Patient Id Association options
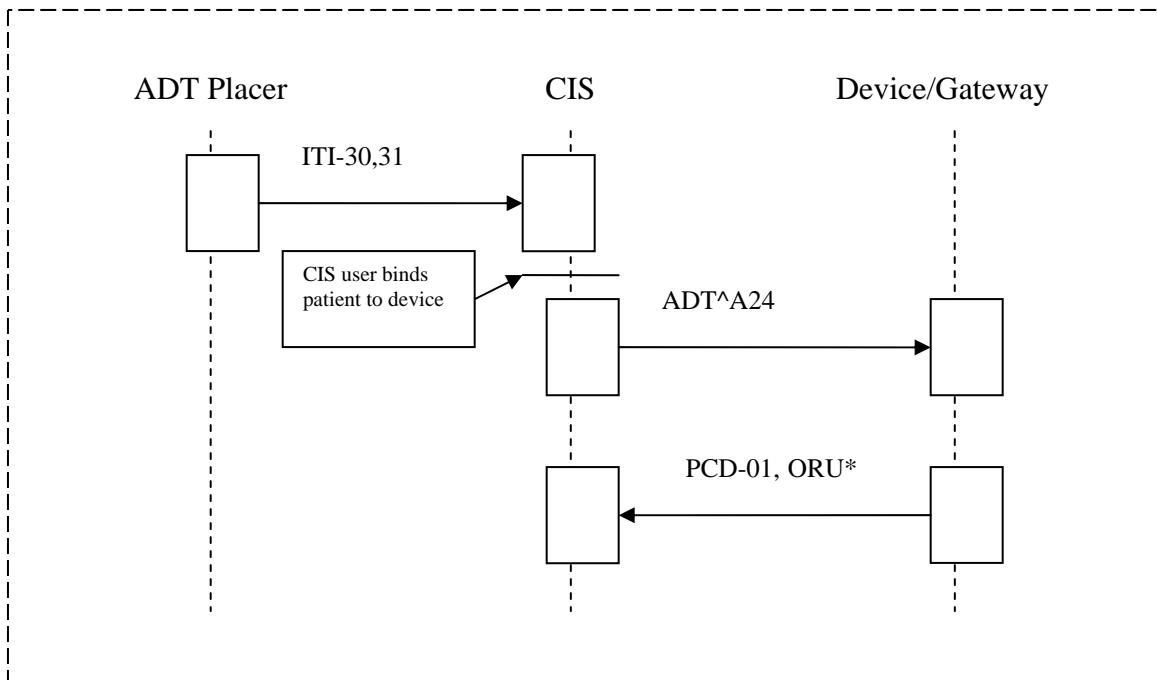
Link Patient A24

Proposal:

Use the Link Patient A24 message to associate a patient care device with the patient. The device identifier is sent in the second PID segment. The patient identifier code associated with the device id in PID 3 will have an RI id type.

Requires two PID segments and PID 3 to be populated.

```
MSH                             Message Header                            2
[{ SFT }]                       Software Segment                          2
[  UAC  ]                       User Authentication Credential            2
EVN                             Event Type                                3
PID                             Patient (1) Identification                3
[  PD1  ]                       Patient (1) Additional Demographics       3
[  PV1  ]                       Patient (1) Visit                         3
[{ DB1 }]                       Patient (1) Disability Information         3
PID                             Patient (2) Identification                3
```

The Link device id is sent in the patient id field with an identifier type of RI.

RI	Resource identifier	A generalized resource identifier. Use Case: An identifier type is needed to accommodate what are commonly known as resources. The resources can include human (e.g. a respiratory therapist), non-human (e.g., a companion animal), inanimate object (e.g., an exam room), organization (e.g., diabetic education class) or any other physical or logical entity.

Discussion:

This message requires the use of two PID segments. The intent is to link a person to patient ids used in different facilities.

The device id is sent in the patient id field with an identifier type of RI. The RI type is very broad. Could this lead to a problem?
Issue—
The A24 event is used when the first PID segment needs to be linked to the second PID segment and when both patient identifiers identify the same patient.

Schedule with resource

Proposal:

Patient schedule messages control the occurrence of certain services and the use of particular resources. The message describes the nature of the service and/or the use of the resource, the person or persons responsible for the appointment's booking, and other information relevant to the booking and execution of an appointment.

A patient is not required in the message so this message covers all the use cases brought forward by Ruth. The request and notification events provide a mechanism for linking a patient and device.

Request addition of service /Resource on Appointment (S07)
Request cancelation of service /Resource on Appointment (S09)

Notification of addition of service /Rsource on Appointment (S18)
Notification of cancelaiton of service /Rsource on Appointment (S20)

```
MSH                             Message Header                              2
SCH                             Schedule Activity Information              10
[ {                             --- PATIENT begin
    PID                         Patient Identification                      3
    [ PV1 ]                     Patient Visit                               3
    [ { OBX } ]                 Observation/Result                          4
} ]                             --- PATIENT end
{                               --- RESOURCES begin
  RGS                           Resource Group Segment                     10
  [ {                           --- GENERAL_RESOURCE begin
     AIG                        Appointment Information - General Resource  10
     [ { NTE } ]                Notes and Comments for the AIG              2
  } ]                           --- GENERAL_RESOURCE end
```

HL7 Attribute Table - SCH – Scheduling Activity Information

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
6	250	CE	R			00883	Event Reason
16	250	XCN	R	Y		00885	Filler Contact Person
25	250	CE	O		0278	00889	Filler Status Code
26	22	EI	C	Y		00216	Placer Order Number
27	22	EI	C	Y		00217	Filler Order Number

HL7 Attribute Table - AIG - Appointment Information – General Resource

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	4	SI	R			00896	Set ID - AIG
2	3	ID	C		0206	00763	Segment Action Code
3	250	CE	C			00897	Resource ID
4	250	CE	R			00898	Resource Type
5	250	CE	O	Y		00899	Resource Group
6	5	NM	O			00900	Resource Quantity
7	250	CE	O			00901	Resource Quantity Units
8	26	TS	C			01202	Start Date/Time
9	20	NM	C			00891	Start Date/Time Offset
10	250	CE	C			00892	Start Date/Time Offset Units
11	20	NM	O			00893	Duration
12	250	CE	O			00894	Duration Units
13	10	IS	C		0279	00895	Allow Substitution Code

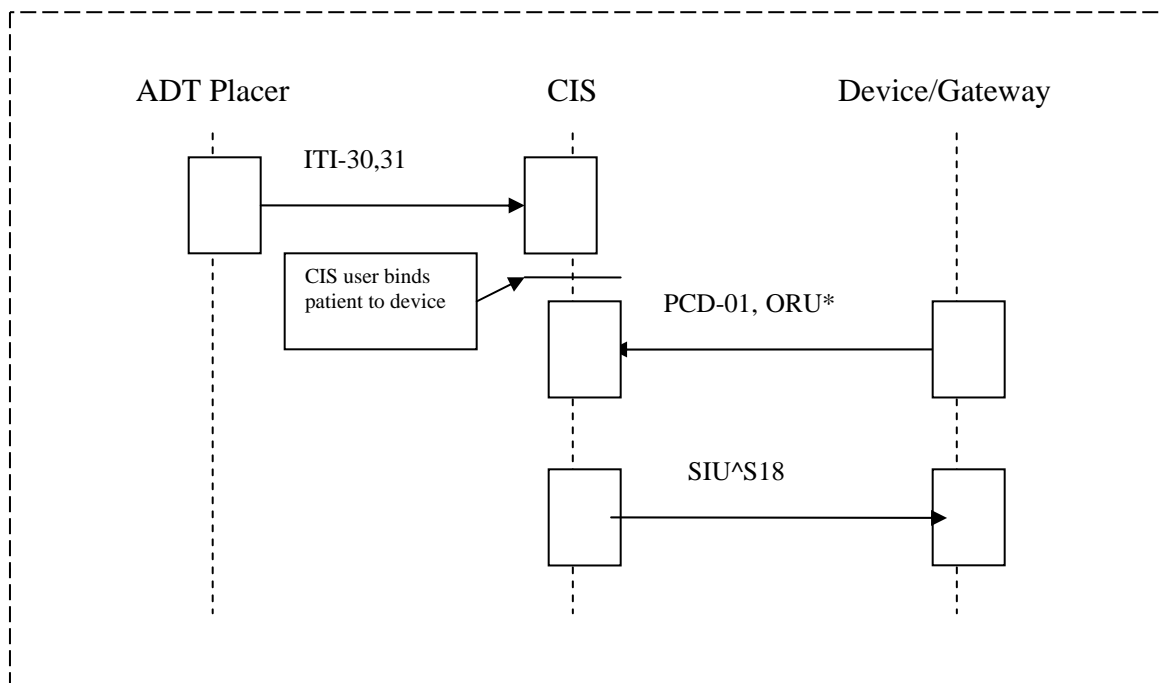| SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
14	250	CE	C		0278	00889	Filler Status Code

Discussion:

The schedule message is used to schedule a patient or resources into ancillary services. These services are usually related to a procedure. The services included: reserving locations for a period of time, the use of equipment and the scheduling of personnel. The inclusion of patient data is optional because resources can be reserved before a specific patient identity is available.
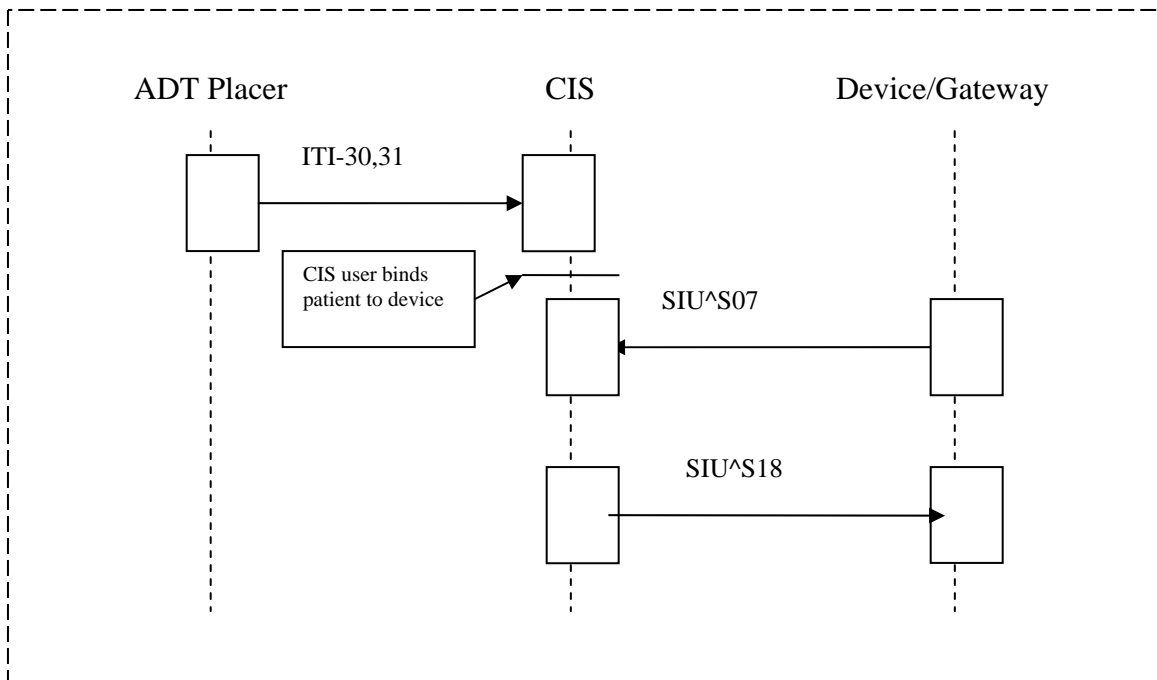
The schedule segment event reason is listed as required but the field descriptions indicate that the requirement is a mistake. There are fields to capture the user as the filler contact person. Order numbers can be communicated in fields 26 and 27.

The AIG segment provides the ability to identify the equipment to be associated with the patient.

Device communicates observation to CIS. The user associates the observations to a patient. The CIS returns a patient device association back to the device.

The user associates the device to the patient, using handheld or device GUI. A message

Discussion:

The schedule message is used to schedule a patient or resources into ancillary services. These services are usually related to a procedure. The services included: reserving locations for a period of time, the use of equipment and the scheduling of personnel. The inclusion of patient data is optional because resources can be reserved before a specific patient identity is available.

The schedule segment event reason is listed as required but the field descriptions indicate that the requirement is a mistake. There are fields to capture the user as the filler contact person. Order numbers can be communicated in fields 26 and 27.

The AIG segment provides the ability to identify the equipment to be associated with the patient.

Comment received from Hans Buitendijk when this option was presented to HL7 O&O group "Scheduling primarily deals with the states up to the actual instance. An appointment is made and managed, but the inpatient/outpatient stay/visit is then managed in ADT as the confirmed association between Patient, and certain resources, plus some notion of time. At most then the scheduling of the device would be Scheduling, while the actual association is not"
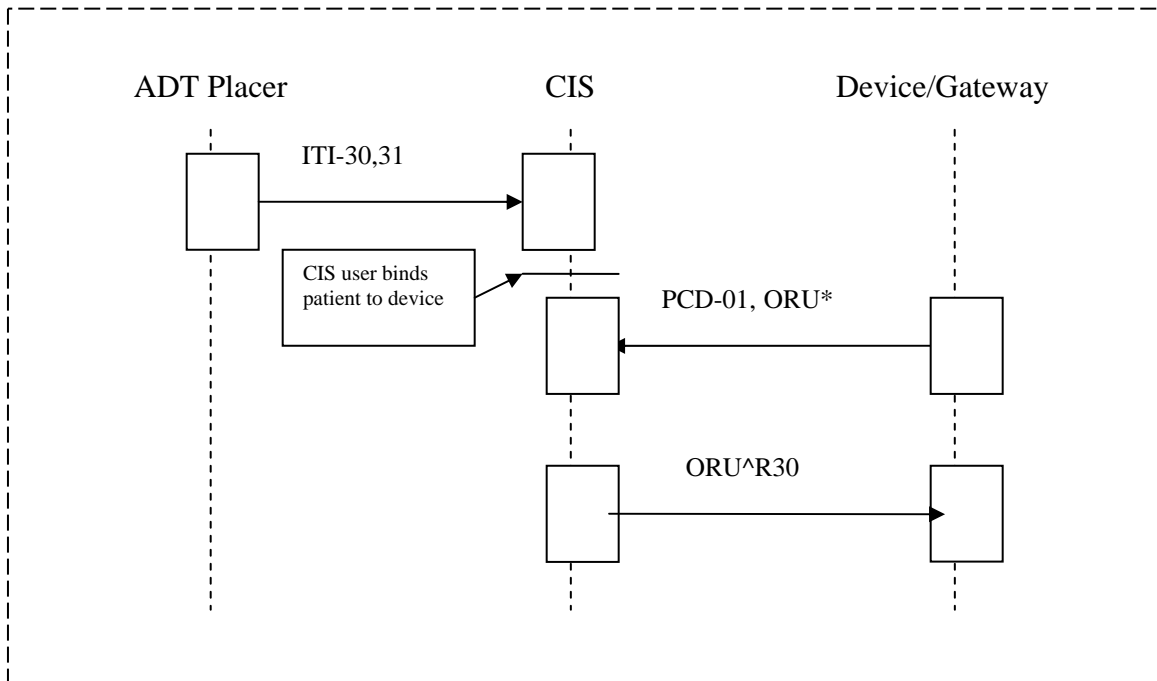
Observation Message

Proposal:

Unsolicited Point-Of-Care Observation Message Without Existing Order – Place An Order (Event R30)
Unsolicited New Point-Of-Care Observation Message – Search For An Order (Event R31

Segments	Description	Status	Chapter
MSH	Message Header		2
PID	Patient Identification		3
[	--- VISIT begin		
PV1	Patient Visit		3
]	--- VISIT end		
ORC	Common Order information		4
OBR	Observation Request		7
{	--- OBSERVATION begin		
OBX	Observation Results, one per reported value		7
}	--- OBSERVATION end		

Discussion:

The ORU message requires the patient identification section.

The R01 event is the same as the PCD-01 status message. When deciphering the message the receiving system will need to look at the OBR 4 service id, OBX 3 observation

identifier or other field to determine that the message is communicating a device to be associated with a patient. The device being associated in defined in OBX 18.

The use of the R30 and R31 appear to be limited to the lab messaging environment. These events require that a lab order (OML^O21) be used to return the placer order number.

Patient Registration A04--

NEEDS HL7 Patient Admin WG clarification, the PRT is not listed in the January 2009 ballot in the ADT section but is in Chapter 7. I recall a proposal that the PRT segment would replace the ROL segment.

Proposal:

Use the Patient Registration A40 message to associate a patient care device with the patient. This proposal is based on the HL7 2.7 message including the new PRT participation segment.

```
MSH                          Message Header                          2
[{ SFT }]                    Software Segment                        2
[  UAC  ]                    User Authentication Credential          2
EVN                          Event Type                              3
PID                          Patient (1) Identification              3
[  PD1  ]                    Patient (1) Additional Demographics     3
[  PRT  ]                    Participation (for Patient)             3
 [                           --- VISIT begin
   PV1                       Patient Visit                           3
   [PV2]                     Patient Visit – Additional Information   3
   [{PRT}]                   Participation (for Patient Visit)       7
 ]                           --- VISIT end
```

HL7 Attribute Table - PRT – Participation Information

SEQ	LEN	C.LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME
1	1..4		EI	C	N		02379	Participation Instance ID
2	2..2		ID	R		0287	00816	Action Code
3			CWE	O			02380	Action Reason
4			CWE	R		0912	02381	Participation
5			XCN	C	Y		02382	Participation Person
6			CWE	C			02383	Participation Person Provider Type
7			CWE	C		0406	02384	Participant Organization Unit Type
8			XON	C	Y		02385	Participation Organization
9			PL	C	Y		02386	Participant Location

SEQ	LEN	C.LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME
10			EI	C	Y		02348	Participation Device
11			DTM	O			02387	Participation Begin Date/Time (arrival time)
12			DTM	O			02388	Participation End Date/Time (departure time)
13			CWE	O			02389	Participation Qualitative Duration
14			XAD	C	Y		02390	Participation Address
15			XTN	O	Y		02391	Participant Telecommunication Address

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.

Example: The device used to register the shipment at the waypoint.
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.

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

Definition: This field contains the date/time when the participation began.
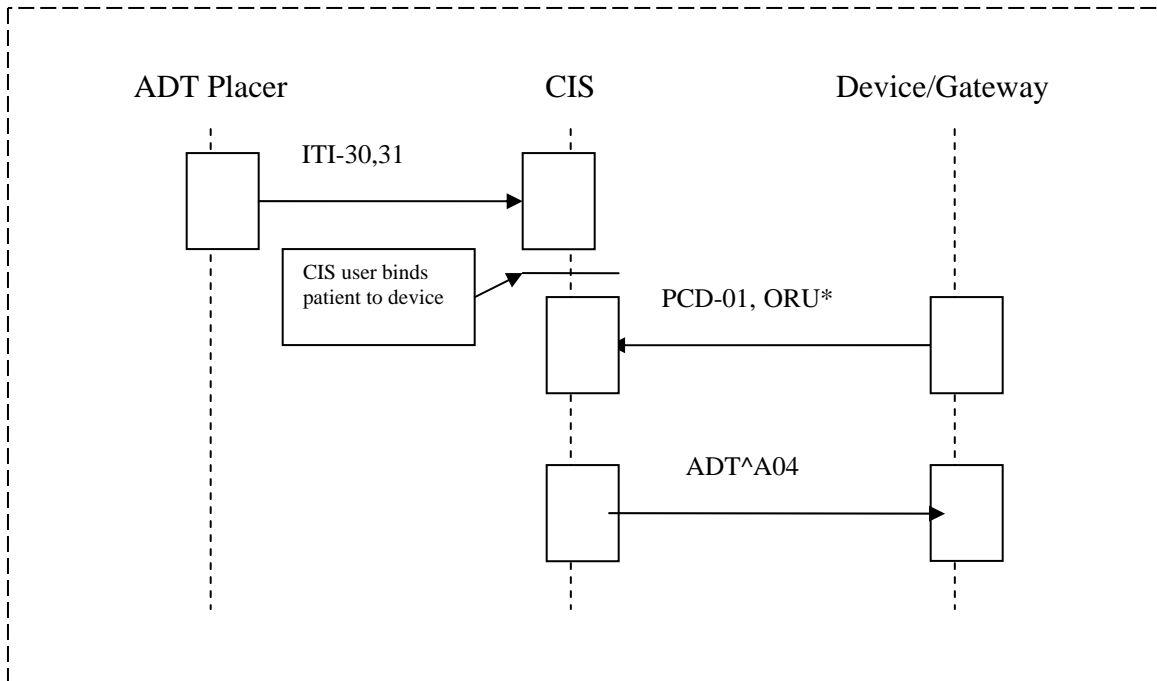In the case of waypoints, this reflects the time a shipment arrives at the waypoint.

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.

Discussion:

If the PRT has not been added should PCD consider proposing a new ADT event that included the PRT to support patient association activation and deactivation?