <Alternate Coding System OID (ST)> ^ <Alternate Value Set OID (ST)> ^ <Alternate Value Set Version ID (DTM)> ^ <Second Alternate Coding System OID (ST)> ^ <Second Alternate Value Set OID (ST)> ^ <Second Alternate Value Set Version ID (DTM)>

Definition: This field contains the qualitative length of time for participation (e.g., until the next assessment, four days, until discharge, etc.).

For the Report Alert Status [PCD-05] transaction this field is not populated.

PRT-14 Participation Address (XAD) 02390

Components:<Street Address (SAD)> ^ <Other Designation (ST)> ^ <City (ST)> ^ <State or Province (ST)> ^ <Zip or Postal Code (ST)> ^ <Country (ID)> ^ <Address Type (ID)> ^ <Other Geographic Designation (ST)> ^ <County/Parish Code (CWE)> ^ <Census Tract (CWE)> ^ <Address Representation Code (ID)> ^ <WITHDRAWN Constituent> ^ <Effective Date (DTM)> ^ <Expiration Date (DTM)> ^ <Expiration Reason (CWE)> ^ <Temporary Indicator (ID)> ^ <Bad Address Indicator (ID)> ^ <Address Usage (ID)> ^ <Addressee (ST)> ^ <Comment (ST)> ^ <Preference Order (NM)> ^ <Protection Code (CWE)> ^ <Address Identifier (EI)>

Subcomponents for Street Address (SAD): <Street or Mailing Address (ST)> & <Street Name (ST)> & <Dwelling Number (ST)>

Subcomponents for County/Parish Code (CWE): <Identifier (ST)> & <Text (ST)> & <Name of Coding System (ID)> & <Alternate Identifier (ST)> & <Alternate Text (ST)> & <Name of Alternate Coding System (ID)> & <Coding System Version ID (ST)> & <Alternate Coding System Version ID (ST)> & <Original Text (ST)> & <Second Alternate Identifier (ST)> & <Second Alternate Text (ST)> & <Name of Second Alternate Coding System (ID)> & <Second Alternate Coding System Version ID (ST)> & <Coding System OID (ST)> & <Value Set OID (ST)> & <Value Set Version ID (DTM)> & <Alternate Coding System OID (ST)> & <Alternate Value Set OID (ST)> & <Alternate Value Set Version ID (DTM)> & <Second Alternate Coding System OID (ST)> & <Second Alternate Value Set OID (ST)> & <Second Alternate Value Set Version ID (DTM)>

Subcomponents for Census Tract (CWE): <Identifier (ST)> & <Text (ST)> & <Name of Coding System (ID)> & <Alternate Identifier (ST)> & <Alternate Text (ST)> & <Name of Alternate Coding System (ID)> & <Coding System Version ID (ST)> & <Alternate Coding System Version ID (ST)> & <Original Text (ST)> & <Second Alternate Identifier (ST)> & <Second Alternate Text (ST)> & <Name of Second Alternate Coding System (ID)> & <Second Alternate Coding System Version ID (ST)> & <Coding System OID (ST)> & <Value Set OID (ST)> & <Value Set Version ID (DTM)> & <Alternate Coding System OID (ST)> & <Alternate Value Set OID (ST)> & <Alternate Value Set Version ID (DTM)> & <Second Alternate Coding System OID (ST)> & <Second Alternate Value Set OID (ST)> & <Second Alternate Value Set Version ID (DTM)>

Subcomponents for Expiration Reason (CWE): <Identifier (ST)> & <Text (ST)> & <Name of Coding System (ID)> & <Alternate Identifier (ST)> & <Alternate Text (ST)> & <Name of Alternate Coding System (ID)> & <Coding System Version ID (ST)> & <Alternate Coding System Version ID (ST)> & <Original Text (ST)> & <Second Alternate Identifier (ST)> & <Second Alternate Text (ST)> & <Name of Second Alternate Coding System (ID)> & <Second Alternate Coding System Version ID (ST)> & <Coding System OID (ST)> & <Value Set OID (ST)> & <Value Set Version ID (DTM)> & <Alternate Coding System OID (ST)> & <Alternate Value Set OID (ST)> & <Alternate Value Set Version ID (DTM)> & <Second Alternate Coding System OID (ST)> & <Second Alternate Value Set OID (ST)> & <Second Alternate Value Set Version ID (DTM)>

Subcomponents for Protection Code (CWE): <Identifier (ST)> & <Text (ST)> & <Name of Coding System (ID)> & <Alternate Identifier (ST)> & <Alternate Text (ST)> & <Name of Alternate Coding System (ID)> & <Coding System Version ID (ST)> & <Alternate Coding System Version ID (ST)> & <Original Text (ST)> & <Second Alternate

Identifier (ST)> & <Second Alternate Text (ST)> & <Name of Second Alternate Coding System (ID)> & <Second Alternate Coding System Version ID (ST)> & <Coding System OID (ST)> & <Value Set OID (ST)> & <Value Set Version ID (DTM)> & <Alternate Coding System OID (ST)> & <Alternate Value Set OID (ST)> & <Alternate Value Set Version ID (DTM)> & <Second Alternate Coding System OID (ST)> & <Second Alternate Value Set OID (ST)> & <Second Alternate Value Set Version ID (DTM)>

Subcomponents for Address Identifier (EI): <Entity Identifier (ST)> & <Namespace ID (IS)> & <Universal ID (ST)> & <Universal ID Type (ID)>

Definition: This field contains addresses associated with the participation. The address can repeat to indicate alternate addresses or an alternate expression of the same address.

Condition: The address must be present if the Participation is Performing Organization Medical Director.

For the Report Alert Status [PCD-05] transaction this field is not populated.

PRT-15 Participation Telecommunication Address (XTN) 02391

Components:<WITHDRAWN Constituent> ^ <Telecommunication Use Code (ID)> ^ <Telecommunication Equipment Type (ID)> ^ <Communication Address (ST)> ^ <Country Code (SNM)> ^ <Area/City Code (SNM)> ^ <Local Number (SNM)> ^ <Extension (SNM)> ^ <Any Text (ST)> ^ <Extension Prefix (ST)> ^ <Speed Dial Code (ST)> ^ <Unformatted Telephone number (ST)> ^ <Effective Start Date (DTM)> ^ <Expiration Date (DTM)> ^ <Expiration Reason (CWE)> ^ <Protection Code (CWE)> ^ <Shared Telecommunication Identifier (EI)> ^ <Preference Order (NM)>

Subcomponents for Expiration Reason (CWE): <Identifier (ST)> & <Text (ST)> & <Name of Coding System (ID)> & <Alternate Identifier (ST)> & <Alternate Text (ST)> & <Name of Alternate Coding System (ID)> & <Coding System Version ID (ST)> & <Alternate Coding System Version ID (ST)> & <Original Text (ST)> & <Second Alternate Identifier (ST)> & <Second Alternate Text (ST)> & <Name of Second Alternate Coding System (ID)> & <Second Alternate Coding System Version ID (ST)> & <Coding System OID (ST)> & <Value Set OID (ST)> & <Value Set Version ID (DTM)> & <Alternate Coding System OID (ST)> & <Alternate Value Set OID (ST)> & <Alternate Value Set Version ID (DTM)> & <Second Alternate Coding System OID (ST)> & <Second Alternate Value Set OID (ST)> & <Second Alternate Value Set Version ID (DTM)>

Subcomponents for Protection Code (CWE): <Identifier (ST)> & <Text (ST)> & <Name of Coding System (ID)> & <Alternate Identifier (ST)> & <Alternate Text (ST)> & <Name of Alternate Coding System (ID)> & <Coding System Version ID (ST)> & <Alternate Coding System Version ID (ST)> & <Original Text (ST)> & <Second Alternate Identifier (ST)> & <Second Alternate Text (ST)> & <Name of Second Alternate Coding System (ID)> & <Second Alternate Coding System Version ID (ST)> & <Coding System OID (ST)> & <Value Set OID (ST)> & <Value Set Version ID (DTM)> & <Alternate Coding System OID (ST)> & <Alternate Value Set OID (ST)> & <Alternate Value Set Version ID (DTM)> & <Second Alternate Coding System OID (ST)> & <Second Alternate Value Set OID (ST)> & <Second Alternate Value Set Version ID (DTM)>

Subcomponents for Shared Telecommunication Identifier (EI): <Entity Identifier (ST)> & <Namespace ID (IS)> & <Universal ID (ST)> & <Universal ID Type (ID)>

Definition: The waypoint telecommunication address field carries telecommunications addresses for the waypoint. These telecommunications addresses are used to contact the waypoint for additional information regarding the receipt of the shipment. The address can repeat to indicate alternate addresses or an alternate expression of the same address.

For the Report Alert [PCD-04] transaction this field may also be used if only a PIN/Carrier destination is known, in which case the PIN is in the first sub-component of the Communication Address component and the Carrier is in the second sub-component of the Communication Address component.

For the Report Alert Status [PCD-05] transaction, if the PIN/Carrier of the recipient is known then this would contain that information just as it is passed in Report Alert [PCD-04] so that the Alert Reporter could use this information to contact the recipient.

PRT-16 Participation Device Identifier (EI) 03476

Components: <Entity Identifier (ST)> ^ <Namespace ID (IS)> ^ <Universal ID (ST)> ^ <Universal ID Type (ID)>

Definition: Provides the U.S. FDA UDI device identifier (DI) element.

This is the first component in the UDI and acts as the look up key for the Global Unique Device Identification Database (GUDID), and may be used for retrieving additional attributes.

When exchanging Device Identifiers (DI) the root shall be the OID, or standards' appropriate corollary to the OID, assigned to DI and the extension shall be the Human Readable Form of the content. For example, for DIs the root shall be:

GS1 DIs: 2.51.1.1

HIBCC DIs: 1.0.15961.10.816

ICCBBA DIs:2.16.840.1.113883.6.18.1.17 for Blood containers and 2.16.840.1.113883.6.18.1.34 otherwise.

Example: |00643169001763^^2.51.1.1^ISO|

7.1.1.2PRT-17 Participation Device Manufacture Date (DTM) 03477

Definition: Date and time when the device was manufactured.

Note: The user system may need to convert the date and optional hour from the UDI Human Readable Form to a timestamp style data type, augmenting the date as required to provide for a complete date and optionally the hour.

Example: |20140401|

PRT-18 Participation Device Expiry Date (DTM) 03478

Definition: Date and time when the device is no longer approved for use. Not generally applicable in IHE PCD transactions.

Note: The user system may need to convert the date and optional hour from the UDI Human Readable Form to a timestamp style data type, augmenting the date as required to provide for a complete date and optionally the hour.

Example: |20160712|

PRT-19 Participation Device Lot Number (ST) 03479

Definition: Alphanumeric string that identifies the device's production lot number.

Example: |123ABC|

PRT-20 Participation Device Serial Number (ST) 03480

Definition: Manufacturer's serial number for this device.

CAUTION: See the related privacy considerations discussion in PRT.10.

Example: |21A11F4855|