# Chapter 1. Admission, Discharge, and Transfer

## a. PURPOSE

The ADT transaction set provides for transmitting new or updated demographic and visit information about patients. Since virtually any system attached to the network requires information about patients, it is one of the most commonly used transaction sets.

Generally, information is entered into an ADT system and passed to the nursing, ancillary and financial systems either in the form of an unsolicited update or in response to a record-oriented query.

This chapter defines the transactions at the seventh level, i.e., the abstract messages. The examples included in this chapter were constructed using the HL7 Encoding Rules.

## c. TRIGGER EVENTS AND MESSAGE DEFINITIONS

Each triggering event is listed below, along with the applicable form of the message exchange. The notation used to describe the sequence, optionality, and repetition of segments is described in Chapter 2, "Format for Defining Abstract Messages."

The triggering events that follow are all served by the ADT unsolicited update and the ACK response.

## i. Admit a patient (event code A01)

Normally entered in the primary ADT system and broadcast to the nursing units and ancillary systems. Includes short-stay and John Doe admissions.

| ADT | ADT Message | | | | Chapter |
|---|---|---|---|---|---|
| MSH | Message Header | | | | 2 |
| EVN | Event Type | | | | 3 |
| PID | Patient Identification | | 3 | | |
| [ { NK1 } ] | Next of Kin | | 3 | | |
| PV1 | Patient Visit | | | | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 | | | |
| [ { OBX } ] | Observation/Result | | 7 | | |
| [ { AL1 } ] | Allergy Information | | 3 | | |
| [ { DG1 } ] | Diagnosis Information | | 6 | | |
| [ { PR1 } ] | Procedures | | | 6 | |
| [ { GT1 } ] | Guarantor Information | | 6 | | |
| [ | | | | | |
| { IN1 | Insurance Information | | | 6 | |
| [ IN2 ] | Insurance Information - Addit. Info. | 6 | | | |
| [ IN3 ] | Insurance Information - Cert. | | 6 | | |
| } | | | | | |
| ] | | | | | |
| [ ACC ] | Accident Information | | | 6 | |
| [ UB1 ] | Universal Bill Information | | 6 | | |
| [ UB2 ] | Universal Bill 92 Information | | 6 | | |

| ACK | General Acknowledgement | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| MSA | Message Acknowledgement | 2 | |
| [ ERR ] | Error Information | 2 | |

## iii. Transfer a patient (event code A02)

A patient moves from one location to another.

| ADT | ADT Message | | | | Chapter |
|---|---|---|---|---|---|
| MSH | Message Header | | | | 2 |
| EVN | Event Type | | | | 3 |
| PID | Patient Identification | | 3 | | |
| PV1 | Patient Visit | | | | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 | | | |
| [ { OBX } ] | Observation/Result | | 7 | | |

| ACK | General Acknowledgement | Chapter |
|---|---|---|
| MSH | Message Header | 2 |
| MSA | Message Acknowledgement | 2 |
| [ ERR ] | Error Information | 2 |

## v. Discharge a patient (event code A03)

Refers to changing a patient's status from, for example, inpatient to discharged.

| ADT | ADT Message | Chapter |
|---|---|---|
| MSH | Message Header | 2 |
| EVN | Event Type | 3 |
| PID | Patient Identification | 3 |
| PV1 | Patient Visit | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 |
| [ { OBX } ] | Observation/Result | 7 |

| ACK | General Acknowledgement | Chapter |
|---|---|---|
| MSH | Message Header | 2 |
| MSA | Message Acknowledgement | 2 |
| [ ERR ] | Error Information | 2 |

## vii. Register a patient (event code A04)

Includes emergency room patients and outpatients.

| ADT | ADT Message | | | | Chapter |
|---|---|---|---|---|---|
| MSH | Message Header | | | | 2 |
| EVN | Event Type | | | | 3 |
| PID | Patient Identification | | 3 | | |
| [ { NK1 } ] | Next of Kin | | 3 | | |
| PV1 | Patient Visit | | | | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 | | | |
| [ { OBX } ] | Observation/Result | | 7 | | |
| [ { AL1 } ] | Allergy Information | | 3 | | |
| [ { DG1 } ] | Diagnosis Information | | 6 | | |
| [ { PR1 } ] | Procedures | | | 6 | |
| [ { GT1 } ] | Guarantor Information | | 6 | | |
| [ | | | | | |
| { IN1 | Insurance Information | | | 6 | |
| [ IN2 ] | Insurance Information - Addit. Info. | 6 | | | |
| [ IN3 ] | Insurance Information - Cert. | | 6 | | |
| } | | | | | |
| ] | | | | | |
| [ ACC ] | Accident Information | | | 6 | |
| [ UB1 ] | Universal Bill Information | | 6 | | |
| [ UB2 ] | Universal Bill 92 Information | | 6 | | |

| ACK | General Acknowledgement | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| MSA | Message Acknowledgement | 2 | |
| [ ERR ] | Error Information | 2 | |

## ix. Pre-admit a patient (event code A05)

A patient may be pre-admitted for a variety of reasons; e.g., prior to surgery so that they will be able to receive tests administered in the lab. The data may be entered into the surgery scheduling system and passed to the ADT system.

| ADT | ADT Message | | | | Chapter |
|---|---|---|---|---|---|
| MSH | Message Header | | | | 2 |
| EVN | Event Type | | | | 3 |
| PID | Patient Identification | | 3 | | |
| [ { NK1 } ] | Next of Kin | | 3 | | |
| PV1 | Patient Visit | | | | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 | | | |
| [ { OBX } ] | Observation/Result | | 7 | | |
| [ { AL1 } ] | Allergy Information | | 3 | | |
| [ { DG1 } ] | Diagnosis Information | | 6 | | |
| [ { PR1 } ] | Procedures | | | 6 | |
| [ { GT1 } ] | Guarantor Information | | 6 | | |
| [ | | | | | |
| { IN1 | Insurance Information | | | 6 | |
| [ IN2 ] | Insurance Information - Addit. Info. | 6 | | | |
| [ IN3 ] | Insurance Information - Cert. | | 6 | | |
| } | | | | | |
| ] | | | | | |
| [ ACC ] | Accident Information | | | 6 | |
| [ UB1 ] | Universal Bill Information | | 6 | | |
| [ UB2 ] | Universal Bill 92 Information | | 6 | | |

| ACK | General Acknowledgement | | | Chapter |
|---|---|---|---|---|
| MSH | Message Header | | | 2 |
| MSA | Message Acknowledgement | | 2 | |
| [ ERR ] | Error Information | | 2 | |

## xi. Transfer an outpatient to inpatient (event code A06)

| ADT | ADT Message | | | Chapter |
|---|---|---|---|---|
| MSH | Message Header | | | 2 |
| EVN | Event Type | | | 3 |
| PID | Patient Identification | | 3 | |
| [ MRG ] | Merge Information | | | 3 |
| [ { NK1 } ] | Next of Kin | | 3 | |
| PV1 | Patient Visit | | | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 | | |
| [ { OBX } ] | Observation/Result | | 7 | |
| [ { AL1 } ] | Allergy Information | | 3 | |
| [ { DG1 } ] | Diagnosis Information | | 6 | |
| [ { PR1 } ] | Procedures | | | 6 |
| [ { GT1 } ] | Guarantor Information | | 6 | |
| [ | | | | |
| { IN1 | Insurance Information | | | 6 |
| [ IN2 ] | Insurance Information - Addit. Info. | 6 | | |
| [ IN3 ] | Insurance Information - Cert. | | 6 | |
| } | | | | |
| ] | | | | |
| [ ACC ] | Accident Information | | | 6 |
| [ UB1 ] | Universal Bill Information | | 6 | |
| [ UB2 ] | Universal Bill 92 Information | | 6 | |

| ACK | General Acknowledgement | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| MSA | Message Acknowledgement | 2 | |
| [ ERR ] | Error Information | 2 | |

## xiii. Transfer an inpatient to outpatient (event code A07)

| ADT | ADT Message | | | Chapter |
|---|---|---|---|---|
| MSH | Message Header | | | 2 |
| EVN | Event Type | | | 3 |
| PID | Patient Identification | | 3 | |
| [ MRG ] | Merge Information | | | 3 |
| [ { NK1 } ] | Next of Kin | | 3 | |
| PV1 | Patient Visit | | | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 | | |
| [ { OBX } ] | Observation/Result | | 7 | |
| [ { AL1 } ] | Allergy Information | | 3 | |
| [ { DG1 } ] | Diagnosis Information | | 6 | |
| [ { PR1 } ] | Procedures | | | 6 |
| [ { GT1 } ] | Guarantor Information | | 6 | |

| | | | |
|---|---|---|---|
| [ | | | |
| { IN1 | Insurance Information | | 6 |
| [ IN2 ] | Insurance Information - Addit. Info. | 6 | |
| [ IN3 ] | Insurance Information - Cert. | 6 | |
| } | | | |
| ] | | | |
| [ ACC ] | Accident Information | | 6 |
| [ UB1 ] | Universal Bill Information | 6 | |
| [ UB2 ] | Universal Bill 92 Information | 6 | |

| ACK | General Acknowledgement | Chapter |
|---|---|---|
| MSH | Message Header | 2 |
| MSA | Message Acknowledgement | 2 |
| [ ERR ] | Error Information | 2 |

## xv. Update patient information (event code A08)

This trigger event is used when any patient information has changed, but no other trigger event has occurred.

| ADT | ADT Message | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| EVN | Event Type | | 3 |
| PID | Patient Identification | 3 | |
| [ { NK1 } ] | Next of Kin | 3 | |
| PV1 | Patient Visit | | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 | |
| [ { OBX } ] | Observation/Result | 7 | |
| [ { AL1 } ] | Allergy Information | 3 | |
| [ { DG1 } ] | Diagnosis Information | 6 | |
| [ { PR1 } ] | Procedures | | 6 |
| [ { GT1 } ] | Guarantor Information | 6 | |
| [ | | | |
| { IN1 | Insurance Information | | 6 |
| [ IN2 ] | Insurance Information - Addit. Info. | 6 | |
| [ IN3 ] | Insurance Information - Cert. | 6 | |
| } | | | |
| ] | | | |
| [ ACC ] | Accident Information | | 6 |
| [ UB1 ] | Universal Bill Information | 6 | |
| [ UB2 ] | Universal Bill 92 Information | 6 | |

| ACK | General Acknowledgement | Chapter |
|---|---|---|
| MSH | Message Header | 2 |

| | | |
|---|---|---|
| MSA | Message Acknowledgement | 2 |
| [ ERR ] | Error Information | 2 |

## xvii. Patient departing (event code A09)

A patient is being moved from his assigned location to a new location. For example, this can be used when the nursing system is not the same as the ADT system or to indicate a patient leaving an outpatient bed. The DG1 segment remains in this message for backwards compatibility only.

| ADT | ADT Message | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| EVN | Event Type | | 3 |
| PID | Patient Identification | 3 | |
| PV1 | Patient Visit | | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 | |
| [ { OBX } ] | Observation/Result | 7 | |
| [ { DG1 } ] | Diagnosis Information | 6 | |

| ACK | General Acknowledgement | Chapter |
|---|---|---|
| MSH | Message Header | 2 |
| MSA | Message Acknowledgement | 2 |
| [ ERR ] | Error Information | 2 |

## xix. Patient arriving (event code A10)

The patient arrives at his new assigned location.

| ADT | ADT Message | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| EVN | Event Type | | 3 |
| PID | Patient Identification | 3 | |
| PV1 | Patient Visit | | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 | |
| [ { OBX } ] | Observation/Result | 7 | |
| [ { DG1 } ] | Diagnosis Information | 6 | |

| ACK | General Acknowledgement | Chapter |
|---|---|---|
| MSH | Message Header | 2 |
| MSA | Message Acknowledgement | 2 |
| [ ERR ] | Error Information | 2 |

## xxi.
## 3.2.11 Cancel admit (event code A11)

| ADT | ADT Message | | | Chapter |
|---|---|---|---|---|
| MSH | Message Header | | | 2 |
| EVN | Event Type | | | 3 |
| PID | Patient Identification | | 3 | |
| PV1 | Patient Visit | | | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 | | |
| [ { OBX } ] | Observation/Result | | 7 | |
| [ { DG1 } ] | Diagnosis Information | | 6 | |

| ACK | General Acknowledgement | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| MSA | Message Acknowledgement | 2 | |
| [ ERR ] | Error Information | 2 | |

## xxiii. Cancel transfer (event code A12)

New location must show the location of the patient prior to the transfer.

| ADT | ADT Message | | | Chapter |
|---|---|---|---|---|
| MSH | Message Header | | | 2 |
| EVN | Event Type | | | 3 |
| PID | Patient Identification | | 3 | |
| PV1 | Patient Visit | | | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 | | |
| [ { OBX } ] | Observation/Result | | 7 | |
| [ { DG1 } ] | Diagnosis Information | | 6 | |

| ACK | General Acknowledgement | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| MSA | Message Acknowledgement | 2 | |
| [ ERR ] | Error Information | 2 | |

**xxv.**

### **3.2.13** Cancel discharge (event code A13)

New location must show the location of the patient prior to the discharge.

| ADT | ADT Message | | | Chapter |
|---|---|---|---|---|
| MSH | Message Header | | | 2 |
| EVN | Event Type | | | 3 |
| PID | Patient Identification | | 3 | |
| [ { NK1 } ] | Next of Kin | | 3 | |
| PV1 | Patient Visit | | | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 | | |
| [ { OBX } ] | Observation/Result | | 7 | |
| [ { AL1 } ] | Allergy Information | | 3 | |
| [ { DG1 } ] | Diagnosis Information | | 6 | |
| [ { PR1 } ] | Procedures | | | 6 |
| [ { GT1 } ] | Guarantor Information | | 6 | |
| [ | | | | |
| { IN1 | Insurance Information | | | 6 |
| [ IN2 ] | Insurance Information - Addit. Info. | 6 | | |
| [ IN3 ] | Insurance Information - Cert. | | 6 | |
| } | | | | |
| ] | | | | |
| [ ACC ] | Accident Information | | | 6 |
| [ UB1 ] | Universal Bill Information | | 6 | |
| [ UB2 ] | Universal Bill 92 Information | | 6 | |

| ACK | General Acknowledgement | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| MSA | Message Acknowledgement | 2 | |
| [ ERR ] | Error Information | 2 | |

## xxvii. Pending admit (event code A14)

Reservation or when patient admission is to occur imminently. Similar to a pre-admit.

| ADT | ADT Message | | | Chapter |
|---|---|---|---|---|
| MSH | Message Header | | | 2 |
| EVN | Event Type | | | 3 |
| PID | Patient Identification | | 3 | |
| [ { NK1 } ] | Next of Kin | | 3 | |
| PV1 | Patient Visit | | | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 | | |
| [ { OBX } ] | Observation/Result | | 7 | |
| [ { AL1 } ] | Allergy Information | | 3 | |
| [ { DG1 } ] | Diagnosis Information | | 6 | |
| [ { PR1 } ] | Procedures | | | 6 |
| [ { GT1 } ] | Guarantor Information | | 6 | |
| [ | | | | |
| { IN1 | Insurance Information | | | 6 |
| [ IN2 ] | Insurance Information - Addit. Info. | 6 | | |
| [ IN3 ] | Insurance Information - Cert. | | 6 | |
| } | | | | |
| ] | | | | |
| [ ACC ] | Accident Information | | | 6 |
| [ UB1 ] | Universal Bill Information | | 6 | |
| [ UB2 ] | Universal Bill 92 Information | | 6 | |

| ACK | General Acknowledgement | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| MSA | Message Acknowledgement | 2 | |
| [ ERR ] | Error Information | 2 | |

## xxix. Pending transfer (event code A15)

| ADT | ADT Message | | | Chapter |
|---|---|---|---|---|
| MSH | Message Header | | | 2 |
| EVN | Event Type | | | 3 |
| PID | Patient Identification | | 3 | |
| PV1 | Patient Visit | | | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 | | |
| [ { OBX } ] | Observation/Result | | 7 | |
| [ { DG1 } ] | Diagnosis Information | | 6 | |

| ACK | General Acknowledgement | | Chapter |
|---|---|---|---|

| | | | |
|---|---|---|---|
| MSH | Message Header | | 2 |
| MSA | Message Acknowledgement | 2 | |
| [ ERR ] | Error Information | 2 | |

## xxxi. Pending discharge (event code A16)

| ADT | ADT Message | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| EVN | Event Type | | 3 |
| PID | Patient Identification | 3 | |
| PV1 | Patient Visit | | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 | |
| [ { OBX } ] | Observation/Result | 7 | |
| [ { DG1 } ] | Diagnosis Information | 6 | |

| ACK | General Acknowledgement | Chapter |
|---|---|---|
| MSH | Message Header | 2 |
| MSA | Message Acknowledgement | 2 |
| [ ERR ] | Error Information | 2 |

## xxxiii. Swap patients (event code A17)

Used when it is decided that two patients will exchange beds. The patient ID and visit data are repeated for the two patients being swapped. See Section 3.5.1 for a discussion of issues related to implementing this trigger event.

| ADT | ADT Message | | | Chapter |
|---|---|---|---|---|
| MSH | Message Header | | | 2 |
| EVN | Event Type | | | 3 |
| PID | Patient (1) Identification | | 3 | |
| PV1 | Patient (1) Visit | | 3 | |
| [ PV2 ] | Patient (1) Visit - Additional Info. | 3 | | |
| [ { OBX } ] | Observation/Result (1) | 7 | | |
| PID | Patient (2) Identification | | 3 | |
| PV1 | Patient (2) Visit | | 3 | |
| [ PV2 ] | Patient (2) Visit - Additional Info. | 3 | | |
| [ { OBX } ] | Observation/Result (2) | 7 | | |

| ACK | General Acknowledgement | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| MSA | Message Acknowledgement | 2 | |
| [ ERR ] | Error Information | 2 | |

## xxxv. Merge patient information (event code A18)

Used to merge current and previous patient identification numbers: patient ID - internal, patient ID - external, alternate patient ID and patient account number. This is required, for example, when a patient has previously been registered under a new patient identification number because of an error or because there was insufficient time to determine the actual patient identification number. The merge event occurs when the decision is made to combine the information under either the new or old identifier(s). It is recommended that events A34, A35 and A36 be utilized in place of the A18 event whenever possible. [Event A18 is being kept for backwards compatibility.]

The PID segment contains the surviving patient ID information. The MRG segment contains the non-surviving information.

This merge event is non-specific in that as a result of the merge several patient identifiers may or may not have changed. For sites requiring (or desiring) greater specificity with regard to this type of message, three new events (A34, A35, and A36) are available as alternatives. These events restrict the merge to patient ID - internal, or patient account number, or both respectively. See Section 3.5.2 for a discussion of issues related to implementing patient merge events.

| ADT | ADT Message | Chapter |
|---|---|---|
| MSH | Message Header | 2 |
| EVN | Event Type | 3 |

| | | | |
|---|---|---|---|
| PID | Patient Identification | 3 | |
| [ MRG ] | Merge Information | | 3 |
| PV1 | Patient Visit | | 3 |

| ACK | General Acknowledgement | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| MSA | Message Acknowledgement | 2 | |
| [ ERR ] | Error Information | 2 | |

## xxxvii. Patient query (event code A19)

The following triggering event is served by QRY (a query from another system) and ADR (a response from an ADT system.)

Another application determines a need for ADT data about a patient and sends a query to the ADT system. The Who Filter in the QRD can identify the patient or account number upon which the query is defined and can contain a Format Code of R (record oriented). If the query is based on Patient ID and there are data associated with multiple accounts, it is an implementation issue as to which account data should be returned. The ADT Event Type Segment, if included in the response, describes the last event for which the ADT system initiated an unsolicited update.

| QRY | Query | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| QRD | Query Definition | 2 | |
| [ QRF ] | Query Filter | | 2 |

| ADR | ADT Response | Chapter |
|---|---|---|
| MSH | Message Header | 2 |
| MSA | Message Acknowledgement | 2 |
| [ERR] | Error | 2 |
| QRD | Query Definition | 2 |
| { | | |
| [ EVN ] | Event Type | 3 |
| PID | Patient Identification | 3 |
| [ {NK1} ] | Next of Kin | 3 |
| PV1 | Patient Visit | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 |
| [ {OBX} ] | Observation/Result | 7 |
| [ {AL1} ] | Allergy Information | 3 |
| [ {DG1} ] | Diagnosis Information | 6 |
| [ {PR1} ] | Procedures | 6 |
| [ {GT1} ] | Guarantor Information | 6 |
| [ | | |
| { | | |
| IN1 | Insurance Information | 6 |
| [ IN2 ] | Insurance Information - Addit. Info. | 6 |
| [ IN3 ] | Insurance Information - Cert. | 6 |
| } | | |
| ] | | |
| [ ACC ] | Accident Information | 6 |
| [ UB1 ] | Universal Bill Information | 6 |
| [ UB2 ] | Universal Bill Information | 6 |
| } | | |
| [ DSC ] | Continuation Pointer | 2 |

(1) A19 usage notes

In addition to single patient responses, the ADT record oriented query/response needs to support responses containing multiple patients for the following query types (by subject filter): return census for a nursing unit (ANU); return patients matching a name search (APN); and return patients for a given physician (APP).

For multiple patient responses, additional values for *URD-3-R/U who subject defintion* may be used, such as:

IPInpatient
OPOutpatient
DCDischarged

For the ANU subject filter, the ADT systems response must have some method of conveying the fact that some beds are empty (as well as returning the data for all patients in the occupied beds). This will be done as follows:

a)Bed Full

Regular { [EVN], PID, PV1 } segment group for each patient with *PV1-40-bed status* value of 'O' occupied.

b)Bed Empty

For this case, all fields in the corresponding EVN, PID, and PV1 segments are null except for the following fields in the PV1 segment.

**PV1-3-assigned patient location* contains the new bed location information

**PV1-40-bed status* contains one of the following values: U (unoccupied), H (housekeeping), or C (closed).

## xxxix. Bed status update (event code A20)

Certain nursing/census applications need to be able to update the ADT system's bed status. The following is the associated record layout.

| ADT | ADT Message | Chapter |
|---|---|---|
| MSH | Message Header | 2 |
| EVN | Event Type | 3 |
| NPU | Non-patient Update | 3 |

| ACK | General Acknowledgement | Chapter |
|---|---|---|
| MSH | Message Header | 2 |
| MSA | Message Acknowledgement | 2 |
| [ ERR ] | Error Information | 2 |

## xli. Patient goes on a "leave of absence" (event code A21)

| ADT | ADT Message | Chapter |
|---|---|---|
| MSH | Message Header | 2 |
| EVN | Event Type | 3 |
| PID | Patient Identification | 3 |
| PV1 | Patient Visit | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 |
| [ { OBX } ] | Observation/Result | 7 |

| ACK | General Acknowledgement | Chapter |
|---|---|---|
| MSH | Message Header | 2 |
| MSA | Message Acknowledgement | 2 |
| [ ERR ] | Error Information | 2 |

## xliii. Patient returns from a "leave of absence" (event code A22)

| ADT | ADT Message | | | Chapter |
|---|---|---|---|---|
| MSH | Message Header | | | 2 |
| EVN | Event Type | | | 3 |
| PID | Patient Identification | | 3 | |
| PV1 | Patient Visit | | | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 | | |
| [ { OBX } ] | Observation/Result | | 7 | |

| ACK | General Acknowledgement | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| MSA | Message Acknowledgement | 2 | |
| [ ERR ] | Error Information | 2 | |

## xlv. Delete a patient record (event code A23)

Delete visit specific information.

| ADT | ADT Message | | | Chapter |
|---|---|---|---|---|
| MSH | Message Header | | | 2 |
| EVN | Event Type | | | 3 |
| PID | Patient Identification | | 3 | |
| PV1 | Patient Visit | | | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 | | |
| [ { OBX } ] | Observation/Result | | 7 | |

| ACK | General Acknowledgement | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| MSA | Message Acknowledgement | 2 | |
| [ ERR ] | Error Information | 2 | |

## xlvii. Link patient information (event code A24)

Where the first PID segment needs to be linked to the second PID segment. See Section 3.5.3 for a discussion of issues related to implementing patient link messages.

| ADT | ADT Message | | | Chapter |
|---|---|---|---|---|
| MSH | Message Header | | | 2 |
| EVN | Event Type | | | 3 |
| PID | Patient (1) Identification | | 3 | |
| [ PV1 ] | Patient (1) Visit | | 3 | |
| PID | Patient (2) Identification | | 3 | |

| | | |
|---|---|---|
| [ PV1 ] | Patient (2) Visit | 3 |

| ACK | General Acknowledgement | Chapter |
|---|---|---|
| MSH | Message Header | 2 |
| MSA | Message Acknowledgement | 2 |
| [ ERR ] | Error Information | 2 |

## xlix. Cancel pending discharge (event code A25)

| ADT | ADT Message | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| EVN | Event Type | | 3 |
| PID | Patient Identification | 3 | |
| PV1 | Patient Visit | | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 | |
| [ { OBX } ] | Observation/Result | 7 | |

| ACK | General Acknowledgement | Chapter |
|---|---|---|
| MSH | Message Header | 2 |
| MSA | Message Acknowledgement | 2 |
| [ ERR ] | Error Information | 2 |

## li. Cancel pending transfer (event code A26)

| ADT | ADT Message | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| EVN | Event Type | | 3 |
| PID | Patient Identification | 3 | |
| PV1 | Patient Visit | | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 | |
| [ { OBX } ] | Observation/Result | 7 | |

| ACK | General Acknowledgement | Chapter |
|---|---|---|
| MSH | Message Header | 2 |
| MSA | Message Acknowledgement | 2 |
| [ ERR ] | Error Information | 2 |

## liii. Cancel pending admit (event code A27)

| ADT | ADT Message | Chapter |
|---|---|---|
| MSH | Message Header | 2 |
| EVN | Event Type | 3 |
| PID | Patient Identification | 3 |
| PV1 | Patient Visit | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 |
| [ { OBX } ] | Observation/Result | 7 |

| ACK | General Acknowledgement | Chapter |
|---|---|---|
| MSH | Message Header | 2 |
| MSA | Message Acknowledgement | 2 |
| [ ERR ] | Error Information | 2 |

## Iv. Add person information (event code A28)

The purpose of this message and the three following messages is to allow sites with multiple systems and respective master data bases to communicate activity related to a person between systems. Each system has an interest in the data base activity of the others in order to maintain data integrity across an institution. While defined within the ADT message set, these messages differ in that they are not patient specific.

For example, a site with separate inpatient, outpatient and medical record systems may require that each system maintain concurrent person information. Prior to an admit, in the inpatient system the new patient is added to the master data base of the system resulting in the broadcast of a message. The outpatient system receives the message and adds the person to its data base with the possibility that the person may some day become a patient in its system. The medical record system receives the message and adds the person to its data base with the possibility that it will track inpatient, outpatient or clinical data for the person.

In addition to adding a person to a data base, the delete, update and merge messages work in a similar manner to maintain concurrent person information.

| ADT | ADT Message | | | Chapter |
|---|---|---|---|---|
| MSH | Message Header | | | 2 |
| EVN | Event Type | | | 3 |
| PID | Patient Identification | | 3 | |
| [ { NK1 } ] | Next of Kin | | 3 | |
| PV1 | Patient Visit | | | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 | | |
| [ { OBX } ] | Observation/Result | | 7 | |
| [ { AL1 } ] | Allergy Information | | 3 | |
| [ { DG1 } ] | Diagnosis Information | | 6 | |
| [ { PR1 } ] | Procedures | | | 6 |
| [ { GT1 } ] | Guarantor Information | | 6 | |
| [ | | | | |
| { IN1 | Insurance Information | | | 6 |
| [ IN2 ] | Insurance Information - Addit. Info. | 6 | | |
| [ IN3 ] | Insurance Information - Cert. | | 6 | |
| } | | | | |
| ] | | | | |
| [ ACC ] | Accident Information | | | 6 |
| [ UB1 ] | Universal Bill Information | | 6 | |
| [ UB2 ] | Universal Bill 92 Information | | 6 | |

| ACK | General Acknowledgement | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| MSA | Message Acknowledgement | 2 | |
| [ ERR ] | Error Information | 2 | |

## lvii. Delete person information (event code A29)

Delete all demographic information related to this person.

| ADT | ADT Message | | | Chapter |
|---|---|---|---|---|
| MSH | Message Header | | | 2 |
| EVN | Event Type | | | 3 |
| PID | Patient Identification | | 3 | |
| PV1 | Patient Visit | | | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 | | |
| [ { OBX } ] | Observation/Result | | 7 | |

| ACK | General Acknowledgement | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| MSA | Message Acknowledgement | 2 | |
| [ ERR ] | Error Information | 2 | |

## lix. Merge person information (event code A30)

| ADT | ADT Message | | | Chapter |
|---|---|---|---|---|
| MSH | Message Header | | | 2 |
| EVN | Event Type | | | 3 |
| PID | Patient Identification | | 3 | |
| MRG | Merge Information | | | 3 |

| ACK | General Acknowledgement | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| MSA | Message Acknowledgement | 2 | |
| [ ERR ] | Error Information | 2 | |

## lxi. Update person information (event code A31)

| ADT | ADT Message | Chapter |
|---|---|---|
| MSH | Message Header | 2 |
| EVN | Event Type | 3 |
| PID | Patient Identification | 3 |
| [ { NK1 } ] | Next of Kin | 3 |
| PV1 | Patient Visit | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 |
| [ { OBX } ] | Observation/Result | 7 |
| [ { AL1 } ] | Allergy Information | 3 |
| [ { DG1 } ] | Diagnosis Information | 6 |
| [ { PR1 } ] | Procedures | 6 |
| [ { GT1 } ] | Guarantor Information | 6 |
| [ | | |
| { IN1 | Insurance Information | 6 |
| [ IN2 ] | Insurance Information - Addit. Info. | 6 |
| [ IN3 ] | Insurance Information - Cert. | 6 |
| } | | |
| ] | | |
| [ ACC ] | Accident Information | 6 |
| [ UB1 ] | Universal Bill Information | 6 |
| [ UB2 ] | Universal Bill 92 Information | 6 |

| ACK | General Acknowledgement | Chapter |
|---|---|---|
| MSH | Message Header | 2 |
| MSA | Message Acknowledgement | 2 |
| [ ERR ] | Error Information | 2 |

## lxiii. Cancel patient arriving (event code A32)

| ADT | ADT Message | Chapter |
|---|---|---|
| MSH | Message Header | 2 |
| EVN | Event Type | 3 |
| PID | Patient Identification | 3 |
| PV1 | Patient Visit | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 |
| [ { OBX } ] | Observation/Result | 7 |

| ACK | General Acknowledgement | Chapter |
|---|---|---|
| MSH | Message Header | 2 |
| MSA | Message Acknowledgement | 2 |
| [ ERR ] | Error Information | 2 |

## lxv. Cancel patient departing (event code A33)

| ADT | ADT Message | | | Chapter |
|---|---|---|---|---|
| MSH | Message Header | | | 2 |
| EVN | Event Type | | | 3 |
| PID | Patient Identification | | 3 | |
| PV1 | Patient Visit | | | 3 |
| [ PV2 ] | Patient Visit - Additional Info. | 3 | | |
| [ { OBX } ] | Observation/Result | | 7 | |

| ACK | General Acknowledgement | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| MSA | Message Acknowledgement | 2 | |
| [ ERR ] | Error Information | 2 | |

## lxvii. Merge patient information - patient ID only (event code A34)

Only Patient Identification - Internal has changed as a result of the merge. See Section 3.5.2 for a discussion of issues related to implementing merge messages.

| ADT | ADT Message | | | Chapter |
|---|---|---|---|---|
| MSH | Message Header | | | 2 |
| EVN | Event Type | | | 3 |
| PID | Patient Identification | | 3 | |
| MRG | Merge Information | | | 3 |

| ACK | General Acknowledgement | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| MSA | Message Acknowledgement | 2 | |
| [ ERR ] | Error Information | 2 | |

## lxix. Merge patient information - account number only (event code A35)

Only Patient Account Number has changed as a result of the merge. See Section 3.5.2 for a discussion of issues related to implementing merge messages.

| ADT | ADT Message | Chapter |
|---|---|---|
| MSH | Message Header | 2 |

| | | | |
|---|---|---|---|
| EVN | Event Type | | 3 |
| PID | Patient Identification | 3 | |
| MRG | Merge Information | | 3 |

| ACK | General Acknowledgement | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| MSA | Message Acknowledgement | | 2 |
| [ ERR ] | Error Information | | 2 |

## lxxi.Merge patient information - patient ID & account number (event code A36)

Both Patient Identification - Internal and Patient Account Number have changed as a result of the merge. See Section 3.5.2 for a discussion of issues related to implementing merge messages.

| ADT | ADT Message | | Chapter |
|---|---|---|---|
| MSH | Hessage Header | | 2 |
| EVN | Event Type | | 3 |
| PID | Patient Identification | 3 | |
| MRG | Merge Information | | 3 |

| ACK | General Acknowledgement | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| MSA | Message Acknowledgement | | 2 |
| [ ERR ] | Error Information | | 2 |

### lxxiii. Un-link patient information (event code A37)

Unlinks two PID segments previously linked via an A24.

| ADT | ADT Message | | | Chapter |
|---|---|---|---|---|
| MSH | Message Header | | | 2 |
| EVN | Event Type | | | 3 |
| PID | Patient (1) Identification | 3 | | |
| [ PV1 ] | Patient (1) Visit | | 3 | |
| PID | Patient (2) Identification | 3 | | |
| [ PV1 ] | Patient (2) Visit | 3 | | |

| ACK | General Acknowledgement | | Chapter |
|---|---|---|---|
| MSH | Message Header | | 2 |
| MSA | Message Acknowledgement | 2 | |
| [ ERR ] | Error Information | 2 | |

# e. MESSAGE SEGMENTS

## i. EVN - Event type

The EVN segment is used to communicate necessary trigger event information to receiving applications. Valid event types for all chapters are contained in *table 0003 - event type code*.

Figure 3-1 EVN attributes

| SEQ | LEN | DT | R/O | RP/# | TBL# | ITEM# | ELEMENT NAME |
|---|---|---|---|---|---|---|---|
| 1 | 3 | ID | R | | 0003 | 00099 | Event Type Code |
| 2 | 26 | TS | R | | | 00100 | Date/Time of Event |
| 3 | 26 | TS | | | | 00101 | Date/Time Planned Event |
| 4 | 3 | ID | | | 0062 | 00102 | Event Reason Code |
| 5 | 5 | ID | | | 0188 | 00103 | Operator ID |

3.3.1.0 EVN field definitions

(1) Event type code (ID) 00099

Definition: codes correspond to the trigger events described in this section. e.g., admission, transfer, registration. This field is left in for backwards compatibility. It is recommended to use the second component (trigger event) of *MSH-9-message type* to transmit event type code information.

Table 0003 Event type code

| Value | Description |
|---|---|
| A01 | Admit a patient |
| A02 | Transfer a patient |
| A03 | Discharge a patient |
| A04 | Register a patient |
| A05 | Preadmit a patient |
| A06 | Transfer an outpatient to inpatient |
| A07 | Transfer an inpatient to outpatient |
| A08 | Update patient information |
| A09 | Patient departing |
| A10 | Patient arriving |
| A11 | Cancel admit |
| A12 | Cancel transfer |
| A13 | Cancel discharge |
| A14 | Pending admit |
| A15 | Pending transfer |
| A16 | Pending discharge |
| A17 | Swap patients |
| A18 | Merge patient information |
| A19 | Patient query |
| A20 | Nursing/Census application updates |
| A21 | Leave of absence - out (leaving) |
| A22 | Leave of absence - in (returning) |
| A23 | Delete a patient record |
| A24 | Link patient information |
| A25 | Cancel pending discharge |
| A26 | Cancel pending transfer |
| A27 | Cancel pending admit |
| A28 | Add person information |
| A29 | Delete person information |
| A30 | Merge person information |
| A31 | Update person information |
| A32 | Cancel patient arriving |
| A33 | Cancel patient departing |
| A34 | Merge patient information - patient ID only |
| A35 | Merge patient information - account number only |
| A36 | Merge patient information - patient ID and account number |
| A37 | Unlink patient information |
| M01 | Master file not otherwise specified (for backwards compatibility only) |
| M02 | Master file - Staff Practioner |
| M03 | Master file - Test/Observation |
| O01 | Order message |
| O02 | Order response |
| P01 | Add and update patient account |
| P02 | Purge patient account |
| P03 | Post detail financial transaction |
| P04 | Generate bill and A/R statements |

| | |
|---|---|
| Q01 | Immediate access |
| Q02 | Deferred access |
| Q05 | Unsolicited display update |
| R01 | Unsolicited transmission of requested observation |
| R02 | Query for results of observation |
| R03 | Display-oriented results, query/unsol. update |
| R04 | Response to query; transmission of requested observation |

(2) Date/time of event (TS) 00100

Definition: most systems will default to the system date/time when the transaction was entered, but should also permit an override.

(3) Date/time planned event (TS) 00101

Definition: date/time the event is planned. Recommend that the PV2 expected admit date and expected discharge date be used whenever possible.

(4) Event reason code (ID) 00102

Definition: describes the reason for this event (e.g., patient request, physician order, census management, etc.). Refer to *user-defined table 0062 - event reason* for valid codes.

User-defined Table 0062 Event reason

| Value | Description |
|---|---|
| 01 | Patient request |
| 02 | Physician order |
| 03 | Census management |

(5) Operator ID (ID) 00103

Definition: identifies the individual responsible for triggering the event. Refer to user-defined *table 0188 - operator ID* for suggested values.

## iii. PID - Patient Identification

The PID segment is used by all applications as the primary means of communicating patient identification information. This segment contains permanent patient identifying, and demographic information that, for the most part, is not likely to change frequently.

Figure 3-2 PID attributes

| SEQ | LEN | DT | R/O | RP/# | TBL# | ITEM# | ELEMENT NAME |
|---|---|---|---|---|---|---|---|
| 1 | 4 | SI | | | | 00104 | Set ID - Patient ID |
| 2 | 16 | CK | | | | 00105 | Patient ID (External ID) |
| 3 | 20 | CM | R | Y | | 00106 | Patient ID (Internal ID) |
| 4 | 12 | ST | | | | 00107 | Alternate Patient ID |
| 5 | 48 | PN | R | | | 00108 | Patient Name |
| 6 | 30 | ST | | | | 00109 | Mother's Maiden Name |
| 7 | 26 | TS | | | | 00110 | Date of Birth |
| 8 | 1 | ID | | | 0001 | 00111 | Sex |
| 9 | 48 | PN | | Y | | 00112 | Patient Alias |
| 10 | 1 | ID | | | 0005 | 00113 | Race |
| 11 | 106 | AD | | Y/3 | | 00114 | Patient Address |
| 12 | 4 | ID | | | | 00115 | County Code |
| 13 | 40 | TN | | Y/3 | | 00116 | Phone Number - Home |
| 14 | 40 | TN | | Y/3 | | 00117 | Phone Number - Business |
| 15 | 25 | ST | | | | 00118 | Language - Patient |
| 16 | 1 | ID | | | 0002 | 00119 | Marital Status |
| 17 | 3 | ID | | | 0006 | 00120 | Religion |
| 18 | 20 | CK | | | | 00121 | Patient Account Number |
| 19 | 16 | ST | | | | 00122 | SSN Number - Patient |
| 20 | 25 | CM | | | | 00123 | Driver's Lic Num - Patient |
| 21 | 20 | CK | | | | 00124 | Mother's Identifier |
| 22 | 1 | ID | | | 0189 | 00125 | Ethnic Group |
| 23 | 25 | ST | | | | 00126 | Birth Place |
| 24 | 2 | ID | | | | 00127 | Multiple Birth Indicator |
| 25 | 2 | NM | | | | 00128 | Birth Order |
| 26 | 3 | ID | | Y | 0171 | 00129 | Citizenship |
| 27 | 60 | CE | | | 0172 | 00130 | Veterans Military Status |

### 3.3.2.0 PID field definitions

#### (1) Set ID - patient ID (SI) 00104

Definition: for those messages that permit segments to repeat, the Set ID field is used to identify the repetitions. For example, the swap and query transactions allow for multiple PID segments would have Set ID values of 1, 2, then 3, etc.

#### (2) Patient ID (external ID) (CK) 00105

Components: <patient ID (ST)> ^ <check digit (NM)> ^ <check digit scheme (ID)> ^ <assigning facility ID (ST)>

Definition: if the patient is from another institution, outside office, etc., the identifier used by that institution can be shown here. This may be a number which multiple disparate corporations or facilities share. Refer to *table 0061 - check digit scheme* in Chapter 2.

(3) Patient ID (internal ID) (CM) 00106

Components: <patient ID (NM)> ^ <check digit (NM)> ^ < check digit scheme (ID)> ^ <assigning facility ID (ST)> ^ <type (ID)>

Definition: primary ID used by the facility to uniquely identify a patient at the time of admit, (e.g., medical record number, billing number, etc). Refer to *table 0061-check digit scheme*.

(4) Alternate patient ID (ST) 00107

Definition: third number may be required to identify a patient. Possible contents include a visit number, a visit date, or Social Security Number.

(5) Patient name (PN) 00108

Components: <family name> ^ <given name> ^ <middle initial or name> ^ <suffix (e.g., JR or III)> ^ <prefix (e.g., DR)> ^ <degree (e.g., MD)>

Definition: name is standard format described in Chapter 2.

(6) Mother's maiden name (ST) 00109

Definition: family name under which the mother was born (i.e., before marriage.) Used to disambiguate patients with the same last name.

(7) Date of birth (TS) 00110

Definition: patient's date of birth.

(8) Sex (ID) 00111

Definition: patient's sex. Refer to *table 0001 - sex* for valid codes.

Table 0001 Sex

| Value | Description |
|---|---|
| F | Female |
| M | Male |
| O | Other |
| U | Unknown |

(9) Patient alias (PN) 00112

Components: <family name> ^ <given name> ^ <middle initial or name> ^ <suffix (e.g., JR or III)> ^ <prefix (e.g., DR)> ^ <degree (e.g., MD)>

Definition: name(s) by which the patient has been known at some time.

(10) Race (ID) 00113

Definition: ERISA also has a published list of ethnic classifications which may be used by local agreement at a site. Refer to *user-defined table 0005 - race*.

(11) Patient address (AD) 00114

Components: <street address> ^ < other designation> ^ <city> ^ <state or province> ^ <zip or postal code> ^ <country> ^ <type> ^ <other geographic designation>

Definition: mailing address of the patient.

(12) County code (ID) 00115

Definition: patient's county code. This field was left in for backwards compatibility. County can now be supported in the other geographic designation component of the AD data type.

(13) Phone number - home (TN) 00116

Definition: up to three repetitions are permitted. The first is considered the primary number.

(14) Phone number - business (TN) 00117

Definition: up to three repetitions are permitted. The first is considered the primary one.

(15) Language - patient (ST) 00118

Definition: the patient's primary language.

(16) Marital status (ID) 00119

Definition: patient's marital status. Refer to *user-defined table 0002 - marital status* for suggested entries.

User-defined Table 0002 Marital status

| Value | Description |
|---|---|
| A | Separated |
| D | Divorced |
| M | Married |
| S | Single |
| W | Widowed |

(17) Religion (ID) 00120

Definition: patient's religion. Refer to *user-defined table 0006 - religion*.

(18) Patient account number (CK) 00121

Components: <patient ID (ST)> ^ <check digit (NM)> ^ <check digit scheme (ID)> ^ <assigning facility ID (ST)>

Definition: number assigned by accounting to which all charges, payments, etc. are recorded. It is used to identify the patient's account. Refer to *table 0061 - check digit scheme* in Chapter 2.

(19) SSN number - patient (ST) 00122

Definition: patient's social security number. This number may also be an RR retirement number.

(20) Driver's lic num - patient (CM) 00123

Components: <license number> ^ <issuing state, province, country>

Definition: patient's drivers license number. Some sites may use this as a unique number that identifies the patient. Default of the second component is the state in which the patient is being registered.

(21) Mother's identifier (CK) 00124

Components: <patient ID (ST)> ^ <check digit (NM)> ^ <check digit scheme (ID)> ^ <assigning facility ID (ST)>

Definition: used as a link field for newborns, for example. Typically a patient ID or account number may be used. Refer to HL7 *table 0061 - check digit scheme* as defined in Chapter 2.

(22) Ethnic group (ID) 00125

Definition: further defines patient ancestry. Refer to user-defined *table 0189 - ethnic group* for suggested values.

(23) Birth place (ST) 00126

Definition: indicates the location of the patient's birth.

(24) Multiple birth indicator (ID) 00127

Definition: indicates if the patient was part of a multiple birth. Refer to HL7 *table 0136 - Y/N indicator* as described in Chapter 2.

(25) Birth order (NM) 00128

Definition: if a patient was part of a multiple birth, a value (number) indicating the patient's birth order.

(26) Citizenship (ID) 00129

Definition: indicates the patient's country of citizenship. Refer to *user-defined table 0171 - country code* for suggested values or to ISO 3166.

(27) Veterans military status (CE) 00130

Components: <identifier> ^ <text> ^ <name of coding system>^
<alternate identifier> ^ <alternate text> ^ <name of alternate coding system>

Definition: indicates the military status assigned to a veteran. Refer to *user-defined table 0172 - veterans military status* for suggested codes.

(28) Usage notes: PID patient identification

The assigning facility ID, the fourth component of the patient identifiers, is a string of up to six characters which is uniquely associated with the facility that originally assigned the number. A given institution or group of intercommunicating institutions should establish a list of facilities that may be potential assigners of patient identification (and other important identification) numbers. The list will be one of the institution's master dictionary lists. Since third parties (other than the assigners of patient identification numbers) may send or receive HL7 messages containing patient identification numbers, the assigning facility ID in the patient identification numbers may not be the same as the sending and receiving systems identified in the MSH. The assigning facility ID must be unique across applications at a given site. This field is required in HL7 implementations that have more than a single ADT/REG application assigning such numbers.

## v. PV1 - Patient visit

The PV1 segment is used by Registration/ADT applications to communicate information on a visit specific basis. This segment can be used to send multiple visit statistic records to the same patient account, or single visit records to more than one account. Individual sites must determine this segment's use.

Figure 3-3 PV1 attributes

| SEQ | LEN | DT | R/O | RP/# | TBL# | ITEM# | ELEMENT NAME |
|---|---|---|---|---|---|---|---|
| 1 | 4 | SI | | | | 00131 | Set ID - Patient Visit |
| 2 | 1 | ID | R | | 0004 | 00132 | Patient Class |
| 3 | 12 | CM | | | | 00133 | Assigned Patient Location |
| 4 | 2 | ID | | | 0007 | 00134 | Admission Type |
| 5 | 20 | ST | | | | 00135 | Preadmit Number |
| 6 | 12 | CM | | | | 00136 | Prior Patient Location |
| 7 | 60 | CN | | | 0010 | 00137 | Attending Doctor |
| 8 | 60 | CN | | | 0010 | 00138 | Referring Doctor |
| 9 | 60 | CN | | Y | 0010 | 00139 | Consulting Doctor |
| 10 | 3 | ID | | | 0069 | 00140 | Hospital Service |
| 11 | 12 | CM | | | | 00141 | Temporary Location |
| 12 | 2 | ID | | | 0087 | 00142 | Preadmit Test Indicator |
| 13 | 2 | ID | | | 0092 | 00143 | Readmission Indicator |
| 14 | 3 | ID | | | 0023 | 00144 | Admit Source |
| 15 | 2 | ID | | Y | 0009 | 00145 | Ambulatory Status |
| 16 | 2 | ID | | | 0099 | 00146 | VIP Indicator |
| 17 | 60 | CN | | | 0010 | 00147 | Admitting Doctor |
| 18 | 2 | ID | | | 0018 | 00148 | Patient Type |
| 19 | 15 | NM | | | | 00149 | Visit Number |
| 20 | 50 | CM | | Y/4 | 0064 | 00150 | Financial Class |
| 21 | 2 | ID | | | 0032 | 00151 | Charge Price Indicator |
| 22 | 2 | ID | | | 0045 | 00152 | Courtesy Code |
| 23 | 2 | ID | | | 0046 | 00153 | Credit Rating |
| 24 | 2 | ID | | Y | 0044 | 00154 | Contract Code |
| 25 | 8 | DT | | Y | | 00155 | Contract Effective Date |
| 26 | 12 | NM | | Y | | 00156 | Contract Amount |
| 27 | 3 | NM | | Y | | 00157 | Contract Period |
| 28 | 2 | ID | | | 0073 | 00158 | Interest Code |
| 29 | 1 | ID | | | 0110 | 00159 | Transfer to Bad Debt Code |
| 30 | 8 | DT | | | | 00160 | Transfer to Bad Debt Date |
| 31 | 10 | ID | | | 0021 | 00161 | Bad Debt Agency Code |
| 32 | 12 | NM | | | | 00162 | Bad Debt Transfer Amount |
| 33 | 12 | NM | | | | 00163 | Bad Debt Recovery Amount |
| 34 | 1 | ID | | | 0111 | 00164 | Delete Account Indicator |
| 35 | 8 | DT | | | | 00165 | Delete Account Date |
| 36 | 3 | ID | | | 0112 | 00166 | Discharge Disposition |
| 37 | 25 | CM | | | 0113 | 00167 | Discharged to Location |
| 38 | 2 | ID | | | 0114 | 00168 | Diet Type |
| 39 | 2 | ID | | | 0115 | 00169 | Servicing Facility |
| 40 | 1 | ID | | | 0116 | 00170 | Bed Status |
| 41 | 2 | ID | | | 0117 | 00171 | Account Status |
| 42 | 12 | CM | | | | 00172 | Pending Location |
| 43 | 12 | CM | | | | 00173 | Prior Temporary Location |
| 44 | 26 | TS | | | | 00174 | Admit Date/Time |
| 45 | 26 | TS | | | | 00175 | Discharge Date/Time |
| 46 | 12 | NM | | | | 00176 | Current Patient Balance |
| 47 | 12 | NM | | | | 00177 | Total Charges |

| SEQ | LEN | DT | R/O | RP/# | TBL# | ITEM# | ELEMENT NAME |
|---|---|---|---|---|---|---|---|
| 48 | 12 | NM | | | | 00178 | Total Adjustments |
| 49 | 12 | NM | | | | 00179 | Total Payments |
| 50 | 20 | CM | | | | 00180 | Alternate Visit ID |

### 3.3.3.0 PV1 field definitions

#### (1) Set ID - patient visit (SI) 00131

Definition: number that uniquely identifies this transaction for the purpose of adding, changing, or deleting the transaction. For those messages that permit segments to repeat, the Set ID field is used to identify the repetitions. For example, the swap and query transactions allow for multiple PID segments would have Set ID values of 1, 2, then 3, etc.

#### (2) Patient class (ID) 00132

Definition: a common field used by systems to categorize patients by site. It does not have a consistent industry-wide definition. Subject to site-specific variations. Refer to *user-defined table 0004 - patient class* for suggested codes.

User-defined Table 0004 Patient class

| Value | Description |
|---|---|
| E | Emergency |
| I | Inpatient |
| O | Outpatient |
| P | Preadmit |
| R | Recurring Patient |
| B | Obstetrics |

(3) Assigned patient location (CM) 00133

Components: <nurse unit> ^ <room> ^ <bed> ^ < facility ID> ^ <bed status>

Definition: New location is the patient's initial assigned location, or the location to which he is being moved. For canceling a transaction or discharging a patient, the current room number should be in this field. If a value exists in the fifth component (bed status) it supercedes the value in 3.3.3.40.

(4) Admission type (ID) 00134

Definition: indicates the circumstance under which the patient was or will be admitted.

User-defined Table 0007 Admission type

| Value | Description |
|---|---|
| A | Accident |
| E | Emergency |
| L | Labor and Delivery |
| R | Routine |

(5) Pre-admit number (ST) 00135

Definition: uniquely identifies the patient's pre-admit account. Some systems will continue to use the pre-admit number as the billing number after the patient has been admitted. In the future, this field should be a CK data type -- like the account number.

(6) Prior patient location (CM) 00136

Components: <nurse unit> ^ <room> ^ <bed> ^ <facility ID> ^ <bed status>

Definition: old location is null if the patient is new. It contains the prior patient location if the patient is being transferred. If a value exists in the fifth component (bed status) it supercedes the value in 3.3.3.40.

(7) Attending doctor (CN) 00137

Components: <physician ID> ^ <family name> ^ <given name> ^ <middle initial or name> ^ <suffix (e.g., JR or III)> ^ <prefix (e.g., DR)> ^ <degree (e.g., MD)> ^ <source table ID>

Definition: Depending on local agreements, either ID or the name may be absent. Refer to *user-defined table 0010 - physician ID*.

(8) Referring doctor (CN) 00138

Components: <physician ID> ^ <family name> ^ <given name> ^ <middle initial or name> ^ <suffix (e.g., JR or III)> ^ <prefix (e.g., DR)> ^ <degree (e.g., MD)> ^ <source table ID>

Definition: depending on local agreements, either ID or the name may be absent. Refer to *user-defined table 0010 - physician ID*.

(9) Consulting doctor (CN) 00139

Components: <physician ID> ^ <family name> ^ <given name> ^ <middle initial or name> ^ <suffix (e.g., JR or III)> ^ <prefix (e.g., DR)> ^ <degree (e.g., MD)> ^ <source table ID>

Definition: depending on local agreements, either ID or the name may be absent. Refer to *user-defined table 0010 - physician ID*.

(10) Hospital service (ID) 00140

Definition: The treatment or type of surgery the patient is scheduled to receive. Required field with trigger events A01, A02, A14, A15. Refer to *user-defined table 0069 - hospital service*.

(11) Temporary location (CM) 00141

Components: <nurse unit> ^ <room> ^ <bed> ^ <facility ID> ^ <bed status>

Definition: location other than the assigned location required for a temporary period of time (e.g., OR). If a value exists in the fifth component (bed status) it supercedes the value in 3.3.3.40.

(12) Pre-admit test indicator (ID) 00142

Definition: indicates that the patient must have pre-admission testing done in order to be admitted. Refer to *user-defined table 0087 - pre-admit test indicator* for suggested codes.

(13) Re-admission indicator (ID) 00143

Definition: indicates that a patient is being re-admitted to the facility and the circumstances. **R** for readmission or else null. Also recurring patient visits can be indicated. Refer to *user-defined table 0092 - re-admission indicator*.

(14) Admit source (ID) 00144

Definition: indicates where the patient was admitted. Refer to *user-defined table 0023 - admit source* for suggested codes.

(15) Ambulatory status (ID) 00145

Definition: refer to *user-defined table 0009 - ambulatory status* for suggested entries.

User-defined Table 0009 Ambulatory status

| Value | Description |
|---|---|
| A0 | No functional limitations |
| A1 | Ambulates with assistive device |
| A2 | Wheelchair/stretcher bound |
| A3 | Comatose; non-responsive |
| A4 | Disoriented |
| A5 | Vision impaired |
| A6 | Hearing impaired |
| A7 | Speech impaired |
| A8 | Nonenglish speaking |
| A9 | Functional level unknown |
| B1 | Oxygen Therapy |
| B2 | Special equipment (tubes, IVs, catheters) |
| B3 | Amputee |
| B4 | Mastectomy |
| B5 | Paraplegic |
| B6 | Pregnant |

(16) VIP indicator (ID) 00146

Definition: user-defined code to identify the type of VIP. Refer to *user-defined table 0099 - VIP indicator*.

(17) Admitting doctor (CN) 00147

Components: <doctor ID> ^ <family name> ^ <given name> ^ <middle initial or name> ^ <suffix (e.g., JR or III)> ^ <prefix (e.g., DR)> ^ <degree (e.g., MD)> ^ <source table ID>

Definition: by local agreement name or ID may not be present. Refer to *user-defined table 0010 - physician ID*.

(18) Patient type (ID) 00148

Definition: site-specific values. Refer *user-defined table 0018 - patient type*.

(19) Visit number (NM) 00149

Definition: unique number assigned to each patient visit. This is left as NM data type for backwards compatibility but HL7 recommends new implementations use CK data type.

(20) Financial class (CM) 00150

Components: <financial class (ID)> ^ <effective date (TS)>

Definition: primary financial class assigned to the patient for the purpose of identifying sources of reimbursement. Repeats up to 4 times. Refer to *user-defined table 0064 - financial class* for suggested codes.

(21) Charge price indicator (ID) 00151

Definition: code used to determine which price schedule is to be used for room and bed charges. Refer to *user-defined table 0032 - charge/price indicator*.

(22) Courtesy code (ID) 00152

Definition: code that indicates whether the patient will be extended certain special courtesies. Refer to *user-defined table 0045 - courtesy code*.

(23) Credit rating (ID) 00153

Definition: user-defined code to determine past credit experience. Refer *user-defined table 0046 - credit rating*.

(24) Contract code (ID) 00154

Definition: identifies the type of contract entered into by the facility and the guarantor for the purpose of settling outstanding account balances. Refer to *user-defined table 0044 - contract code*.

(25) Contract effective date (DT)00155

Definition: date the contract is to start.

(26) Contract amount (NM) 00156

Definition: amount to be paid by the guarantor each period as per the contract.

(27) Contract period (NM) 00157

Definition: specifies the duration of the contract for user-defined periods.

(28) Interest code (ID) 00158

Definition: indicates the amount of interest that will be charged the guarantor on any outstanding amounts. Refer to *user-defined table 0073 - interest rate code*.

(29) Transfer to bad debt code (ID) 00159

Definition: indicates the account was transferred to bad debts and the reason. Refer to *user-defined table 0110 - transfer to bad debt code*.

(30) Transfer to bad debt date (DT) 00160

Definition: date that the account was transferred to a bad debt status.

(31) Bad debt agency code (ID) 00161

Definition: uniquely identifies the bad debt agency that the account was transferred to. This code is site-defined. This field was kept as an ST type for backwards compatibility. One possible implementation is to edit against a table such as, *user-defined table 0021 - bad debt agency code*, however this is not required.

(32) Bad debt transfer amount (NM) 00162

Definition: amount that was transferred to a bad debt status.

(33) Bad debt recovery amount (NM) 00163

Definition: amount recovered from the guarantor on the account.

(34) Delete account indicator (ID) 00164

Definition: indicates that the account was deleted from the file and the reason. Refer to *user-defined table 0111 - delete account code*.

(35) Delete account date (DT) 00165

Definition: date that the account was deleted from the file.

(36) Discharge disposition (ID) 00166

Definition: disposition of the patient at time of discharge (i.e., discharged to home; expired; etc.). Refer to *user-defined table 0112 - discharged disposition*.

(37) Discharged to location (CM) 00167

Components: <code> ^ <description>

Definition: indicates a facility to which the patient was discharged. Refer to *user-defined table 0113 - discharged to location.*

(38) Diet type (ID) 00168

Definition: indicates a special diet type for a patient. Refer to *user-defined table 0114 - diet type.*

(39) Servicing facility (ID) 00169

Definition: used in a multiple facility environment to indicate the facility with which this visit is associated. Refer to *user-defined table 0115 - servicing facility.*

An optional fourth component, facility ID, may be valued in each individual location field in PV1, instead of placing it here.

(40) Bed status (ID) 00170

Definition: refer to *user-defined table 0116 - bed status.*

User-defined Table 0116 Bed status

| Value | Description |
|---|---|
| C | Closed |
| H | Housekeeping |
| O | Occupied |
| U | Unoccupied |
| K | Contaminated |
| I | Isolated |

An optional fifth component, bed status, may be valued in each individual location field in PV1, instead of placing it here. This field is maintained for backward compatibility.

(41) Account status (ID) 00171

Definition: refer to *user-defined table 0117 - account status.*

(42) Pending location (CM) 00172

Components: <nurse unit> ^ <room> ^ <bed> ^ <facility ID> ^ <bed status>

Definition: indicates the nursing station, room, bed, facility ID and bed status to which the patient may be moved. If a value exists in the fifth component (bed status) it supercedes the value in 3.3.3.40.

(43) Prior temporary location (CM) 00173

Components: <nurse unit> ^ <room> ^ <bed> ^ <facility ID> ^ <bed status>

Definition: can be used when a patient is arriving or departing or for general update events. If a value exists in the fifth component (bed status) it supercedes the value in 3.3.3.40.

(44) Admit date/time (TS) 00174

Definition: admit date/time. To be used if the event date/time is different than the admit date and time, i.e., a retroactive update.

(45) Discharge date/time (TS) 00175

Definition: discharge date/time. To be used if the event date/time is different than the admit date and time, i.e., a retroactive update.

(46) Current patient balance (NM) 00176

Definition: visit balance due.

(47) Total charges (NM) 00177

Definition: total visit charges.

(48) Total adjustments (NM) 00178

Definition: total adjustments for visit.

(49) Total payments (NM) 00179

Definition: total payments for visit.

(50) Alternate visit ID (CM) 00180

Components: <patient ID (ST)> ^ <check digit (NM)> ^ < check digit scheme (ID)> ^ <assigning facility ID (ST)>^<visit ID type (ID)>

Definition: optional visit ID number to be used if needed. - ID used by the facility to uniquely identify a patient at the time of admit. Refer to HL7 *table 0061 - check digit scheme* as defined in Chapter 2. Refer to user-defined *table 0192 - visit ID type*.

(51) PV1 usage notes

The facility (servicing) ID, the optional fourth component of each patient location field, is a string of up to six characters which is uniquely associated with the facility containing the location. A given institution or group of intercommunicating institutions should establish a list of facilities that may be potential assigners of patient locations. The list will be one of the institution's master dictionary lists. Since third parties other than the assigners of patient locations may send or receive HL7 messages containing patient locations, the facility ID in the patient location may not be the same as that implied by the sending and receiving systems identified in the MSH. The facility ID must be unique across facilities at a given site. This field is required in HL7 implementations that have more than a single facility with bed locations, since the same <nurse unit> ^ <room> ^ <bed> combination may exist at more than one facility.

## vii. PV2 - Patient visit - additional information

The PV2 segment is a continuation of visit specific information contained on the PV1 segment.

Figure 3-4 PV2 attributes

| SEQ | LEN | DT | R/O | RP/# | TBL# | ITEM# | ELEMENT NAME |
|---|---|---|---|---|---|---|---|
| 1 | 12 | CM | | | | 00181 | Prior Pending Location |
| 2 | 60 | CE | | | 0129 | 00182 | Accommodation Code |
| 3 | 60 | CE | | | | 00183 | Admit Reason |
| 4 | 60 | CE | | | | 00184 | Transfer Reason |
| 5 | 25 | ST | | Y | | 00185 | Patient Valuables |
| 6 | 25 | ST | | | | 00186 | Patient Valuables Location |
| 7 | 2 | ID | | | 0130 | 00187 | Visit User Code |
| 8 | 8 | DT | | | | 00188 | Expected Admit Date |
| 9 | 8 | DT | | | | 00189 | Expected Discharge Date |

### 3.3.4.0 PV2 field definitions

#### (1) Prior pending location (CM) 00181

Components: <nurse unit> ^ <room> ^ <bed> ^ <facility ID> ^ <bed status>

Definition: required only for **Cancel Pending Transfer (A27)** messages.

#### (2) Accommodation code (CE) 00182

Components: <identifier> ^ <text> ^ <name of coding system>^
<alternate identifier> ^ <alternate text> ^ <name of alternate coding system>

Definition: indicates the specific patient accommodations for this visit. Refer to *user-defined table 0129 - accommodation code*.

#### (3) Admit reason (CE) 00183

Components: <identifier> ^ <text> ^ <name of coding system>^
<alternate identifier> ^ <alternate text> ^ <name of alternate coding system>

Definition: short description the patient admission reason.

#### (4) Transfer reason (CE) 00184

Components: <identifier> ^ <text> ^ <name of coding system>^
<alternate identifier> ^ <alternate text> ^ <name of alternate coding system>

Definition: short description of the patient location change reason.

#### (5) Patient valuables (ST) 00185

Definition: short description of patient valuables checked in during admission.

(6) Patient valuables location (ST) 00186

Definition: indicates the location of the patient's valuables.

(7) Visit user code (ID) 00187

Definition: further categorizes a patient's visit with respect to an individual institution's needs (e.g., teaching flag = TE, indicating the patient is a teaching case). Refer to *user-defined table 0130 - visit user code.*

(8) Expected admit date (DT) 00188

Definition: date patient expected to be admitted.

(9) Expected discharge date (DT) 00189

Definition: non-event related date used by ancillaries to more accurately determine projected workloads.

## ix. NK1 - Next of kin

The NK1 segment contains information about the patient's other related parties. Any associated parties may be identified. Utilizing *NK1-1-set ID,* multiple NK1 segments can be sent to patient accounts.

Figure 3-5 NK1 attributes

| SEQ | LEN | DT | R/O | RP/# | TBL# | ITEM# | ELEMENT NAME |
|---|---|---|---|---|---|---|---|
| 1 | 4 | SI | R | | | 00190 | Set ID - Next of Kin |
| 2 | 48 | PN | | | | 00191 | Name |
| 3 | 60 | CE | | | 0063 | 00192 | Relationship |
| 4 | 106 | AD | | | | 00193 | Address |
| 5 | 40 | TN | | Y/3 | | 00194 | Phone Number |
| 6 | 40 | TN | | | | 00195 | Business Phone Number |
| 7 | 60 | CE | | | 0131 | 00196 | Contact Role |
| 8 | 8 | DT | | | | 00197 | Start Date |
| 9 | 8 | DT | | | | 00198 | End Date |
| 10 | 60 | ST | | | | 00199 | Next of Kin Job Title |
| 11 | 20 | CM | | | | 00200 | Next of Kin Job Code/Class |
| 12 | 20 | ST | | | | 00201 | Next of Kin Employee Number |
| 13 | 60 | ST | | | | 00202 | Organization Name |

3.3.5.0 NK1 field definitions

(1) Set ID - next of kin (SI) 00190

Definition: uniquely identifies the NK1 records for the purpose of adding, changing, or deleting records. For those messages that permit segments to repeat, the Set ID field is used to identify the repetitions. For example, the swap and query transactions allow for multiple PID segments would have Set ID values of 1, 2, then 3, etc.

(2) Name (PN) 00191

Components: <family name> ^ <given name> ^ <middle initial or name> ^ <suffix (e.g., JR or III)> ^ <prefix (e.g., DR)> ^ <degree (e.g., MD)>

Definition: name of the next of kin.

(3) Relationship (CE) 00192

Components: <identifier> ^ <text> ^ <name of coding system>^
<alternate identifier> ^ <alternate text> ^ <name of alternate coding system>

Definition: defines the actual personal relationship that the next of kin has to the patient. Refer to *user-defined table 0063 - relationship*. Examples might include: brother, sister, mother, father, friend, spouse, emergency contact, employer, etc.

(4) Address (AD) 00193

Components: <street address> ^ < other designation> ^ <city> ^ <state or province> ^ <zip or postal code> ^ <country> ^ <type> ^ <other geographic designation>

Definition: defines the address of the associated party.

(5) Phone number (TN) 00194

Definition: defines the telephone number of the associated party.

(6) Business phone number (TN) 00195

Definition: defines the business telephone number of the associated party.

(7) Contact role (CE) 00196

Components: <identifier> ^ <text> ^ <name of coding system>^
<alternate identifier> ^ <alternate text> ^ <name of alternate coding system>

Definition: indicates the specific relationship role (next of kin, employer, emergency contact, etc.). Refer to *user-defined table 0131 - contact role*. This field specifies the role that the next of kin plays with regards to the patient. For example, an employer, emergency contact, next of kin, insurance company, state agency, federal agency etc.

(8) Start date (DT) 00197

Definition: start of relationship.

(9) End date (DT) 00198

Definition: end of relationship.

(10) Next of kin job title (ST) 00199

Definition: title of the next of kin at their place of employment.

(11) Next of kin job code/class (CM) 00200

Components: <job code (ID)> ^ <employee classification (ID)>

Definition: the employers Job Code or Employee Classification used for the next of kin at their place of employment.

(12) Next of kin employee number (ST) 00201

Definition: number the employer assigns to the employee that is acting as next of kin.

(13) Organization name (ST) 00202

Definition: in cases where an employer serves as next of kin, this is the name of the organization which serves as the next of kin. This field may also be used to communicate the name of the organization where the next of kin works.

## xi. AL1 - Patient allergy information

The AL1 segment contains patient allergy information of various types. Most of this information will be derived from user-defined tables. Each AL1 segment describes a single patient allergy.

Figure 3-6 AL1 attributes

| SEQ | LEN | DT | R/O | RP/# | TBL# | ITEM# | ELEMENT NAME |
|---|---|---|---|---|---|---|---|
| 1 | 4 | SI | R | | | 00203 | Set ID - Allergy |
| 2 | 2 | ID | | | 0127 | 00204 | Allergy Type |
| 3 | 60 | CE | R | | | 00205 | Allergy Code/Mnemonic/Description |
| 4 | 2 | ID | | | 0128 | 00206 | Allergy Severity |
| 5 | 15 | ST | | | | 00207 | Allergy Reaction |
| 6 | 8 | DT | | | | 00208 | Identification Date |

### 3.3.6.0 AL1 field definitions

#### (1) Set ID - allergy (SI) 00203

Definition: number that uniquely identifies the individual transaction for adding, deleting or updating an allergy description in the patient's record. For those messages that permit segments to repeat, the Set ID field is used to identify the repetitions. For example, the swap and query transactions allow for multiple PID segments would have Set ID values of 1, 2, then 3, etc.

#### (2) Allergy type (ID) 00204

Definition: indicates a general allergy category (drug, food, pollen, etc.).

User-defined Table 0127 Allergy type

| Value | Description |
|---|---|
| DA | Drug Allergy |
| FA | Food Allergy |
| MA | Miscellaneous Allergy |
| MC | Miscellaneous Contraindication |

#### (3) Allergy code/mnemonic/description (CE) 00205

Components: <identifier> ^ <text> ^ <name of coding system>^
<alternate identifier> ^ <alternate text> ^ <name of alternate coding system>

Definition: uniquely identifies a particular allergy. This element may conform to some external, standard coding system (which must be identified), or it may conform to local, largely textual or mnemonic descriptions.

#### (4) Allergy severity (ID) 00206

Definition: indicates the general severity of the allergy (severe, moderate, mild, etc.).

User-defined Table 0128 Allergy severity

| Value | Description |
|---|---|
| SV | Severe |
| MO | Moderate |
| MI | Mild |

#### (5) Allergy reaction (ST) 00207

Definition: short, textual description of the specific allergy reaction (convulsions, sneeze, rash, etc.).

#### (6) Identification date (DT) 00208

Definition: date the allergy was identified.

## xiii. NPU - Bed status update

The NPU segment allows the updating of census (bed status) data without sending patient specific data. For example: changing the status of a bed from **housekeeping** to **unoccupied**.

Figure 3-7 NPU attributes

| SEQ | LEN | DT | R/O | RP/# | TBL# | ITEM# | ELEMENT NAME |
|---|---|---|---|---|---|---|---|
| 1 | 12 | CM | R | | 0079 | 00209 | Bed Location |
| 2 | 1 | ID | | | 0116 | 00170 | Bed Status |

3.3.7.0 NPU field definitions

(1) Bed location (CM) 00209

Components: <nurse unit> ^ <room> ^ <bed> ^ <facility ID> ^ <bed status>

Definition: bed location is a valid bed location. Refer to *user-defined table 0079 - location*.

(2) Bed status (ID) 00170

Definition: refer to *user-defined table 0116 - bed status* for suggested entries.

## xv. MRG - Merge patient information

The MRG segment provides receiving applications with information necessary to initiate the merging of patient data as well as groups of records. It is intended that this segment be used throughout the standard to allow the merging of registration, accounting, and clinical records within specific applications.

Figure 3-8 MRG attributes

| SEQ | LEN | DT | R/O | RP/# | TBL# | ITEM# | ELEMENT NAME |
|---|---|---|---|---|---|---|---|
| 1 | 20 | CM | R | | | 00211 | Prior Patient ID - Internal |
| 2 | 16 | ST | | | | 00212 | Prior Alternate Patient ID |
| 3 | 20 | CK | | | | 00213 | Prior Patient Account Number |
| 4 | 16 | CK | | | | 00214 | Prior Patient ID - External |

### 3.3.8.0 MRG field definitions

#### (1) Prior patient ID - internal (CM) 00211

Components: <patient ID (ST)> ^ <check digit (NM)> ^ <check digit scheme (ID)> ^ <assigning facility ID (ST)> ^ <type (ID)>

Definition: *table 0061 - check digit scheme* is defined in Chapter 2.

#### (2) Prior alternate patient ID (ST) 00212

Components: <patient ID (ST)> ^ <check digit (NM)> ^ <check digit scheme (ID)> ^ <assigning facility ID (ST)> ^ <type (ID)>

Definition: *table 0061 - check digit scheme* is defined in Chapter 2.

#### (3) Prior patient account number (CK) 00213

Components: <account number (NM)> ^ <check digit (NM)> ^ <check digit scheme (ID)> ^ <assigning facility ID (ST)>

Definition: *table 0061 - check digit scheme* is defined in Chapter 2.

#### (4) Prior patient ID - external (CK) 00214

Components: <patient ID (ST)> ^ <check digit (NM)> ^ <check digit scheme (ID)> ^ <assigning facility ID (ST)>

Definition: *table 0061 - check digit scheme* is defined in Chapter 2.

#### (5) Segment notes: MRG merge patient information

The assigning facility ID, the fourth component of the patient identifiers, is a string of up to six characters which is uniquely associated with the facility that originally assigned the number. A given institution or group of intercommunicating institutions should establish a list of facilities that may be potential assigners of patient identification (and other important identification) numbers. The list will be one of the institution's master dictionary lists. Since third parties (other than the assigners of patient identification numbers) may send or receive HL7 messages containing patient identification numbers, the assigning facility ID in the patient identification numbers may not be the same as the sending and receiving systems identified in the MSH. The assigning facility ID must be unique across applications at a given site. This field is required in HL7 implementations that have more than a single ADT/REG application assigning such numbers.

# g. EXAMPLE TRANSACTIONS

## i. Admit a patient - trigger event A01 (basic example)

```
MSH|^~\&|REGADT|MCM|LABADT|MCM|198808181126|SECURITY|ADT^A01|MSG00001|P|2.2|<cr>
EVN|01|198808181123||<cr>
PID|||PATID1234^5^M11||JONES^WILLIAM^A^III||19610615|M||C|1200 N ELM STREET^
    ...GREENSBORO^NC^27401-1020|GL|(919)379-1212|(919)271-3434||S||
    ...PATID12345001^2^M10|123456789|987654^NC|<cr>
NK1|JONES^BARBARA^K|WIFE|<cr>
PV1|1|I|2000^2012^01||||004777^LEBAUER^SIDNEY^J.|||SUR||||ADM|A0|<cr>
```

Patient William A. Jones, III was admitted on July 18, 1988 at 1123 a.m. by doctor Sidney J. Lebauer (#004777) for surgery (SUR). He has been assigned to room 2012, bed 01 on nursing unit 2000.

The message was sent from system REGADT at the MCM site to system LABADT also at the MCM site on the same date as the admission took place but three minutes after the admit.

## iii. Merge patient information - trigger event A18 (basic example)

```
MSH|^~\&|REGADT|MCM|RSP1P8|MCM|198808181320|SECURITY|ADT^A18|MSG00002|P|2.2|<cr>
EVN|18|198808181318||<cr>
PID|||PATID5678^9^M11||JONES^WILLIAM^A^JR||19310615|M||C|303 EDWARDS
    ...DRIVE^GREENSBORO^NC^27410|GL|(919)294-1212|(919)288-0101||M||
    ...PATID12345001^2^M10|987654321|143257^NC|<cr>
MRG|PATID1234^5^M11||<cr>
NK1|JONES^NANCY^K|WIFE|<cr>
PV1|1|I|2000^2012^01||||004777^LEBAUER^SIDNEY^J.|||SUR||||||<cr>
```

During the admission process, the admitting secretary used the medical record number of William A. Jones, III instead of William A. Jones, Jr. The billing number stayed the same since it is tied to the visit and numerous charges have already been incurred. The inclusion of the MRG segment with the old patient ID filled in, triggers the merge.

### v. Admit a patient - trigger event A01 (complex example)

```
MSH|^~\&|REGADT|MCM|LABADT||199112311418||ADT^A01|000001|P|2.2|||<CR>
EVN|A01|199112311418|199112311418|01|<CR>
PID|||2-68708-5|253763|MASSIE^JAMES^""^""^""^""^||19560129|M|||171
    ...ZOBERLEIN^^ISHPEMING^MI^49849^""^||(900)485-5344|
    ...(900)485-5344||S|C||371-66-9256||<CR>
NK1||MASSIE^MARYLOU^""^""^""^""^|MOTHER|171 ZOBERLEIN^^ISHPEMING^MI^49849^""^|
    ...(900)485-5344|<CR>
PV1||E|EMERG||||0148^ADDISON,JAMES|0148^ADDISON,JAMES|0148^ADDISON,JAMES|2||
    ...||||||0148^ADDISON,JAMES|S||A|||||||||||||||||||||199112311418|
    ...199201210800|||||<CR>
DG1|1|19||L FIFTH FINGER LAC||00|||||||||<CR>
GT1|1||MASSIE^JAMES^""^""^""^""^||171 ZOBERLEIN^^ISHPEMING^MI^49849^""^|
    ...(900)485-5344|(900)485-5344||||SELF|371-66-925||||MOOSES AUTO
    ...CLINIC|171 ZOBERLEIN^^ISHPEMING^MI^49849^""|(900)485-5344||||<CR>
IN1|1|0|BC1|BLUE  CROSS|171 ZOBERLEIN^^ISHPEMING^M149849^""^||
    ...(900)485-5344|90||||||50 OK|||||||||||||||||||<CR>
```

# i. IMPLEMENTATION CONSIDERATIONS

## i. Swapping a patient

Some systems may handle this as a single function. Others may require a multiple process where:

a)patient A is assigned as temporary location

b)patient B is assigned patient A's location

c)patient A is assigned patient B's prior location

The three-step scenario requires three separate transfer messages instead of a single swap message. If all beds in a hospital are occupied, it may be necessary to use a dummy location.

## iii. Merging patient/person information

The intent of trigger events A18, A30, A34, A35, and A36 are to reconcile distinct sets of existing patient data records which have been entered under different identification numbers, either deliberately or due to errors. Ideally, following one of these trigger events, all of the affected patient data should be accessible under whatever surviving patient identifiers were specified in the messages. Due to substantial differences in database architectures and system dependent data processing requirements or limitations, the exact meaning and implementation of these events must be negotiated between systems.

### v. Patient record links

Linking two or more patients does not require the actual merging of patient information as discussed in Section 3.5.2; following a link trigger event, sets of affected patient data records should remain distinct. However, due to differences in database architectures, there may be system dependent limitations or restrictions regarding the linking of one or more patients which must be negotiated.

## k. OUTSTANDING ISSUES

None.