17. Materials Management

Chapter Chair/Editor: Jane Foard
McKesson Provider Technologies

Chapter Chair: Anita Benson
Datascene

17.1 CHAPTER 17 CONTENTS

17.2 PURPOSE

This Materials Management chapter defines abstract messages for the purpose of communicating various events related to the transactions derived from supply chain management within a healthcare facility. There are two basic types of messages defined in this chapter: *inventory item master file updates, and supply item sterilization messages.*

The inventory item master file segments published in this chapter are based on master file add and update messages between applications such as *materials management, scheduling, and sterilization applications.*

The sterilization and decontamination messages published in this chapter are based on a request, response, or unsolicited update. These transactions occur between an instrument-tracking system and a sterilizer or washer.

This chapter describes various roles under which applications might operate. The roles discussed in this chapter illustrate the underlying model used to develop this specification. They do not imply the need for a particular application model or method of implementation.

This chapter defines the transactions at the seventh level, that is, the abstract message. Various schemes are used to generate the actual characters that comprise the messages according to the communication environment. The HL7 Encoding Rules will be used where there is not a complete Presentation Layer. This is described in Chapter 1, "Relationship to Other Protocols." The examples included in this chapter were constructed using the HL7 Encoding Rules.

17.2.1 Inventory Item Master Updates

The goal of the Inventory Item Master Update message specifications is to facilitate the communication of inventory item master catalog and lot information between applications. The main subject of such communication is the *supply item*. These inventory item master segments are used with trigger event M15 – Inventory Item Master File Message , and M16 – Inventory Item Master File Message – Enhanced. The message structures of these events are published in Chapter 8 - Master Files.

17.2.1.0 Item Master Catalog

The *item master catalog* provides a catalog of supplies used for ordering to replenish inventory at supply locations, for general usage in a healthcare facility for scheduled appointments, surgery, and to provide identifiers for instrument-tracking used for the sterilization process. The catalog consists of numerous attributes related to a supply item. Supply items and associated attributes can be specific to a domain such as Inventory, Scheduling, Pharmacy, and Sterilization.

17.2.1.1 Inventory Locations

Inventory locations contain a list of items that are stocked at the location, or that can be ordered from the location (but not stocked on a regular basis). Inventory locations receive updates to the attributes of supply items from the general supply location's item master catalog. Even though the general supply location's item master catalog and the other inventory locations item master both share the majority of the supply item attributes, those attributes can have a different value in each location. For example, the status of a supply item (active, inactive, pending inactive), can be inactive in the general supply location item master catalog (meaning it cannot be ordered), but the same item may be pending inactive at another inventory location

that still has the supply item in stock, and will issue the supply item until the stock is depleted, but cannot order to replenish the stock at this location.

The following are the primary attributes of a supply item:

- Unique identification code

  The unique identification code for a supply item describes a relation to a supply that can be ordered. This would likely be a catalog number specific to a manufacturer of the supply item.

- Supply Item Description

  The name or text description of the supply item provides a human-readable identification of the supply.

- Supply Item Type

  This attribute describes a type or class of supply items. This would typically be a supply type such as office supplies, OR supplies, or laboratory supplies.

17.2.2 Sterilization and Decontamination

Sterilization and decontamination messages in this chapter are exchanged between a sterilizer or washer and an Instrument-tracking System. The main focus of the sterilization and decontamination process is a load or grouping of *supply items*. These messages communicate sterilizer configuration, sterilizer lot, and device and cycle data messages related to instances of sterilizing and decontaminating supply items.

Sterilization is a process used to render a product free from viable microorganisms in order to meet infection prevention standards. Sterilizers are defined as apparatus used to sterilize medical devices, equipment and supplies by direct exposure to the sterilizing agent. The typical sterilizing agent for high temperature sterilization is saturated steam under pressure; low temperature sterilizing agents are peracetic acid or ethylene oxide gas.

Decontamination is defined by the Occupational Safety and Health Administration (OSHA) as the use of physical or chemical means to remove, inactivate or destroy blood-borne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use or disposal. {29 CFR 1910.1030} Washers provide decontamination services in order to render items safe for handling.

Steam sterilizers have defined cycles that achieve sterilization by attaining certain temperatures for specific lengths of time. These cycles are validated using AAMI (Association for Advancement of Medical Instrumentation) standards.

Ethylene Oxide gas and peracetic acid sterilizers have defined cycles that are validated by the manufacturer's research to achieve sterilization at specific temperatures and exposure times to the sterilant.

Sterilization and decontamination cycles are defined as a sequence of steps or phases that are designed to achieve sterilization or decontamination.

Typical phases for steam sterilization include Condition, Sterilize and Exhaust. Phases for Ethylene Oxide sterilization include Condition, Sterilize, Exhaust and Aerate. Peracetic acid sterilizers also have similar phases.

The following tables contain examples of typical cycles for sterilizers and washers.

Representative Steam Sterilization Cycles

Cycles	Sterilize Temperature	Sterilize Time	Dry Time	Recommended Load
Express	270°F (132°C)	4.0 Min	3.0 MIN.	Single wrapped instrument tray with a single instrument. Non-porous good, only.
Flash	270°F (132°C)	3.0 MIN	1.0 MIN	Unwrapped instrument tray with a single instrument

Prevacuum Testing Cycles for Steam Sterilizers

Prevacuum Testing Cycles	Sterilizer Temperature	Sterilize Time	Dry Time	Recommended Load
Leak Test	270°F (132°C)	N/A	N/A	N/A
Dart Test	270°F (132°C)	3½ MIN.	1.0 MIN	Bowie-Dick Test or DART
Dart Warmup	270°F (132°C)	3.0 MIN.	1.0 MIN.	N/A

17.2.3 Application roles

In the sterilization and decontamination specification, there are two roles that an application can assume: a filler application role, and a placer application role. These application roles define the interaction that an application will have with other applications in the messaging environment. In many environments, any one application may take on more than one application role.

In this specification, the definition of application roles is not intended to define or limit the functionality of specific products developed by vendors of such applications. Instead, this information is provided to help define the model used to develop this specification, and to provide an unambiguous way for applications to communicate with each other.

17.3 TRIGGER EVENTS

This chapter defines trigger events used to communicate supply item information between applications.

The inventory item master file notification trigger events are defined in Chapter 8, Master Files. The sterilization and decontamination related trigger events in this chapter are defined in section *17.4*, "*Inventory Item Master Messages Segments*," and ***Error! Reference source not found.***, "*Placer Application Requests and Trigger Events*."

17.3.1 Statuses

The status of a supply item describes the state of the supply item in the item master catalog and at an inventory location. Typical statuses of a supply item may include the following: Active, Pending Inactive, and Inactive.

The status of a load describes the state of a load during a sterilization cycle. Typical statuses of a load may include the following: Pending, Active, Complete, and Canceled.

17.3.2 Glossary

17.3.2.0 Bowie-Dick Test

A diagnostic test of a dynamic-air-removal steam sterilizer's ability to remove air from the sterilizer chamber and prevent air reentrainment.

17.3.2.1 Catalog Item

Supply items that are available to be ordered from the item master catalog.

17.3.2.2 Cycle - Sterilization

A define sequence of operational events designed to achieve sterilization which are carried out in a sealed chamber.

17.3.2.3 Cycle - Steam Sterilization, Gravity Displacement Type

Type of sterilization cycle in which incoming steam displaces residual air through a port or drain in or near the bottom of the sterilizing chamber.

17.3.2.4 Cycle Time

The total elapsed time of a sterilization cycle from the time the process is initiated until the cycle is completed. Cycle time may include heat-up time, exposure time, come-down time, cooling and drying time and on appropriate equipment, pre- and post-vacuum time.

17.3.2.5 Decontamination

The use of physical or chemical means to remove, inactivate or destroy blood borne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use or disposal.

17.3.2.6 Entrainment

Collecting or transporting of solid particles or a second fluid or vapor by the flow of the primary fluid or vapor at high velocity.

17.3.2.7 EO

Ethylene Oxide Gas used as low temperature sterilizing agent.

17.3.2.8 Exposure Time

Period of time during a sterilization process in which items are exposed to the sterilant at the specified sterilization parameters.

17.3.2.9 Lot Control

Numbers, letters or a combination of both by which a particular group of products can be traced to a particular sterilization operation.

17.3.2.10 Nonstocked Items

Supply items that are not routinely ordered and issued at a specific supply location, but are available to be ordered depending on the item status.

17.3.2.11 NonCatalog Item

Supply items that are ordered and issued at a specific supply location, but are not available to be ordered through the item master catalog.

17.3.2.12 Par Level

Par Level refers to an inventory location specific to a particular area of the healthcare facility, such as Surgery.

17.3.2.13 Sterile

State of being free from all living microorganisms.

17.3.2.14 Sterilization

The process used to render a product free from viable microorganisms.

Note: In a sterilization process, the nature of a microbiological death is described by an exponential function. Therefore, the presence of microorganisms on any individual item can be expressed in terms of probability. While this probability can be reduced to a very low number, it can never be reduced to zero.

17.3.2.15 Sterilizer

An apparatus used to sterilize medical devices, equipment and supplies by direct exposure to the sterilizing agent.

17.3.2.16 Stocked Items

Supply items that are routinely ordered and issued at a specific supply location.

17.3.2.17 TDC

Tubes, Drains and Catheters

17.3.2.18 Washer

An apparatus that provides decontamination services in order to render items safe for handling.

17.3.3 Organization of This Chapter: Trigger Events and Message Definitions

This specification contains four functional groupings of trigger events and message definitions. The trigger events within each of the placer, filler, and query functional groupings share the same or similar message definitions.

The first functional grouping of trigger events and message definitions describes the common master file notification messages for use of the record level events for adds, deletes, updates, deactivations, and reactivations. This functional grouping is specific to the item master inventory messages.

The second functional grouping of trigger events and message definitions describes *placer request transactions*. This grouping defines the trigger events and message definitions for transactions from applications acting in a placer application role, and also defines the related filler application response messages sent back by applications fulfilling the auxiliary role. These messages are described in section *17.5*, "*Placer Application Requests and Trigger Events*."

The second functional grouping describes trigger events and message definitions for *unsolicited transactions* from applications acting in the filler application role. This grouping describes the unsolicited messages originating from an application fulfilling the filler role, and the response messages sent back by applications fulfilling the auxiliary role. These messages are described in section ***Error! Reference source not found.***, "*Filler Application Messages and Trigger Events Unsolicited*."

The notation used to describe the sequence, optionality, and repetition of segments is described in Chapter 2, "Format for defining abstract messages."

17.3.3.0 Update mode

This chapter uses the "Action code/unique identifier" mode for updating via repeating segments. For more information on updating via repeating segments, please see section 2.15.4, "Modes for updating via repeating segments," in Chapter 2. The definition of the "Action code/unique identifier" update mode can be found in Chapter 2, section 2.15.4.2, "Action code/unique identifier mode update definition."

17.4 INVENTORY ITEM MASTER MESSAGES SEGMENTS

This section describes the segments described in the Inventory Item Master File Message (Event M15) and Inventory Item Master File Message - Enhanced (Event M16) master file messages. The description of these events and the messages structures are published in Chapter 8, Master Files. The M15 Inventory Item Master File trigger event and the IIM inventory item master segment is a limited implementation. The M16 Inventory Item Master File - Enhanced trigger event is a comprehensive Materials Management message.

The enhanced inventory item master message communicates additions and updates of supply items and their attributes from a general supply location to additional supply locations within a healthcare facility.

The general supply inventory location sends a transaction to multiple inventory locations with this trigger event, communicating adds and changes to item master catalog and inventory supply items.

The ILT segment formerly published in v2.5 Chapter 8, Master Files, will now be published in this chapter because of its use in the Materials Management domain.

17.4.1 IIM - Inventory Item Master Segment

The Inventory Item Master segment (IIM) contains information about the stock of product that can be used to fulfill an ordered test/service. All of the fields in this segment describe the test/service and other basic attributes pertaining to Service Item defined within an Other Observation/Service Item master file. This segment is related to centrally stocked or supply management concerns.

HL7 Attribute Table - IIM - Inventory Item Master

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	250	CWE	R			01897	Primary Key Value - IIM
2	250	CWE	R			01799	Service Item Code
3	250	ST	O			01800	Inventory Lot Number
4	24	DTM	O			01801	Inventory Expiration Date
5	250	CWE	O			01802	Inventory Manufacturer Name
6	250	CWE	O			01803	Inventory Location

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
7	24	DTM	O			01804	Inventory Received Date
8	12	NM	O			01805	Inventory Received Quantity
9	250	CWE	O			01806	Inventory Received Quantity Unit
10	12	MO	O			01807	Inventory Received Item Cost
11	24	DTM	O			01808	Inventory On Hand Date
12	12	NM	O			01809	Inventory On Hand Quantity
13	250	CWE	O			01810	Inventory On Hand Quantity Unit
14	705	CNE	O		0088	00393	Procedure Code
15	705	CNE	O	Y	0340	01316	Procedure Code Modifier

17.4.1.0 IIM Field Definitions

17.4.1.1 IIM-1 Primary Key Value - IIM (CWE) 01897

```
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)>
```

Definition: This field contains the code assigned by the institution for the purpose of uniquely identifying an inventoried item. It is the identifying key value, and must match MFE-4 - Primary Key Value - MFE.

17.4.1.2 IIM-2 Service Item Code (CWE) 01799

```
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)>
```

Definition: This field contains the identifier of the service item. It relates the inventory item of this message to an entry in an Other Observation/Service Item master file.

17.4.1.3 IIM-3 Inventory Lot Number (ST) 01800

Definition: This field contains the lot number of the service item in inventory.

Note: The lot number is the number printed on the label attached to the item or container holding the substance. If the substance is a vaccine, for example, and a diluent is required, a lot number may appear on the vial containing the diluent; however, any such identifier associated with a diluent is not the identifier of interest. The substance lot number should be reported, not that of the diluent.

17.4.1.4 IIM-4 Inventory Expiration Date (DTM) 01801

Definition: This field contains the expiration date of the service item in inventory.

Note: Expiration date does not always have a "day" component; therefore, such a date may be transmitted as YYYYMM.

17.4.1.5 IIM-5 Inventory Manufacturer Name (CWE) 01802

```
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)>
```

Definition: This field contains the manufacturer of the service item in inventory.

17.4.1.6 IIM-6 Inventory Location (CWE) 01803

```
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)>
```

Definition: This field contains the location of the inventory. As an implementation consideration, this location can have a range of specificity. The location can be very general, e.g., a facility where the inventory is warehoused, or very specific, e.g., a shelf location.

17.4.1.7 IIM-7 Inventory Received Date (DTM) 01804

Definition: This field contains the most recent date that the product in question was received into inventory.

17.4.1.8 IIM-8 Inventory Received Quantity (NM) 01805

Definition: This field contains the quantity of this inventory item that was received on the date specific in IIM-7 Inventory Received Date.

17.4.1.9 IIM-9 Inventory Received Quantity Unit (CWE) 01806

```
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)>
```

Definition: This field specifies the unit for IIM-8 Inventory Received Quantity and IIM-10 Inventory Received Item Cost.

17.4.1.10 IIM-10 Inventory Received Item Cost (MO) 01807

```
Components:  <Quantity (NM)> ^ <Denomination (ID)>
```

Definition: This field contains the per-unit cost of the inventory item at the time of receipt. IIM-9 Inventory Received Quantity Unit specifies the per-unit basis of this field.

17.4.1.11 IIM-11 Inventory on Hand Date (DTM) 01808

Definition: This field specifies the most recent date that an inventory count for the inventory item was performed.

17.4.1.12 IIM-12 Inventory on Hand Quantity (NM) 01809

Definition: This field contains the quantity of this inventory item that was available for issue/use as of the date specified in IIM-11 Inventory on Hand Date. No adjustment has been made for subsequent use.

17.4.1.13 IIM-13 Inventory on Hand Quantity Unit (CWE) 01810

```
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)>
```

Definition: This field specifies the unit for IIM-12 - Inventory on Hand Quantity.

17.4.1.14 IIM-14 Procedure Code (CNE) 00393

```
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)>
```

Definition: This field contains a unique identifier assigned to the service item, if any, associated with the charge. In the United States this is often the HCPCS code. Refer to *Externally defined Table 0088 - Procedure code* for suggested values. This field is a CNE data type for compatibility with clinical and ancillary systems.

As of v2.6, the known applicable external coding systems include those in the table below. If the code set you are using is in this table, then you must use that designation.

Procedure Code Coding Systems

Coding System	Description	Comment
C4	CPT-4	American Medical Association, P.O. Box 10946, Chicago IL 60610.
C5	CPT-5	(under development – same contact as above)
HCPCS	CMS (formerly HCFA) Common Procedure Coding System	HCPCS: contains codes for medical equipment, injectable drugs, transportation services, and other services not found in

Coding System	Description	Comment
		CPT4.
HPC	CMS (formerly HCFA) Procedure Codes (HCPCS)	Health Care Financing Administration (HCFA) Common Procedure Coding System (HCPCS) including modifiers.1

17.4.1.15 IIM-15 Procedure Code Modifier (CNE) 01316

```
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)>
```

Definition: This field contains the procedure code modifier to the procedure code reported in IIM-14 Procedure Code, when applicable. Procedure code modifiers are defined by USA regulatory agencies such as CMS and the AMA. Multiple modifiers may be reported. Refer to *Externally defined Table 0340 - Procedure code modifier* for suggested values.

As of v2.6, the known applicable external coding systems include those in the table below. If the code set you are using is in this table, then you must use that designation.

Procedure Code Modifier Coding Systems

Coding System	Description	Comment
CPTM	CPT Modifier Code	Available for the AMA at the address listed for CPT above. These codes are found in Appendix A of CPT 2000 Standard Edition. (CPT 2000 Standard Edition, American Medical Association, Chicago, IL)
HPC	CMS (formerly HCFA) Procedure Codes (HCPCS)	Health Care Financing Administration (HCFA) Common Procedure Coding System (HCPCS) including modifiers.2

17.4.2 ITM - Material Item Segment

The Material Item segment (ITM) contains information about inventory supply items (stocked or non-stocked).

HL7 Attribute Table - ITM – Material Item

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	250	EI	R			02186	Item Identifier
2	999	ST	O			02274	Item Description
3	250	CWE	O		0776	02187	Item Status
4	250	CWE	O		0778	02188	Item Type
5	250	CWE	O			02189	Item Category
6	4	CNE	O		0532	02190	Subject to Expiration Indicator

1 The HCPCS code is divided into three "levels." Level I includes the entire CPT-4 code by reference. Level II includes the American Dental Association's Current Dental Terminology (CDT-2) code by reference. Level II also includes the genuine HCPCS codes, approved and maintained jointly by the Alpha-Numeric Editorial Panel, consisting of CMS, the Health Insurance Association of America, and the Blue Cross and Blue Shield Association. Level III are codes developed locally by Medicare carriers. The HCPCS modifiers are divided into the same three levels, I being CPT-4 modifiers, II CDT-2 and genuine HCPCS modifiers, and III being locally agreed modifiers.

The genuine HCPCS codes and modifiers of level II can be found at http://www.hcfa.gov/stats/anhcpcdl.htm. CMS distributes the HCPCS codes via the National Technical Information Service (NTIS, www.ntis.gov) and NTIS distribution includes the CDT-2 part of HCPCS Level II, but does not include the CPT-4 part (Level I). CMS may distribute the CPT-4 part to its contractors.

2 The HCPCS code is divided into three "levels." Level I includes the entire CPT-4 code by reference. Level II includes the American Dental Association's Current Dental Terminology (CDT-2) code by reference. Level II also includes the genuine HCPCS codes, approved and maintained jointly by the Alpha-Numeric Editorial Panel, consisting of CMS, the Health Insurance Association of America, and the Blue Cross and Blue Shield Association. Level III are codes developed locally by Medicare carriers. The HCPCS modifiers are divided into the same three levels, I being CPT-4 modifiers, II CDT-2 and genuine HCPCS modifiers, and III being locally agreed modifiers.

The genuine HCPCS codes and modifiers of level II can be found at http://www.hcfa.gov/stats/anhcpcdl.htm. CMS distributes the HCPCS codes via the National Technical Information Service (NTIS, www.ntis.gov) and NTIS distribution includes the CDT-2 part of HCPCS Level II, but does not include the CPT-4 part (Level I). CMS may distribute the CPT-4 part to its contractors.

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
7	250	EI	O			02191	Manufacturer Identifier
8	999	ST	O			02275	Manufacturer Name
9	20	ST	O			02192	Manufacturer Catalog Number
10	4	CWE	O			02193	Manufacturer Labeler Identification Code
11	4	CNE	O		0532	02070	Patient Chargeable Indicator
12	250	CWE	O		0132	00361	Transaction Code
13	12	CP	O			00366	Transaction amount - unit
14	4	CNE	O		0532	02197	Stocked Item Indicator
15	250	CWE	O		0871	02266	Supply Risk Codes
16	250	XON	O	Y	0790	02199	Approving Regulatory Agency
17	4	CNE	O		0532	02200	Latex Indicator
18	250	CWE	O	Y	0793	02201	Ruling Act
19	30	IS	O		0320	00282	Item Natural Account Code
20	6	NM	O			02203	Approved To Buy Quantity
21	10	MO	O			02204	Approved To Buy Price
22	4	CNE	O		0532	02205	Taxable Item Indicator
23	4	CNE	O		0532	02206	Freight Charge Indicator
24	4	CNE	O		0532	02207	Item Set Indicator
25	250	EI	O			02208	Item Set Identifier
26	4	CNE	O		0532	02209	Track Department Usage Indicator
27	705	CNE	O		0088	00393	Procedure Code
28	705	CNE	O	Y	0340	01316	Procedure Code Modifier
29	705	CWE	O		0376	01370	Special Handling Code

17.4.2.0 ITM Field Definitions

17.4.2.1 ITM-1 Item Identifier (EI) 02186

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

Definition: The Item Identifier is a unique code assigned to the material item by the Item Inventory Master catalog software application to identify the item.

17.4.2.2 ITM-2 Item Description (ST) 02274

Definition: The Item Description is a description of the material item identified in ITM-1.

17.4.2.3 ITM-3 Item Status (CWE) 02187

```
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)>
```

Definition: The status (useful for reporting and item usage purposes) that applies to an item. Refer to *User-defined Table 0776 – Item Status* for suggested values.

User-defined Table 0776 – Item Status

Value	Description	Comment
A	Active	Item is available to be purchased or issued.
P	Pending Inactive	Item is not available to be purchased, but is available to be issued.
I	Inactive	Item is not available to be purchased or issued.

17.4.2.4 ITM-4 Item Type (CWE) 02188

```
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)>
```

Definition: The Item Type is a classification of material items into like groups as defined and utilized within an Operating Room setting for charting procedures. An Item Type is a higher level of classification than an Item Category as described in ITM-4.

User-defined Table 0778 – Item Type

Value	Description	Comment
EQP	Equipment	
SUP	Supply	
IMP	Implant	
MED	Medication	
TDC	Tubes, Drains, and Catheters	

17.4.2.5 ITM-5 Item Category (CWE) 02189

```
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)>
```

Definition: The Item Category is a classification of material items into like groups for the purpose of categorizing purchases and reporting within a materials management setting. The Item Category classification is a lower level grouping of material items than what is described in ITM-3 as Item Type. UNSPSC is the recommended coding system.

17.4.2.6 ITM-6 Subject To Expiration Indicator (CNE) 02190

```
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)>
```

Definition: This field contains an indicator used as a reference to specify whether the item is subject to containing an expiration date. Refer to *HL7 Table 0532 - Expanded yes/no indicator table* in Chapter 2 for valid values.

17.4.2.7 ITM-7 Manufacturer Identifier (EI) 02191

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

Definition: This field identifies the identifying code of the manufacturer of the item.

17.4.2.8 ITM-8 Manufacturer Name (ST) 02275

Definition: This field identifies the name of the manufacturer of the manufacturer identified in ITM-7.

17.4.2.9 ITM-9 Manufacturer Catalog Number (ST) 02192

Definition: This field contains the catalog assigned to the item by the manufacturer.

17.4.2.10 ITM-10 Manufacturer Labeler Identification Code (CWE) 02193

```
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)>
```

Definition: This field contains the Labeler Identification Code (LIC) number assigned to the manufacturer that represents the manufacturer of the item.

17.4.2.11 ITM-11 Patient Chargeable Indicator (CNE) 02070

```
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)>
```

Definition: This field indicates whether the item is patient chargeable. Refer to *HL7 Table 0532 – Expanded Yes/no Indicator table* in Chapter 2 for valid values.

17.4.2.12 ITM-12 Transaction Code (CWE) 00361

```
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)>
```

Definition: This field contains the code assigned by the institution for the purpose of uniquely identifying a patient billing code specific for a supply item. In the context of this message, this is a code that is a cross-reference to the Item Code/Id. This field would be used to uniquely identify a procedure, supply item, or test for charges; or to identify the payment medium for payments. It can reference, for example, a CBC (a lab charge), or an Elastic Bandage 3" (supply charge), or Chest 1 View (radiology charge). For instance the code would be 300-0001, with a description of CBC.

Refer to *User-defined Table 0132 - Transaction Code* for suggested values. See Chapter 7 for a discussion of the universal service ID for charges.

User-defined Table 0132 - Transaction Code

Value	Description	Comment
	No suggested values defined	

17.4.2.13 ITM-13 Transaction Amount - Unit (CP) 00366

```
Components:  <Price (MO)> ^ <Price Type (ID)> ^ <From Value (NM)> ^ <To Value (NM)> ^ <Range Units (CWE)> ^
             <Range Type (ID)>

Subcomponents for Price (MO):  <Quantity (NM)> & <Denomination (ID)>

Subcomponents for Range Units (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)>
```

Definition: Unit price of transaction. Price of a single item. This field contains the dollar amount charged to patients for this item.

17.4.2.14 ITM-14 Stocked Item Indicator (CNE) 02197

```
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)>
```

Definition: This field contains an indicator signifying whether the item is stocked in **any** inventory location in the healthcare organization. Refer to *HL7 Table 0532 – Expanded Yes/no Indicator table* in Chapter 2 for valid values.

17.4.2.15 ITM-15 Supply Risk Codes (CWE) 02266

```
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)>
```

Definition: This field contains a code that identifies any known or suspected hazard associated with this material item.

User-defined Table 0871 – Supply Risk Codes

Code	Description	Comment/Usage Note/Definition
COR	Corrosive	Material is corrosive and may cause severe injury to skin, mucous membranes and eyes. Avoid any unprotected contact.
FLA	Flammable	Material is highly flammable and in certain mixtures (with air) may lead to explosions. Keep away from fire, sparks and excessive heat.
EXP	Explosive	Material is an explosive mixture. Keep away from fire, sparks, and heat.
INJ	Injury Hazard	Material is solid and sharp (e.g., cannulas.) Dispose in hard container.
TOX	Toxic	Material is toxic to humans and/or animals. Special care must be taken to avoid incorporation, even of small amounts.
RAD	Radioactive	Material is a source for ionizing radiation and must be handled with special care to avoid injury of those who handle it and to avoid environmental hazards.
UNK	Unknown	Material hazard level is unknown.

17.4.2.16 ITM-16 Approving Regulatory Agency (XON) 02199

```
Components:  <Organization Name (ST)> ^ <Organization Name Type Code (IS)> ^ <DEPRECATED-ID Number (NM)> ^
             <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 Assigning Authority (HD):  <Namespace ID (IS)> & <Universal ID (ST)> & <Universal ID Type
             (ID)>

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

Definition: This field contains a code indicating the regulatory agency the item has been approved by, such as the FDA or AMA.

Refer to *User-defined Table 0790 – Approving Regulatory Agency* for suggested values.

User-defined Table 0790 – Approving Regulatory Agency

Value	Description	Comment
FDA	Food and Drug Administration	
AMA	American Medical Association	

17.4.2.17 ITM-17 Latex Indicator (CNE) 02200

```
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)>
```

Definition: This field contains an indicator signifying whether the item is made of or contains latex. Refer to *HL7 Table 0532 - Expanded yes/no indicator table* in Chapter 2 for valid values.

17.4.2.18 ITM-18 Ruling Act (CWE) 02201

```
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)>
```

Definition: This field contains a code indicating an act containing a rule that the item is legally required to be included in notification reporting. This code is often used for reporting or tracking.

User-defined Table 0793 –Ruling Act

Value	Description	Comment
SMDA	Safe Medical Devices Act	

17.4.2.19 ITM-19 Item Natural Account Code (IS) 00282

Definition: This field contains the expense/natural account number from the general ledger chart of accounts associated with the item. Refer to *HL7 Table 0320 – Item Natural Account Code* in Chapter 4 for valid values.

17.4.2.20 ITM-20 Approved to Buy Quantity (NM) 02203

Definition: This field contains the quantity of this item that can be purchased within a user-defined time frame (e.g., one year) at the order unit of measure.

17.4.2.21 ITM-21 Approved to Buy Price (MO) 02204

```
Components:  <Quantity (NM)> ^ <Denomination (ID)>
```

Definition: This field contains the dollar limit of this item that you can purchase within a user-defined time frame (e.g., one year).

17.4.2.22 ITM-22 Taxable Item Indicator (CNE) 02205

```
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)>
```

Definition: This field contains an indicator signifying whether the item is taxable when purchasing the item or issuing the item to patients. Refer to *HL7 Table 0532 - Expanded yes/no indicator table* in Chapter 2 for valid values.

17.4.2.23 ITM-23 Freight Charge Indicator (CNE) 02206

```
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)>
```

Definition: This field contains an indicator signifying whether freight is an allowable charge to be allocated to the line of an invoice containing the item. Refer to *HL7 Table 0532 - Expanded yes/no indicator table* in Chapter 2 for valid values.

17.4.2.24 ITM-24 Item Set Indicator (CNE) 02207

```
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)>
```

Definition: This field contains an indicator signifying whether the item is an 'item set' rather than an individual item. An item set is a set of surgical supplies. Refer to *HL7 Table 0532 - Expanded yes/no indicator table* in Chapter 2 for valid values.

17.4.2.25 ITM–25 Item Set Identifier (EI) 02208

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

Definition: The Item Identifier is a unique code assigned to the material item by the Item Inventory Master catalog software application to identify the item.

17.4.2.26 ITM–26 Track Department Usage Indicator (CNE) 02209

```
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)>
```

Definition: This field contains an indicator signifying whether the usage figures are tracked for this item by department. Refer to *HL7 Table 0532 - Expanded yes/no indicator table* in Chapter 2 for valid values.

17.4.2.27 ITM-27 Procedure Code (CNE) 00393

```
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)>
```

Definition: This field contains a unique identifier assigned to the service item, if any, associated with the charge. In the United States this is often the HCPCS code. Refer to *Externally defined Table 0088 - Procedure code* for suggested values. This field is a CNE data type for compatibility with clinical and ancillary systems.

As of v2.6, the known applicable external coding systems include those in the table below. If the code set you are using is in this table, then you must use that designation.

HL7 Table 0088 - Procedure Code Coding Systems

Coding System	Description	Comment
C4	CPT-4	American Medical Association, P.O. Box 10946, Chicago IL 60610.
C5	CPT-5	(under development – same contact as above)
HCPCS	CMS (formerly HCFA) Common Procedure Coding System	HCPCS: contains codes for medical equipment, injectable drugs, transportation services, and other services not found in CPT4.
HPC	CMS (formerly HCFA)Procedure Codes (HCPCS)	Health Care Financing Administration (HCFA) Common Procedure Coding System (HCPCS) including modifiers.[3]

3 The HCPCS code is divided into three "levels." Level I includes the entire CPT-4 code by reference. Level II includes the American Dental Association's Current Dental Terminology (CDT-2) code by reference. Level II also includes the genuine HCPCS codes, approved and maintained jointly by the Alpha-Numeric Editorial Panel, consisting ofCMS, the Health Insurance Association of America, and the Blue Cross and Blue Shield Association. Level III are codes developed locally by Medicare carriers. The HCPCS modifiers are divided into the same three levels, I being CPT-4 modifiers, II CDT-2 and genuine HCPCS modifiers, and III being locally agreed modifiers.

17.4.2.28 ITM-28 Procedure Code Modifier (CNE) 01316

```
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)>
```

Definition: This field contains the procedure code modifier to the procedure code reported in ITM-27 – Procedure Cod, when applicable. Procedure code modifiers are defined by USA regulatory agencies such as CMS and the AMA. Multiple modifiers may be reported. Refer to *Externally defined Table 0340 - Procedure code modifier* for suggested values.

As of v2.6, the known applicable external coding systems include those in the table below. If the code set you are using is in this table, then you must use that designation.

HL7 Table 0340 - Procedure Code Modifier Coding Systems

Coding System	Description	Comment
CPTM	CPT Modifier Code	Available for the AMA at the address listed for CPT above. These codes are found in Appendix A of CPT 2000 Standard Edition. (CPT 2000 Standard Edition, American Medical Association, Chicago, IL)
HPC	CMS (formerly HCFA)Procedure Codes (HCPCS)	Health Care Financing Administration (HCFA) Common Procedure Coding System (HCPCS) including modifiers.[4]

17.4.2.29 ITM-29 Special Handling Code (CWE) 01370

```
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)>
```

Definition: This field contains a special handling code to describe special handling considerations for this item. Refer to *User-defined Table 0376 – Special Handling Code* in Chapter 7 for suggested values. 'The value set can be extended with user specific values.

17.4.3 STZ - Sterilization Parameter Segment

The STZ segment contains sterilization-specific attributes of a supply item.

HL7 Attribute Table - STZ – Sterilization Parameter

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	250	CWE			0806	02213	Sterilization Type
2	250	CWE				02214	Sterilization Cycle
3	250	CWE			0809	02215	Maintenance Cycle
4	250	CWE			0811	02216	Maintenance Type

17.4.3.0 STZ Field Definitions

17.4.3.1 STZ-1 Sterilization Type (CWE) 02213

```
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)>
```

The genuine HCPCS codes and modifiers of level II can be found at http://www.hcfa.gov/stats/anhcpcdl.htm. CMS distributes the HCPCS codes via the National Technical Information Service (NTIS, www.ntis.gov) and NTIS distribution includes the CDT-2 part of HCPCS Level II, but does not include the CPT-4 part (Level I). CMS may distribute the CPT-4 part to its contractors.

4 The HCPCS code is divided into three "levels." Level I includes the entire CPT-4 code by reference. Level II includes the American Dental Association's Current Dental Terminology (CDT-2) code by reference. Level II also includes the genuine HCPCS codes, approved and maintained jointly by the Alpha-Numeric Editorial Panel, consisting of CMS, the Health Insurance Association of America, and the Blue Cross and Blue Shield Association. Level III are codes developed locally by Medicare carriers. The HCPCS modifiers are divided into the same three levels, I being CPT-4 modifiers, II CDT-2 and genuine HCPCS modifiers, and III being locally agreed modifiers.

The genuine HCPCS codes and modifiers of level II can be found at http://www.hcfa.gov/stats/anhcpcdl.htm. CMS distributes the HCPCS codes via the National Technical Information Service (NTIS, www.ntis.gov) and NTIS distribution includes the CDT-2 part of HCPCS Level II, but does not include the CPT-4 part (Level I). CMS may distribute the CPT-4 part to its contractors.

Definition: This field contains the type of sterilization used for sterilizing the inventory supply item in the ITM segment. Refer to *User-defined Table 0806 – Sterilization Type* for suggested values.

User-defined Table 0806 – Sterilization Type

Value	Description	Comment
EOG	Ethylene Oxide Gas	
PCA	Peracetic acid	
STM	Steam	

17.4.3.2 STZ-2 Sterilization Cycle (CWE) 02214

```
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)>
```

Definition: This field contains the sterilization cycle used for sterilization of the inventory supply item. The AAMI Standard defines steam sterilization cycles – cycle names: pressure, temperature, dry time. Refer to *User-defined table 0702 – Cycle Type* in SCD-28 – Cycle Type.

17.4.3.3 STZ-3 Maintenance Cycle (CWE) 02215

```
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)>
```

Definition: This field contains the maintenance cycle used for the inventory supply item, such as the number of times to sharpen after five uses. Refer to *User-defined Table 0809 – Maintenance Cycle* for suggested values.

User-defined Table 0809 – Maintenance Cycle

Value	Description	Comment
	No suggested values	

17.4.3.4 STZ-4 Maintenance Type (CWE) 02216

```
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)>
```

Definition: This field contains the type of maintenance performed on the inventory supply item. This is different than the maintenance cycle in the sense that it can describe the number of maintenance cycles that can be performed before disposing of the inventory supply item. Refer to *User-defined Table 0811 – Maintenance Type* for suggested values.

User-defined Table 0811 – Maintenance Type

Value	Description	Comment
	No suggested values	

17.4.4 VND – Purchasing Vendor Segment

This segment contains purchasing vendors that supply the inventory supply item specified in the ITM segment.

HL7 Attribute Table – VND – Purchasing Vendor

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	2	SI	R			02217	Set Id – VND
2	250	EI	R			02218	Vendor Identifier
3	999	ST	O			02276	Vendor Name
4	20	EI	O			02219	Vendor Catalog Number
5	1	CNE	O		0532	02220	Primary Vendor Indicator

17.4.4.0 VND Field Definitions

17.4.4.1 VND-1 Set ID - VND (SI) 02217

Definition: This field contains a sequential number that identifies this segment within a given PURCHASING_VENDOR segment group. For the first occurrence of the segment in a given group, the sequence number shall be one; for the second occurrence, the sequence number shall be two; etc.

17.4.4.2 VND-2 Vendor Identifier (EI) 02218

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

Definition: This field contains the identifier of the vendor in the system.

17.4.4.3 VND-3 Vendor Name (ST) 02276

Definition: This field contains the name of the vendor identified in VND-2.

17.4.4.4 VND-4 Vendor Catalog Number (EI) 02219

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

Definition: This field contains the catalog number assigned to the item by a purchasing vendor.

17.4.4.5 VND-5 Primary Vendor Indicator (CNE) 02220

```
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)>
```

Definition: This field contains an indicator to communicate whether this purchasing vendor is the primary vendor used to place orders for inventory supply item. Refer to *HL7 Table 0532 - Expanded yes/no indicator table* in Chapter 2 for valid values.

17.4.5 PKG - Packaging Segment

This segment contains the type of packaging available for the inventory supply item to be ordered and/or issued to a department or other supply location for a specified Purchasing Vendor. It would be recommended to send this segment in descending unit of measure order corresponding with the ascending Set ID.

HL7 Attribute Table – PKG - Item Packaging

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	2	SI	R			02221	Set Id - PKG
2	250	CWE	O		0818	02222	Packaging Units
3	1	CNE	O		0532	02223	Default Order Unit Of Measure Indicator
4	12	NM				02224	Package Quantity
5	12	CP	O			02225	Price
6	12	CP	O			02226	Future Item Price
7	24	DTM	O			02227	Future Item Price Effective Date

17.4.5.0 PKG Field Definitions

17.4.5.1 PKG-1 Set ID - PKG (SI) 02221

Definition: This field contains a sequential number that identifies this segment within a given Purchasing Vendor segment group. For the first occurrence of the segment, the sequence number shall be one; for the second occurrence, the sequence number shall be two; etc.

17.4.5.2 PKG-2 Packaging Units (CWE) 02222

```
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)>
```

Definition: This field contains the packaging unit that this inventory supply item can be ordered or issued in when purchased from the vendor in the related vendor segment.

User-defined Table 0818 – Package

Value	Description	Comment
CS	Case	
BX	Box	
EA	Each	
SET	Set	

17.4.5.3 PKG-3 Default Order Unit of Measure Indicator (CNE) 02223

```
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)>
```

Definition: This field contains an indicator that determines whether or not the unit of measure present in the PKG-2 is considered the default Order unit of measure. Refer to *HL7 Table 0532 - Expanded yes/no indicator table* in Chapter 2 for valid values.

17.4.5.4 PKG-4 Package Quantity (NM) 02224

Definition: This field contains the number of units present within a unit of measure.

17.4.5.5 PKG-5 Price (CP) 02225

```
Components:  <Price (MO)> ^ <Price Type (ID)> ^ <From Value (NM)> ^ <To Value (NM)> ^ <Range Units (CWE)> ^
             <Range Type (ID)>

Subcomponents for Price (MO):  <Quantity (NM)> & <Denomination (ID)>

Subcomponents for Range Units (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)>
```

Definition: This field contains the price of the item when purchased from the vendor in the associated VND segment, for the unit of measure present in this PKG segment.

17.4.5.6 PKG-6 Future Item Price (CP) 02226

```
Components:  <Price (MO)> ^ <Price Type (ID)> ^ <From Value (NM)> ^ <To Value (NM)> ^ <Range Units (CWE)> ^
             <Range Type (ID)>

Subcomponents for Price (MO):  <Quantity (NM)> & <Denomination (ID)>

Subcomponents for Range Units (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)>
```

Definition: This field contains a future price for the item based on the packaging unit in PKG-2.

17.4.5.7 PKG-7 Future Item Price Effective Date (DTM) 02227

Definition: This field contains the date and time that a price change for the item becomes effective.

17.4.6 PCE – Patient Charge Cost Center Exception

The Patient Charge Cost Center Exception segment identifies the Patient Price associated with Cost Center and Patient Charge Identifier combinations that should be used in an instance that the item is billed to a patient. The grouping of Cost Center accounts, Patient Charge Identifier, and Patient Price is unique.

HL7 Attribute Table – PCE – Patient Charge Cost Center Exceptions

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	2	SI	R			02228	Set ID – PCE
2	30	IS	O		0319	00281	Cost Center Account Number
3	250	CWE	O		0132	00361	Transaction Code
4	12	CP	O			00366	Transaction Amount - Unit

17.4.6.0 PCE Field Definitions

17.4.6.1 PCE-1 Set ID – PCE (SI) 02228

Definition: This field contains a sequential number that identifies this segment within a given material item segment group. For the first occurrence of the segment in a given group, the sequence number shall be one; for the second occurrence, the sequence number shall be two; etc.

17.4.6.2 PCE-2 Cost Center Account Number (IS) 00281

Definition: This field would contain the specific general ledger cost center account number associated with a department that may issue or charge for this item. Refer to *HL7 Table 0319 – Department Cost Center* in Chapter 4 for valid values.

17.4.6.3 PCE-3 Transaction Code (CWE) 00361

```
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)>
```

Definition: This field contains a code that is used by a billing system to charge for the inventory supply item, the descriptive name of the patient charge for that system (as it may appear on a patient's bill or charge labels) and the name of the coding system that assigned the charge code. Refer to *User-defined Table 0132 – Transaction Codes* in Chapter 6 for suggested values.

17.4.6.4 PCE-4 Transaction Amount - Unit (CP) 00366

```
Components:  <Price (MO)> ^ <Price Type (ID)> ^ <From Value (NM)> ^ <To Value (NM)> ^ <Range Units (CWE)> ^
             <Range Type (ID)>

Subcomponents for Price (MO):  <Quantity (NM)> & <Denomination (ID)>

Subcomponents for Range Units (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)>
```

Definition: The price that a department charges to a patient for this inventory supply item when using the Patient Charge Billing code present in this segment.

17.4.7 IVT – Material Location Segment

The Material Location segment (IVT) contains information specific to an inventory location for the inventory supply item in the Material Item (ITM) segment.

HL7 Attribute Table – IVT – Material Location

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	4	SI	R			02062	Set Id – IVT
2	250	EI	R			02063	Inventory Location Identifier
3	999	ST	O			02277	Inventory Location Name
4	250	EI	O			02064	Source Location Identifier
5	999	ST	O			02278	Source Location Name
6	250	CWE	O		0625	02065	Item Status
7	250	EI	O	Y		02066	Bin Location Identifier
8	250	CWE	O			02067	Order Packaging
9	250	CWE	O			02068	Issue Packaging
10	16	EI	O			02069	Default Inventory Asset Account
11	4	CNE	O		0532	02070	Patient Chargeable Indicator
12	250	CWE	O		0132	00361	Transaction Code
13	12	CP	O			00366	Transaction amount - unit
14	250	CWE	O		0634	02073	Item Importance Code

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
15	4	CNE	O		0532	02074	Stocked Item Indicator
16	4	CNE	O		0532	02075	Consignment Item Indicator
17	4	CNE	O		0532	02076	Reusable Item Indicator
18	12	CP	O			02077	Reusable Cost
19	250	EI	O	Y		02078	Substitute Item Identifier
20	250	EI	O			02079	Latex-Free Substitute Item Identifier
21	250	CWE	O		0642	02080	Recommended Reorder Theory
22	4	NM	O			02081	Recommended Safety Stock Days
23	4	NM	O			02082	Recommended Maximum Days Inventory
24	8	NM	O			02083	Recommended Order Point
25	8	NM	O			02084	Recommended Order Amount
26	4	CNE	O		0532	02085	Operating Room Par Level Indicator

17.4.7.0 IVT Field Definitions

17.4.7.1 IVT-1 Set ID - IVT (SI) 02062

Definition: This field contains a sequential number that identifies this segment within a given Material Location segment group. For the first occurrence of the segment, the sequence number shall be one; for the second occurrence, the sequence number shall be two; etc.

17.4.7.2 IVT-2 Inventory Location Identifier (EI) 02063

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

Definition: This field contains the code identifying an inventory supply location that stocks or purchases this item.

17.4.7.3 IVT-3 Inventory Location Name (ST) 02277

Definition: This field contains the name of the inventory supply location identified in IVT-2.

17.4.7.4 IVT-4 Source Location Identifier (EI) 02064

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

Definition: This field contains the code identifying the source location that purchases and stocks items in addition to filling supply requests for the location specified in IVT-2. For example, IVT-2 may be considered Central Supply, an inventory location that issues to departments. IVT-3 may be considered General Stores, a supply location that most items are received into when delivered to the healthcare facility. General Stores would then replenish the Central Supply inventory. Central Supply would then issue supplies to departments based on requests for supplies.

17.4.7.5 IVT-5 Source Location Name (ST) 02278

Definition: This field contains the name of the source supply location identified in IVT-4.

17.4.7.6 IVT-6 Item Status (CWE) 02065

```
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)>
```

Definition: This field contains the status that applies to the inventory supply item for the inventory location specified in IVT-2. Refer to *User-defined Table 0625 – Item Status Codes* for suggested values.

User-defined Table 0625 – Item Status Codes

Value	Description	Comment
1	Active	Item is available to be purchased or issued.

Value	Description	Comment
2	Pending Inactive	Item is not available to be purchased, but is available to be issued.
3	Inactive	Item is not available to be purchased or issued.

17.4.7.7 IVT-7 Bin Location Identifier (EI) 02066

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

Definition: A unique code assigned to a bin location located within the inventory location in IVT-2, where the inventory supply item may be stored.

17.4.7.8 IVT-8 Order Packaging (CWE) 02067

```
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)>
```

Definition: This field contains the primary packaging unit by which the item can be requisitioned or ordered to replenish the inventory supply item for the corresponding inventory location specified in IVT-2. See *User-defined Table 0818 – Package* in PKG-2 – Packaging Units for suggested values.

17.4.7.9 IVT-9 Issue Packaging (CWE) 02068

```
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)>
```

Definition: This field contains the primary issue packaging unit by which the inventory supply item can be issued to departments or other locations by the corresponding inventory location specified in IVT-2. See *User-defined Table 0818 – Package* in PKG-2 – Packaging Units for suggested values.

17.4.7.10 IVT-10 Default Inventory Asset Account (EI) 02069

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

Definition: This field contains the general ledger number for the default inventory asset account used in journal transactions associated with items stored in this inventory location. The account includes all elements of a general ledger account (a fully qualified general ledger account number). All elements may include a corporation, department/cost center account, and expense account.

17.4.7.11 IVT-11 Patient Chargeable Indicator (CNE) 02070

```
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)>
```

Definition: This field indicates whether the item is patient chargeable at this inventory location. Refer to *HL7 Table 0532 - Expanded yes/no indicator table* in Chapter 2 for valid values.

17.4.7.12 IVT-12 Transaction Code (CWE) 00361

```
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)>
```

Definition: This field contains a code that is used by a billing system to charge for the inventory supply item, the descriptive name of the patient charge for that system (as it may appear on a patient's bill or charge labels) and the name of the coding system that assigned the charge code. Refer to *User-defined Table 0132 – Transaction Codes* in Chapter 6 for suggested values.

17.4.7.13 IVT-13 Transaction Amount – Unit (CP) 00366

```
Components:  <Price (MO)> ^ <Price Type (ID)> ^ <From Value (NM)> ^ <To Value (NM)> ^ <Range Units (CWE)> ^
             <Range Type (ID)>

Subcomponents for Price (MO):  <Quantity (NM)> & <Denomination (ID)>

Subcomponents for Range Units (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)>
```

Definition: This field contains the dollar amount charged to patients for this single inventory supply item.

17.4.7.14 IVT-14 Item Importance Code (CWE) 02073

```
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)>
```

Definition: This field contains an indicator of the level of importance of an item considered for this inventory location, such as an indicator signifying whether the item is considered critical for this inventory location. Refer to *User-defined Table 0634 – Item Importance Codes* for suggested values.

User-defined Table 0634 – Item Importance Codes

Value	Description	Comment
CRT	Critical	

17.4.7.15 IVT-15 Stocked Item Indicator (CNE) 02074

```
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)>
```

Definition: This field contains an indicator that identifies whether the item is regularly stocked in this inventory location. Stock items are ordered regularly as part of the healthcare organization's inventory replenishment cycle. If the item is not regularly stocked in this inventory location (non-stock item), the item is available to be ordered from this inventory location if requested by a department. Refer to *HL7 Table 0532 - Expanded yes/no indicator table* in Chapter 2 for valid values.

17.4.7.16 IVT-16 Consignment Item Indicator (CNE) 02075

```
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)>
```

Definition: This field contains an indicator signifying whether the inventory supply item is purchased on consignment. If the item is purchased on consignment, the healthcare organization does not pay for the inventory supply item until it is used. Refer to *HL7 Table 0532 - Expanded yes/no indicator table* in Chapter 2 for valid values.

17.4.7.17 IVT-17 Reusable Item Indicator (CNE) 02076

```
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)>
```

Definition: This field contains an indicator signifying that the inventory supply item is reusable, for example, after sterilization. Refer to *HL7 Table 0532 - Expanded yes/no indicator table* in Chapter 2 for valid values.

17.4.7.18 IVT-18 Reusable Cost (CP) 02077

```
Components:  <Price (MO)> ^ <Price Type (ID)> ^ <From Value (NM)> ^ <To Value (NM)> ^ <Range Units (CWE)> ^
             <Range Type (ID)>

Subcomponents for Price (MO):  <Quantity (NM)> & <Denomination (ID)>

Subcomponents for Range Units (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)>
```

Definition: This field contains the issue cost charged to a department or patient for a reusable item. This cost is calculated based on the cost of reprocessing the item. Examples of reusable items are linens, restraints, and procedure packs (custom for specific procedures).

17.4.7.19 IVT-19 Substitute Item Identifier (EI) 02078

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

Definition: The substitute item is an item that is recommended as a substitute for the corresponding item in ITM-1.

17.4.7.20 IVT-20 Latex-Free Substitute Item Identifier (EI) 02079

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

Definition: The latex-free substitute item is an item that is latex-free, recommended as a substitute for the corresponding item in the ITM-1 segment when a latex-free item is needed.

17.4.7.21 IVT-21 Recommended Reorder Theory (CWE) 02080

```
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)>
```

Definition: This field contains the method used to calculate a recommendation for when and how much of an inventory supply item to reorder. Refer to *User-defined Table 0642 – Reorder Theory Codes* for suggested values.

User-defined Table 0642 – Reorder Theory Codes

Value	Description	Comment
D	DOP/DOQ	Corresponds to the theory that calculates the appropriate order point and recommends the quantity to order based on system parameters and historical trends. DOP stands for Dynamic Order Point, and DOQ stands for Dynamic Order Quantity.
M	MIN/MAX	Corresponds to theory - the quantity recommended is the Order Quantity, less the On Hand Quantity, and less the On Order Quantity. The Order Amount is the desired Maximum On Hand Quantity.
O	Override	The quantity recommended is the Order Quantity, less the On Order Quantity. The Order Amount is the amount to order when the On Hand reaches the Order Point.

17.4.7.22 IVT-22 Recommended Safety Stock Days (NM) 02081

Definition: This field contains the number of days for stock to be kept on-hand to cushion against a stock-out for this item.

17.4.7.23 IVT-23 Recommended Maximum Days Inventory (NM) 02082

Definition: This field contains the maximum number of days of inventory to have on-hand at any one point in time. This value is used in calculations of recommended order quantities

17.4.7.24 IVT-24 Recommended Order Point (NM) 02083

Definition: This field contains the on-hand quantity referencing the recommended level of inventory at which the item should be re-ordered.

17.4.7.25 IVT-25 Recommended Order Amount (NM) 02084

Definition: This field contains the quantity that the system should recommend to order when the on-hand quantity is equal to or less than the reorder point. The quantity should be set at the Order Unit of Measure.

17.4.7.26 IVT-26 Operating Room Par Level Indicator (CNE) 02085

```
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)>
```

Definition: This field contains an indicator that determines whether on-hands inventory will be decremented when performing Preference List Issues. Refer to *HL7 Table 0532 - Expanded yes/no indicator table* in Chapter 2 for valid values.

If valued with a 'Y', this indicates to the system that the item to be issued is contained in an OR Par Level area (in an actual Operating Room) and not an Operating Room inventory area; therefore, on-hands of the Operation Room inventory area will not be decremented. If valued with a 'N', the item is contained in an Operating Room inventory location and on-hands will be decremented when performing Preference List Issues.

17.4.8 ILT – Material Lot Segment

The Material Lot segment (ILT) contains material information specific to a lot within an inventory location associated with the item in the IVT segment. This segment is similar to the IIM segment used with the limited inventory item master message.

Note that on-hand quantities do NOT refer to a continuously updated quantity. The expectation is for periodic physical inventory.

HL7 Attribute Table – ILT – Material Lot

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	4	SI	R			02086	Set Id - ILT
2	250	ST	R			01800	Inventory Lot Number
3	24	DTM	O			01801	Inventory Expiration Date
4	24	DTM	O			01804	Inventory Received Date
5	12	NM	O			01805	Inventory Received Quantity
6	250	CWE	O			01806	Inventory Received Quantity Unit
7	12	MO	O			01807	Inventory Received Item Cost
8	24	DTM	O			01808	Inventory On Hand Date
9	12	NM	O			01809	Inventory On Hand Quantity
10	250	CWE	O			01810	Inventory On Hand Quantity Unit

17.4.8.0 ILT Field Definitions

17.4.8.1 ILT-1 Set ID – ILT (SI) 02086

Definition: This field contains the number that identifies this transaction. For the first occurrence of the segment, the sequence number shall be one; for the second occurrence, the sequence number shall be two; etc.

17.4.8.2 ILT-2 Inventory Lot Number (ST) 01800

Definition: This field contains the lot number of the service item in inventory.

Note: The lot number is the number printed on the label attached to the item or container holding the substance. If the substance is a vaccine, for example, and a diluent is required, a lot number may appear on the vial containing the diluent; however, any such identifier associated with a diluent is not the identifier of interest. The substance lot number should be reported, not that of the diluent.

17.4.8.3 ILT-3 Inventory Expiration Date (DTM) 01801

Definition: This field contains the expiration date of the service item in inventory.

Note: Expiration date does not always have a "day" component; therefore, such a date may be transmitted as YYYYMM.

17.4.8.4 ILT-4 Inventory Received Date (DTM) 01804

Definition: This field contains the most recent date that the product in question was received into inventory.

17.4.8.5 ILT-5 Inventory Received Quantity (NM) 01805

Definition: This field contains the quantity of this inventory item that was received on the date specific in ILT-4 - Inventory Received Date field.

17.4.8.6 ILT-6 Inventory Received Quantity Unit (CWE) 01806

```
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)>
```

Definition: This field specifies the unit for the Inventory Received Quantity. See *User-defined Table 0818 – Package* in PKG-2 – Packaging Units for suggested values.

17.4.8.7 ILT-7 Inventory Received Item Cost (MO) 01807

```
Components:  <Quantity (NM)> ^ <Denomination (ID)>
```

Definition: This field contains the per-unit cost of the inventory item at the time of receipt. ILT-6 - Inventory Received Quantity Unit field specifies the per-unit basis of this field.

17.4.8.8 ILT-8 Inventory on Hand Date (DTM) 01808

Definition: This field specifies the most recent date that an inventory count was performed for the inventory item.

17.4.8.9 ILT-9 Inventory on Hand Quantity (NM) 01809

Definition: This field contains the quantity of this inventory item that was available for issue/use as of the date specified in ILT-8 - Inventory on Hand Date field. No adjustment has been made for subsequent use.

17.4.8.10 ILT-10 Inventory on Hand Quantity Unit (CWE) 01810

```
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)>
```

Definition: This field contains the quantity of this inventory item that was available for issue/use as of the date specified in ILT-8 - Inventory on Hand Date field. No adjustment has been made for subsequent use. See *User-defined Table 0818 – Package* in PKG-2 – Packaging Units for suggested values.

17.5 PLACER APPLICATION REQUESTS AND TRIGGER EVENTS

Placer request and filler response transactions are the messages and trigger events used between placer applications and filler applications. The placer application initiates transactions using the **SLR, STI, SDR,** or **SMD** message types, requesting information with the given trigger event message detail. The filler application responds to these requests, using the **SLS, STS, SDS,** or **SMS** message types, to either grant or deny the requests from the placer application.

When initiating a request, the placer application will generate and send a message type containing all of the information necessary to communicate the desired action to the filler application. All required segments and fields (both explicitly required and conditionally required) should be provided to the filler application, as defined in this chapter. When the filler application receives the transaction, it acknowledges it with the appropriate accept acknowledgment using an **ACK** message (assuming that the enhanced acknowledgment mode is in use).

After processing the request at the application level, the filler acknowledges the transaction with the appropriate application acknowledgment in a response message type (again assuming that an application acknowledgment was requested under the enhanced acknowledgment mode or that the original acknowledgment mode is in use). Applying the explanations of the various application acknowledgment codes in the context of this chapter, an application accept from the filler means that the request was processed and accepted by the filler.

An application error from the filler means that the request was processed and denied. An application reject from the filler means that the request was not, and could not be, processed due to one or more reasons unrelated to its content (for example, it fails the basic application protocol validation, the filler system is down, or there was an internal error).

There are no unsolicited messages initiated from a filler application defined in this set of trigger events. Those messages and trigger events are defined below, in section *17.6*, "*Filler Application Messages and Trigger Events Unsolicited*."

All of the trigger events associated with placer request and filler response transactions use the message definitions that follow:

17.5.1 SLR/ACK - Request New Sterilization Lot (Event S28)

A placer application (Sterilizer) sends a transaction with this trigger event to a filler application (Instrument-tracking system) to request that a new sterilization lot be added. If it is successful, the filler application returns an application acknowledgment (if requested under the enhanced acknowledgment mode, or if the original acknowledgment mode is in use).

SLR^S28^SLR_S28	Request New Sterilization	Status	Chapter
MSH	Message Header		2

SLR^S28^SLR_S28	Request New Sterilization	Status	Chapter
[{ SFT }]	Software		2
[UAC]	User Authentication Credential Segment		2
{SLT}	Sterilization Lot		17

ACK^S28^ACK	General Acknowledgment	Status	Chapter
MSH	Message Header		2
[{ SFT }]	Software		2
[UAC]	User Authentication Credential Segment		2
MSA	Acknowledgment		2
[{ ERR }]	Error		2

17.5.2 SLR/ACK - Request Sterilization Lot Deletion (Event S29)

A request sterilization lot deletion is sent by the placer application to the filler application to request that a lot that had been created in error be removed from the system. A delete trigger event differs from a cancel trigger event in that a delete acts to remove an error, whereas a cancel acts to prevent a valid request from occurring. If it is successful, an application acknowledgment is returned.

The delete trigger event should be implemented with careful forethought, as it typically has different effects and repercussions in various applications. In some applications, a delete event cannot be undone. This means that if a delete transaction was sent erroneously, recovery will be difficult or impossible. In other applications, a delete transaction will not result in the physical deletion of the record(s), but will set a status or a flag. In these cases, the filler and/or placer appointment identifiers (the numbers or codes that uniquely identify the sterilization lot or request to the placer and filler applications) probably cannot be reused. Since an application may maintain a record of deleted sterilization lots, the reuse of an identifier may cause a conflict in the applications' processing of transactions.

SLR^S29^SLR_S28	Request Sterilization Lot Deletion	Status	Chapter
MSH	Message Header		2
[{ SFT }]	Software		2
[UAC]	User Authentication Credential Segment		2
{SLT}	Sterilization Lot		17

ACK^S29^ACK	General Acknowledgment	Status	Chapter
MSH	Message Header		2
[{ SFT }]	Software		2
[UAC]	User Authentication Credential Segment		2
MSA	Acknowledgment		2
[{ ERR }]	Error		2

17.5.3 STI/ACK - Request Item (Event S30)

A request item is sent by the placer application to the filler application to request the ID and description of an item to be sterilized or decontaminated. If it is successful, the filler application returns an application acknowledgment (if requested under the enhanced acknowledgment mode, or if the original acknowledgment mode is in use).

STI^S30^SLR_S28	Sterilization Item Request	Status	Chapter
MSH	Message Header		2
[{ SFT }]	Software		2
[UAC]	User Authentication Credential Segment		2
{SLT}	Sterilization Lot		17

ACK^S30^ACK	General Acknowledgment	Status	Chapter
MSH	Message Header		2
[{ SFT }]	Software		2
[UAC]	User Authentication Credential Segment		2
MSA	Acknowledgment		2
[{ ERR }]	Error		2

17.5.4 SDR/ACK - Request Anti-Microbial Device Data (Event S31)

This trigger event is sent by the placer application to the filler application to request anti-microbial device data created during the decontamination/sterilization of medical supplies. In the context of this message segment, the term 'device' refers to a sterilizer or a washer. Sterilizers perform a sterilization process and washers perform a decontamination process.

SDR^S31^SDR_S31	Anti-Microbial Device Data Request	Status	Chapter
MSH	Message Header		2
[{ SFT }]	Software		2
[UAC]	User Authentication Credential Segment		2
<	--- ANTI-MICROBIAL DEVICE DATA begin		
SDD	Sterilization Device		17
[{SCD}]	Sterilization Cycle		17
>	--- ANTI-MICROBIAL DEVICE DATA end		

ACK^S31^ACK	Anti-Microbial Device Data Request Response	Status	Chapter
MSH	Message Header		2
[{ SFT }]	Software		2
[UAC]	User Authentication Credential Segment		2
MSA	Acknowledgment		2
[{ ERR }]	Error		2

17.5.5 SMD/ACK - Request Anti-Microbial Device Cycle Data (Event S32)

This trigger event is sent by the placer application to the filler application to request anti-microbial device cycle data created during the decontamination/sterilization of medical supplies. In the context of this message segment, the term 'device' refers to a sterilizer or a washer. Sterilizers perform a sterilization process and washers perform a decontamination process.

SMD^S32^SDR_S32	Anti-Microbial Device Cycle Data Request	Status	Chapter
MSH	Message Header		2
[{ SFT }]	Software		2
[UAC]	User Authentication Credential Segment		2
<	--- ANTI-MICROBIAL DEVICE CYCLE DATA begin		
SDD	Sterilization Device		17
[{SCD}]	Sterilization Cycle		17
>	--- ANTI-MICROBIAL DEVICE CYCLE DATA end		

ACK^S32^ACK	Anti-Microbial Device Cycle Data Request Response	Status	Chapter
MSH	Message Header		2
[{ SFT }]	Software		2

ACK^S32^ACK	Anti-Microbial Device Cycle Data Request Response	Status	Chapter
[UAC]	User Authentication Credential Segment		2
MSA	Acknowledgment		2
[{ ERR }]	Error		2

17.6 FILLER APPLICATION MESSAGES AND TRIGGER EVENTS UNSOLICITED

Unsolicited transactions from filler applications are the messages and trigger events used between filler applications and auxiliary applications. Transactions are initiated by the filler application, using the **STC** message to notify auxiliary applications of a sterilization configuration set. The auxiliary application responds to these notifications, using the **ACK** message, either to acknowledge receipt of the transaction, or to signal that an interfacing error of some kind has occurred.

As the discussion of application roles has indicated above, any one application can have more than one application role. If it is important that the application acting in the placer application role in your messaging environment be notified of unsolicited sterilization configurations, then it must also support the role of an auxiliary application.

When initiating a notification transaction, the filler application will generate and send an **STC, SLN, SDN,** or **SCN** message containing all of the information necessary to communicate the desired information to the auxiliary application. All required segments and fields (both explicitly required and conditionally required) should be provided by the filler application, as defined in this chapter. When the auxiliary application receives the transaction, it acknowledges with the appropriate accept acknowledgment using an **ACK** message (assuming that the enhanced acknowledgment mode is in use). After processing the notification at the application level, the auxiliary application acknowledges the transaction with the appropriate application acknowledgment in an **ACK** message (assuming that an application acknowledgment was requested under the enhanced acknowledgment mode or that the original acknowledgment mode is in use). Applying the explanations of the various application acknowledgment codes (detailed in Chapter 2) in the context of this chapter, an application accept from the auxiliary application means that the notification was processed and accepted. An application error from the auxiliary application means that the auxiliary application was unable to process the notification at the application level. An application reject from the auxiliary application means that the request was not, and could not be, processed due to one or more reasons unrelated to its content (for example, it fails the basic application protocol validation, the system is down, or there was an internal error).

17.6.1 STC/ACK - Notification of Sterilization Configuration (Event S33)

This message is sent from a filler application to notify other applications of a new sterilization configuration. The information in the STC segment describes the detail of the new sterilization configuration.

STC^S33^STC_S33	Sterilization Configuration Notification	Status	Chapter
MSH	Message Header		2
[{ SFT }]	Software		2
[UAC]	User Authentication Credential Segment		2
{SCP}	Sterilization Configuration		17

ACK^S33^ACK	General Acknowledgment	Status	Chapter
MSH	Message Header		2
[{ SFT }]	Software		2
[UAC]	User Authentication Credential Segment		2
MSA	Acknowledgment		2
[{ ERR }]	Error		2

17.6.2 SLN/ACK - Notification of New Sterilization Lot (Event S34)

This message is sent from a filler application to notify other applications that a new sterilization lot has been created. The information provided in the SLT segment describes the new sterilization lot that has been created by the filler application.

SLN^S34^SLR_S28	Notification of New Sterilization Lot	Status	Chapter
MSH	Message Header		2
[{ SFT }]	Software		2
[UAC]	User Authentication Credential Segment		2
{SLT}	Sterilization Lot		17

ACK^S34^ACK	General Acknowledgment	Status	Chapter
MSH	Message Header		2
[{ SFT }]	Software		2
[UAC]	User Authentication Credential Segment		2
MSA	Acknowledgment		2
[{ ERR }]	Error		2

17.6.3 SLN/ACK - Notification of Sterilization Lot Deletion (Event S35)

This message is sent from a filler application to notify other applications that a sterilization lot has been deleted. The information provided in the SLT segment describes the sterilization lot that has been deleted by the filler application.

SLN^S35^SLR_S28	Notification of Sterilization Lot Deletion	Status	Chapter
MSH	Message Header		2
[{ SFT }]	Software		2
[UAC]	User Authentication Credential Segment		2
{SLT}	Sterilization Lot		17

ACK^S35^ACK	General Acknowledgment	Status	Chapter
MSH	Message Header		2
[{ SFT }]	Software		2
[UAC]	User Authentication Credential Segment		2
MSA	Acknowledgment		2
[{ ERR }]	Error		2

17.6.4 SDN/ACK - Notification of Anti-Microbial Device Data (Event S36)

This message is sent from a filler application to notify other applications that anti-microbial device data has been generated. The information in the SDN segment and the other detail segments as appropriate describe the detail of a device during a sterilization or decontamination cycle.

SDN^S36^SDR_S31	Anti-Microbial Device Data Notification	Status	Chapter
MSH	Message Header		2
[{ SFT }]	Software		2
[UAC]	User Authentication Credential Segment		2
<	--- ANTI-MICROBIAL DEVICE DATA begin		
SDD	Sterilization Device		17
[{SCD}]	Sterilization Cycle		17
>	--- ANTI-MICROBIAL DEVICE DATA end		

ACK^S36^ACK	General Acknowledgment	Status	Chapter
MSH	Message Header		2
[{ SFT }]	Software		2
[UAC]	User Authentication Credential Segment		2
MSA	Acknowledgment		2
[{ ERR }]	Error		2

17.6.5 SCN/ACK - Notification of Anti-Microbial Device Cycle Data (Event S37)

This message is sent from a filler application to notify other applications that anti-microbial device cycle data has been generated. The information in the SCN segment and the other detail segments as appropriate describe details of a sterilization or decontamination cycle.

SCN^S37^SDR_S32	Anti-Microbial Device Cycle Data Notification	Status	Chapter
MSH	Message Header		2
[{ SFT }]	Software		2
[UAC]	User Authentication Credential Segment		2
<	--- ANTI-MICROBIAL DEVICE CYCLE DATA begin		
SDD	Sterilization Device		17
[{SCD}]	Sterilization Cycle		17
>	--- ANTI-MICROBIAL DEVICE CYCLE DATA end		

ACK^S37^ACK	General Acknowledgment	Status	Chapter
MSH	Message Header		2
[{ SFT }]	Software		2
[UAC]	User Authentication Credential Segment		2
MSA	Acknowledgment		2
[{ ERR }]	Error		2

17.7 STERILIZATION AND DECONTAMINATION MESSAGE SEGMENTS

17.7.1 SCP – Sterilizer Configuration Segment

The sterilization configuration segment contains information specific to configuration of a sterilizer or washer for processing sterilization or decontamination loads.

HL7 Attribute Table - SCP - Sterilizer Configuration Notification (Anti-Microbial Devices)

SEQ	LEN	DT	R/O/C	RP/#	TBL#	ITEM#	ELEMENT NAME
1	2	NM				02087	Number Of Decontamination/Sterilization Devices
2	250	CWE			0651	02088	Labor Calculation Type
3	250	CWE			0653	02089	Date Format
4	8	EI				02090	Device Number
5	999	ST				02279	Device Name
6	2	ST				02091	Device Model Name
7	250	CWE			0657	02092	Device Type
8	250	CWE			0659	02093	Lot Control

17.7.1.0 SCP Field Definitions

17.7.1.1 SCP-1 Number of Decontamination/Sterilization Devices (NM) 02087

Definition: The number of decontamination/sterilization devices recognized by the instrument-tracking system. The decontamination/sterilization device(s) would configure itself based on the data in this message.

17.7.1.2 SCP-2 Labor Calculation Type (CWE) 02088

```
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)>
```

Definition: The method at which labor is calculated for use in tracking employee productivity.

User Defined Table 0651 – Labor Calculation Type

Value	Description	Comment
TME	Time	
CST	Cost	

17.7.1.3 SCP-3 Date Format (CWE) 02089

```
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)>
```

Definition: The format of the date that is used to record date parameters of a decontamination/sterilization instance.

User-defined Table 0653 – Date Format

Value	Description	Comment
1	mm/dd/yy	USA standard
2	yy.mm.dd	ANSI standard
3	dd/mm/yy	Britain/France standard
4	dd.mm.yy	Germany standard
5	yy/mm/dd	Japan standard
6	Yymmdd	ISO standard

17.7.1.4 SCP-4 Device Number (EI) 02090

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

Definition: The number of the device (e.g., 01).

17.7.1.5 SCP-5 Device Name (ST) 02279

Definition: The name of the device associated with the device number in SCP-4 (e.g., VAC)

17.7.1.6 SCP-6 Device Model Name (ST) 02091

Definition: The manufacturer's designated model name.

17.7.1.7 SCP-7 Device Type (CWE) 02092

```
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)>
```

Definition: The type of device, such as a steam sterilizer or gas sterilizer.

User-Defined Table 0657 – Device Type

Value	Description	Comment
1	EO Gas Sterilizer	
2	Steam Sterilizer	
3	Peracetic Acid	

17.7.1.8 SCP-8 Lot Control (CWE) 02093

```
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)>
```

Definition: A code assigned to a device to indicate if the sterilization load is built in the sub-sterile area adjacent to an Operating Room or the Central Processing Department (Central Supply).

User-Defined Table 0659 – Lot Control

Value	Description	Comment
1	OR Mode Without Operator	
2	OR Mode with Operator	
3	CPD Mode Without Operator	
4	CPD Mode With Operator	
5	Offline Mode	

17.7.2 SLT – Sterilization Lot Segment

The SLT segment defines requests, responses, and notifications of sterilization lots and supply item descriptions. This message may be used for CPD (Central Supply) and OR (Sub-sterile area outside of an Operating Room) mode.

HL7 Attribute Table – SLT – Sterilization Lot

SEQ	LEN	DT	R/O/C	RP/#	TBL#	ITEM#	ELEMENT NAME
1	8	EI				02094	Device Number
2	999	ST				02280	Device Name
3	11	EI				02095	Lot Number
4	250	EI				02096	Item Identifier
5	30	ST				02097	Bar Code

17.7.2.0 SLT Field Definitions

17.7.2.1 SLT-1 Device Number (EI) 02094

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

Definition: The unique identifier of the device (assigned by user, not assigned by the software application; e.g.: 01).

17.7.2.2 SLT-2 Device Name (ST) 02280

Definition: The name of the device associated with the device number in SLT-1 (e.g., VAC).

17.7.2.3 SLT-3 Lot Number (EI) 02095

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

Definition: A unique number associated with an instance of a sterilization/decontamination cycle assigned by the instrument-tracking system.

17.7.2.4 SLT-4 Item Identifier (EI) 02096

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

Definition: The Item Identifier is a unique code assigned to the material item by the Instrument-tracking software application to identify the item being sterilized or decontaminated.

17.7.2.5 SLT-5 Bar Code (ST) 02097

Definition: The special identification code, printed as a set of vertical bars of differing widths, used on instruments to identify them and provide for rapid, error-free input by a barcode scanning device. The coding can include numbers, letters or a combination of both.

17.7.3 SDD - Sterilization Device Data Segment

The SDD segment contains the attributes of an instance of a cycle that provides sterilization or decontamination of medical supplies.

HL7 Attribute Table - SDD – Sterilization Device Data

SEQ	LEN	DT	R/O/C	RP/#	TBL#	ITEM#	ELEMENT NAME
1	11	EI				02098	Lot Number
2	8	EI				02099	Device Number
3	999	ST				02281	Device Name
4	1	IS			0667	02100	Device Data State
5	3	IS			0669	02101	Load Status
6	3	NM				02102	Control Code
7	15	ST				02103	Operator Name

17.7.3.0 SDD Field Definitions

17.7.3.1 SDD-1 Lot Number (EI) 02098

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

Definition: A unique number associated with an instance of a sterilization/decontamination cycle assigned by the instrument-tracking system.

17.7.3.2 SDD-2 Device Number (EI) 02099

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

Definition: The number of the device (e.g., 01 VAC).

17.7.3.3 SDD-3 Device Name (ST) 02281

Definition: The name of the device associated with the device number in SDD-2 (e.g., 01 VAC).

17.7.3.4 SDD-4 Device Data State (IS) 02100

Definition: The state of data being sent, i.e., historic data of the cycle or a real-time snapshot of the current value of the cycle data. During a sterilization process, data is consistently being output to record the value of the data at each point in time within the instance of a cycle. For example, the temperature is recorded at every point in time during the cycle.

User-defined Table 0667 – Device Data State -

Value	Description	Comment
0	Real Time Values	Display data
1	Historic Values	Print data

17.7.3.5 SDD-4 Load Status (IS) 02101

Definition: The status of the load.

User-Defined Table 0669 – Load Status

Value	Description	Comment
LLD	Building a Load	A load is being built
LCP	Load In Process	The load is running
LCC	Load is Complete	The load is complete
LCN	Load Canceled	The load is canceled

17.7.3.6 SDD-5 Control Code (NM) 02102

Definition: A code to command the device to send cycle data from the previous load to the instrument-tracking system.

17.7.3.7 SDD-6 Operator Name (ST) 02103

Definition: The person who started the device load for the decontamination/sterilization process.

17.7.4 SCD – Anti-Microbial Cycle Data Segment

The SCD segment contains cycle data representing an instance of a sterilization or decontamination.

HL7 Attribute Table - SCD - Anti-Microbial Cycle Data

SEQ	LEN	DT	R/O/C	RP/#	TBL#	ITEM#	ELEMENT NAME
1	16	TM				02104	Cycle Start Time
2	16	NM				02105	Cycle Count
3	36	CQ				02106	Temp Max
4	36	CQ				02107	Temp Min
5	16	NM				02108	Load Number
6	16	CQ				02109	Condition Time
7	16	CQ				02110	Sterilize Time
8	16	CQ				02111	Exhaust Time
9	16	CQ				02112	Total Cycle Time
10	4	CWE			0682	02113	Device Status
11	24	DTM				02114	Cycle Start Date/Time
12	16	CQ				02115	Dry Time
13	16	CQ				02116	Leak Rate
14	36	CQ				02117	Control Temperature
15	36	CQ				02118	Sterilizer Temperature
16	16	TM				02119	Cycle Complete Time
17	36	CQ				02120	Under Temperature
18	36	CQ				02121	Over Temperature
19	4	CNE			0532	02122	Abort Cycle
20	4	CNE			0532	02123	Alarm
21	4	CNE			0532	02124	Long in Charge Phase
22	4	CNE			0532	02125	Long in Exhaust Phase
23	4	CNE			0532	02126	Long in Fast Exhaust Phase
24	4	CNE			0532	02127	Reset
25	15	XCN				02128	Operator - Unload
26	4	CNE			0532	02129	Door Open
27	4	CNE			0532	02130	Reading Failure
28	3	CWE			0702	02131	Cycle Type
29	16	CQ				02132	Thermal Rinse Time
30	16	CQ				02133	Wash Time
31	16	CQ				02134	Injection Rate
32	705	CNE			0088	00393	Procedure Code
33	250	CX		Y		00106	Patient Identifier List
34	250	XCN			0010	00137	Attending Doctor
35	36	SN				01356	Dilution Factor

SEQ	LEN	DT	R/O/C	RP/#	TBL#	ITEM#	ELEMENT NAME
36	16	CQ				02139	Fill Time
37	36	CQ				02140	Inlet Temperature

17.7.4.0 SCD Field Definitions

17.7.4.1 SCD-1 Cycle Start Time (TM) 02104

Definition: The time that the load cycle begins.

17.7.4.2 SCD-2 Cycle Count (NM) 02105

Definition: The number of cycles that have been completed.

17.7.4.3 SCD-3 Temp Max (CQ) 02106

```
Components:  <Quantity (NM)> ^ <Units (CWE)>

Subcomponents for Units (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)>
```

Definition: The maximum temperature achieved during a specific cycle.

17.7.4.4 SCD-4 Temp Min (CQ) 02107

```
Components:  <Quantity (NM)> ^ <Units (CWE)>

Subcomponents for Units (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)>
```

Definition: The minimum temperature achieved during a specific cycle.

17.7.4.5 SCD-5 Load Number (NM) 02108

Definition: A number assigned to the load by the anti-microbial device. This number is incremented by the machine per cycle during the day and reset at midnight.

17.7.4.6 SCD-6 Condition Time (CQ) 02109

```
Components:  <Quantity (NM)> ^ <Units (CWE)>

Subcomponents for Units (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)>
```

Definition: The actual amount of cycle time spent in the conditioning phase. For example, in a pre-vac sterilizer the condition phase is achieved by pulsing the machine six times to create a vacuum.

17.7.4.7 SCD-7 Sterilize Time (CQ) 02110

```
Components:  <Quantity (NM)> ^ <Units (CWE)>

Subcomponents for Units (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)>
```

Definition: The actual amount of cycle time spent sterilizing supplies.

17.7.4.8 SCD-8 Exhaust Time (CQ) 02111

```
Components:  <Quantity (NM)> ^ <Units (CWE)>

Subcomponents for Units (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)>
```

Definition: The actual amount of cycle time spent draining pressure from the sterilizer chamber.

17.7.4.9 SCD-9 Total Cycle Time (CQ) 02112

```
Components:  <Quantity (NM)> ^ <Units (CWE)>

Subcomponents for Units (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)>
```

Definition: The sum of time spent in all phases of a cycle.

17.7.4.10 SCD-10 Device Status (CWE) 02113

```
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)>
```

Definition: The status of a device.

User Defined Table 0682 – Device Status-

Value	Description	Comment
0	Ready	Door Locked
1	Not Ready	Door Unlocked

17.7.4.11 SCD-11 Cycle Start Date/Time (DTM) 02114

Definition: The date and time that the cycle started.

17.7.4.12 SCD-12 Dry Time (CQ) 02115

```
Components:  <Quantity (NM)> ^ <Units (CWE)>

Subcomponents for Units (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)>
```

Definition: The amount of cycle time spent drying the load.

17.7.4.13 SCD-13 Leak Rate (CQ) 02116

```
Components:  <Quantity (NM)> ^ <Units (CWE)>

Subcomponents for Units (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)>
```

Definition: The amount of pressure that the chamber can hold expressed as barometric pressure.

17.7.4.14 SCD-14 Control Temperature (CQ) 02117

```
Components:  <Quantity (NM)> ^ <Units (CWE)>

Subcomponents for Units (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)>
```

Definition: Amount of overdrive above the sterilize temperature.

17.7.4.15 SCD-15 Sterilizer Temperature (CQ) 02118

```
Components:  <Quantity (NM)> ^ <Units (CWE)>

Subcomponents for Units (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)>
```

Definition: The current temperature in the anti-microbial device.

17.7.4.16 SCD-16 Cycle Complete Time (TM) 02119

Definition: The time of day that the cycle completed.

17.7.4.17 SCD-17 Under Temperature (CQ) 02120

```
Components:  <Quantity (NM)> ^ <Units (CWE)>

Subcomponents for Units (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)>
```

Definition: The temperature reached during a cycle, which fell below the required temperature range.

17.7.4.18 SCD-18 Over Temperature (CQ) 02121

```
Components:  <Quantity (NM)> ^ <Units (CWE)>
```

```
Subcomponents for Units (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)>
```

Definition: The temperature reached during a cycle, which exceeded the required temperature.

17.7.4.19 SCD-19 Abort Cycle (CNE) 02122

```
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)>
```

Definition: A notification that the cycle was aborted. Refer to *HL7 Table 0532 - Expanded yes/no indicator table* in Chapter 2 for valid values.

17.7.4.20 SCD-20 Alarm (CNE) 02123

```
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)>
```

Definition: A notification that the time, temperature, or pressure reached is invalid for a specific phase of a cycle. Refer to *HL7 Table 0532 - Expanded yes/no indicator table* in Chapter 2 for valid values.

17.7.4.21 SCD-21 Long in Charge Phase (CNE) 02124

```
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)>
```

Definition: A notification that the charge phase in the cycle has exceeded the maximum time allowed. Refer to *HL7 Table 0532 - Expanded yes/no indicator table* in Chapter 2 for valid values.

17.7.4.22 SCD-22 Long in Exhaust Phase (CNE) 02125

```
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)>
```

Definition: A notification that the exhaust phase in the cycle has exceeded the maximum time allowed. Refer to *HL7 Table 0532 - Expanded yes/no indicator table* in Chapter 2 for valid values.

17.7.4.23 SCD-23 Long in Fast Exhaust Phase (CNE) 02126

```
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)>
```

Definition: A notification that the fast exhaust phase in the cycle has exceeded the maximum time allowed. Refer to *HL7 Table 0532 - Expanded yes/no indicator table* in Chapter 2 for valid values.

17.7.4.24 SCD-24 Reset (CNE) 02127

```
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)>
```

Definition: An indicator that specific anti-microbial device parameters have been set to system defaults. Refer to *HL7 Table 0532 - Expanded yes/no indicator table* in Chapter 2 for valid values.

17.7.4.25 SCD-25 Operator – Unload (XCN) 02128

```
Components:  <ID Number (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)> ^ <DEPRECATED-
            Degree (e.g., MD) (IS)> ^ <Source Table (IS)> ^ <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)> ^ <DEPRECATED-
            Name Validity Range (DR)> ^ <Name Assembly Order (ID)> ^ <Effective Date (DTM)> ^ <Expiration Date
            (DTM)> ^ <Professional Suffix (ST)> ^ <Assigning Jurisdiction (CWE)> ^ <Assigning Agency or
            Department (CWE)>

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 Assigning Authority (HD):  <Namespace ID (IS)> & <Universal ID (ST)> & <Universal ID Type
            (ID)>
```

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

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)>

Subcomponents for Name Validity Range (DR):  <Range Start Date/Time (DTM)> & <Range End Date/Time (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)>

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)>
```

Definition: The name of the operator that unloaded the anti-microbial device.

17.7.4.26 SCD-26 Door Open (CNE) 02129

```
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)>
```

Definition: An indicator that the door is open. Refer to *HL7 Table 0532 - Expanded yes/no indicator table* in Chapter 2 for valid values.

17.7.4.27 SCD-27 Reading Failure (CNE) 02130

```
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)>
```

Definition: A notification that an error was encountered while reading the cycle data for a specific cycle. Refer to *HL7 Table 0532 - Expanded yes/no indicator table* in Chapter 2 for valid values.

17.7.4.28 SCD-28 Cycle Type (CWE) 02131

```
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)>
```

Definition: The type of cycle that is being executed. A cycle type is a specific sterilization method used for a specific type of supply item.

User-Defined Table 0702 – Cycle Type-

Value	Description	Comment
FLS	Flash	Used to quickly sterilize instruments that were dropped during surgery.
PRV	Prevac	A prevac cycle is vacuum assisted.
GRV	Gravity	A gravity cycle is executed at atmospheric pressure.
LQD	Liquid	A cycle specific to sterilizing liquids.
EXP	Express	An express cycle is similar to a flash cycle but the supply item is wrapped.
DRT	Dart	A dart cycle is a special cycle used to test the integrity of the sterilizer chamber to hold a vacuum.
DRW	Dart Warm-up Cycle	A dart warm-up cycle is used to bring the sterilizer chamber up to operating temperature in order to run a dart test cycle.
THR	Thermal	
ISO	Isothermal	
BWD	Bowie-Dick Test	A Bowie-Dick test cycle is a special cycle used to test the integrity of the sterilizer chamber to hold a vacuum.
LKT	Leak Test	A leak test cycle tests the integrity of the sterilizer chamber to hold a vacuum over a specific period of time.
WFP	Wrap/Steam Flush Pressure Pulse (Wrap/SFPP)	A Wrap/SFPP cycle uses steam pulses instead of a vacuum during the conditioning phase of the cycle when the supply item is unwrapped.
SFP	Steam Flush Pressure Pulse	An SFPP cycle uses steam pulses instead of a vacuum during the conditioning phase of the cycle when the supply item is wrapped.

Value	Description	Comment
CMW	Chemical Wash	A chemical wash cycle.
PEA	Peracetic Acid	A peracetic acid cycle.
EOH	EO High Temperature	
EOL	EO Low Temperature	
CRT	Cart Wash	
UTL	Utensil Wash	
IST	Instrument Wash	
GLS	Glassware	
PLA	Plastic Goods Wash	
ANR	Anesthesia/Respiratory	Special Wash cycle
GTL	Gentle	
OPW	Optional Wash	Any Optional Wash cycle
BDP	Bedpans	
TRB	Tray/Basin	
GNP	Gen. Purpose	
COD	Code	
RNS	Rinse	
2RS	Second Rinse	
DEC	Decontamination	

17.7.4.29 SCD-29 Thermal Rinse Time (CQ) 02132

```
Components:  <Quantity (NM)> ^ <Units (CWE)>

Subcomponents for Units (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)>
```

Definition: The amount of time spent in the thermal rinse phase of a decontamination cycle.

17.7.4.30 SCD-30 Wash Time (CQ) 02133

```
Components:  <Quantity (NM)> ^ <Units (CWE)>

Subcomponents for Units (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)>
```

Definition: The amount of time spent in the wash phase of a decontamination cycle.

17.7.4.31 SCD-31 Injection Rate (CQ) 02134

```
Components:  <Quantity (NM)> ^ <Units (CWE)>

Subcomponents for Units (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)>
```

Definition: The injection rate of a wash or dry agent.

17.7.4.32 SCD-32 Procedure Code (CNE) 00393

```
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)>
```

Definition: The unique identifier indicating the type of procedure performed on the patient with the supplies being sterilized.

As of v2.6, the known applicable external coding systems include those in the table below. If the code set you are using is in this table, then you must use that designation.

HL7 Table 0088 - Procedure Code Coding Systems

Coding System	Description	Comment
C4	CPT-4	American Medical Association, P.O. Box 10946, Chicago IL 60610.

Coding System	Description	Comment
C5	CPT-5	(under development – same contact as above)
HCPCS	CMS (formerly HCFA) Common Procedure Coding System	HCPCS: contains codes for medical equipment, injectable drugs, transportation services, and other services not found in CPT4.
HPC	CMS (formerly HCFA)Procedure Codes (HCPCS)	Health Care Financing Administration (HCFA) Common Procedure Coding System (HCPCS) including modifiers.5

17.7.4.33 SCD–33 Patient Identifier List (CX) 00106

```
Components:  <ID Number (ST)> ^ <Identifier Check Digit (ST)> ^ <Check Digit Scheme  (ID)> ^ <Assigning
             Authority (HD)> ^ <Identifier Type Code (ID)> ^ <Assigning Facility (HD)> ^ <Effective Date (DT)>
             ^ <Expiration Date (DT)> ^ <Assigning Jurisdiction (CWE)> ^ <Assigning Agency or Department (CWE)>

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

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

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)>

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)>
```

Definition: The unique identifier associating the patient with the supplies being sterilized.

17.7.4.34 SCD–34 Attending Doctor (XCN) 01137

```
Components:  <ID Number (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)> ^ <DEPRECATED-
             Degree (e.g., MD) (IS)> ^ <Source Table (IS)> ^ <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)> ^ <DEPRECATED-
             Name Validity Range (DR)> ^ <Name Assembly Order (ID)> ^ <Effective Date (DTM)> ^ <Expiration Date
             (DTM)> ^ <Professional Suffix (ST)> ^ <Assigning Jurisdiction (CWE)> ^ <Assigning Agency or
             Department (CWE)>

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 Assigning Authority (HD):  <Namespace ID (IS)> & <Universal ID (ST)> & <Universal ID Type
             (ID)>

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

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)>

Subcomponents for Name Validity Range (DR):  <Range Start Date/Time (DTM)> & <Range End Date/Time (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)>

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)>
```

---

5 The HCPCS code is divided into three "levels." Level I includes the entire CPT-4 code by reference. Level II includes the American Dental Association's Current Dental Terminology (CDT-2) code by reference. Level II also includes the genuine HCPCS codes, approved and maintained jointly by the Alpha-Numeric Editorial Panel, consisting of CMS, the Health Insurance Association of America, and the Blue Cross and Blue Shield Association. Level III are codes developed locally by Medicare carriers. The HCPCS modifiers are divided into the same three levels, I being CPT-4 modifiers, II CDT-2 and genuine HCPCS modifiers, and III being locally agreed modifiers.

The genuine HCPCS codes and modifiers of level II can be found at http://www.hcfa.gov/stats/anhcpcdl.htm. CMS distributes the HCPCS codes via the National Technical Information Service (NTIS, www.ntis.gov) and NTIS distribution includes the CDT-2 part of HCPCS Level II, but does not include the CPT-4 part (Level I). CMS may distribute the CPT-4 part to its contractors.

Definition: The unique identifier associating the physician with the supplies being sterilized, used for the procedure and patient identified in this message. Refer to *User-defined Table 0010 - Physician ID* for suggested values.

User-defined Table 0010 - Physician ID

Value	Description	Comment
	No suggested values.	

17.7.4.35 SCD–35 Dilution Factor (SN) 01356

```
Components:  <Comparator (ST)> ^ <Num1 (NM)> ^ <Separator/Suffix (ST)> ^ <Num2 (NM)>
```

Definition: The dilution ratio of peracetic acid to water.

17.7.4.36 SCD–36 Fill Time (CQ) 02139

```
Components:  <Quantity (NM)> ^ <Units (CWE)>

Subcomponents for Units (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)>
```

Definition: The amount of time spent in filling the sterilizer chamber with dilutant.

17.7.4.37 SCD–37 Inlet Temperature (CQ) 02140

```
Components:  <Quantity (NM)> ^ <Units (CWE)>

Subcomponents for Units (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)>
```

Definition: The temperature of the dilutant upon entering the sterilizer chamber.

17.8 EXAMPLE TRANSACTIONS

17.8.1 Inventory Item Master Catalog Add - Event M16

An inventory clerk in the General Supply Inventory location has added a new supply item to the item master catalog. A Master File Add message is sent (MAD) to notify selected inventory locations that this supply item has been added to the item master catalog

```
MSH|^~\&|MATERIALSYS|FACA|INVSYS|CENSUPPLY|200408150900||MFN^M16^MFN_M16|090849SU
    PITM|P|2.6|||AL|AL|||<cr>
MFI|INV|MATERIALSYS|UPD|200408121100|SU|<cr>
MFE|MAD|F589|200408121100|JMC090387^^JMFcr>
SFT|COMPAPP|9.0.0|MATIERALSYS|4500|200401010700|<cr>
UAC| KERB|MATSYS|AP|Octet-stream|A|Clerk|<cr>
ITM|10001|Formula 8oz|A|SUP|DietaryFormula|Y|ALR|MANUFACTURER|F589|ALR900||Y|300-
    0001^FormulaAlim_8oz|4.92|Y||FDA|N||100-9088-37887|20|29.75|N|N|N||||REF|<cr>
VND|001|M00933|VENDOR|FV9975|Y|<cr>
VND|002|M00934|VENDOR2|FV9976|N|<cr>
PKG|001|CS|6|Y|5|29.50|30.25|200409030100|<cr>
PKG|002|EA|N|1|4.92|5.04|200409030100|<cr>
PCE|001|9188|300-0002|5.35|<cr>
ITV|001|GS^General Stores|CS^Central Supply|1|GS-031|CS|EA|100-9200-00000|Y|300-
    0001|4.95||Y|N|N||||M|30|450|100|400|N|<cr>

MSH|^~\&|MATERIALSYS|FACA|INVSYS|CENSUPPLY|200408150900||MFN^M16^MFN_M16|090849SU
    PITM|P|2.6|||AL|AL|||<cr>
MSA|CA|8000|||||<cr>
```

17.8.2 Request New Sterilization Lot - Event S28

The sterilizer operator is preparing to run a flash sterilizer load. The sterilizer requests a lot number from the instrument-tracking system to assign to the load.

```
MSH|^~\&|Sterila|FacilB|Instrutrak|FacilA|200410010800||SLR^S28|021244STER|P|2.6|
    ||AL|ER||||||<cr>
SFT|Hospital A|9.0|Sterila|10101010|9.0 999|New Load|200402140900|<cr>
UAC|KERB|MATSYS|AP|Octet-stream|A|Clerk|<cr>
SLT|87995|DEVICE NAME|A46|LF4|1435567677<cr>

MSH|^~\&|Sterila|FacilB|Instrutrak|FacilA|200410010800||SLR^S28|021244STER|P|2.6|
    ||AL|ER||||||<cr>
MSA|CA|021244STER||||<cr>

MSH|^~\&|Instrutrak|FacilB|Sterila|FacilA|2004010010801||SLS^S28|021244STER|P|2.6
    |||AL|ER||||||<cr>
SFT|Hospital A|9.0|Sterila|10101010|9.0 999|New Load|200402140900|<cr>
UAC|KERB|MATSYS|AP|Octet-stream|A|Admin|<cr>
SLT|01||||<cr>

MSH|^~\&|Instrutrak|FacilB|Sterila|FacilA|2004010010801||SLS^S28|021244STER|P|2.6
    |||AL|ER||||||<cr>
MSA|CA|021244STER||||<cr>
```

17.9 IMPLEMENTATION CONSIDERATIONS

None

17.10 OUTSTANDING ISSUES

None