

**National Electronic Data Interchange
Transaction Set Implementation Guide**

**Health Care Claim
Request for
Additional
Information**

277

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REF	Medical Record Identification	75
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DTP	Response Due Date	78
PWK	Claim Supplemental Information	80
PER	Response Contact Information	82
N1	Response Contact Identification	85
N3	Response Contact Address	87
N4	Response Contact City/State/ZIP Code	88
SVC	Service Line Information	90
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STC	Claim Level Status Information	106
REF	Patient Account Number	109
REF	Institutional Bill Type Identification	110
REF	Medical Record Identification	112
DTP	Claim Service Date	114
DTP	Response Due Date	115
PWK	Claim Supplemental Information	117
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1 Purpose and Business Overview

1.1 Document Purpose

For the health care industry to achieve the potential administrative cost savings associated with Electronic Data Interchange (EDI), standards have been developed and need to be implemented consistently by all organizations. To facilitate a smooth transition into the EDI environment, uniform implementation is critical.

The purpose of this implementation guide is to provide standardized data requirements and content to all users for a specific business function of the ANSI ASC X12.317, Health Care Claim Status Notification (277). This implementation guide focuses on the use of the 277 by a health care payer to request additional information to support a health care claim or encounter. The use of the 277 for this specific business purpose is the reason for this separate implementation guide. This implementation guide provides a detailed explanation of the transaction set by defining uniform data content, identifying valid code tables, and specifying values applicable for the business focus of the 277 Request for Additional Information. The intention of the developers of the 277 is represented in the guide.

This implementation guide is designed to assist those who request or who receive requests to supplement claim review using the 277 format. The entities requesting additional health care information include, but are not limited to, insurance companies, Third Party Administrators (TPAs), managed care service organizations, state and federal agencies and their contractors, plan purchasers, and any other entity that processes health care claims or manages the delivery of health care services.

Other business partners affiliated with the 277 include billing services; consulting services; vendors of systems; software and EDI translators; and EDI network intermediaries such as Automated Clearing Houses (ACHs), Value-Added Networks (VANs), and telecommunications services.

1.1.1 Trading Partner Agreements

It is appropriate and prudent for payers to have trading partner agreements that go with the standard Implementation Guides. This is because there are 2 levels of scrutiny that all electronic transactions must go through.

First is standards compliance. These requirements **MUST** be completely described in the Implementation Guides for the standards, and **NOT** modified by specific trading partners.

Second is the specific processing, or adjudication, of the transactions in each trading partner's individual system. Since this will vary from site to site (e.g., payer to payer), additional documentation which gives information regarding the processing, or adjudication, will prove helpful to each site's trading partners (e.g., providers), and will simplify implementation.

It is important that these trading partner agreements **NOT**:

- Modify the definition, condition, or use of a data element or segment in the standard Implementation Guide
- Add any additional data elements or segments to this Implementation Guide
- Utilize any code or data values which are not valid in this Implementation Guide
- Change the meaning or intent of this Implementation Guide

These types of companion documents should exist solely for the purpose of clarification, and should not be required for acceptance of a transaction as valid.

1.1.2 HIPAA Role in Implementation Guides

The Health Insurance Portability and Accountability Act of 1996 (P.L. 104-191 - known as HIPAA) includes provisions for Administrative Simplification, which require the Secretary of Department of Health and Human Services to adopt standards to support the electronic exchange of administrative and financial health care transactions primarily between health care providers and plans. HIPAA directs the Secretary to adopt standards for transactions to enable health information to be exchanged electronically and to adopt specifications for implementing each standard.

Detailed Implementation Guides for each standard must be available at the time of the adoption of HIPAA standards so that health plans, providers, clearing-houses, and software vendors can ready their information systems and application software for compliance with the standards. Consistent usage of the standards, including loops, segments, data elements, etc., across all guides is mandatory to support the Secretary's commitment to standardization. This Implementation Guide has been developed for use as a HIPAA Implementation Guide for Health Care Claims Request for Additional Information. Should the Secretary adopt the X12 277 Health Care Claims Request for Additional Information transaction as an industry standard, this Implementation Guide describes the consistent industry usage called for by HIPAA. If adopted under HIPAA, the X12 277 Health Care Claims Request for Additional Information transaction cannot be implemented except as described in this Implementation Guide.

1.1.3 Disclaimers with the Transactions

The developers of this Implementation Guideline strongly discourage the transmission of a disclaimer as a part of the transaction. Any disclaimers necessary should be outlined in the agreement between trading partners. Under no circumstances should there be more than one disclaimer returned per individual response.

1.2 Version and Release

This implementation guide is based on the October 1998 ASC X12 standards, referred to as Version 4, Release 2, Sub-release 0, (004020). This is the first ASC X12N guide for this business function of this transaction set. Earlier documentation for this transaction set includes a tutorial based upon Version 3, Release 4, Sub-release 0 (003040) of the 277.

1.3 Business Use and Definition

The Health Care Claim Status Notification (277) transaction set is intended to meet the particular needs of the Healthcare Industry for Claim Status Information in multiple business scenarios. The 277 transaction set can be used as the following:

- An unsolicited Health Care Claim Request for Additional Information
- Health Care Payer Unsolicited Claim Status
- A response to a Health Care Claim Status Request (276)

This implementation guide only addresses using the 277 as a Request for Additional Information to support a health care claim or encounter. The 277 transaction provides the mechanism for asking one or more questions, requests for information, about specific claims. The actual answer, additional information response, must be able to be reassociated with the original question. This is accomplished with a control number.

Separate implementation guides were developed to detail using the 277 as a response to a 276, and using the 277 as the Health Care Payer Unsolicited Claim Status notification.

1.3.1 Unsolicited Request for Additional Information

Medical and utilization reviews are performed during the adjudication process. Typically, claims that come under such review are suspended. The payer requests specific information for each claim or service suspended for medical review. This information supplements or supports the provider's request for payment of the services under review. The Health Care Claim Request for Additional Information is used for this purpose.

Generally, when the claim requires specific additional information for a payer's adjudication process to continue, the Health Care Claim Request for Additional Information is used. The business use of the Health Care Claim Request for Additional Information requires the subsequent response from the provider to be received by the payer within a specified time range. Therefore, the response due date is critical for this business use. The time frame for response, terms, and conditions of each business event may vary. The payer defines the time frame for the provider using the response due date. When the time frame for a response is exceeded, claims proceed through the adjudication process.

1.4 Information Flows

Figure 1, General Claim Status Information Flow, illustrates the flow of information related to this implementation of the Health Care Claim Status Notification.

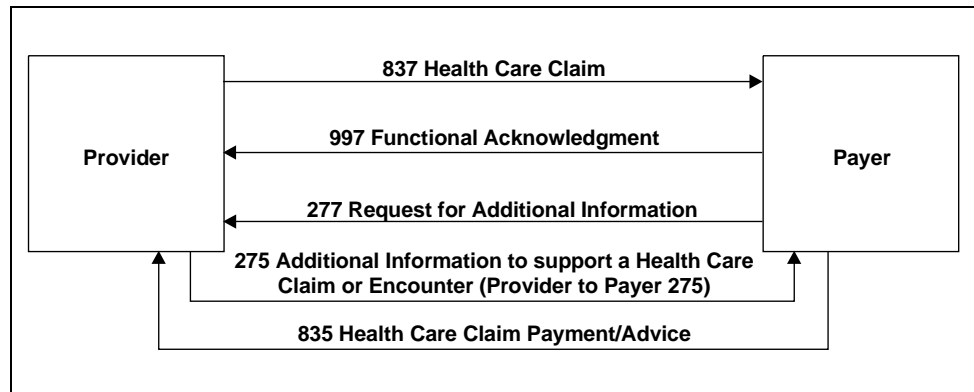


Figure 1. General Claim Status Information Flow

The provider needs to differentiate between the multiple uses of the 277 Health Care Claim Status. Refer to 2.2.1.1, 277 Table 1- Header Level, for details.

2 Data Overview

This section introduces the structure of the 277 Health Care Claim Request for Additional Information and describes the positioning of the business data within the structure. Familiarity with ASC X12 nomenclature, segments, data elements, hierarchical levels, and looping structures is recommended for a review, see Appendix A, ASC X12 Nomenclature, and Appendix B, EDI Control Directory.

2.1 Overall Data Architecture

Two formats or views are used to present the transaction set: the implementation view and the standard view. Figure 2, 277 Transaction Set Listing, shows the implementation view. This view displays only the segments and their designated health care names described in this implementation guide. The intent of the implementation view is to clarify the purpose and use of the segments by restricting the view to display only those segments used with their assigned health care names. This implementation view is provided in complete detail at the beginning of Section 3.

The standard view is presented in Section 3, Transaction Set. The standard view displays all segments available within the transaction set with their assigned ASC X12 names.

2.2 Data Use by Business Use

The 277 transaction is divided into two tables. Table 1 contains transaction control information. Table 2 contains the detail information for the business function of the transaction and is presented in 2.2.2, Table 2 - Detail Information.

Header					
POS. #	SEG. ID	NAME	USAGE	REPEAT	LOOP REPEAT
010	ST	Transaction Set Header	R	1	
020	BHT	Beginning of Hierarchical Transaction	R	1	
Detail - Information Source					
POS. #	SEG. ID	NAME	USAGE	REPEAT	LOOP REPEAT
		LOOP ID - 2000A INFORMATION SOURCE LEVEL			>1
010	HL	Information Source Level	R	1	
		LOOP ID - 2100A PAYER NAME			>1
050	NM1	Payer Name	R	1	
080	PER	Payer Contact Information	S	1	
Detail - Information Receiver					
POS. #	SEG. ID	NAME	USAGE	REPEAT	LOOP REPEAT
		LOOP ID - 2000B INFORMATION RECEIVER LEVEL			>1
010	HL	Information Receiver Level	R	1	
		LOOP ID - 2100B INFORMATION RECEIVER NAME			>1
050	NM1	Information Receiver Name	R	1	
Detail - Service Provider					
POS. #	SEG. ID	NAME	USAGE	REPEAT	LOOP REPEAT
		LOOP ID - 2000C SERVICE PROVIDER LEVEL			>1
010	HL	Service Provider Level	R	1	
		LOOP ID - 2100C PROVIDER NAME			>1
050	NM1	Provider Name	R	1	
Detail - Subscriber					
POS. #	SEG. ID	NAME	USAGE	REPEAT	LOOP REPEAT
		LOOP ID - 2000D SUBSCRIBER LEVEL			>1
010	HL	Subscriber Level	R	1	
		LOOP ID - 2100D SUBSCRIBER NAME			>1
050	NM1	Subscriber Name	R	1	
		LOOP ID - 2200D PAYER CLAIM IDENTIFICATION			>1
090	TRN	Payer Claim Identification	S	1	
100	STC	Claim Level Status Information	S	>1	
110	REF	Patient Account Number	S	1	
		...			
Detail - Dependent					
POS. #	SEG. ID	NAME	USAGE	REPEAT	LOOP REPEAT
		LOOP ID - 2000E DEPENDENT LEVEL			>1
010	HL	Dependent Level	S	1	
		LOOP ID - 2100D DEPENDENT NAME			>1
050	NM1	Dependent Name	R	1	
		LOOP ID - 2200D PAYER CLAIM IDENTIFICATION			>1
090	TRN	Payer Claim Identification	S	1	
100	STC	Claim Level Status Information	R	>1	
110	REF	Patient Account Number	R	1	
		...			
		...			

Figure 2. 277 Transaction Set Listing

2.2.1 Table 1 — Transaction Control Information

Table 1 is named the Header Level, which includes the ST and BHT segments. The ST segment identifies the start of a transaction and the specific transaction set. The BHT identifies the transaction's business purpose and the hierarchical structure. See figure 3 for an example of Table 1.

Table 1 - Header					
POS.#	SEG.ID	NAME	USAGE	REPEAT	LOOP REPEAT
010	ST	Transaction Set Header	R	1	
020	BHT	Beginning of Hierarchical Transaction	R	1	

Figure 3. Table 1 — Header Level

2.2.1.1 277 Table 1 — Header Level

A coding example of Table 1 in the 277 Request for Additional Information follows.

See Appendix A, ASC X12 Nomenclature, for descriptions of data element separators (e.g., *) and segment terminators (e.g., ~)

ST*277*0001*004020X104~
BHT*0010*48*932A17*19980819*1211*RQ~

The Transaction Set Header Segment (ST) identifies the transaction set by using 277 as the data value for the transaction set identifier code data element, ST01. The originator of the transaction set assigns the unique control number ST02 which is shown here as 0001. In this example, the originator is the payer. ST03 contains the same value that was used in GS08. Providing the information from GS08 at this level can ensure that the appropriate application mapping is utilized at translation time.

The Beginning of Hierarchical Transaction Segment (BHT) indicates that the transaction uses a hierarchical data structure. The value of "0010" in the hierarchical structure code data element, BHT01, describes the order of the hierarchical levels and the business purpose of each level. This data element is defined in greater detail in 2.2.1.2, Hierarchical Level Data Structure.

The BHT segment also contains the transaction set purpose code, BHT02, which indicates "suspended" by use of data value 48. The business application system generates fields BHT03, originator's reference number, and BHT04 Date of Transaction Creation. Because the 277 transaction is multi-functional, it is important for the receiver to know which business purpose is served. Therefore, the Transaction Set Type Code data element, BHT06, is used. An RQ value indicates that this is a "request" for additional information for suspended claim(s).

The Functional Group Header Segment (GS) provides additional identification of the business purpose of multi-functional transaction sets. See Appendix B, EDI Control Directory, for a detailed description of the elements in the GS segment.

2.2.1.2

Hierarchical Level Data Structure

The hierarchical level structure identifies and relates the participants involved in the transaction. The participants identified in the 277 transaction set are generally the payer, submitter (e.g., service bureau, Claims Clearinghouse, provider groups), provider of service, subscriber, and dependent. A "0010" value in the BHT hierarchical structure code describes the order of appearance of subsequent loops within the transaction set and refers to these participants, respectively, in the following terms:

- Information Source
- Information Receiver
- Service Provider
- Subscriber
- Dependent

2.2.2

Table 2 — Detail Information

The hierarchical level structure is used in Table 2. Each hierarchical level (HL) is a series of loops. The loops are identified by numbers. The hierarchical level that identifies the participant and the relationship to other participants is Loop ID-2000. The individual or entity name is contained in Loop ID-2100. The specific claim details use Loop ID-2200 to identify the claim and Loop ID-2220 to identify the specific services. Loop ID-2225 can be used optionally to identify the payer's adjudication location waiting to receive the response.

Figure 4, Table 2 - Detail Level, presents the segments used in Table 2 of the 277. These segments define the participants; the specific claim(s); and the specific information, per claim, that is requested.

The participants described are as follows:

- **Information Source** — The decision maker in the business transaction. For this business use, this entity is the payer.
- **Information Receiver** — Recipient of the request from the the information source. For this business use, this entity can be a provider, a provider group, a clearinghouse, a service bureau, an agency, an employer, etc.
- **Service Provider** — Deliverer of the health care service.
- **Subscriber** — The party on behalf of whom health insurance benefits are maintained.
- **Dependent** — The party entitled to health care benefits because of his or her relationship to the subscriber.

NOTE

The term "information source" does **not** refer to who is sending the transaction. Instead, it refers to the owner of the decision making information. In this business use, the term "information source" describes the entity that placed the claim(s) in suspense and that is requesting specific additional information — the payer. The hierarchical level code data element, also known as HL03, describes the relationships between the hierarchical levels. The value in HL03 identifies the relationships within the transaction.

- When HL03 = 20, the hierarchical level contains the information source.
- When HL03 = 21, the hierarchical level contains the information receiver.
- When HL03 = 19, the hierarchical level contains the service provider.
- When HL03 = 22, the hierarchical level contains the subscriber information.
- When HL03 = 23, the hierarchical level contains the dependent information.

Sample Table 2 configurations for the 277 transaction set follow:

- Request for Additional Information when the **subscriber is the patient**.

Information Source (20)
 Information Receiver (21)
 Service Provider (19)
 Subscriber (22)
 Information Requested
 Claim services
 Response location

POS. #	SEG. ID	NAME	USAGE	REPEAT	LOOP REPEAT
LOOP ID - 2000D SUBSCRIBER LEVEL					
010	HL	Subscriber Level	R	1	>1
LOOP ID - 2100D SUBSCRIBER NAME					
050	NM1	Subscriber Name	R	1	>1
LOOP ID - 2200D PAYER CLAIM IDENTIFICATION					
090	TRN	Payer Claim Identification	S	1	
100	STC	Claim Level Status Information	S	>1	
110	REF	Patient Account Number	S	1	
110	REF	Institutional Bill Type Identification	S	1	
110	REF	Medical Record Identification	S	1	
120	DTP	Claim Service Date	S	2	
120	DTP	Response Due Date	R	2	
LOOP ID - 2210D CLAIM SUPPLEMENTAL INFORMATION					
130	PWK	Claim Supplemental Information	S	1	>1
140	PER	Response Contact Information	S	1	
150	N1	Response Contact Identification	S	1	
160	N3	Response Contact Address	S	1	
170	N4	Response Contact City/State/ZIP Code	S	1	
LOOP ID - 2220D SERVICE LINE INFORMATION					
180	SVC	Service Line Information	R	1	>1
190	STC	Service Line Status Information	R	>1	
200	REF	Service Line Item Identification	S	1	
210	DTP	Service Line Date	S	1	

Figure 4. Table 2 — Detail Level

- Request for Additional Information when the **dependent is the patient**.

Information Source (20)
 Information Receiver (21)
 Service Provider (19)
 Subscriber (22)
 Dependent (23)
 Information Requested
 Claim services
 Response location

The following matrix identifies the segments that may be used in the hierarchical levels for the Request for Additional Information when the **subscriber is the patient**:

Loop ID	Seg. ID	Info. Source HL (20)	Info. Receiver HL (21)	Service Provider HL (19)	Subscriber HL (22)	Dependent HL (23)	Business Purpose
2000	HL	YES	YES	YES	YES		Describes participants and relationships
2100	NM1	YES	YES	YES	YES		Participant name
2200	TRN				YES		Payer's Control Number
2200	STC				YES		Claim status and specific information requested
2200	REF				YES		Provider's patient control number
2200	REF				YES		Institutional type of bill
2200	REF				YES		Provider's medical record number
2200	DTP				YES		Dates of service on submitted claim
2200	DTP				YES		Response due date
2210	PWK				YES		Mandatory to use loop
2210	PER				YES		Payer's location to receive additional info
2210	N1				YES		Name of payer
2210	N3				YES		Address to return info
2210	N4				YES		City State Zip Code to return info
2220	SVC				YES		Service line information
2220	STC				YES		Service line information requested
2220	REF				YES		Line item control number
2220	DTP				YES		Line item dates of service

The following matrix identifies the segments that may be used in the hierarchical levels for the Request for Additional Information when the **dependent is the patient**:

Loop ID	Seg. ID	Info. Source HL (20)	Info. Receiver HL (21)	Service Provider HL (19)	Subscriber HL (22)	Dependent HL (23)	Business Purpose
2000	HL	YES	YES	YES	YES		Describes participants and relationships
2100	NM1	YES	YES	YES	YES		Participant name
2200	TRN					YES	Payer's Control Number
2200	STC					YES	Claim status and specific information requested
2200	REF					YES	Provider's patient control number
2200	REF					YES	Institutional type of bill
2200	REF					YES	Provider's medical record number
2200	DTP					YES	Dates of service on submitted claim
2200	DTP					YES	Response due date
2210	PWK					YES	Mandatory to use loop
2210	PER					YES	Payer's location to receive additional info
2210	N1					YES	Name of payer
2210	N3					YES	Address to return info
2210	N4					YES	City State Zip Code to return info
2220	SVC					YES	Service line information
2220	STC					YES	Service line information requested
2220	REF					YES	Line item control number
2220	DTP					YES	Line item dates of service

2.2.2.1 Transaction Participants

A detailed view of the segments and data elements used to describe the participants and their relationships is presented here. The segments and data elements are found in Loop ID-2000 and Loop ID-2100. The coding examples are presented sequentially as found within an actual transaction set; however, for reading ease each segment begins on a new line.

The Information Receiver and the Service Provider hierarchical levels have a unique relationship. "Information Receiver" refers to the entity that will process the detailed information contained within the transaction set.

In some cases, the Information Receiver is the clearinghouse that will forward the requests to the Service Provider described when HL03 = 19.

In other cases, the Information Receiver is a service bureau entity acting on behalf of the Service Provider. When this occurs, the service bureau entity is described when HL03 = 21, and the Service Provider is described when HL03 = 19.

In other instances, the Information Receiver also is the Service Provider. When this occurs, the same entity is described at two hierarchical levels - when HL03 = 21 and when HL03 = 19.

The following example demonstrates coding for segments and data elements within the Information Source hierarchical level:

HL*1*0*20*1~
NM1*PR*2*ABC INSURANCE***PI*12345~**

The following is a coding example of the Information Receiver hierarchical level:

HL*2*1*21*1~
NM1*41*2*XYZ SERVICE***46*A22222221~**

The following is a coding example of the Service Provider hierarchical level:

HL*3*2*19*1~
NM1*1P*2*ST HOLY HILL HOSPITAL***SV*3999000B~**

The following is a coding example of the Subscriber hierarchical level:

HL*4*3*22*1~
NM1*IL*1*SMITH*ROBERT*J*MI*555991234~**

The following is a coding example of the Dependent hierarchical level:

HL*5*4*23*0~
NM1*QC*1*SMITH*HARRIET*M*MI*525224321~**

2.2.2.1.1

HL Segment

An overview of HL segment coding techniques is presented here to convey these relationships.

The following is a summary of the HL segment coding examples:

HL*1*0*20*1~	Extract from Information Source level
...	
HL*2*1*21*1~	Extract from Information Receiver level
...	
HL*3*2*19*1~	Extract from Service Provider level
...	
HL*4*3*22*1~	Extract from Subscriber level
...	
HL*5*4*23*0~	Extract from Dependent level
...	

Note the following from a review of the preceding examples:

- HLs are sequentially numbered. The sequential number is found in HL01, which is the first data element in the HL segment.
- The second element, or HL02, indicates the sequential number of the parent hierarchical level to which this HL02 hierarchical level is subordinate. Information Source is the parent. By value of "0" in HL02, it is known that this HL02 is the highest hierarchical level. The Information Receiver level is subordinate to the

hierarchical level numbered 1 (HL01). The Service Provider level is subordinate to the hierarchical level numbered 2 (HL02), etc.

- The data value in data element HL03 describes the hierarchical level entity. For example, when HL03 = 20, the hierarchical level is the Information Source. When HL03 = 23, the hierarchical level is the Dependent.
- Data element HL04 indicates whether or not subordinate hierarchical levels exist. A value of "1" indicates subsequent hierarchical levels. A value of "0" indicates that no hierarchical levels follow.

NOTE

Specific claim detail information is not given a hierarchical level. The specific claim(s) in suspense are described in Loop ID-2200 and the service information follows in Loop ID-2220. This claim(s) information is said to "float." There is a technique for placing this information within the hierarchical levels. Claim information is positioned in the same hierarchical level that describes its owner-participant, either the Subscriber or the Dependent. That means the claim(s) information is placed at the Subscriber hierarchical level when the patient is the subscriber the information is placed at the Dependent hierarchical level when the patient is the dependent of the subscriber.

Optionally, Loop ID-2210 is available at the discretion of the payer. Some payers may request that the provider route the response information to a specific location.

2.2.2.1.2

NM1 Segment

Always use the NM1 segment to carry the primary identifier (see NM108 and NM109).

NM1*PR*2*ABC INSURANCE***PI*12345~**

Within the NM1 segment,

NM101 = PR

NM102 = 2

This value indicates that the entity is a non-person. An entity that is a person is identified with a value of "1". When the entity is a person, NM103 and NM104 contain the last and first names, respectively.

NM103 = ABC INSURANCE

This value identifies the Information Source as "ABC INSURANCE".

NM108 = PI

This value identifies the next data element as the assigned Payer Identification.

NM109 = 12345

This value is the actual identification code associated with NM108 (e.g., PI), that is, the payer named ABC INSURANCE in this example.

2.2.3

The Claim

When a request for additional information is made, the payer supplies the parameters that assist the provider in locating the claim. These parameters are frequently the patient control number, type of bill, medical record number, and dates of service. The provider is the source of this information. If the information is found on the original billed claim, the payer returns these data elements in Loop

2.2.3.1 Loop ID-2200

ID-2200 of the request for additional information. See 2.2.3.1, Loop ID-2200, for additional information.

When the requested information is more clearly identified by specifying the claim line level, Loop ID-2220 is used. See 2.2.3.3, Loop ID-2220, for additional information.

Figure 5, The Claim, presents the implementation view of Loop ID-2200. This appears at either the subscriber or dependent HL loop.

The following is a coding example of the 277 Health Care Claim Request for Additional Information Loop ID-2200:

```
TRN*1*1722634842~
STC*R0:18682-5:LOI*19980824~
REF*EJ*SMITH123~
REF*BLT*131~
REF*EA*JS980503LAB~
DTP*232*RD8*19980501-19980515~
DTP*106*D8*19980801~
```

Detail - Subscriber						
POS. #	SEG. ID	NAME	USAGE	REPEAT	LOOP REPEAT	
...						
		LOOP ID - 2200D PAYER CLAIM CONTROL NUMBER				>1
090	TRN	Payer Claim Control Number	S	1		
100	STC	Claim Level Status Information	S	>1		
110	REF	Patient Account Number	S	1		
110	REF	Institutional Bill Type Identification	S	1		
110	REF	Medical Record Identification	S	1		
120	DTP	Claim Service Date	S	2		
120	DTP	Response Due Date	R	2		
...						

Figure 5. The Claim

2.2.3.1.1 TRN Segment

The 277 transaction is a mechanism for requesting additional information, about a specific claim. The response must be able to be reassociated with the original request in the payer's adjudication system.

This is accomplished with a control number.

The TRN segment conveys the payer's control number. This identification number is found in TRN02. This identifier is used by the payer to re-associate the response to the appropriate claim. This number is assigned by the payer's system.

The payer needs to receive this number back with the response. When the response is an ASC X12 275 transaction, this number is returned in a TRN segment.

An example follows:

TRN*1*1722634842~

TRN01 = 1

This value indicates that the number in TRN02 is a current transaction trace number.

TRN02 = 1722634842

The value shown is the payer's control number. This specific information must be return in the ASC X12 275 tranaction in a TRN segment.

2.2.3.1.2

STC Segment

The STC segment is used to express the specific information the payer requires from the provider to complete the adjudication process for the identified claim. A payer may request additional information in support of a claim here at the claim level, at the service line level, or at both locations.

The requested information is described using composite data element C043. The composite data element appears at 3 locations within the STC segment STC01, STC10, and STC11. The requested information is only described in STC01 while STC10 and STC11 are used to provide greater specificity to the request. The STC segment is repeated for each question. Therefore a maximum of 3 codes can be used to define 1 question.

The four simple elements within the composite element are as follows:

- The Category code. The Category code indicates the type of request. The code source (Health Care Claim Status Category Code 507) contains values not applicable to this implementation. The only valid codes for this business use are the two character request values, which all begin with "R".
- The Health Care Claim Status Message code. The Health Care Claim Status Message code contains the detail information about the actual question. The code supplied in this element is from the Logical Observation Identifier Names and Codes (LOINC) list (663). These codes identify high level information groupings, specific data elements, and modifiers to groupings and data elements. The high level groupings and specific data element codes are only used in STC01. The modifiers are only used in STC10 and STC11. LOINC codes are used to request specific information. LOINC modifier codes are used to qualify the scope of the request for information. For example, LOINC code 18657-7 is requesting the Rehabilitation treatment plan, plan of treatment (narrative). A LOINC modifier code of 18803-7 would qualify the requested information to include all data of the selected type that represents observations made 30 days or fewer before the starting date of service for this claim. Refer to the HL7 companion documents for additional information on LOINC codes. There is a companion document describing LOINC codes used as modifiers.
- The Entity Identifier Code. The Entity Identifier Code is not used in the implementation.
- The Code List Qualifier Code. The Code List Qualifier Code is used to identify that the second element contains a LOINC code. This element must always contain the value "LOI" in this implementation.

The Category and LOINC codes are code lists external to ASC X12 standards. See Appendix C, External Code Sources, for instructions about how to obtain these lists.

NOTE

The delimiter separating elements within a composite data element is different from the delimiter separating simple elements. In the coding examples that follow, the composite delimiter is a colon (:). See Appendix A for further information about delimiters.

The following is a coding example of requested additional information at the claim level:

STC*R0:18682-5::LOI*19980824~

Within the STC,

STC01-1 = R0

This value indicates that the claim has been suspended for additional information/general requests.

STC01-2 = 18682-5

This value indicates that the complete list of Ambulance questions is being requested.

STC01-3 = Not used

STC01-4 = LOI

This value indicates that the code in STC01-2 is from the LOINC code list.

STC02 = 19980824

This value is the date of the payer's request. This is the date that starts the payer's time frame for the provider to return the response.

When questions are only asked regarding specific service line information the STC segment at the claim level contains date of the payer's request in STC02. When this occurs STC01 is used. STC01-1 will always contain the value "R0", STC01-2 will always contain "19016-5", and STC01-4 will always contain "LOI".

2.2.3.1.3

The REF Segment at the Claim Level

The provider's primary identifier frequently - the patient account number - and the institutional type of bill, which is a supplemental identifier, are found in REF segments. The medical record number, a supplemental identifier for the provider's use, also is located in the REF segment. The REF segment can be repeated a maximum of three times in this location.

The following are coding examples of the REF segment:

REF*EJ*SMITH123~ Patient Account number

REF*BLT*131~ Institutional type of bill

REF*EA*JS980503LAB~ Medical Record Number

The REF segment conveys the provider's primary identifier of the claim. This identifier is found in REF02. It is frequently referred to as the "patient account number." By convention, the provider creating the original claim using the 837 transaction will use CLM01 to convey this number. Also by convention, the payer will return the data value found in this element to the provider in the REF02..

REF*EJ*SMITH123~

Within the REF,

REF01 = EJ

This value indicates that the next data element contains the provider's assigned identifier. "EJ" identifies the patient account number; "EA" identifies the medical record number; "BLT" identifies the institutional type of bill. The sequence of the appearance of the "EA", "EJ", or "BLT" "REF" segments is not significant, but the segments must be contiguous.

REF02 = SMITH123

This data value is the patient account number assigned by the provider for this claim.

When REF01 is BLT, REF02 contains the institutional type of bill (e.g., 131).

When REF01 is EA, REF02 contains the patient's medical record number assigned by the provider.

NOTE:

The REF segments for Institutional Type of Bill and Medical Record Number are not used when requesting additional information pertaining to a Professional claim or service line.

2.2.3.1.4

DTP Segment

The DTP segment at this level occurs twice. The first occurrence specifies the dates of service as supplied by the claim originator. This occurrence is required for institutional claims and recommended for all other claims. The dates must be returned to the provider if the payer received them.

The second occurrence of the DTP conveys the latest date that the payer will accept the requested information. The general business practice states that the provider has a specific number of days in which to respond to the payer. The time to respond is based on the duration from the date that the payer requests additional information. If the specified number of days elapses before the payer receives the additional information, the routine practice is to deny or delete the claim.

The following is a coding example of the DTP segment:

DTP*232*RD8*19980501-	Claim Statement Period
19980515~	From Through Dates
DTP*106*D8*19980801~	Response Due Date

Within the DTP,

DTP01 = 232

This value indicates Claim Statement Period Start. This means that the date time period data element found in DTP03 represents the statement from through dates for the claim. The value 106 in the second REF indicates the response due date. This means that the date time period data element (DTP03) specifies the latest date the payer will accept the requested information.

DTP02 = RD8

This value indicates that the next data element — the date time period — is a range of dates expressed in the format CCYYMMDD-CCYYMMDD. The value of D8 indicates that the date format is CCYYMMDD.

DTP03 = 19980501-19980515

This represents the actual Statement From Through Dates found on the original claim.

2.2.3.2

Loop ID-2210

When DTP02 = 106, DTP03 contains the latest date that the payer will accept the requested information.

The payer may chose to use Loop ID-2210 to expedite processing the returned additional information received from the provider. This is accomplished by specifying internal routing identifiers.

Figure 6, Table 2 - Detail, represents the implementation view of Loop ID-2210.

Detail - Subscriber					
POS. #	SEG. ID	NAME	USAGE	REPEAT	LOOP REPEAT
...					
		LOOP ID - 2210D CLAIM SUPPLEMENTAL INFORMATION			>1
130	PWK	Claim Supplemental Information	R	1	
140	PER	Response Contact Information	S	1	
150	N1	Response Contact Identification	S	1	
160	N3	Response Contact Address	S	1	
170	N4	Response Contact City/State/ZIP Code	S	1	
...					

Figure 6. Table 2 — Detail

2.2.3.2.1

PWK Segment

The PWK segment is used in conjunction with the PER segment, which is described in 2.2.3.2.2, PER Segment. The 2210 Loop, (Claim Supplemental Information), is situational. if the payer does not use internal work flow routing, the entire loop does not appear in the transaction set.

The following example demonstrates a minimum, but sufficient, way of identifying the type of information being routed:

PWK*OZ~

Within the PWK,

PWK01 = OZ

This value indicates that the information being routed is support data for the claim.

2.2.3.2.2

PER Segment

The PER segment works in conjunction with the PWK segment. The payer uses the PER segment to specify the administrative communications contact who should receive the additional information when sent by the provider. The PER segment is used to identify the entity who is expecting to receive the additional information from the provider.

The following example demonstrates the identification of the entity to whom the provider should return the additional information and the method the provider should use to convey this information:

PER*ICED*03EM~**

Within the PER,

PER01 = IC

This value indicates that the person or group named is the Information Contact.

PER03 = ED

This value indicates that the provider should use Electronic Data Interchange (EDI) to return the additional information, and it also indicates that the next data element contains the electronic data interchange access number to be used by the provider for this specific request. In this manner, additional information from a provider can be returned to the person conducting the review.

PER04 = 03EM

This is the actual value that the payer assigns to identify the individual conducting the review of the additional information to be returned by the provider.

2.2.3.2.3

N1 Segment

The N1 segment will identify the person or office location to route the response to for the requested additional information. This segment will supercede information supplied in the PER segment in the Payer Contact Information segment in the Information Source Level (Loop Id 2100A).

2.2.3.2.4

N3 Segment

The N3 segment is not required, but the developers of this implementation guide recommend using it at the Response Contact occurrences. An example follows:

N3*1 SMITH STREET*SUITE 100~

Within the N3 segment,

N301 = 1 SMITH STREET

This indicates the street address of the location associated with PI, the payer.

N302 = SUITE 100

This data element allows placement of additional address information.

2.2.3.2.5

N4 Segment

The N4 segment is not required but the developers of this implementation guide recommend using it at the Response Contact occurrences.

An example follows:

N4*MIAMI*FL*33131~

Within the N4 segment,

N401 = MIAMI

This value is the city name location associated with PI, the payer.

N402 = FL

This value is the state location associated with PI, the payer.

N403 = 33131

This value is the postal ZIP Code associated with PI, the payer.

Although the coding examples shown for the NM1, N3, and N4 segments and data elements specify the Information Source, these segments and elements are used in the same manner for each participant - the Information Receiver, Service Provider, Subscriber, and Dependent. At this point in the transaction,

2.2.3.3

Loop ID-2200, the suspended claim is identified and the information requested is specified.

Loop ID-2220

Figure 7, Service Line, represents the implementation view of Loop ID-2220.

Detail - Subscriber					
POS. #	SEG. ID	NAME	USAGE	REPEAT	LOOP REPEAT
...					
		LOOP ID - 2220D SERVICE LINE INFORMATION			>1
180	SVC	Service Line Information	R	1	
190	STC	Service Line Status Information	R	>1	
200	REF	Service Line Item Identification	S	1	
210	DTP	Service Line Date	S	1	

Figure 7. Service Line

2.2.3.3.1

The following is a coding example of the 277 Request for Additional Information Loop ID-2220:

```
SVC*HC:99214*75****1~
STC*R4:18660-1:LOI*19980824****R4:18790-6:LOI
REF*FJ*03~
DTP*472*RD8*19980401-19980401~
```

SVC Segment

The payer uses the SVC segment to identify a particular service or line item for which additional information is requested. Specific service information is identified in the following example:

```
SVC*HC:99214*75*0****1~
```

Within the SVC,

SVC01-1 = HC

This value indicates that the next data element contains a item from the Health Care Financing Administration Common Procedural Coding System (HCPCS) codes list.

SVC01-2 = 99214

This value is the actual HCPCS code for the service being requested.

SVC02 = 75

This is the actual amount billed for this service, \$75.00.

SVC07 = 1

This value represents the original submitted units of service.

2.2.3.3.2

STC Segment

The STC segment is used to express the specific information the payer requires from the provider to complete the adjudication process for the identified claim. A payer may request additional information in support of a claim here at the claim level, at the service line level, or at both locations.

The requested information is described using composite data element C043. The composite data element appears at 3 locations within the STC segment STC01, STC10, and STC11. The requested information is only described in STC01 while STC10 and STC11 are used to provide greater specificity to the request. The STC segment is repeated for each question. Therefore a maximum of 3 codes can be used to define 1 question.

The four simple elements within the composite element are as follows:

- The Category code. The Category code indicates the type of request. The code source (Health Care Claim Status Category Code 507) contains values not applicable to this implementation. The only valid codes for this business use are the two character request values, which all begin with "R".
- The Health Care Claim Status Message code. The Health Care Claim Status Message code contains the detail information about the actual question. The code supplied in this element is from the Logical Observation Identifier Names and Codes (LOINC) list (663). These codes identify high level information groupings, specific data elements, and modifiers to groupings and data elements. The high level groupings and specific data element codes are only used in STC01. The modifiers are only used in STC10 and STC11. LOINC codes are used to request specific information. LOINC modifier codes are used to qualify the scope of the request for information. For example, LOINC code 18657-7 is requesting the Rehabilitation treatment plan, plan of treatment (narrative). A LOINC modifier code of 18803-7 would qualify the requested information to include all data of the selected type that represents observations made 30 days or fewer before the starting date of service for this claim. Refer to the HL7 companion documents for additional information on LOINC codes. There is a companion document describing LOINC codes used as modifiers.
- The Entity Identifier Code. The Entity Identifier Code is not used in the implementation.
- The Code List Qualifier Code. The Code List Qualifier Code is used to identify that the second element contains a LOINC code. This element must always contain the value "LOI" in this implementation.

The Category and LOINC codes are code lists external to ASC X12 standards. See Appendix C, External Code Sources, for instructions about how to obtain these lists.

NOTE

The delimiter separating elements within a composite data element is different from the delimiter separating simple elements. In the coding examples that follow, the composite delimiter is a colon (:). See Appendix A for further information about delimiters.

The following is a coding example of requested additional information at the claim level:

STC*R0:18682-5::LOI*19980824~

Within the STC,

STC01-1 = R0

This value indicates that the claim has been suspended for additional information/general requests.

STC01-2 = 18682-5

This value indicates that the complete list of Ambulance questions is being requested.

STC01-3 = Not used

STC01-4 = LOI

This value indicates that the code in STC01-2 is from the LOINC code list.

STC02 = 19980824

This value is the date of the payer's request. This is the date that starts the payer's time frame for the provider to return the response.

When questions are only asked regarding specific service line information the STC segment at the claim level contains date of the payer's request in STC02. When this occurs STC01 is used. STC01-1 will always contain the value "R0", STC01-2 will always contain "19016-5", and STC01-4 will always contain "LOI".

2.2.3.3.3

REF Segment

The REF segment identifies the specific line item number of the suspended service line. The REF segment can occur a maximum of one time in this location.

The following is a coding example of the REF segment:

REF*FJ*03~

Within the REF,

REF01 = FJ

When REF01 contains the value "FJ", the Line Item Control number is identified in REF02.

REF02 = 03

This value is the actual line item number. The service line item number is three.

2.2.3.3.4

DTP Segment

At this location, the DTP segment identifies the dates of service for the specified line item.

DTP*472*RD8*19980401-19980401~

Within the DTP segment at the line item level,

DTP01 = 472

This value is the date/time qualifier element. When the value is "472", the date found in DTP03 is known to be the service date.

DTP02 = RD8

This value is the date/time period format qualifier. When this value is "RD8", the format of the date in DTP03 is known to be CCYYMMDD-CCYYMMDD.

DTP03 = 19980401-19980401

The date range, represented in DTP03, is the dates of service for the specified line item, as defined by the prior qualifiers.

2.3 Interaction with Other Transaction Sets

This section presents an overview of related transaction sets and discusses their direct or indirect interaction with the 277 Request for Additional Information.

2.3.1 The Claim (837)

Submitting a claim, whether by using the 837 or another format, is the first step in the claim adjudication process. All data elements found on the original bill have their source from the provider's billing system. When additional supporting information is required for a claim to complete the payer's adjudication process, the payer can develop the claim electronically by requesting information from the provider using the 277 Request for Additional Information. Data from the original claim is returned to the provider on the 277 to facilitate locating the claim or the supporting information.

2.3.2 The Functional Acknowledgment (997)

The Functional Acknowledgment (997) transaction is used upon request by one of the trading partners. As shown in figure 1, General Claim Status Information Flow, the provider and the payer use the 997 in both the send and the receive modes.

A 997 can be used by the following:

- the payer to acknowledge claim receipt (837)
- the provider to acknowledge receipt of an Unsolicited Claim Status Health Care Payer (277)
- the provider to acknowledge receipt of a Health Care Claim Request for Additional Information (277)
- the payer to acknowledge receipt of a Health Care Claim Status Request (276)
- the provider to acknowledge receipt of a Health Care Claim Status Response (277)
- the provider to acknowledge receipt of an Health Care Claim Payment/Advice (835)

2.3.3 The Health Care Patient Information (275) Transaction Set

The specific data elements and supporting information are identified when a provider receives a 277 Request for Additional Information.

3 Transaction Set

3.1 Presentation Examples

NOTE

See Appendix A, ASC X12 Nomenclature, to review the transaction set structure, including descriptions of segments, data elements, levels, and loops.

The ASC X12 standards are generic. For example, multiple trading communities use the same Administrative Communications Contact segment (PER) to specify contact names and phone numbers. Each community decides which elements to use and which code values in those elements are applicable. This implementation guide uses a format that depicts both the generalized standard and the trading community-specific implementation.

The transaction set detail is comprised of two main sections with subsections within the main sections.

Transaction Set Listing

Implementation

Standard

Segment Detail

Implementation

Standard

Diagram

Element Summary

The examples in figures 8 through 13 define the presentation of the transaction set which follows.

IMPLEMENTATION

Indicates that this section is the implementation and not the standard

835 Health Care Claim Payment/Advice

Table 1 - Header

PAGE #	POS. #	SEG. ID	NAME	USAGE	REPEAT	LOOP REPEAT
53	010	ST	835 Header	R	1	
54	020	BPR	Financial Information	R	1	
60	040	TRN	Reassociation Key	R	1	
62	050	CUR	Non-US Dollars Currency	S	1	
65	060	REF	Receiver ID	S	1	
66	060	REF	Version Number	S	1	
68	070	DTM	Production Date	S	1	
PAYER NAME						1
70	080	N1	Payer Name	R	1	
72	100	N3	Payer Address	S	1	
75	110	N4	Payer City, State, ZIP Code	S	1	
76	120	REF	Additional Payer Reference Number	S	1	
78	130	PER	Payer Contact	S	1	
PAYEE NAME						1
79	080	N1	Payee Name	R	1	
81	100	N3	Payee Address	S	1	
82	110	N4	Payee City, State, ZIP Code	S	1	
84	120	REF	Payee Additional Reference Number	S	>1	

Each segment is assigned an industry specific name. Not used segments do not appear

Each loop is assigned an industry specific name

Segment repeats and loop repeats reflect actual usage

R=Required
S=Situational

Position Numbers and Segment IDs retain their X12 values

Individual segments and entire loops are repeated

Figure 8. Transaction Set Key — Implementation

STANDARD

Indicates that this section is identical to the ASC X12 standard

835 Health Care Claim Payment/Advice

Functional Group ID: **HP**

This Draft Standard for Trial Use contains the format and establishes the data contents of the Health Care Claim Payment/Advice Transaction Set (835) within the context of the Electronic Data Interchange (EDI) environment. This transaction set can be used to make a payment, send an Explanation of Benefits (EOB) remittance advice, or make a payment and send an EOB remittance advice only from a health insurer to a health care provider either directly or via a financial institution.

See Appendix A, ASC X12 Nomenclature for a complete description of the standard

Table 1 - Header

POS. #	SEG. ID	NAME	REQ. DES.	MAX USE	LOOP REPEAT
010	ST	Transaction Set Header	M	1	
020	BPR	Beginning Segment for Payment Order/Remittance Advice	M	1	
030	NTE	Note/Special Instruction	O	>1	
040	TRN	Trace	O	1	

Figure 9. Transaction Set Key — Standard

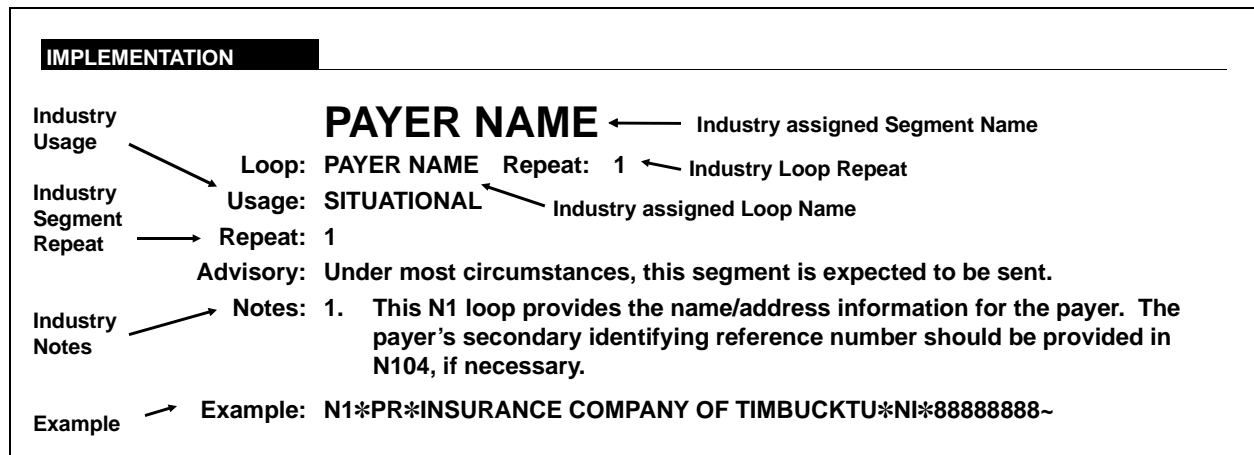


Figure 10. Segment Key — Implementation

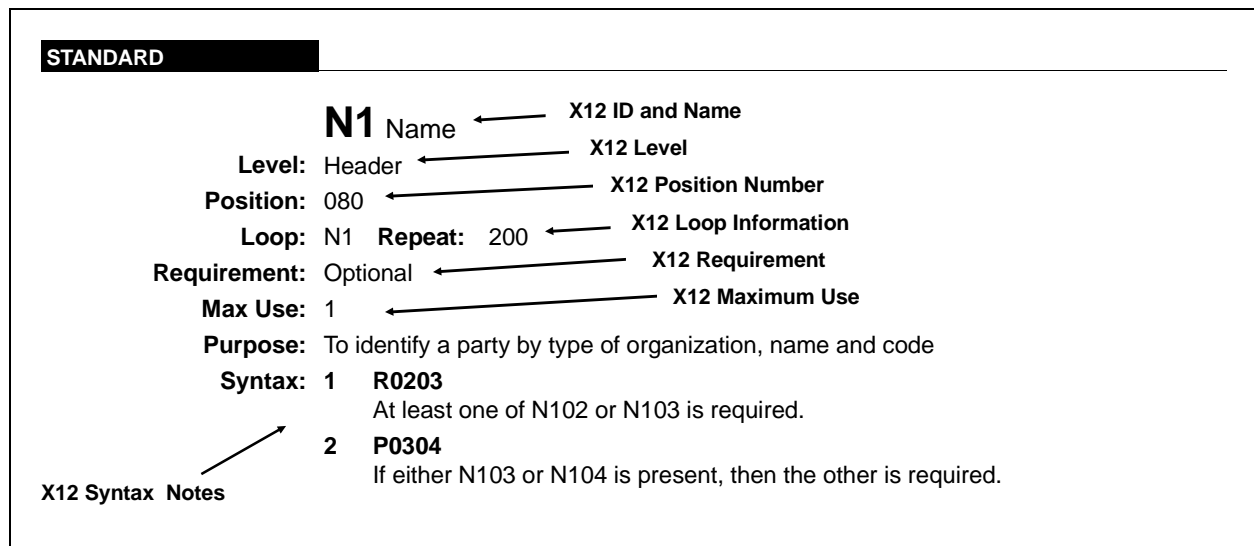


Figure 11. Segment Key — Standard

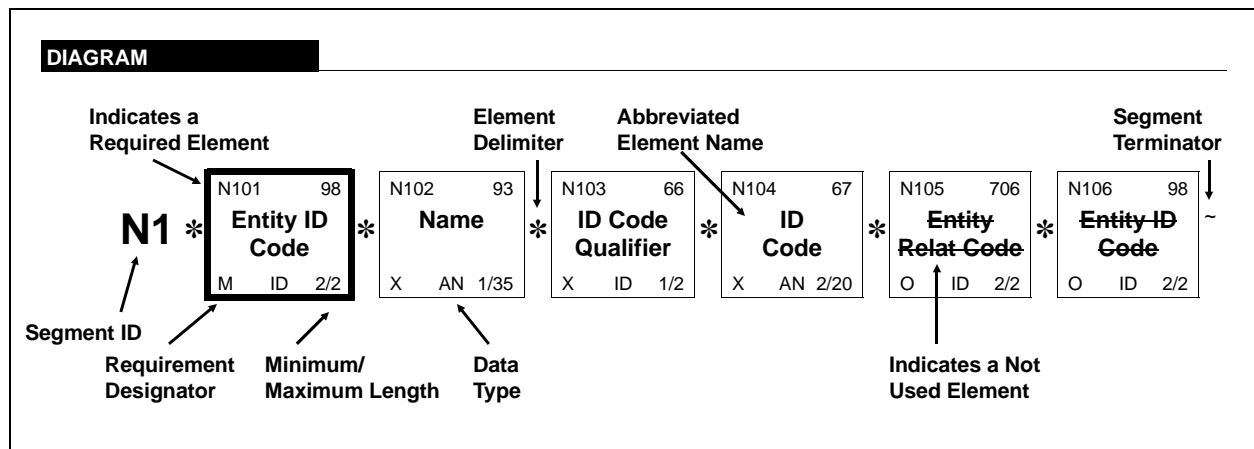


Figure 12. Segment Key — Diagram

ELEMENT SUMMARY									
USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES					
REQUIRED	SVC01	C003	COMPOSITE MEDICAL PROCEDURE IDENTIFIER	M					
Industry Usages: See the following page for complete descriptions X12 Semantic Note Industry Note			To identify a medical procedure by its standardized codes and applicable modifiers SEMANTIC NOTES 03 C003-03 modifies the value in C003-02. 04 C003-04 modifies the value in C003-02. 05 C003-05 modifies the value in C003-02. 06 C003-06 modifies the value in C003-02. 07 C003-07 is the description of the procedure identified in C003-02. Use the adjudicated Medical Procedure Code.						
REQUIRED	SVC01 - 1	235	Product/Service ID Qualifier	M ID	2/2				
Selected Code Values See Appendix C for external code source reference			Code identifying the type/source of the descriptive number used in Product/Service ID (234) <table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>AD</td> <td>American Dental Association Codes</td> </tr> </tbody> </table> CODE SOURCE 135: American Dental Association Codes			CODE	DEFINITION	AD	American Dental Association Codes
CODE	DEFINITION								
AD	American Dental Association Codes								

ELEMENT SUMMARY					
USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES	
REQUIRED	N101	98	Entity Identifier Code	M ID	2/3
Reference Designator SITUATIONAL Data Element Number			Code identifying an organizational entity, a physical location, property or an individual 93 Name Free-form name SYNTAX: R0203		
SITUATIONAL	N102	66	Identification Code Qualifier	X ID	1/2
X12 Syntax Note X12 Comment			Code designating the system/method of code structure used for Identification Code (67) SITUATIONAL N103 67 Identification Code Code identifying a party or other code SYNTAX: P0304 ADVISORY: Under most circumstances, this element is expected to be sent. COMMENT: This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.		

Figure 13. Segment Key — Element Summary

Industry Usages:

- | | |
|-------------|---|
| Required | This item must be used to be compliant with this implementation guide. |
| Not Used | This item should not be used when complying with this implementation guide. |
| Situational | The use of this item varies, depending on data content and business context. The defining rule is generally documented in a syntax or usage note attached to the item.* The item should be used whenever the situation defined in the note is true; otherwise, the item should not be used. |

* NOTE

If no rule appears in the notes, the item should be sent if the data is available to the sender.

IMPLEMENTATION

277 Health Care Claim Status Notification

Table 1 - Header

PAGE #	POS. #	SEG. ID	NAME	USAGE	REPEAT	LOOP REPEAT
40	0100	ST	Transaction Set Header	R	1	
42	0200	BHT	Beginning of Hierarchical Transaction	R	1	

Table 2 - Detail Information Source

PAGE #	POS. #	SEG. ID	NAME	USAGE	REPEAT	LOOP REPEAT
			LOOP ID - 2000A INFORMATION SOURCE LEVEL			>1
44	0100	HL	Information Source Level	R	1	
			LOOP ID - 2100A PAYER NAME			>1
46	0500	NM1	Payer Name	R	1	
48	0800	PER	Payer Contact Information	S	1	

Table 2 - Detail Information Receiver

PAGE #	POS. #	SEG. ID	NAME	USAGE	REPEAT	LOOP REPEAT
			LOOP ID - 2000B INFORMATION RECEIVER LEVEL			>1
51	0100	HL	Information Receiver Level	R	1	
			LOOP ID - 2100B INFORMATION RECEIVER LEVEL			>1
53	0500	NM1	Information Receiver Level	R	1	

Table 2 - Detail Service Provider

PAGE #	POS. #	SEG. ID	NAME	USAGE	REPEAT	LOOP REPEAT
			LOOP ID - 2000C SERVICE PROVIDER LEVEL			>1
56	0100	HL	Service Provider Level	R	1	
			LOOP ID - 2100C PROVIDER NAME			>1
58	0500	NM1	Provider Name	R	1	

Table 2 - Detail Subscriber

PAGE #	POS. #	SEG. ID	NAME	USAGE	REPEAT	LOOP REPEAT
			LOOP ID - 2000D SUBSCRIBER LEVEL			>1
61	0100	HL	Subscriber Level	R	1	
			LOOP ID - 2100D SUBSCRIBER NAME			>1
63	0500	NM1	Subscriber Name	R	1	
			LOOP ID - 2200D PAYER CLAIM IDENTIFICATION NUMBER			>1
66	0900	TRN	Payer Claim Identification Number	S	1	
68	1000	STC	Claim Level Status Information	S	>1	
71	1100	REF	Patient Account Number	S	1	
73	1100	REF	Institutional Bill Type Identification	S	1	
75	1100	REF	Medical Record Identification	S	1	
77	1200	DTP	Claim Service Date	S	2	
78	1200	DTP	Response Due Date	R	2	
			LOOP ID - 2210D CLAIM SUPPLEMENTAL INFORMATION			>1
80	1300	PWK	Claim Supplemental Information	S	1	
82	1400	PER	Response Contact Information	S	1	
85	1500	N1	Response Contact Identification	S	1	
87	1600	N3	Response Contact Address	S	1	
88	1700	N4	Response Contact City/State/ZIP Code	S	1	
			LOOP ID - 2220D SERVICE LINE INFORMATION			>1
90	1800	SVC	Service Line Information	S	1	
93	1900	STC	Service Line Status Information	S	>1	
96	2000	REF	Service Line Item Identification	S	1	
97	2100	DTP	Service Line Date	S	1	

Table 2 - Detail Dependent

PAGE #	POS. #	SEG. ID	NAME	USAGE	REPEAT	LOOP REPEAT
			LOOP ID - 2000E DEPENDENT LEVEL			>1
99	0100	HL	Dependent Level	S	1	
			LOOP ID - 2100E DEPENDENT NAME			>1
101	0500	NM1	Dependent Name	R	1	
			LOOP ID - 2200E PAYER CONTROL IDENTIFICATION NUMBER			>1
104	0900	TRN	Payer Control Identification Number	S	1	
106	1000	STC	Claim Level Status Information	R	>1	
109	1100	REF	Patient Account Number	R	1	
110	1100	REF	Institutional Bill Type Identification	S	1	
112	1100	REF	Medical Record Identification	S	1	
114	1200	DTP	Claim Service Date	S	2	
115	1200	DTP	Response Due Date	R	2	
			LOOP ID - 2210E CLAIM SUPPLEMENTAL INFORMATION			>1
117	1300	PWK	Claim Supplemental Information	S	1	
119	1400	PER	Response Contact Information	S	1	
122	1500	N1	Response Contact Identification	S	1	

124	1600	N3	Response Contact Address	S	1	
125	1700	N4	Response Contact City/State/ZIP Code	S	1	
LOOP ID - 2220E SERVICE LINE INFORMATION						>1
127	1800	SVC	Service Line Information	S	1	
130	1900	STC	Service Line Status Information	S	>1	
133	2000	REF	Service Line Item Identification	S	1	
134	2100	DTP	Service Line Date	S	1	
135	2700	SE	Transaction Set Trailer	S	1	

STANDARD

277 Health Care Claim Status NotificationFunctional Group ID: **HN**

This Draft Standard for Trial Use contains the format and establishes the data contents of the Health Care Claim Status Notification Transaction Set (277) for use within the context of an Electronic Data Interchange (EDI) environment. This transaction set can be used by a health care payer or authorized agent to notify a provider, recipient, or authorized agent regarding the status of a health care claim or encounter or to request additional information from the provider regarding a health care claim or encounter. This transaction set is not intended to replace the Health Care Claim Payment/Advice Transaction Set (835) and therefore, will not be used for account payment posting. The notification may be at a summary or service line detail level. The notification may be solicited or unsolicited.

Table 1 - Header

POS. #	SEG. ID	NAME	REQ. DES.	MAX USE	LOOP REPEAT
0100	ST	Transaction Set Header	M	1	
0200	BHT	Beginning of Hierarchical Transaction	M	1	
0300	REF	Reference Identification	O	10	
LOOP ID - 1000					>1
0400	NM1	Individual or Organizational Name	O	1	
0500	N2	Additional Name Information	O	2	
0600	N3	Address Information	O	2	
0700	N4	Geographic Location	O	1	
0800	REF	Reference Identification	O	2	
0900	PER	Administrative Communications Contact	O	1	

Table 2 - Detail

POS. #	SEG. ID	NAME	REQ. DES.	MAX USE	LOOP REPEAT
LOOP ID - 2000					>1
0100	HL	Hierarchical Level	M	1	
0200	SBR	Subscriber Information	O	1	
0300	PAT	Patient Information	O	1	
0400	DMG	Demographic Information	O	1	
LOOP ID - 2100					>1
0500	NM1	Individual or Organizational Name	O	1	
0600	N3	Address Information	O	2	
0700	N4	Geographic Location	O	1	
0800	PER	Administrative Communications Contact	O	1	
LOOP ID - 2200					>1
0900	TRN	Trace	O	1	
1000	STC	Status Information	M	>1	
1100	REF	Reference Identification	O	3	
1200	DTP	Date or Time or Period	O	2	
LOOP ID - 2210					>1
1300	PWK	Paperwork	O	1	
1400	PER	Administrative Communications Contact	O	1	
1500	N1	Name	O	1	

1600	N3	Address Information	O	1	
1700	N4	Geographic Location	O	1	
LOOP ID - 2220					>1
1800	SVC	Service Information	O	1	
1900	STC	Status Information	M	>1	
2000	REF	Reference Identification	O	1	
2100	DTP	Date or Time or Period	O	1	
LOOP ID - 2225					>1
2200	PWK	Paperwork	O	1	
2300	PER	Administrative Communications Contact	O	1	
2400	N1	Name	O	1	
2500	N3	Address Information	O	1	
2600	N4	Geographic Location	O	1	
2700	SE	Transaction Set Trailer	M	1	

NOTES:

- 2/0200** The SBR segment may only appear at the Subscriber (HL03=22) level.
- 2/0400** The DMG segment may only appear at the Subscriber (HL03=22) or Dependent (HL03=23) level.
- 2/1300** The 2210 loop may be used when there is a status notification or a request for additional information about a particular claim.
- 2/2200** The 2225 loop may be used when there is a status notification or a request for additional information about a particular service line.

IMPLEMENTATION

TRANSACTION SET HEADER

Usage: REQUIRED

Repeat: 1

Notes: 1. Implementation Convention Reference Identifier

Example: ST*277*0001*004020X104~

STANDARD

ST Transaction Set Header

Level: Header

Position: 0100

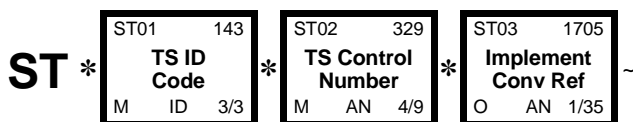
Loop: _____

Requirement: Mandatory

Max Use: 1

Purpose: To indicate the start of a transaction set and to assign a control number

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	ST01	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set SEMANTIC: The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).	M ID 3/3
			277 Health Care Claim Status Notification	
REQUIRED	ST02	329	Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M AN 4/9

REQUIRED	ST03	1705	Implementation Convention Reference	O	AN	1/35
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Reference assigned to identify Implementation Convention

ALIAS: Implementation Convention Reference Identifier

SEMANTIC: The implementation convention reference (ST03) is used by the translation routines of the interchange partners to select the appropriate implementation convention to match the transaction set definition.

This field contains the same value as data element GS08. The value is 004020X104. Some translator products strip off the ISA and GS segments prior to application (ST - SE) processing. Providing the information from GS08 at this level will help ensure the appropriate application mapping is utilized at translation time.

This value is always 004020X104.

IMPLEMENTATION

BEGINNING OF HIERARCHICAL TRANSACTION

Usage: REQUIRED

Repeat: 1

Example: BHT*0010*48*277X10400001*19980621*1211*RQ~

STANDARD

BHT Beginning of Hierarchical Transaction

Level: Header

Position: 0200

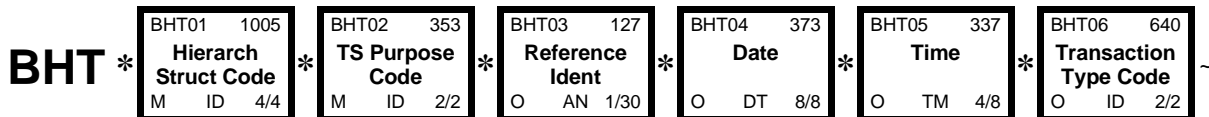
Loop: _____

Requirement: Mandatory

Max Use: 1

Purpose: To define the business hierarchical structure of the transaction set and identify the business application purpose and reference data, i.e., number, date, and time

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	BHT01	1005	Hierarchical Structure Code Code indicating the hierarchical application structure of a transaction set that utilizes the HL segment to define the structure of the transaction set	M ID 4/4
			CODE	DEFINITION
			0010	Information Source, Information Receiver, Provider of Service, Subscriber, Dependent
REQUIRED	BHT02	353	Transaction Set Purpose Code Code identifying purpose of transaction set	M ID 2/2
			CODE	DEFINITION
			48	Suspended
REQUIRED	BHT03	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	O AN 1/30
			SEMANTIC: BHT03 is the number assigned by the originator to identify the transaction within the originator's business application system.	

REQUIRED	BHT04	373	Date Date expressed as CCYYMMDD	O DT 8/8
			<i>ALIAS: Transaction Set Creation Date</i>	
			SEMANTIC: BHT04 is the date the transaction was created within the business application system.	
REQUIRED	BHT05	337	Time Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	O TM 4/8
			<i>ALIAS: Transaction Set Creation Time</i>	
			SEMANTIC: BHT05 is the time the transaction was created within the business application system.	
REQUIRED	BHT06	640	Transaction Type Code Code specifying the type of transaction	O ID 2/2
			CODE	DEFINITION
			RQ	Request

IMPLEMENTATION

INFORMATION SOURCE LEVEL

Loop: 2000A — INFORMATION SOURCE LEVEL Repeat: >1

Usage: REQUIRED

Repeat: 1

Example: HL*1*0*20*1~

STANDARD

HL Hierarchical Level

Level: Detail

Position: 0100

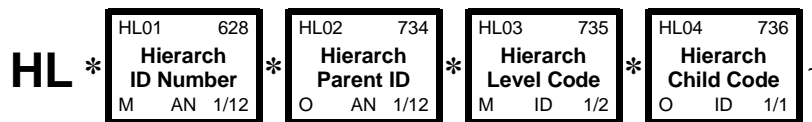
Loop: 2000 Repeat: >1

Requirement: Mandatory

Max Use: 1

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	HL01	628	Hierarchical ID Number A unique number assigned by the sender to identify a particular data segment in a hierarchical structure COMMENT: HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.	M AN 1/12
REQUIRED	HL02	734	Hierarchical Parent ID Number Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to COMMENT: HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.	O AN 1/12

This element will always contain the value '0' at this level.

REQUIRED	HL03	735	Hierarchical Level Code	M	ID	1/2
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Code defining the characteristic of a level in a hierarchical structure

COMMENT: HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.

CODE	DEFINITION
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20	Information Source
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REQUIRED	HL04	736	Hierarchical Child Code	O	ID	1/1
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Code indicating if there are hierarchical child data segments subordinate to the level being described

COMMENT: HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

CODE	DEFINITION
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1	Additional Subordinate HL Data Segment in This Hierarchical Structure.
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IMPLEMENTATION

PAYER NAME

Loop: 2100A — PAYER NAME Repeat: >1

Usage: REQUIRED

Repeat: 1

Notes: 1. Payers with multiple locations or lines of business may require the payer name to be completed.

Example: NM1*PR*2*ABC INSURANCE*****PI*12345~

STANDARD

NM1 Individual or Organizational Name

Level: Detail

Position: 0500

Loop: 2100 Repeat: >1

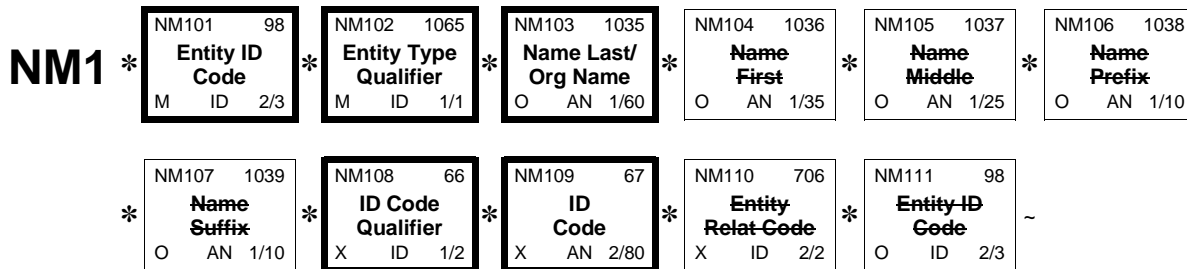
Requirement: Optional

Max Use: 1

Purpose: To supply the full name of an individual or organizational entity

Syntax: 1. **P0809**
 If either NM108 or NM109 is present, then the other is required.
 2. **C1110**
 If NM111 is present, then NM110 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	NM101	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual	M ID 2/3
			CODE	DEFINITION
			PR	Payer

REQUIRED	NM102	1065	Entity Type Qualifier Code qualifying the type of entity SEMANTIC: NM102 qualifies NM103.	M	ID	1/1
			CODE DEFINITION			
			2 Non-Person Entity			
REQUIRED	NM103	1035	Name Last or Organization Name Individual last name or organizational name ALIAS: <i>Payer Name</i>	O	AN	1/60
NOT USED	NM104	1036	Name First	O	AN	1/35
NOT USED	NM105	1037	Name Middle	O	AN	1/25
NOT USED	NM106	1038	Name Prefix	O	AN	1/10
NOT USED	NM107	1039	Name Suffix	O	AN	1/10
REQUIRED	NM108	66	Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67) SYNTAX: P0809	X	ID	1/2
			CODE DEFINITION			
			PI Payor Identification			
			XV Health Care Financing Administration National Payer Identification Number (PAYERID) Required if the National Payer ID is mandated for use. Otherwise, one of the other listed codes may be used. CODE SOURCE 540: Health Care Financing Administration National PAYERID			
REQUIRED	NM109	67	Identification Code Code identifying a party or other code ALIAS: <i>Payer Identifier</i> SYNTAX: P0809	X	AN	2/80
			For Medicare use, this is the Carrier or Fiscal Intermediary assigned code.			
NOT USED	NM110	706	Entity Relationship Code	X	ID	2/2
NOT USED	NM111	98	Entity Identifier Code	O	ID	2/3

IMPLEMENTATION

PAYER CONTACT INFORMATION

Loop: 2100A — PAYER NAME

Usage: SITUATIONAL

Repeat: 1

Notes: 1. This segment is required when the payer needs to identify a specific person, area, or contact information for facsimile transmissions, voice or email information related to responses.

Example: PER*IC*MEDICAL REVIEW
 DEPARTMENT*TE*3135551234*EX*6593*FX*3135554321~ OR
 PER*IC**TE*3135551234***FX*3135554321~ OR
 PER*IC*****FX*3135554321~

STANDARD

PER Administrative Communications Contact

Level: Detail

Position: 0800

Loop: 2100

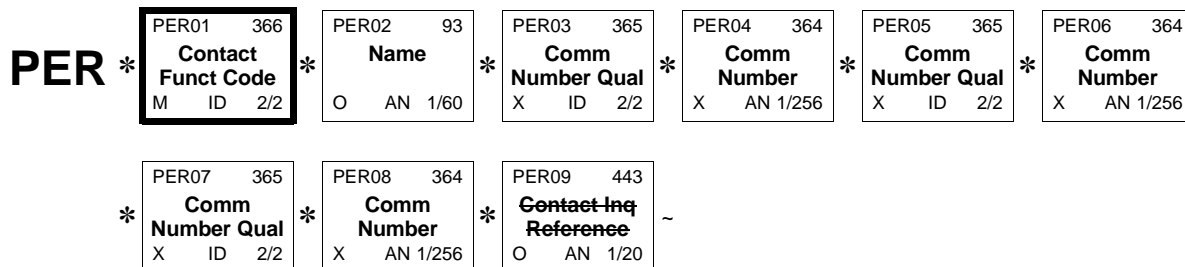
Requirement: Optional

Max Use: 1

Purpose: To identify a person or office to whom administrative communications should be directed

- Syntax:**
1. **P0304**
If either PER03 or PER04 is present, then the other is required.
 2. **P0506**
If either PER05 or PER06 is present, then the other is required.
 3. **P0708**
If either PER07 or PER08 is present, then the other is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	PER01	366	Contact Function Code Code identifying the major duty or responsibility of the person or group named	M ID 2/2
			CODE	DEFINITION
			IC	Information Contact
SITUATIONAL	PER02	93	Name Free-form name	O AN 1/60
			<i>ALIAS: Payer Contact Name</i>	
			This element is required when a specific person or department is the contact for the response in order to clarify requests concerning additional information requests.	
SITUATIONAL	PER03	365	Communication Number Qualifier Code identifying the type of communication number	X ID 2/2
			SYNTAX: P0304	
			CODE	DEFINITION
			ED	Electronic Data Interchange Access Number
			EM	Electronic Mail
			TE	Telephone
SITUATIONAL	PER04	364	Communication Number Complete communications number including country or area code when applicable	X AN 1/256
			<i>ALIAS: Payer Contact Communication Number</i>	
			SYNTAX: P0304	
			Used only when the specified communication number exists and the sender determines that this number may be needed by the receiver to facilitate communication.	
			Use PER04 to supply International Codes, Area Code (within U.S.), Local exchanges, and telephone numbers. When an additional extension is required PER06 should be used.	
SITUATIONAL	PER05	365	Communication Number Qualifier Code identifying the type of communication number	X ID 2/2
			SYNTAX: P0506	
			CODE	DEFINITION
			EX	Telephone Extension

SITUATIONAL	PER06	364	Communication Number Complete communications number including country or area code when applicable <i>ALIAS: Payer Contact Communication Number</i> SYNTAX: P0506 Used only when the specified communication number exists and the sender determines that this number may be needed by the receiver to facilitate communication. Use PER06 to supply telephone extensions only. International Codes, Area Codes (within U.S.), Exchanges, and telephone numbers should be placed in PER04.	X	AN	1/256				
SITUATIONAL	PER07	365	Communication Number Qualifier Code identifying the type of communication number SYNTAX: P0708	X	ID	2/2				
			<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>FX</td> <td>Facsimile</td> </tr> </tbody> </table>	CODE	DEFINITION	FX	Facsimile			
CODE	DEFINITION									
FX	Facsimile									
SITUATIONAL	PER08	364	Communication Number Complete communications number including country or area code when applicable <i>ALIAS: Payer Contact Communication Number</i> SYNTAX: P0708 Used only when the specified communication number exists and the sender determines that this number may be needed by the receiver to facilitate communication.	X	AN	1/256				
NOT USED	PER09	443	Contact Inquiry Reference	O	AN	1/20				

IMPLEMENTATION

INFORMATION RECEIVER LEVEL

Loop: 2000B — INFORMATION RECEIVER LEVEL **Repeat:** >1

Usage: REQUIRED

Repeat: 1

Notes: 1. This entity expects a response from the Information Source.

Example: HL*2*1*21*1~

STANDARD

HL Hierarchical Level

Level: Detail

Position: 0100

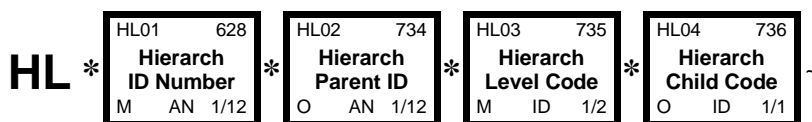
Loop: 2000 **Repeat:** >1

Requirement: Mandatory

Max Use: 1

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	HL01	628	Hierarchical ID Number A unique number assigned by the sender to identify a particular data segment in a hierarchical structure COMMENT: HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.	M AN 1/12
REQUIRED	HL02	734	Hierarchical Parent ID Number Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to COMMENT: HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.	O AN 1/12

This element at this level will always contain the value used in the Information Source HL01 element. See Loop Id 2000A.

REQUIRED	HL03	735	Hierarchical Level Code	M	ID	1/2
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Code defining the characteristic of a level in a hierarchical structure

COMMENT: HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.

CODE	DEFINITION
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21	Information Receiver
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REQUIRED	HL04	736	Hierarchical Child Code	O	ID	1/1
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Code indicating if there are hierarchical child data segments subordinate to the level being described

COMMENT: HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

CODE	DEFINITION
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1	Additional Subordinate HL Data Segment in This Hierarchical Structure.
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IMPLEMENTATION

INFORMATION RECEIVER LEVEL

Loop: 2100B — INFORMATION RECEIVER LEVEL Repeat: >1

Usage: REQUIRED

Repeat: 1

Notes: 1. This is the submitter of the original claim.

Example: NM1*41*2*XYZ SERVICE*****46*A222222221~

STANDARD

NM1 Individual or Organizational Name

Level: Detail

Position: 0500

Loop: 2100 Repeat: >1

Requirement: Optional

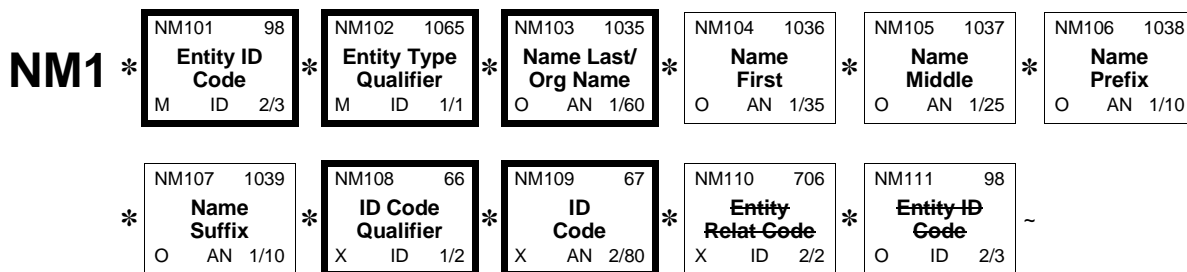
Max Use: 1

Purpose: To supply the full name of an individual or organizational entity

Syntax: 1. **P0809**
If either NM108 or NM109 is present, then the other is required.

2. **C1110**
If NM111 is present, then NM110 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	NM101	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual	M ID 2/3
			41 Submitter	

REQUIRED	NM102	1065	Entity Type Qualifier Code qualifying the type of entity SEMANTIC: NM102 qualifies NM103.	M	ID	1/1								
			<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Person</td> </tr> <tr> <td>2</td> <td>Non-Person Entity</td> </tr> </tbody> </table>	CODE	DEFINITION	1	Person	2	Non-Person Entity					
CODE	DEFINITION													
1	Person													
2	Non-Person Entity													
REQUIRED	NM103	1035	Name Last or Organization Name Individual last name or organizational name ALIAS: <i>Information Receiver Last or Organization Name</i>	O	AN	1/60								
SITUATIONAL	NM104	1036	Name First Individual first name ALIAS: <i>Information Receiver First Name</i> This name is required when the value in NM102 is 1 and the person has a first name.	O	AN	1/35								
SITUATIONAL	NM105	1037	Name Middle Individual middle name or initial ALIAS: <i>Information Receiver Middle Name</i> This name is required when the value in NM102 is 1 and the person has a middle name or initial.	O	AN	1/25								
SITUATIONAL	NM106	1038	Name Prefix Prefix to individual name ALIAS: <i>Information Receiver Name Prefix</i> Required if additional name information is needed to identify the Information Receiver. This field is required when the value in data element NM102 is 1 and the information is known.	O	AN	1/10								
SITUATIONAL	NM107	1039	Name Suffix Suffix to individual name ALIAS: <i>Information Receiver Name Suffix</i> Required if additional name information is needed to identify the Information Receiver. This field is required when the value in data element NM102 is 1 and the information is known.	O	AN	1/10								
REQUIRED	NM108	66	Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67) SYNTAX: P0809	X	ID	1/2								
			<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>46</td> <td>Electronic Transmitter Identification Number (ETIN)</td> </tr> <tr> <td>FI</td> <td>Federal Taxpayer's Identification Number</td> </tr> <tr> <td>XX</td> <td>Health Care Financing Administration National Provider Identifier Required value if the National Provider ID is mandated for use. Otherwise, one of the other listed codes may be used.</td> </tr> </tbody> </table>	CODE	DEFINITION	46	Electronic Transmitter Identification Number (ETIN)	FI	Federal Taxpayer's Identification Number	XX	Health Care Financing Administration National Provider Identifier Required value if the National Provider ID is mandated for use. Otherwise, one of the other listed codes may be used.			
CODE	DEFINITION													
46	Electronic Transmitter Identification Number (ETIN)													
FI	Federal Taxpayer's Identification Number													
XX	Health Care Financing Administration National Provider Identifier Required value if the National Provider ID is mandated for use. Otherwise, one of the other listed codes may be used.													

REQUIRED	NM109	67	Identification Code Code identifying a party or other code <i>ALIAS: Information Receiver Identification Number</i> SYNTAX: P0809	X	AN	2/80
NOT USED	NM110	706	Entity Relationship Code	X	ID	2/2
NOT USED	NM111	98	Entity Identifier Code	O	ID	2/3

IMPLEMENTATION

SERVICE PROVIDER LEVEL

Loop: 2000C — SERVICE PROVIDER LEVEL Repeat: >1

Usage: REQUIRED

Repeat: 1

Example: HL*3*2*19*1~

STANDARD

HL Hierarchical Level

Level: Detail

Position: 0100

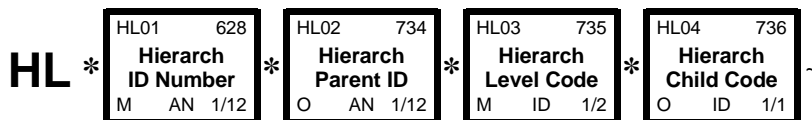
Loop: 2000 Repeat: >1

Requirement: Mandatory

Max Use: 1

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	HL01	628	Hierarchical ID Number A unique number assigned by the sender to identify a particular data segment in a hierarchical structure <i>COMMENT:</i> HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.	M AN 1/12
REQUIRED	HL02	734	Hierarchical Parent ID Number Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to <i>COMMENT:</i> HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.	O AN 1/12

REQUIRED	HL03	735	Hierarchical Level Code	M ID 1/2
-----------------	-------------	------------	--------------------------------	-----------------

Code defining the characteristic of a level in a hierarchical structure

COMMENT: HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.

<u>CODE</u>	<u>DEFINITION</u>
-------------	-------------------

19	Provider of Service
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REQUIRED	HL04	736	Hierarchical Child Code	O ID 1/1
-----------------	-------------	------------	--------------------------------	-----------------

Code indicating if there are hierarchical child data segments subordinate to the level being described

COMMENT: HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

<u>CODE</u>	<u>DEFINITION</u>
-------------	-------------------

1	Additional Subordinate HL Data Segment in This Hierarchical Structure.
----------	---

IMPLEMENTATION

PROVIDER NAME

Loop: 2100C — PROVIDER NAME Repeat: >1

Usage: REQUIRED

Repeat: 1

Example: NM1*1P*2*ST HOLY HILL HOSPITAL*****SV*39999000B~

STANDARD

NM1 Individual or Organizational Name

Level: Detail

Position: 0500

Loop: 2100 Repeat: >1

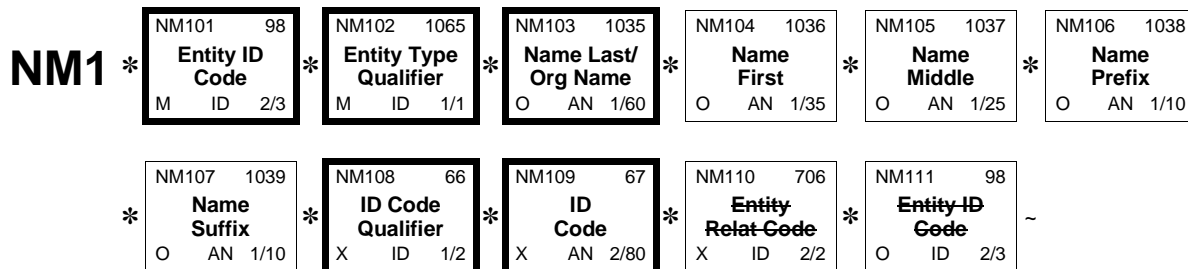
Requirement: Optional

Max Use: 1

Purpose: To supply the full name of an individual or organizational entity

- Syntax: 1. **P0809**
 If either NM108 or NM109 is present, then the other is required.
2. **C1110**
 If NM111 is present, then NM110 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	NM101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			CODE	DEFINITION
			1P	Provider

REQUIRED	NM102	1065	Entity Type Qualifier Code qualifying the type of entity SEMANTIC: NM102 qualifies NM103.	M	ID	1/1												
			<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Person</td> </tr> <tr> <td>2</td> <td>Non-Person Entity</td> </tr> </tbody> </table>	CODE	DEFINITION	1	Person	2	Non-Person Entity									
CODE	DEFINITION																	
1	Person																	
2	Non-Person Entity																	
REQUIRED	NM103	1035	Name Last or Organization Name Individual last name or organizational name ALIAS: <i>Provider Last or Organization Name</i>	O	AN	1/60												
SITUATIONAL	NM104	1036	Name First Individual first name ALIAS: <i>Provider First Name</i> This element is recommended when the value in NM102 is 1. Always return this information when it is supplied on a submitted claim.	O	AN	1/35												
SITUATIONAL	NM105	1037	Name Middle Individual middle name or initial ALIAS: <i>Provider Middle Name</i> This element is recommended when the value in NM102 is 1. Always return this information when it is supplied on a submitted claim.	O	AN	1/25												
SITUATIONAL	NM106	1038	Name Prefix Prefix to individual name Required if additional name information is needed to identify the provider of service. This field is required when the value in data element NM102 is 1 and the information is known.	O	AN	1/10												
SITUATIONAL	NM107	1039	Name Suffix Suffix to individual name Required if additional name information is needed to identify the provider of service. This field is required when the value in data element NM102 is 1 and the information is known.	O	AN	1/10												
REQUIRED	NM108	66	Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67) SYNTAX: P0809	X	ID	1/2												
			<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>CI</td> <td>CHAMPUS (Civilian Health and Medical Program of the Uniformed Services) Identification Number</td> </tr> <tr> <td>MC</td> <td>Medicaid Provider Number</td> </tr> <tr> <td>MP</td> <td>Medicare Provider Number</td> </tr> <tr> <td>PC</td> <td>Provider Commercial Number</td> </tr> <tr> <td>SV</td> <td>Service Provider Number</td> </tr> </tbody> </table>	CODE	DEFINITION	CI	CHAMPUS (Civilian Health and Medical Program of the Uniformed Services) Identification Number	MC	Medicaid Provider Number	MP	Medicare Provider Number	PC	Provider Commercial Number	SV	Service Provider Number			
CODE	DEFINITION																	
CI	CHAMPUS (Civilian Health and Medical Program of the Uniformed Services) Identification Number																	
MC	Medicaid Provider Number																	
MP	Medicare Provider Number																	
PC	Provider Commercial Number																	
SV	Service Provider Number																	

			XX	Health Care Financing Administration National Provider Identifier Required value if the National Provider ID is mandated for use. Otherwise, one of the other listed codes may be used.			
REQUIRED	NM109	67	Identification Code Code identifying a party or other code SYNTAX: P0809		X	AN	2/80
			Provider Identifier				
NOT USED	NM110	706	Entity Relationship Code		X	ID	2/2
NOT USED	NM111	98	Entity Identifier Code		O	ID	2/3

IMPLEMENTATION

SUBSCRIBER LEVEL

Loop: 2000D — SUBSCRIBER LEVEL Repeat: >1

Usage: REQUIRED

Repeat: 1

Notes: 1. If the subscriber and the patient are the same person, do not use the next HL level (HL23) for claim information.

Example: HL*4*3*22*0~ or HL*4*3*22*1~

STANDARD

HL Hierarchical Level

Level: Detail

Position: 0100

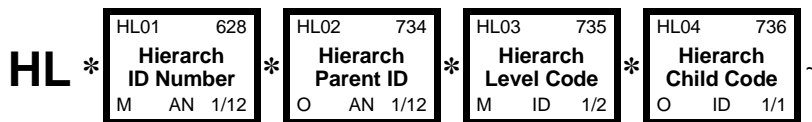
Loop: 2000 Repeat: >1

Requirement: Mandatory

Max Use: 1

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	HL01	628	Hierarchical ID Number A unique number assigned by the sender to identify a particular data segment in a hierarchical structure COMMENT: HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.	M AN 1/12
REQUIRED	HL02	734	Hierarchical Parent ID Number Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to COMMENT: HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.	O AN 1/12

REQUIRED	HL03	735	Hierarchical Level Code	M	ID	1/2
-----------------	-------------	------------	--------------------------------	----------	-----------	------------

Code defining the characteristic of a level in a hierarchical structure

COMMENT: HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.

CODE	DEFINITION
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22	Subscriber
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REQUIRED	HL04	736	Hierarchical Child Code	O	ID	1/1
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Code indicating if there are hierarchical child data segments subordinate to the level being described

COMMENT: HL04 indicates whether or not there are subordinate (or child) HL segments related to the current HL segment.

CODE	DEFINITION
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0	No Subordinate HL Segment in This Hierarchical Structure.
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1	Additional Subordinate HL Data Segment in This Hierarchical Structure.
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IMPLEMENTATION

SUBSCRIBER NAME

Loop: 2100D — SUBSCRIBER NAME Repeat: >1

Usage: REQUIRED

Repeat: 1

Example: NM1*QC*1*SMITH*FRED****MI*64911111A~ or
NM1*IL*1*SMITH*ROBERT*J****MI*555991234~

STANDARD

NM1 Individual or Organizational Name

Level: Detail

Position: 0500

Loop: 2100 Repeat: >1

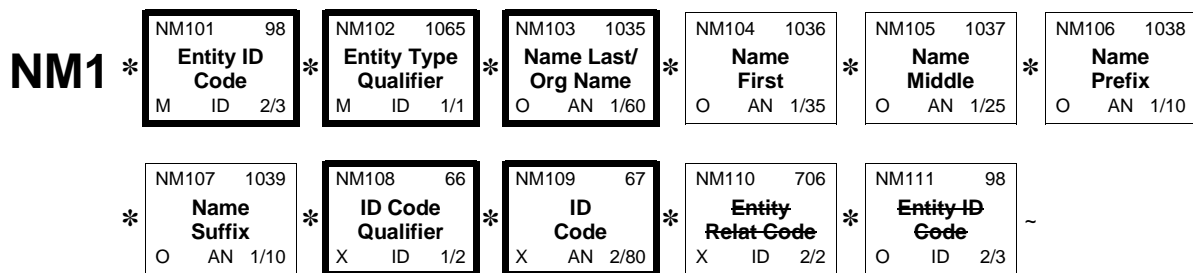
Requirement: Optional

Max Use: 1

Purpose: To supply the full name of an individual or organizational entity

- Syntax:
- P0809**
If either NM108 or NM109 is present, then the other is required.
 - C1110**
If NM111 is present, then NM110 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	NM101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			CODE	DEFINITION
			IL	Insured or Subscriber
			QC	Patient Use this code only when the subscriber is the patient.

REQUIRED	NM102	1065	Entity Type Qualifier Code qualifying the type of entity SEMANTIC: NM102 qualifies NM103.	M	ID	1/1
		CODE	DEFINITION			
		1	Person			
		2	Non-Person Entity Use the value "2" in an employer-subscriber situation such as Worker's Compensation. Use the value "IL" in NM101 for this purpose.			
REQUIRED	NM103	1035	Name Last or Organization Name Individual last name or organizational name ALIAS: <i>Subscriber Last Name</i>	O	AN	1/60
SITUATIONAL	NM104	1036	Name First Individual first name ALIAS: <i>Subscriber First Name</i> ADVISORY: Under most circumstances, this element is expected to be sent. Required if additional name information is needed to identify the subscriber. This field is required when the value in data element NM102 is "1" and the information is known.	O	AN	1/35
SITUATIONAL	NM105	1037	Name Middle Individual middle name or initial ALIAS: <i>Subscriber Middle Name</i> ADVISORY: Under most circumstances, this element is expected to be sent. Required if additional name information is needed to identify the subscriber. This field is required when the value in data element NM102 is "1" and the information is known. This name is recommended when it is available.	O	AN	1/25
SITUATIONAL	NM106	1038	Name Prefix Prefix to individual name ALIAS: <i>Subscriber Name Prefix</i> Required if additional name information is needed to identify the subscriber. This field is required when the value in data element NM102 is "1" and the information is known. Examples include military ranks such as SGT - Sergeant, COR - Corporal.	O	AN	1/10
SITUATIONAL	NM107	1039	Name Suffix Suffix to individual name ALIAS: <i>Subscriber Name Suffix</i> Required if additional name information is needed to identify the subscriber. This field is required when the value in data element NM102 is "1" and the information is known. Examples I, II, IV, JR, SR. Required if known.	O	AN	1/10

REQUIRED	NM108	66	Identification Code Qualifier	X	ID	1/2
Code designating the system/method of code structure used for Identification Code (67)						

SYNTAX: P0809

CODE	DEFINITION
24	<p>Employer's Identification Number</p> <p>Use this code for worker's compensation claims when the employer holds the policy which covers the injured worker. The injured worker information will be identified in the Dependent (HL04=23) Loop.</p>
MI	<p>Member Identification Number</p> <p>Use this code for any payer-assigned identification number, even if the payer actually calls it's number a policy number, receipt number, or some other synonym such as Social Security Number (SSN).</p>
ZZ	<p>Mutually Defined</p> <p>The value 'ZZ' when used in this data element shall be defined as 'HIPAA' Individual Identifier has been adopted. Under the Health Insurance Portability and Accountability Act of 1996, the Secretary of the Department of Health and Human Services must adopt a standard individual identifier for use in this transaction.</p>

REQUIRED	NM109	67	Identification Code	X	AN	2/80
Code identifying a party or other code						

SYNTAX: P0809

NOT USED	NM110	706	Entity Relationship Code	X	ID	2/2
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NOT USED	NM111	98	Entity Identifier Code	O	ID	2/3
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IMPLEMENTATION

PAYER CLAIM IDENTIFICATION NUMBER

Loop: 2200D — PAYER CLAIM IDENTIFICATION NUMBER Repeat: >1

Usage: SITUATIONAL

Repeat: 1

- Notes:
1. This segment is required when the subscriber is the patient.
 2. This is the payer’s control number.
 3. The TRN segment is required by the ASC X12 syntax when Loop ID-2200 is used.

Example: TRN*1*1722634842~

STANDARD

TRN Trace

Level: Detail

Position: 0900

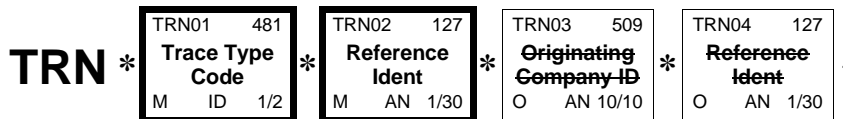
Loop: 2200 Repeat: >1

Requirement: Optional

Max Use: 1

Purpose: To uniquely identify a transaction to an application

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES				
REQUIRED	TRN01	481	Trace Type Code Code identifying which transaction is being referenced	M ID 1/2				
<table border="1" style="width: 100%;"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Current Transaction Trace Numbers</td> </tr> </tbody> </table>					CODE	DEFINITION	1	Current Transaction Trace Numbers
CODE	DEFINITION							
1	Current Transaction Trace Numbers							
REQUIRED	TRN02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	M AN 1/30				
<p>SEMANTIC: TRN02 provides unique identification for the transaction.</p> <p>This is the Control Number assigned by the payer. This number is used by the Payer to connect the request to the response. This number must be returned on the response with the requested information.</p>								
NOT USED	TRN03	509	Originating Company Identifier	O AN 10/10				

NOT USED	TRN04	127	Reference Identification	O	AN	1/30
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IMPLEMENTATION

CLAIM LEVEL STATUS INFORMATION

Loop: 2200D — PAYER CLAIM IDENTIFICATION NUMBER

Usage: MANDATORY

Repeat: >1

- Notes:
1. This segment is required when Loop 2200D is present. The 2200D Loop is only used when the subscriber is the patient.
 2. Questions regarding claim level information will utilize the STC segment at the claim level. In those situations STC01-1 will contain an "Rx" (where "x" represents one of the valid sub-categories from the Health Care Claim Status Category Code list) and STC01-2 contains a LOINC code. The value "LOI" in STC01-4 qualifies STC01-2 as a LOINC code. These same rules apply to STC10 and STC11 when these elements are utilized for claim level requests.

When questions are only asked regarding specific service line information, the STC segment at the Claim Level only conveys the Status Information Effective Date. When this occurs STC01 is used. STC01-1 will only contain the value "R0" and STC01-2 will only contain "19016-5", and STC01-4 will always contain "LOI".

3. Use this segment only when the subscriber is the patient.

Example: STC*R0:19016-5::LOI*19980824~ or STC*R0:18682-5::LOI*19980824~ or STC*R4:18660-1::LOI*19980824***R4:19790-6:LOI~

STANDARD

STC Status Information

Level: Detail

Position: 1000

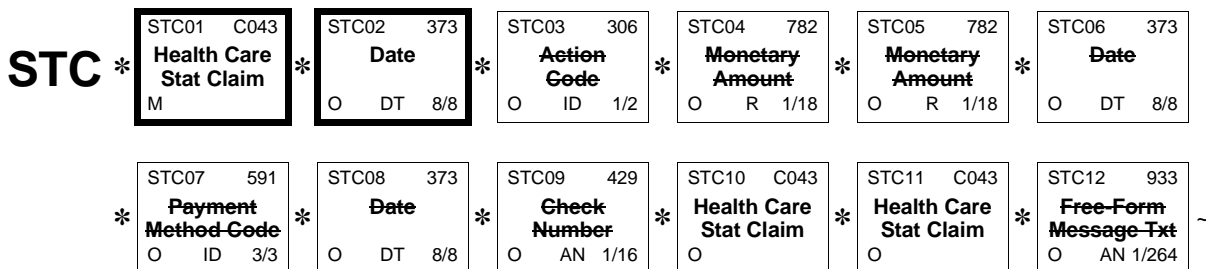
Loop: 2200

Requirement: Mandatory

Max Use: >1

Purpose: To report the status, required action, and paid information of a claim or service line

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	STC01	C043	HEALTH CARE CLAIM STATUS Used to convey status of the entire claim or a specific service line	M
REQUIRED	STC01 - 1	1271	Industry Code Code indicating a code from a specific industry code list <i>ALIAS: Health Care Claim Status Category Code. This business purpose only allows for Requests for Additional Information "R" type Category Codes to be utilized.</i>	M AN 1/30
REQUIRED	STC01 - 2	1271	Industry Code Code indicating a code from a specific industry code list <i>ALIAS: Additional Information Request Code</i> This is the LOINC code. CODE SOURCE 663: Logical Observation Identifier Names and Codes (LOINC)	M AN 1/30
NOT USED	STC01 - 3	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual	O ID 2/3
REQUIRED	STC01 - 4	1270	Code List Qualifier Code Code identifying a specific industry code list	O ID 1/3
			CODE	DEFINITION
			LOI	Logical Observation Identifier Names and Codes (LOINC) Codes This value indicates that STC01-2, STC10-2, STC11-2 is a Logical Observations Identifiers Names and Codes (LOINC). CODE SOURCE 663: Logical Observation Identifier Names and Codes (LOINC)
REQUIRED	STC02	373	Date Date expressed as CCYYMMDD <i>ALIAS: Status Information Effective Date</i> SEMANTIC: STC02 is the effective date of the status information.	O DT 8/8
NOT USED	STC03	306	Action Code	O ID 1/2
NOT USED	STC04	782	Monetary Amount	O R 1/18
NOT USED	STC05	782	Monetary Amount	O R 1/18
NOT USED	STC06	373	Date	O DT 8/8
NOT USED	STC07	591	Payment Method Code	O ID 3/3
NOT USED	STC08	373	Date	O DT 8/8
NOT USED	STC09	429	Check Number	O AN 1/16
SITUATIONAL	STC10	C043	HEALTH CARE CLAIM STATUS Used to convey status of the entire claim or a specific service line Use this element if a second Health Care Claim Status is needed.	O
REQUIRED	STC10 - 1	1271	Industry Code Code indicating a code from a specific industry code list <i>ALIAS: Health Care Claim Status Category Code</i>	M AN 1/30

**This is the Category code and is required if STC10 is used.
This data element must contain the same value as STC01-1.**

REQUIRED **STC10 - 2** **1271** **Industry Code** **M AN 1/30**
Code indicating a code from a specific industry code list

This is the LOINC code and is required if STC10 is used.

CODE SOURCE 663: Logical Observation Identifier Names and Codes (LOINC)

NOT USED **STC10 - 3** **98** **Entity Identifier Code** **O ID 2/3**
Code identifying an organizational entity, a physical location, property or an individual

REQUIRED **STC10 - 4** **1270** **Code List Qualifier Code** **O ID 1/3**
Code identifying a specific industry code list

CODE DEFINITION

LOI **Logical Observation Identifier Names and Codes (LOINC) Codes**

CODE SOURCE 663: Logical Observation Identifier Names and Codes (LOINC)

SITUATIONAL **STC11** **C043** **HEALTH CARE CLAIM STATUS** **O**
Used to convey status of the entire claim or a specific service line

Use this element if a third Health Care Claim Status is needed.

REQUIRED **STC11 - 1** **1271** **Industry Code** **M AN 1/30**
Code indicating a code from a specific industry code list

ALIAS: Health Care Claim Status Category Code

This is the Category code and is required if STC11 is used.

**This is the Category code and is required if STC11 is used.
This data element must contain the same value as STC01-1.**

REQUIRED **STC11 - 2** **1271** **Industry Code** **M AN 1/30**
Code indicating a code from a specific industry code list

ALIAS: Additional Information Request Code Modifier NEW

This is the LOINC code and is required if STC11 is used.

CODE SOURCE 663: Logical Observation Identifier Names and Codes (LOINC)

NOT USED **STC11 - 3** **98** **Entity Identifier Code** **O ID 2/3**
Code identifying an organizational entity, a physical location, property or an individual

REQUIRED **STC11 - 4** **1270** **Code List Qualifier Code** **O ID 1/3**
Code identifying a specific industry code list

CODE DEFINITION

LOI **Logical Observation Identifier Names and Codes (LOINC) Codes**

CODE SOURCE 663: Logical Observation Identifier Names and Codes (LOINC)

NOT USED **STC12** **933** **Free-Form Message Text** **O AN 1/264**

IMPLEMENTATION

PATIENT ACCOUNT NUMBER

Loop: 2200D — PAYER CLAIM IDENTIFICATION NUMBER

Usage: SITUATIONAL

Repeat: 1

- Notes: 1. Use this segment for the provider’s assigned Patient Account Number.
2. Use this segment only when the subscriber is the patient.

Example: REF*EJ*SMITH123~

STANDARD

REF Reference Identification

Level: Detail

Position: 1100

Loop: 2200

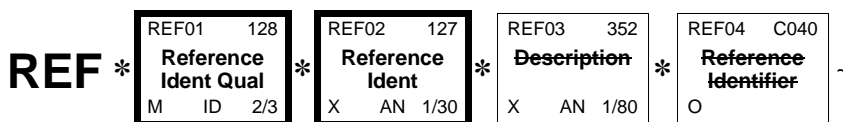
Requirement: Optional

Max Use: 3

Purpose: To specify identifying information

Syntax: 1. R0203
At least one of REF02 or REF03 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES				
REQUIRED	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3				
			<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>EJ</td> <td>Patient Account Number This data element corresponds to the value given in the ANSI ASC X12 837 transaction in CLM01.</td> </tr> </tbody> </table>	CODE	DEFINITION	EJ	Patient Account Number This data element corresponds to the value given in the ANSI ASC X12 837 transaction in CLM01.	
CODE	DEFINITION							
EJ	Patient Account Number This data element corresponds to the value given in the ANSI ASC X12 837 transaction in CLM01.							
REQUIRED	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X AN 1/30				
			ALIAS: Patient Account Number SYNTAX: R0203					
NOT USED	REF03	352	Description	X AN 1/80				

NOT USED	REF04	C040	REFERENCE IDENTIFIER	O
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IMPLEMENTATION

INSTITUTIONAL BILL TYPE IDENTIFICATION

Loop: 2200D — PAYER CLAIM IDENTIFICATION NUMBER

Usage: SITUATIONAL

Repeat: 1

Notes: 1. This is the Institutional Type of Bill from the submitted claim. It is returned in requests for additional information for Institutional type claims only. This segment is not used for professional claims.

2. Use this segment only when the subscriber is the patient.

Example: REF*BLT*111~

STANDARD

REF Reference Identification

Level: Detail

Position: 1100

Loop: 2200

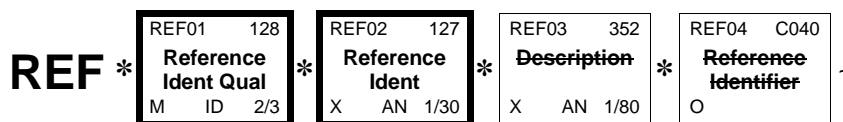
Requirement: Optional

Max Use: 3

Purpose: To specify identifying information

Syntax: 1. **R0203**
At least one of REF02 or REF03 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3
			CODE	DEFINITION
			BLT	Billing Type Use this code for an institutional claim.

REQUIRED	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier SYNTAX: R0203 Found on UB92 paper form locator 4. Found in UB92 - record 40 field 4. Found in ASC X12N 837, CLM05.	X	AN	1/30
NOT USED	REF03	352	Description	X	AN	1/80
NOT USED	REF04	C040	REFERENCE IDENTIFIER	O		

IMPLEMENTATION

MEDICAL RECORD IDENTIFICATION

Loop: 2200D — PAYER CLAIM IDENTIFICATION NUMBER

Usage: SITUATIONAL

Repeat: 1

- Notes:
1. This is the Medical Record Number as submitted on the original claim, and it should be returned when it is available from the submitted claim.
 2. Use this segment only when the subscriber is the patient.

Example: REF*EA*JS960503LAB~

STANDARD

REF Reference Identification

Level: Detail

Position: 1100

Loop: 2200

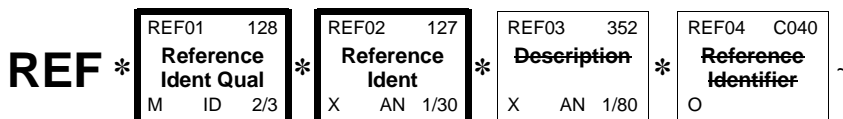
Requirement: Optional

Max Use: 3

Purpose: To specify identifying information

Syntax: 1. R0203
At least one of REF02 or REF03 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES				
REQUIRED	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3				
			<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>EA</td> <td>Medical Record Identification Number Use this code for an institutional claim.</td> </tr> </tbody> </table>	CODE	DEFINITION	EA	Medical Record Identification Number Use this code for an institutional claim.	
CODE	DEFINITION							
EA	Medical Record Identification Number Use this code for an institutional claim.							
REQUIRED	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X AN 1/30				
			<p>SYNTAX: R0203</p> <p>Found in UB92 record 20 field 25. Found in UB92 paper form locator 23. Found in ASC X12N 837.</p>					

NOT USED	REF03	352	Description	X	AN	1/80
NOT USED	REF04	C040	REFERENCE IDENTIFIER	O		

IMPLEMENTATION

CLAIM SERVICE DATE

Loop: 2200D — PAYER CLAIM IDENTIFICATION NUMBER

Usage: SITUATIONAL

Repeat: 2

Notes: 1. Use this segment only when the subscriber is the patient.

Example: DTP*434*RD8*19980401-19980402~

STANDARD

DTP Date or Time or Period

Level: Detail

Position: 1200

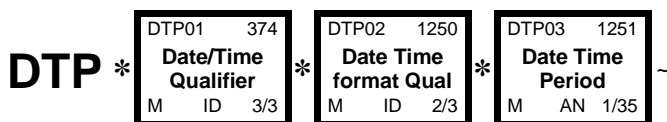
Loop: 2200

Requirement: Optional

Max Use: 2

Purpose: To specify any or all of a date, a time, or a time period

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES				
REQUIRED	DTP01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time	M ID 3/3				
			<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>434</td> <td>Statement</td> </tr> </tbody> </table>	CODE	DEFINITION	434	Statement	
CODE	DEFINITION							
434	Statement							
REQUIRED	DTP02	1250	Date Time Period Format Qualifier Code indicating the date format, time format, or date and time format SEMANTIC: DTP02 is the date or time or period format that will appear in DTP03.	M ID 2/3				
			<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>RD8</td> <td>Range of Dates Expressed in Format CCYYMMDD-CCYYMMDD If there is a single date of service, the begin date equals the end date.</td> </tr> </tbody> </table>	CODE	DEFINITION	RD8	Range of Dates Expressed in Format CCYYMMDD-CCYYMMDD If there is a single date of service, the begin date equals the end date.	
CODE	DEFINITION							
RD8	Range of Dates Expressed in Format CCYYMMDD-CCYYMMDD If there is a single date of service, the begin date equals the end date.							
REQUIRED	DTP03	1251	Date Time Period Expression of a date, a time, or range of dates, times or dates and times	M AN 1/35				

IMPLEMENTATION

RESPONSE DUE DATE

Loop: 2200D — PAYER CLAIM IDENTIFICATION NUMBER

Usage: REQUIRED

Repeat: 2

- Notes: 1. Use this segment only if the subscriber is the patient.
2. This date is supplied to indicate the date the requested information is to be returned by the provider.

Should this date pass without the requested information being supplied by the provider, the claim shall proceed through the adjudication process based upon the information contained in the claim.

Example: DTP*106*D8*19980422~

STANDARD

DTP Date or Time or Period

Level: Detail

Position: 1200

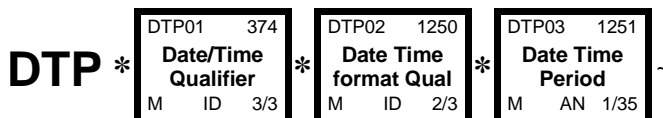
Loop: 2200

Requirement: Optional

Max Use: 2

Purpose: To specify any or all of a date, a time, or a time period

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	DTP01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time	M ID 3/3
			CODE	DEFINITION
			106	Required By
REQUIRED	DTP02	1250	Date Time Period Format Qualifier Code indicating the date format, time format, or date and time format	M ID 2/3
			SEMANTIC: DTP02 is the date or time or period format that will appear in DTP03.	
			CODE	DEFINITION
			D8	Date Expressed in Format CCYYMMDD

REQUIRED	DTP03	1251	Date Time Period	M AN 1/35
-----------------	--------------	-------------	-------------------------	------------------

Expression of a date, a time, or range of dates, times or dates and times

IMPLEMENTATION

CLAIM SUPPLEMENTAL INFORMATION

Loop: 2210D — CLAIM SUPPLEMENTAL INFORMATION Repeat: >1

Usage: SITUATIONAL

Repeat: 1

Notes: 1. When information is to be returned to a location other than that referenced in Loop ID-2000 of HL19 (Information Source), use both the PWK segment and the PER segment in HL22 (Subscriber Level) Loop ID-2210D or HL23 (Dependent Level) Loop ID-2210E. This PWK segment is required by ASC X12 Design Rules in order to use the related PER segment.

Example: PWK*OZ~

STANDARD

PWK Paperwork

Level: Detail

Position: 1300

Loop: 2210 Repeat: >1

Requirement: Optional

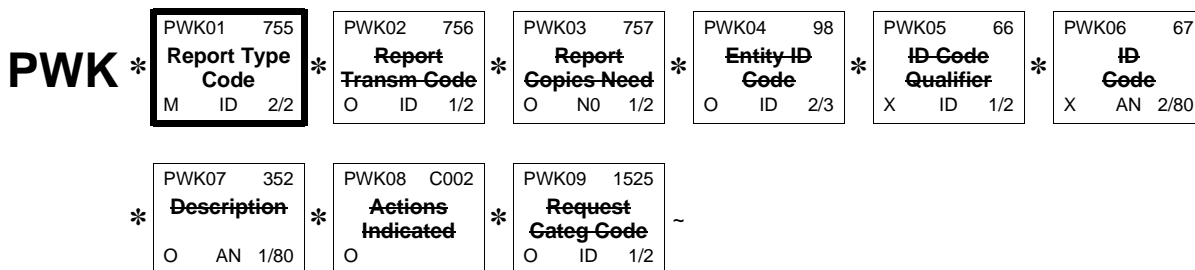
Max Use: 1

Purpose: To identify the type or transmission or both of paperwork or supporting information

Set Notes: 1. The 2210 loop may be used when there is a status notification or a request for additional information about a particular claim.

Syntax: 1. P0506
If either PWK05 or PWK06 is present, then the other is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
REQUIRED	PWK01	755	Report Type Code Code indicating the title or contents of a document, report or supporting item	M	ID	2/2
			CODE	DEFINITION		
			OZ	Support Data for Claim		
NOT USED	PWK02	756	Report Transmission Code	O	ID	1/2
NOT USED	PWK03	757	Report Copies Needed	O	N0	1/2
NOT USED	PWK04	98	Entity Identifier Code	O	ID	2/3
NOT USED	PWK05	66	Identification Code Qualifier	X	ID	1/2
NOT USED	PWK06	67	Identification Code	X	AN	2/80
NOT USED	PWK07	352	Description	O	AN	1/80
NOT USED	PWK08	C002	ACTIONS INDICATED	O		
NOT USED	PWK09	1525	Request Category Code	O	ID	1/2

IMPLEMENTATION

RESPONSE CONTACT INFORMATION

Loop: 2210D — CLAIM SUPPLEMENTAL INFORMATION

Usage: SITUATIONAL

Repeat: 1

- Notes:
1. When information is to be returned to a location other than that referenced in Loop ID-2000 of HL19 (Information Source), use both the PWK segment and the PER segment in HL22 (Subscriber Level) Loop ID-2210D or HL23 (Dependent Level) Loop ID-2210E. This PWK segment is required by ASC X12 Design Rules in order to use the related PER segment.
 2. Use this segment only if the subscriber is the patient.
 3. This segment identifies the person or office location to route the response to for this Request for Additional Information.

This segment will supersede information supplied in the Payer Contact nformation (PER) segment in the Information Source Level (Loop Id 2100A).

Example: PER*IC*MEDICAL REVIEW
DEPARTMENT*TE*3135551234*EX*6593*FX*3135554321~ OR
PER*IC**TE*3135551234***FX*3135554321~ OR
PER*IC*****FX*3135554321~

STANDARD

PER Administrative Communications Contact

Level: Detail

Position: 1400

Loop: 2210

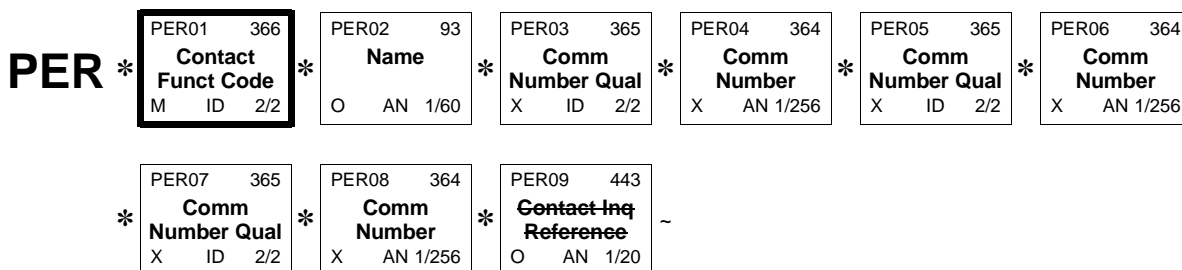
Requirement: Optional

Max Use: 1

Purpose: To identify a person or office to whom administrative communications should be directed

- Syntax:
1. **P0304**
If either PER03 or PER04 is present, then the other is required.
 2. **P0506**
If either PER05 or PER06 is present, then the other is required.
 3. **P0708**
If either PER07 or PER08 is present, then the other is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	PER01	366	Contact Function Code Code identifying the major duty or responsibility of the person or group named	M ID 2/2
			IC Information Contact	
SITUATIONAL	PER02	93	Name Free-form name <i>ALIAS: Response Contact Name</i>	O AN 1/60
			This element is required when a specific person or department is the contact for the response in order to clarify requests concerning additional information requests.	
SITUATIONAL	PER03	365	Communication Number Qualifier Code identifying the type of communication number SYNTAX: P0304	X ID 2/2
			Use this code if a secondary communication is needed.	
			ED Electronic Data Interchange Access Number	
			EM Electronic Mail	
			TE Telephone	
SITUATIONAL	PER04	364	Communication Number Complete communications number including country or area code when applicable <i>ALIAS: Payer Contact Communication Number</i>	X AN 1/256
			SYNTAX: P0304	
			Used only when the specified communication number exists and the sender determines that this number may be needed by the receiver to facilitate communication.	
			Use PER04 to supply International Codes, Area Code (within U.S.), Local exchanges, and telephone numbers. When an additional extension is required PER06 should be used.	

SITUATIONAL	PER05	365	Communication Number Qualifier Code identifying the type of communication number SYNTAX: P0506	X	ID	2/2
			CODE	DEFINITION		
			EX	Telephone Extension		
SITUATIONAL	PER06	364	Communication Number Complete communications number including country or area code when applicable <i>ALIAS: Payer Contact Communication Number</i> SYNTAX: P0506	X	AN	1/256
			Used only when the specified communication number exists and the sender determines that this number may be needed by the receiver to facilitate communication.			
			Use PER06 to supply telephone extensions only. International Codes, Area Codes (within U.S.), Exchanges, and telephone numbers should be placed in PER04.			
SITUATIONAL	PER07	365	Communication Number Qualifier Code identifying the type of communication number SYNTAX: P0708	X	ID	2/2
			CODE	DEFINITION		
			FX	Facsimile		
SITUATIONAL	PER08	364	Communication Number Complete communications number including country or area code when applicable <i>ALIAS: Payer Contact Communication Number</i> SYNTAX: P0708	X	AN	1/256
			Used only when the specified communication number exists and the sender determines that this number may be needed by the receiver to facilitate communication.			
			Use PER08 to supply telephone Facsimile numbers only. International Codes, Area Codes (within U.S.), Exchanges, and telephone numbers should be placed in PER04.			
NOT USED	PER09	443	Contact Inquiry Reference	O	AN	1/20

IMPLEMENTATION

RESPONSE CONTACT IDENTIFICATION

Loop: 2210D — CLAIM SUPPLEMENTAL INFORMATION

Usage: SITUATIONAL

Repeat: 1

Notes: 1. This segment identifies the person or office location to route the response to for this Request for Additional Information.

This segment will supercede information supplied in the PER segment in the Payer Contact Information (PER) segment in the Information Source Level (Loop Id 2100A).

2. Use this segment only when the subscriber is the patient.

Example: N1*PR*ABC INSURANCE COMPANY~

STANDARD

N1 Name

Level: Detail

Position: 1500

Loop: 2210

Requirement: Optional

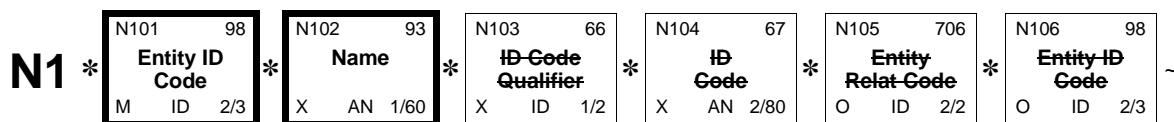
Max Use: 1

Purpose: To identify a party by type of organization, name, and code

Syntax: 1. **R0203**
At least one of N102 or N103 is required.

2. **P0304**
If either N103 or N104 is present, then the other is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	N101	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual	M ID 2/3
			CODE	DEFINITION
			PR	Payer
			X3	Utilization Management Organization

REQUIRED	N102	93	Name Free-form name	X	AN	1/60
			<i>ALIAS: Response Contact Name</i>			
			SYNTAX: R0203			
NOT USED	N103	66	Identification Code Qualifier	X	ID	1/2
NOT USED	N104	67	Identification Code	X	AN	2/80
NOT USED	N105	706	Entity Relationship Code	O	ID	2/2
NOT USED	N106	98	Entity Identifier Code	O	ID	2/3

IMPLEMENTATION

RESPONSE CONTACT ADDRESS

Loop: 2210D — CLAIM SUPPLEMENTAL INFORMATION

Usage: SITUATIONAL

Repeat: 1

Notes: 1. This segment identifies the person or office location to route the response to for this Request for Additional Information.

This segment will supercede information supplied in the PER segment in the Payer Contact Information (PER) segment in the Information Source Level (Loop Id 2100A).

2. Use this segment only when the subscriber is the patient.

Example: N3*1 SMITH STREET*SUITE 100~

STANDARD

N3 Address Information

Level: Detail

Position: 1600

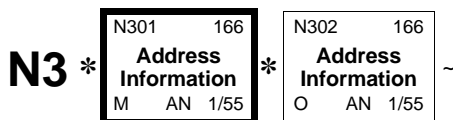
Loop: 2210

Requirement: Optional

Max Use: 1

Purpose: To specify the location of the named party

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	N301	166	Address Information Address information <i>ALIAS: Response Contact Address Line</i>	M AN 1/55
SITUATIONAL	N302	166	Address Information Address information <i>ALIAS: Response Contact Additional Address Line</i>	O AN 1/55

Use this element when the second line of the address information is necessary.

IMPLEMENTATION

RESPONSE CONTACT CITY/STATE/ZIP CODE

Loop: 2210D — CLAIM SUPPLEMENTAL INFORMATION

Usage: SITUATIONAL

Repeat: 1

Notes: 1. This segment identifies the person or office location to route the response to for this Request for Additional Information.

This segment will supercede information supplied in the PER segment in the Payer Contact Information (PER) segment in the Information Source Level (Loop Id 2100A).

2. Use this segment only when the subscriber is the patient.

Example: N4*MIAMI*FL*33131**DP*REVIEW DEPT~

STANDARD

N4 Geographic Location

Level: Detail

Position: 1700

Loop: 2210

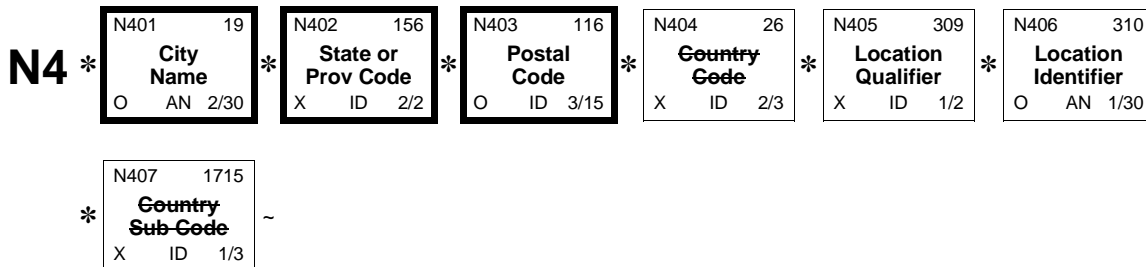
Requirement: Optional

Max Use: 1

Purpose: To specify the geographic place of the named party

- Syntax:
1. **E0207**
Only one of N402 or N407 may be present.
 2. **C0605**
If N406 is present, then N405 is required.
 3. **C0704**
If N407 is present, then N404 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES						
REQUIRED	N401	19	City Name Free-form text for city name <i>ALIAS: Response Contact City Name</i> COMMENT: A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.	O AN 2/30						
REQUIRED	N402	156	State or Province Code Code (Standard State/Province) as defined by appropriate government agency <i>ALIAS: Response Contact State Code</i> SYNTAX: E0207 COMMENT: N402 is required only if city name (N401) is in the U.S. or Canada.	X ID 2/2						
REQUIRED	N403	116	Postal Code Code defining international postal zone code excluding punctuation and blanks (zip code for United States) <i>ALIAS: Response Contact Postal Zone or ZIP Code</i> CODE SOURCE 51: ZIP Code	O ID 3/15						
NOT USED	N404	26	Country Code	X ID 2/3						
SITUATIONAL	N405	309	Location Qualifier Code identifying type of location SYNTAX: C0605 CODE SOURCE 206: Government Bill of Lading Office Code	X ID 1/2						
<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>B1</td> <td>Branch</td> </tr> <tr> <td>DP</td> <td>Department</td> </tr> </tbody> </table>					CODE	DEFINITION	B1	Branch	DP	Department
CODE	DEFINITION									
B1	Branch									
DP	Department									
SITUATIONAL	N406	310	Location Identifier Code which identifies a specific location <i>ALIAS: Response Contact Specific Location</i> SYNTAX: C0605 This is required if a value is present in N405. Use this element when the Response Contact needs to associate this response to a particular domain.	O AN 1/30						
NOT USED	N407	1715	Country Subdivision Code	X ID 1/3						

IMPLEMENTATION

SERVICE LINE INFORMATION

Loop: 2220D — SERVICE LINE INFORMATION Repeat: >1

Usage: SITUATIONAL

Repeat: 1

- Notes:
1. Use this segment to request additional information about a service line.
 2. This segment is required by ASC X12 syntax because it is the first segment in Loop 2220 (Service Line Information) to request additional information about a specific service line. See Appendix A for a detail description of loop and segment usage.
 3. For Institutional claims, SVC01 would be the Health Care Financing Administration (HCFA) Common Procedural Coding System (HCPCS) Code (see Code Source 130) and SVC04 would be the Revenue Code (see Code Source 132).

Example: SVC*NU:71X*15.61~ or SVC*HC:99213*35~

STANDARD

SVC Service Information

Level: Detail

Position: 1800

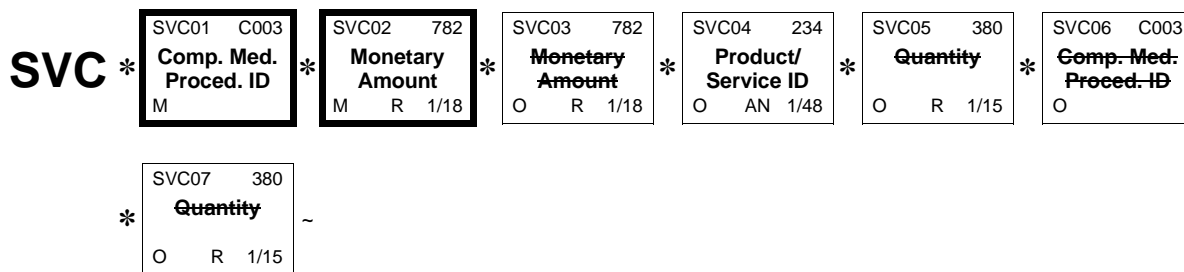
Loop: 2220 Repeat: >1

Requirement: Optional

Max Use: 1

Purpose: To supply payment and control information to a provider for a particular service

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	SVC01	C003	COMPOSITE MEDICAL PROCEDURE IDENTIFIER To identify a medical procedure by its standardized codes and applicable modifiers	M

REQUIRED **SVC01 - 1** **235** **Product/Service ID Qualifier** **M** **ID** **2/2**
Code identifying the type/source of the descriptive number used in Product/Service ID (234)

CODE	DEFINITION
AD	American Dental Association Codes CODE SOURCE 135: American Dental Association Codes
CI	Common Language Equipment Identifier (CLEI)
HC	Health Care Financing Administration Common Procedural Coding System (HCPCS) Codes Because CPT codes of the American Medical Association are also Level 1 HCPCS codes, they are reported under the code HC. CODE SOURCE 130: Health Care Financing Administration Common Procedural Coding System
IV	Home Infusion EDI Coalition (HIEC) Product/Service Code CODE SOURCE 513: Home Infusion EDI Coalition (HIEC) Product/Service Code List
N1	National Drug Code in 4-4-2 Format CODE SOURCE 240: National Drug Code by Format
N2	National Drug Code in 5-3-2 Format CODE SOURCE 240: National Drug Code by Format
N3	National Drug Code in 5-4-1 Format CODE SOURCE 240: National Drug Code by Format
N4	National Drug Code in 5-4-2 Format CODE SOURCE 240: National Drug Code by Format
ND	National Drug Code (NDC) CODE SOURCE 134: National Drug Code
NH	National Health Related Item Code
NU	National Uniform Billing Committee (NUBC) UB92 Codes CODE SOURCE 132: National Uniform Billing Committee (NUBC) Codes

REQUIRED **SVC01 - 2** **234** **Product/Service ID** **M** **AN** **1/48**
Identifying number for a product or service

If the value used in SVC01-1 is NU, then this element is an NUBC Revenue Code. If the Revenue Code is present in SVC01-2, then SVC04 is not used.

Required if submitted on the original claim service line.

SITUATIONAL **SVC01 - 3** **1339** **Procedure Modifier** **O** **AN** **2/2**
This identifies special circumstances related to the performance of the service, as defined by trading partners

Required if submitted on the original claim service line.

SITUATIONAL	SVC01 - 4	1339	Procedure Modifier This identifies special circumstances related to the performance of the service, as defined by trading partners	O AN 2/2
Required if submitted on the original claim service line.				
SITUATIONAL	SVC01 - 5	1339	Procedure Modifier This identifies special circumstances related to the performance of the service, as defined by trading partners	O AN 2/2
Required if submitted on the original claim service line.				
SITUATIONAL	SVC01 - 6	1339	Procedure Modifier This identifies special circumstances related to the performance of the service, as defined by trading partners	O AN 2/2
Required if submitted on the original claim service line.				
NOT USED	SVC01 - 7	352	Description A free-form description to clarify the related data elements and their content	O AN 1/80
REQUIRED	SVC02	782	Monetary Amount Monetary amount <i>ALIAS: Line Item Charge Amount</i> <i>SEMANTIC: SVC02 is the submitted service charge.</i>	M R 1/18
NOT USED	SVC03	782	Monetary Amount	O R 1/18
SITUATIONAL	SVC04	234	Product/Service ID Identifying number for a product or service <i>SEMANTIC: SVC04 is the National Uniform Billing Committee Revenue Code.</i>	O AN 1/48
When SVC01-1 equals NU, the NUBC Revenue Code Belongs in SVC01-2, then SVC04 is not used.				
Required on institutional claims when the NUBC Revenue code is not reported in SVC01-2 and SVC01-1 is not NU.				
NOT USED	SVC05	380	Quantity	O R 1/15
NOT USED	SVC06	C003	COMPOSITE MEDICAL PROCEDURE IDENTIFIER	O
NOT USED	SVC07	380	Quantity	O R 1/15

IMPLEMENTATION

SERVICE LINE STATUS INFORMATION

Loop: 2220D — SERVICE LINE INFORMATION

Usage: MANDATORY

Repeat: >1

Notes: 1. Use this segment only when the subscriber is the patient.

2. Questions regarding Service line level information will utilize the STC segment at the service line level. In those situations STC01-1 will contain an "Rx" (where "x" represents one of the valid sub-categories from the Health Care Claim Status Category Code list) and STC01-2 contains a LOINC code. The value "LOI" in STC01-4 qualifies STC01-2 as a LOINC code.

These same rules apply to STC10 and STC11 when these elements are utilized for claim level requests. When questions are only asked regarding specific service line information, the STC segment at the Claim Level only conveys the Status Information Effective Date. When this occurs STC01 is used. STC01-1 will only contain the value "R0" and STC01-2 will only contain "19016-5" and STC01-4 will always contain "LOI".

Example: STC*R3:18682-5::LOI*19980501~ or STC*R3:18660-1::LOI*19980501*****R4:18790-6::LOI~

STANDARD

STC Status Information

Level: Detail

Position: 1900

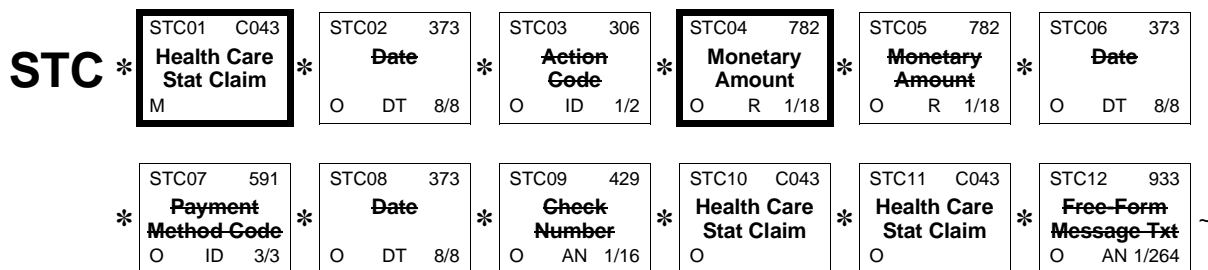
Loop: 2220

Requirement: Mandatory

Max Use: >1

Purpose: To report the status, required action, and paid information of a claim or service line

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES				
REQUIRED	STC01	C043	HEALTH CARE CLAIM STATUS Used to convey status of the entire claim or a specific service line	M				
REQUIRED	STC01 - 1	1271	Industry Code Code indicating a code from a specific industry code list <i>ALIAS: Health Care Claim Status Category Code</i>	M AN 1/30				
REQUIRED	STC01 - 2	1271	Industry Code Code indicating a code from a specific industry code list <i>ALIAS: Additional Information Request Code</i> This is the LOINC code.	M AN 1/30				
NOT USED	STC01 - 3	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual	O ID 2/3				
REQUIRED	STC01 - 4	1270	Code List Qualifier Code Code identifying a specific industry code list	O ID 1/3				
<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>LOI</td> <td>Logical Observation Identifier Names and Codes (LOINC) Codes CODE SOURCE 663: Logical Observation Identifier Names and Codes (LOINC)</td> </tr> </tbody> </table>					CODE	DEFINITION	LOI	Logical Observation Identifier Names and Codes (LOINC) Codes CODE SOURCE 663: Logical Observation Identifier Names and Codes (LOINC)
CODE	DEFINITION							
LOI	Logical Observation Identifier Names and Codes (LOINC) Codes CODE SOURCE 663: Logical Observation Identifier Names and Codes (LOINC)							
NOT USED	STC02	373	Date	O DT 8/8				
NOT USED	STC03	306	Action Code	O ID 1/2				
REQUIRED	STC04	782	Monetary Amount Monetary amount <i>ALIAS: Line Item Charge Amount</i> SEMANTIC: STC04 is the amount of original submitted charges. Use this element for the amount of submitted line item charges. Some HMO encounters may supply zero as the amount of the original line item charges.	O R 1/18				
NOT USED	STC05	782	Monetary Amount	O R 1/18				
NOT USED	STC06	373	Date	O DT 8/8				
NOT USED	STC07	591	Payment Method Code	O ID 3/3				
NOT USED	STC08	373	Date	O DT 8/8				
NOT USED	STC09	429	Check Number	O AN 1/16				
SITUATIONAL	STC10	C043	HEALTH CARE CLAIM STATUS Used to convey status of the entire claim or a specific service line Use this element if a second Health Care Claim Status is needed.	O				
REQUIRED	STC10 - 1	1271	Industry Code Code indicating a code from a specific industry code list <i>ALIAS: Health Care Claim Status Code</i> This is the Category code and is required if STC10 is used. This data element must contain the same value as STC01-1.	M AN 1/30				

REQUIRED	STC10 - 2	1271	Industry Code Code indicating a code from a specific industry code list	M AN 1/30
			<i>ALIAS: Additional Information Request Code Modifier NEW</i>	
			This is the LOINC code and is required if STC10 is used.	
NOT USED	STC10 - 3	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual	O ID 2/3
REQUIRED	STC10 - 4	1270	Code List Qualifier Code Code identifying a specific industry code list	O ID 1/3

CODE DEFINITION

LOI Logical Observation Identifier Names and Codes (LOINC) Codes

CODE SOURCE 663: Logical Observation Identifier Names and Codes (LOINC)

SITUATIONAL	STC11	C043	HEALTH CARE CLAIM STATUS Used to convey status of the entire claim or a specific service line	O
			Use this element if a third Health Care Claim Status is needed.	

REQUIRED	STC11 - 1	1271	Industry Code Code indicating a code from a specific industry code list	M AN 1/30
			<i>ALIAS: Health Care Claim Status Code</i>	
			This is the Category code and is required if STC11 is used. This data element must contain the same value as STC01-1.	

REQUIRED	STC11 - 2	1271	Industry Code Code indicating a code from a specific industry code list	M AN 1/30
			<i>ALIAS: Additional Information Request Code Modifier NEW</i>	
			This is the LOINC code and is required if STC11 is used.	

NOT USED	STC11 - 3	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual	O ID 2/3
REQUIRED	STC11 - 4	1270	Code List Qualifier Code Code identifying a specific industry code list	O ID 1/3

CODE DEFINITION

LOI Logical Observation Identifier Names and Codes (LOINC) Codes

CODE SOURCE 663: Logical Observation Identifier Names and Codes (LOINC)

NOT USED	STC12	933	Free-Form Message Text	O AN 1/264
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IMPLEMENTATION

SERVICE LINE ITEM IDENTIFICATION

Loop: 2220D — SERVICE LINE INFORMATION

Usage: SITUATIONAL

Repeat: 1

Notes: 1. Required when submitted on the claim.

Example: REF*FJ*0001~

STANDARD

REF Reference Identification

Level: Detail

Position: 2000

Loop: 2220

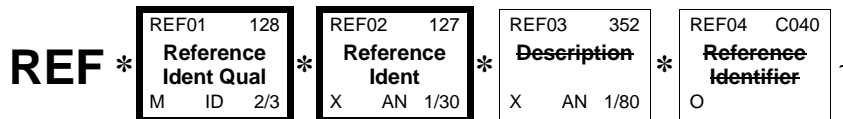
Requirement: Optional

Max Use: 1

Purpose: To specify identifying information

Syntax: 1. R0203
 At least one of REF02 or REF03 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES				
REQUIRED	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3				
			<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>FJ</td> <td>Line Item Control Number This will be the sequence number of the line when the line item control number is not available.</td> </tr> </tbody> </table>	CODE	DEFINITION	FJ	Line Item Control Number This will be the sequence number of the line when the line item control number is not available.	
CODE	DEFINITION							
FJ	Line Item Control Number This will be the sequence number of the line when the line item control number is not available.							
REQUIRED	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X AN 1/30				
			ALIAS: <i>Line Item Control Number</i> SYNTAX: R0203					
NOT USED	REF03	352	Description	X AN 1/80				
NOT USED	REF04	C040	REFERENCE IDENTIFIER	O				

IMPLEMENTATION

SERVICE LINE DATE

Loop: 2220D — SERVICE LINE INFORMATION

Usage: SITUATIONAL

Repeat: 1

- Notes:
1. Required when this is the date of service for a specific line item.
 2. This segment is intended to be used when the Claim Service Date at Loop 2200D is not utilized.

Example: DTP*472*RD8*19980401-19980401~

STANDARD

DTP Date or Time or Period

Level: Detail

Position: 2100

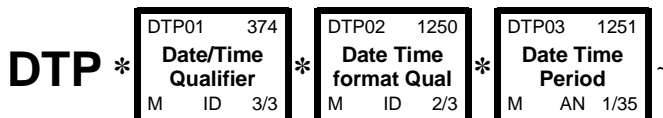
Loop: 2220

Requirement: Optional

Max Use: 1

Purpose: To specify any or all of a date, a time, or a time period

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES				
REQUIRED	DTP01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time	M ID 3/3				
			<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>472</td> <td>Service</td> </tr> </tbody> </table>	CODE	DEFINITION	472	Service	
CODE	DEFINITION							
472	Service							
REQUIRED	DTP02	1250	Date Time Period Format Qualifier Code indicating the date format, time format, or date and time format	M ID 2/3				
			SEMANTIC: DTP02 is the date or time or period format that will appear in DTP03.					
			<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>RD8</td> <td> Range of Dates Expressed in Format CCYYMMDD-CCYYMMDD If there is a single date of service, the begin date equals the end date. </td> </tr> </tbody> </table>	CODE	DEFINITION	RD8	Range of Dates Expressed in Format CCYYMMDD-CCYYMMDD If there is a single date of service, the begin date equals the end date.	
CODE	DEFINITION							
RD8	Range of Dates Expressed in Format CCYYMMDD-CCYYMMDD If there is a single date of service, the begin date equals the end date.							

REQUIRED	DTP03	1251	Date Time Period	M AN	1/35
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Expression of a date, a time, or range of dates, times or dates and times

ALIAS: Service Line Date

IMPLEMENTATION

DEPENDENT LEVEL

Loop: 2000E — DEPENDENT LEVEL Repeat: >1

Usage: MANDATORY

Repeat: 1

Notes: 1. Use this HL segment when the patient is a different person than the subscriber.

Example: HL*5*4*23~

STANDARD

HL Hierarchical Level

Level: Detail

Position: 0100

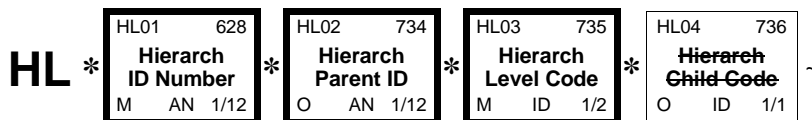
Loop: 2000 Repeat: >1

Requirement: Mandatory

Max Use: 1

Purpose: To identify dependencies among and the content of hierarchically related groups of data segments

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	HL01	628	Hierarchical ID Number A unique number assigned by the sender to identify a particular data segment in a hierarchical structure COMMENT: HL01 shall contain a unique alphanumeric number for each occurrence of the HL segment in the transaction set. For example, HL01 could be used to indicate the number of occurrences of the HL segment, in which case the value of HL01 would be "1" for the initial HL segment and would be incremented by one in each subsequent HL segment within the transaction.	M AN 1/12
REQUIRED	HL02	734	Hierarchical Parent ID Number Identification number of the next higher hierarchical data segment that the data segment being described is subordinate to COMMENT: HL02 identifies the hierarchical ID number of the HL segment to which the current HL segment is subordinate.	O AN 1/12

REQUIRED	HL03	735	Hierarchical Level Code	M	ID	1/2
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Code defining the characteristic of a level in a hierarchical structure

COMMENT: HL03 indicates the context of the series of segments following the current HL segment up to the next occurrence of an HL segment in the transaction. For example, HL03 is used to indicate that subsequent segments in the HL loop form a logical grouping of data referring to shipment, order, or item-level information.

<u>CODE</u>	<u>DEFINITION</u>
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23	Dependent
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NOT USED	HL04	736	Hierarchical Child Code	O	ID	1/1
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IMPLEMENTATION

DEPENDENT NAME

Loop: 2100E — DEPENDENT NAME Repeat: >1

Usage: REQUIRED

Repeat: 1

Example: NM1*QC*1*SMITH*HARRIETT****MI*525224321~

STANDARD

NM1 Individual or Organizational Name

Level: Detail

Position: 0500

Loop: 2100 Repeat: >1

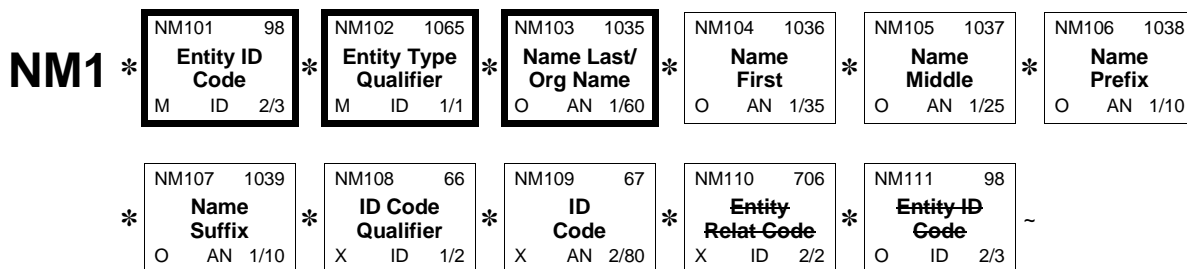
Requirement: Optional

Max Use: 1

Purpose: To supply the full name of an individual or organizational entity

- Syntax:
- P0809**
If either NM108 or NM109 is present, then the other is required.
 - C1110**
If NM111 is present, then NM110 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	NM101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			CODE	DEFINITION
			QC	Patient

REQUIRED	NM102	1065	Entity Type Qualifier Code qualifying the type of entity SEMANTIC: NM102 qualifies NM103.	M	ID	1/1
		CODE	DEFINITION			
		1	Person			
REQUIRED	NM103	1035	Name Last or Organization Name Individual last name or organizational name ALIAS: <i>Patient Last Name</i>	O	AN	1/60
SITUATIONAL	NM104	1036	Name First Individual first name ALIAS: <i>Patient Middle Name</i> Always return this name information when it is supplied on a submitted claim. Required if additional name information is needed to identify the patient.	O	AN	1/35
SITUATIONAL	NM105	1037	Name Middle Individual middle name or initial ALIAS: <i>Patient Middle Name</i> Required if additional name information is needed to identify the patient.	O	AN	1/25
SITUATIONAL	NM106	1038	Name Prefix Prefix to individual name ALIAS: <i>Patient Name Prefix</i> Examples include military ranks such as SGT - Sergeant, COR - Corporal. Required if additional name information is needed to identify the patient.	O	AN	1/10
SITUATIONAL	NM107	1039	Name Suffix Suffix to individual name ALIAS: <i>Patient Name Suffix</i> Examples I, II, IV, JR, SR. Required if known. Required if additional name information is needed to identify the patient.	O	AN	1/10

SITUATIONAL	NM108	66	Identification Code Qualifier	X ID 1/2
Code designating the system/method of code structure used for Identification Code (67)				

SYNTAX: P0809

At this level, NM108 and NM109 are required if the dependent is assigned a unique identification number that is separate from the subscriber number in HL22 (Subscriber Level) at NM108 and NM109.

CODE	DEFINITION
MI	<p>Member Identification Number</p> <p>Use this code for any payer-assigned identification number, even if the payer actually calls it's number a policy number, receipt number, or some other synonym such as Social Security Number (SSN).</p>
ZZ	<p>Mutually Defined</p> <p>The value 'ZZ' when used in this data element shall be defined as 'HIPAA' Individual Identifier has been adopted. Under the Health Insurance Portability and Accountability Act of 1996, the Secretary of the Department of Health and Human Services must adopt a standard individual identifier for use in this transaction.</p>

SITUATIONAL	NM109	67	Identification Code	X AN 2/80
Code identifying a party or other code				

SYNTAX: P0809

At this level, NM108 and NM109 are required if the dependent is assigned a unique identification number that is separate from the subscriber number in HL22 (Subscriber Level) at NM108 and NM109.

NOT USED	NM110	706	Entity Relationship Code	X ID 2/2
NOT USED	NM111	98	Entity Identifier Code	O ID 2/3

IMPLEMENTATION

PAYER CONTROL IDENTIFICATION NUMBER

Loop: 2200E — PAYER CONTROL IDENTIFICATION NUMBER Repeat: >1

Usage: SITUATIONAL

Repeat: 1

- Notes:
1. This is the payer's control number.
 2. The TRN segment is required by the ASC X12 syntax when Loop ID-2200 is used.
 3. Use this segment if the patient is someone other than the subscriber.

Example: TRN*1*1722634842~

STANDARD

TRN Trace

Level: Detail

Position: 0900

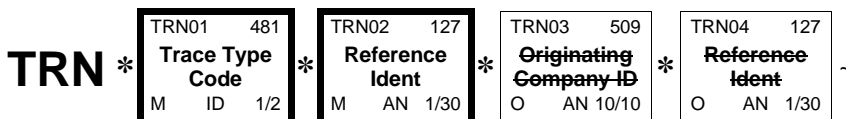
Loop: 2200 Repeat: >1

Requirement: Optional

Max Use: 1

Purpose: To uniquely identify a transaction to an application

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES				
REQUIRED	TRN01	481	Trace Type Code Code identifying which transaction is being referenced	M ID 1/2				
<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Current Transaction Trace Numbers</td> </tr> </tbody> </table>					CODE	DEFINITION	1	Current Transaction Trace Numbers
CODE	DEFINITION							
1	Current Transaction Trace Numbers							
REQUIRED	TRN02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	M AN 1/30				
<p><i>ALIAS: Payer Claim Control Number</i></p> <p>SEMANTIC: TRN02 provides unique identification for the transaction.</p> <p>This is the Control Number as assigned by the payer. This number is used by the payer to connect the request to the response. This number must be returned on the response with the requested information.</p>								

NOT USED	TRN03	509	Originating Company Identifier	O	AN	10/10
NOT USED	TRN04	127	Reference Identification	O	AN	1/30

IMPLEMENTATION

CLAIM LEVEL STATUS INFORMATION

Loop: 2200E — PAYER CONTROL IDENTIFICATION NUMBER

Usage: REQUIRED

Repeat: >1

Notes: 1. Use this segment when the patient is someone other than the subscriber.

2. Questions regarding claim level information will utilize the STC segment at the service line level. In those situations STC01-1 will contain an "Rx" (where "x" represents one of the valid sub-categories from the Health Care Claim Status Category Code list) and STC01-2 contains a LOINC code. The value "LOI" in STC01-4 qualifies STC01-2 as a LOINC code.

Example: STC*R0:19016-5::LOI*19980824~ or STC*R0:18682-5::LOI*19980824~ or STC*R4:18660-1::LOI*19980824****R4:19790-6:LOI~

STANDARD

STC Status Information

Level: Detail

Position: 1000

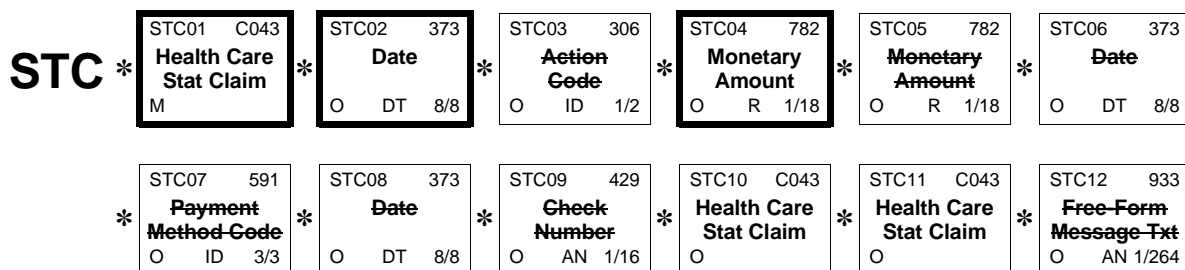
Loop: 2200

Requirement: Mandatory

Max Use: >1

Purpose: To report the status, required action, and paid information of a claim or service line

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	STC01	C043	HEALTH CARE CLAIM STATUS	M
Used to convey status of the entire claim or a specific service line				
Health Care Claim Status Category Code. This business purpose only allows for Requests for Additional Information "R" type Category Codes to be utilized.				

REQUIRED	STC01 - 1	1271	Industry Code Code indicating a code from a specific industry code list <i>ALIAS: Health Care Claim Status Category Code</i> This is the Category Code and is required if STC01 is used.	M AN 1/30				
REQUIRED	STC01 - 2	1271	Industry Code Code indicating a code from a specific industry code list <i>ALIAS: Additional Information Request Code Modifier NEW</i> This is the LOINC code.	M AN 1/30				
NOT USED	STC01 - 3	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual	O ID 2/3				
REQUIRED	STC01 - 4	1270	Code List Qualifier Code Code identifying a specific industry code list	O ID 1/3				
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">CODE</th> <th style="width: 90%;">DEFINITION</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">LOI</td> <td>Logical Observation Identifier Names and Codes (LOINC) Codes CODE SOURCE 663: Logical Observation Identifier Names and Codes (LOINC)</td> </tr> </tbody> </table>					CODE	DEFINITION	LOI	Logical Observation Identifier Names and Codes (LOINC) Codes CODE SOURCE 663: Logical Observation Identifier Names and Codes (LOINC)
CODE	DEFINITION							
LOI	Logical Observation Identifier Names and Codes (LOINC) Codes CODE SOURCE 663: Logical Observation Identifier Names and Codes (LOINC)							
REQUIRED	STC02	373	Date Date expressed as CCYYMMDD <i>ALIAS: Status Information Effective Date</i> SEMANTIC: STC02 is the effective date of the status information.	O DT 8/8				
NOT USED	STC03	306	Action Code	O ID 1/2				
REQUIRED	STC04	782	Monetary Amount Monetary amount <i>ALIAS: Line Item Charge Amount</i> SEMANTIC: STC04 is the amount of original submitted charges. Use this element for the amount of submitted line item charges. Some HMO encounters may supply zero as the amount of the original line item charges.	O R 1/18				
NOT USED	STC05	782	Monetary Amount	O R 1/18				
NOT USED	STC06	373	Date	O DT 8/8				
NOT USED	STC07	591	Payment Method Code	O ID 3/3				
NOT USED	STC08	373	Date	O DT 8/8				
NOT USED	STC09	429	Check Number	O AN 1/16				
SITUATIONAL	STC10	C043	HEALTH CARE CLAIM STATUS Used to convey status of the entire claim or a specific service line Use this element if a second Health Care Claim Status is needed.	O				
REQUIRED	STC10 - 1	1271	Industry Code Code indicating a code from a specific industry code list <i>ALIAS: Health Care Claim Status Category Code</i> This is the Category code and is required if STC10 is used. This data element must contain the same value as STC01-1.	M AN 1/30				

REQUIRED	STC10 - 2	1271	Industry Code Code indicating a code from a specific industry code list	M AN 1/30
<i>ALIAS: Additional Information Request Code Modifier NEW</i>				
This is the LOINC code and is required if STC10 is used.				
NOT USED	STC10 - 3	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual	O ID 2/3
REQUIRED	STC10 - 4	1270	Code List Qualifier Code Code identifying a specific industry code list	O ID 1/3

CODE	DEFINITION
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LOI	Logical Observation Identifier Names and Codes (LOINC) Codes CODE SOURCE 663: Logical Observation Identifier Names and Codes (LOINC)
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SITUATIONAL	STC11	C043	HEALTH CARE CLAIM STATUS Used to convey status of the entire claim or a specific service line	O
Use this element if a third Health Care Claim Status is needed.				
REQUIRED	STC11 - 1	1271	Industry Code Code indicating a code from a specific industry code list	M AN 1/30
<i>ALIAS: Health Care Claim Status Category Code</i>				
This is the Category code and is required if STC11 is used.				
REQUIRED	STC11 - 2	1271	Industry Code Code indicating a code from a specific industry code list	M AN 1/30
<i>ALIAS: Additional Information Request Code Modifier NEW</i>				
This is the LOINC code and is required if STC11 is used.				
NOT USED	STC11 - 3	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual	O ID 2/3
REQUIRED	STC11 - 4	1270	Code List Qualifier Code Code identifying a specific industry code list	O ID 1/3

CODE	DEFINITION
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LOI	Logical Observation Identifier Names and Codes (LOINC) Codes CODE SOURCE 663: Logical Observation Identifier Names and Codes (LOINC)
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NOT USED	STC12	933	Free-Form Message Text	O AN 1/264
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IMPLEMENTATION

PATIENT ACCOUNT NUMBER

Loop: 2200E — PAYER CONTROL IDENTIFICATION NUMBER

Usage: REQUIRED

Repeat: 1

- Notes:
1. Use this segment for the provider’s assigned Patient Account Number.
 2. Use this segment when the patient is someone other than the subscriber.

Example: REF*EJ*SMITH123~

STANDARD

REF Reference Identification

Level: Detail

Position: 1100

Loop: 2200

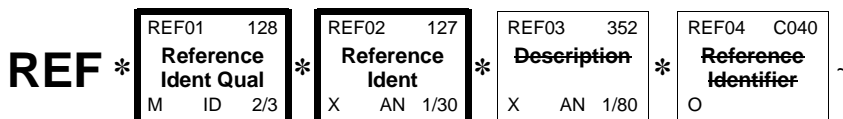
Requirement: Optional

Max Use: 3

Purpose: To specify identifying information

Syntax: 1. R0203
At least one of REF02 or REF03 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES				
REQUIRED	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3				
			<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>EJ</td> <td> Patient Account Number This data element corresponds to the value given in the ANSI ASC X12 837 transaction in CLM01. </td> </tr> </tbody> </table>	CODE	DEFINITION	EJ	Patient Account Number This data element corresponds to the value given in the ANSI ASC X12 837 transaction in CLM01.	
CODE	DEFINITION							
EJ	Patient Account Number This data element corresponds to the value given in the ANSI ASC X12 837 transaction in CLM01.							
REQUIRED	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X AN 1/30				
			SYNTAX: R0203					
NOT USED	REF03	352	Description	X AN 1/80				
NOT USED	REF04	C040	REFERENCE IDENTIFIER	O				

IMPLEMENTATION

INSTITUTIONAL BILL TYPE IDENTIFICATION

Loop: 2200E — PAYER CONTROL IDENTIFICATION NUMBER

Usage: SITUATIONAL

Repeat: 1

Notes: 1. This is the Institutional Type of Bill from the submitted claim. It is returned in requests for additional information for Institutional type claims only. This segment is not used for professional claims.

2. Use this segment when the patient is someone other than the subscriber.

Example: REF*BLT*111~

STANDARD

REF Reference Identification

Level: Detail

Position: 1100

Loop: 2200

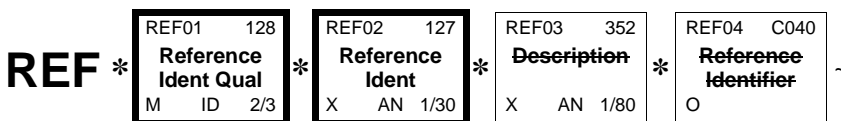
Requirement: Optional

Max Use: 3

Purpose: To specify identifying information

Syntax: 1. R0203
 At least one of REF02 or REF03 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3
			CODE	DEFINITION
			BLT	Billing Type Use this code for an institutional type of bill.

REQUIRED	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier SYNTAX: R0203 Found on UB92 paper form locator 4. Found in UB92 - record 40 field 4. Found in ASC X12N 837, CLM05.	X	AN	1/30
NOT USED	REF03	352	Description	X	AN	1/80
NOT USED	REF04	C040	REFERENCE IDENTIFIER	O		

IMPLEMENTATION

MEDICAL RECORD IDENTIFICATION

Loop: 2200E — PAYER CONTROL IDENTIFICATION NUMBER

Usage: SITUATIONAL

Repeat: 1

Notes: 1. This is the Medical Record Number as submitted on the original institutional claim, and it should be returned when it is available from the submitted claim.

2. Use this segment when the patient is someone other than the subscriber.

Example: REF*EA*JS960503LAB~

STANDARD

REF Reference Identification

Level: Detail

Position: 1100

Loop: 2200

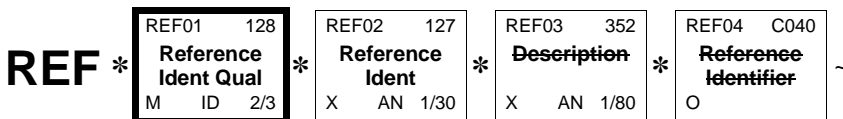
Requirement: Optional

Max Use: 3

Purpose: To specify identifying information

Syntax: 1. R0203
 At least one of REF02 or REF03 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3
			CODE	DEFINITION
			EA	Medical Record Identification Number Use this code for an institutional type of bill.

SITUATIONAL	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier SYNTAX: R0203 Found in UB92 record 20 field 25. Found in UB92 paper form locator 23. Found in ASC X12N 837, Loop ID-2210, segment REF01, qualifier EA.	X	AN	1/30
NOT USED	REF03	352	Description	X	AN	1/80
NOT USED	REF04	C040	REFERENCE IDENTIFIER	O		

IMPLEMENTATION

CLAIM SERVICE DATE

Loop: 2200E — PAYER CONTROL IDENTIFICATION NUMBER

Usage: SITUATIONAL

Repeat: 2

Notes: 1. Use this segment when the patient is someone other than the subscriber.

Example: DTP*434*RD8*19980401-19980401~

STANDARD

DTP Date or Time or Period

Level: Detail

Position: 1200

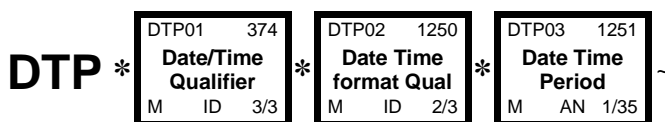
Loop: 2200

Requirement: Optional

Max Use: 2

Purpose: To specify any or all of a date, a time, or a time period

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES				
REQUIRED	DTP01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time	M ID 3/3				
			<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>434</td> <td>Statement</td> </tr> </tbody> </table>	CODE	DEFINITION	434	Statement	
CODE	DEFINITION							
434	Statement							
REQUIRED	DTP02	1250	Date Time Period Format Qualifier Code indicating the date format, time format, or date and time format SEMANTIC: DTP02 is the date or time or period format that will appear in DTP03.	M ID 2/3				
			<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>RD8</td> <td>Range of Dates Expressed in Format CCYYMMDD-CCYYMMDD If there is a single date of service, the begin date equals the end date.</td> </tr> </tbody> </table>	CODE	DEFINITION	RD8	Range of Dates Expressed in Format CCYYMMDD-CCYYMMDD If there is a single date of service, the begin date equals the end date.	
CODE	DEFINITION							
RD8	Range of Dates Expressed in Format CCYYMMDD-CCYYMMDD If there is a single date of service, the begin date equals the end date.							
REQUIRED	DTP03	1251	Date Time Period Expression of a date, a time, or range of dates, times or dates and times	M AN 1/35				

IMPLEMENTATION

RESPONSE DUE DATE

Loop: 2200E — PAYER CONTROL IDENTIFICATION NUMBER

Usage: REQUIRED

Repeat: 2

Notes: 1. This date is supplied to indicate the date the requested information is to be returned by the provider.

Should this date pass without the requested information being supplied by the provider, the claim shall proceed through the adjudication process based upon the information contained in the claim.

2. Use this segment when the patient is someone other than the subscriber.

Example: DTP*106*D8*19980422~

STANDARD

DTP Date or Time or Period

Level: Detail

Position: 1200

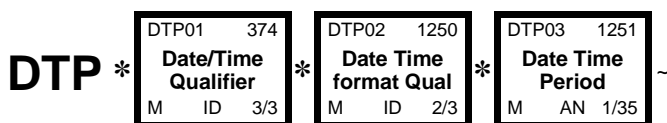
Loop: 2200

Requirement: Optional

Max Use: 2

Purpose: To specify any or all of a date, a time, or a time period

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	DTP01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time	M ID 3/3
			CODE	DEFINITION
			106	Required By

REQUIRED **DTP02** **1250** **Date Time Period Format Qualifier** **M** **ID** **2/3**
 Code indicating the date format, time format, or date and time format

SEMANTIC: DTP02 is the date or time or period format that will appear in DTP03.

CODE	DEFINITION
------	------------

D8	Date Expressed in Format CCYYMMDD
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REQUIRED **DTP03** **1251** **Date Time Period** **M** **AN** **1/35**
 Expression of a date, a time, or range of dates, times or dates and times

ALIAS: *Response Due Date Period* **NEW**

IMPLEMENTATION

CLAIM SUPPLEMENTAL INFORMATION

Loop: 2210E — CLAIM SUPPLEMENTAL INFORMATION **Repeat:** >1

Usage: SITUATIONAL

Repeat: 1

Notes: 1. When information is to be returned to a location other than that referenced in Loop ID-2000 of HL19 (Information Source), use both the PWK segment and the PER segment in HL22 (Subscriber Level) Loop ID-2210D or HL23 (Dependent Level) Loop ID-2210E. This PWK segment is required by ASC X12 Design Rules in order to use the related PER segment.

Example: PWK*OZ~

STANDARD

PWK Paperwork

Level: Detail

Position: 1300

Loop: 2210 **Repeat:** >1

Requirement: Optional

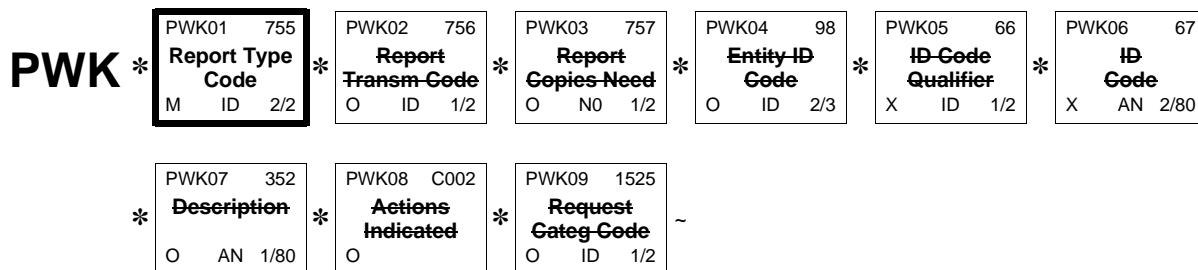
Max Use: 1

Purpose: To identify the type or transmission or both of paperwork or supporting information

Set Notes: 1. The 2210 loop may be used when there is a status notification or a request for additional information about a particular claim.

Syntax: 1. **P0506**
If either PWK05 or PWK06 is present, then the other is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
REQUIRED	PWK01	755	Report Type Code Code indicating the title or contents of a document, report or supporting item	M	ID	2/2
			CODE	DEFINITION		
			OZ	Support Data for Claim		
NOT USED	PWK02	756	Report Transmission Code	O	ID	1/2
NOT USED	PWK03	757	Report Copies Needed	O	N0	1/2
NOT USED	PWK04	98	Entity Identifier Code	O	ID	2/3
NOT USED	PWK05	66	Identification Code Qualifier	X	ID	1/2
NOT USED	PWK06	67	Identification Code	X	AN	2/80
NOT USED	PWK07	352	Description	O	AN	1/80
NOT USED	PWK08	C002	ACTIONS INDICATED	O		
NOT USED	PWK09	1525	Request Category Code	O	ID	1/2

IMPLEMENTATION

RESPONSE CONTACT INFORMATION

Loop: 2210E — CLAIM SUPPLEMENTAL INFORMATION

Usage: SITUATIONAL

Repeat: 1

Notes: 1. This segment identifies the person or office location to route the response to for this Request for Additional Information.

This segment will supercede information supplied in the PER segment in the Payer Contact Information (PER) segment in the Information Source Level (Loop Id 2100A).

2. Use this segment when the patient is someone other than the subscriber.

3. When information is to be returned to a location other than that referenced in Loop ID-2000 of HL19 (Information Source), use both the PWK segment and the PER segment in HL22 (Subscriber Level) Loop ID-2210D or HL23 (Dependent Level) Loop ID-2210E. This PWK segment is required by ASC X12 Design Rules in order to use the related PER segment.

Example: PER*IC*MEDICAL REVIEW
DEPARTMENT*TE*3135551234*EX*6593*FX*3135554321~ OR
PER*IC**TE*3135551234***FX*3135554321~ OR
PER*IC*****FX*3135554321~

STANDARD

PER Administrative Communications Contact

Level: Detail

Position: 1400

Loop: 2210

Requirement: Optional

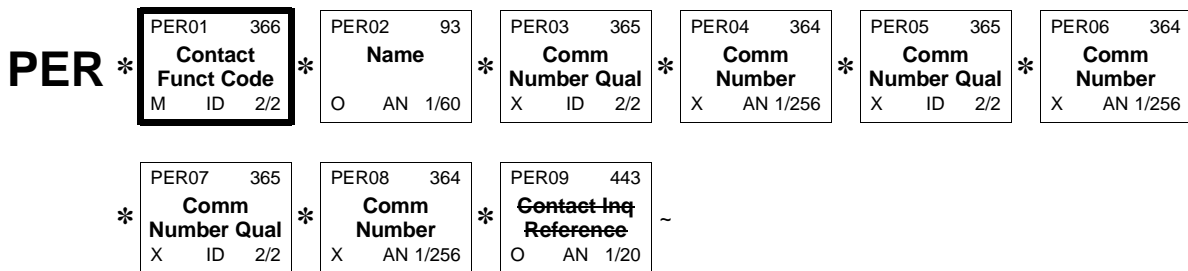
Max Use: 1

Purpose: To identify a person or office to whom administrative communications should be directed

Syntax:

- P0304**
If either PER03 or PER04 is present, then the other is required.
- P0506**
If either PER05 or PER06 is present, then the other is required.
- P0708**
If either PER07 or PER08 is present, then the other is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	PER01	366	Contact Function Code Code identifying the major duty or responsibility of the person or group named	M ID 2/2
			IC Information Contact	
SITUATIONAL	PER02	93	Name Free-form name <i>ALIAS: Response Contact Name</i> This element is required when a specific person or department is the contact for the response in order to clarify requests concerning additional information requests.	O AN 1/60
SITUATIONAL	PER03	365	Communication Number Qualifier Code identifying the type of communication number SYNTAX: P0304	X ID 2/2
			ED Electronic Data Interchange Access Number	
			EM Electronic Mail	
			TE Telephone	
SITUATIONAL	PER04	364	Communication Number Complete communications number including country or area code when applicable <i>ALIAS: Payer Contact Communication Number</i> SYNTAX: P0304 Use PER04 to supply International Codes, Area Code (within U.S.), Local exchanges, and telephone numbers. When an additional extension is required PER06 should be used. Used only when the specified communication number exists and the sender determines that this number may be needed by the receiver to facilitate communication.	X AN 1/256

SITUATIONAL	PER05	365	Communication Number Qualifier Code identifying the type of communication number SYNTAX: P0506	X	ID	2/2
			CODE	DEFINITION		
			EX	Telephone Extension		
SITUATIONAL	PER06	364	Communication Number Complete communications number including country or area code when applicable <i>ALIAS: Payer Contact Communication Number</i> SYNTAX: P0506	X	AN	1/256
Use PER06 to supply telephone extensions only. International Codes, Area Codes (within U.S.), Exchanges, and telephone numbers should be placed in PER04.						
Used only when the specified communication number exists and the sender determines that this number may be needed by the receiver to facilitate communication.						
SITUATIONAL	PER07	365	Communication Number Qualifier Code identifying the type of communication number SYNTAX: P0708	X	ID	2/2
			CODE	DEFINITION		
			FX	Facsimile		
SITUATIONAL	PER08	364	Communication Number Complete communications number including country or area code when applicable <i>ALIAS: Payer Contact Communication Number</i> SYNTAX: P0708	X	AN	1/256
Used only when the specified communication number exists and the sender determines that this number may be needed by the receiver to facilitate communication.						
NOT USED	PER09	443	Contact Inquiry Reference	O	AN	1/20

IMPLEMENTATION

RESPONSE CONTACT IDENTIFICATION

Loop: 2210E — CLAIM SUPPLEMENTAL INFORMATION

Usage: SITUATIONAL

Repeat: 1

- Notes:
1. Use this segment when the patient is someone other than the subscriber.
 2. This segment identifies the person or office location to route the response to for this Request for Additional Information.

This segment will supercede information supplied in the PER segment in the Payer Contact Information (PER) segment in the Information Source Level (Loop Id 2100A).

Example: N1*PR*ABC INSURANCE COMPANY~

STANDARD

N1 Name

Level: Detail

Position: 1500

Loop: 2210

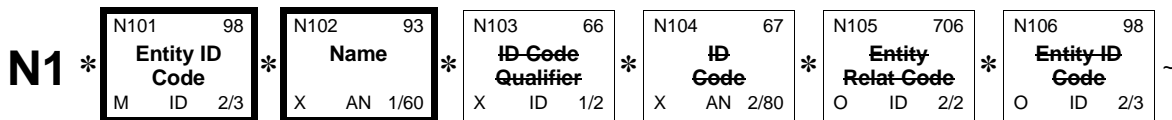
Requirement: Optional

Max Use: 1

Purpose: To identify a party by type of organization, name, and code

- Syntax:
1. **R0203**
At least one of N102 or N103 is required.
 2. **P0304**
If either N103 or N104 is present, then the other is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	N101	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual	M ID 2/3
			PR	Payer

			X3	Utilization Management Organization		
REQUIRED	N102	93	Name Free-form name	X	AN	1/60
			<i>ALIAS: Response Contact Name</i>			
			SYNTAX: R0203			
NOT USED	N103	66	Identification Code Qualifier	X	ID	1/2
NOT USED	N104	67	Identification Code	X	AN	2/80
NOT USED	N105	706	Entity Relationship Code	O	ID	2/2
NOT USED	N106	98	Entity Identifier Code	O	ID	2/3

IMPLEMENTATION

RESPONSE CONTACT ADDRESS

Loop: 2210E — CLAIM SUPPLEMENTAL INFORMATION

Usage: SITUATIONAL

Repeat: 1

Example: N3*1 SMITH STREET*SUITE 100~

STANDARD

N3 Address Information

Level: Detail

Position: 1600

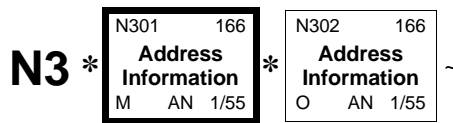
Loop: 2210

Requirement: Optional

Max Use: 1

Purpose: To specify the location of the named party

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	N301	166	Address Information Address information	M AN 1/55
			ALIAS: <i>Response Contact Address Line</i>	
SITUATIONAL	N302	166	Address Information Address information	O AN 1/55
			ALIAS: <i>Response Contact Additional Address Line</i>	

Use this element when the second line of the address information is necessary.

IMPLEMENTATION

RESPONSE CONTACT CITY/STATE/ZIP CODE

Loop: 2210E — CLAIM SUPPLEMENTAL INFORMATION

Usage: SITUATIONAL

Repeat: 1

Notes: 1. This segment identifies the person or office location to route the response to for this Request for Additional Information.

This segment will supercede information supplied in the PER segment in the Payer Contact Information (PER) segment in the Information Source Level (Loop Id 2100A).

2. Use this segment when the patient is someone other than the subscriber.

Example: N4*MIAMI*FL*33131**DP*REVIEW DEPT~

STANDARD

N4 Geographic Location

Level: Detail

Position: 1700

Loop: 2210

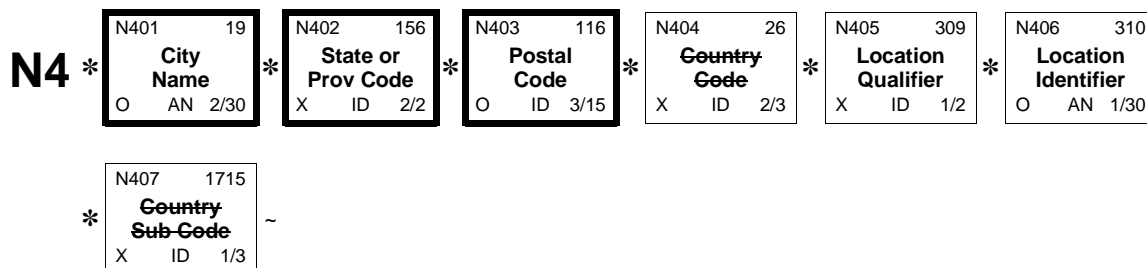
Requirement: Optional

Max Use: 1

Purpose: To specify the geographic place of the named party

- Syntax:
1. **E0207**
Only one of N402 or N407 may be present.
 2. **C0605**
If N406 is present, then N405 is required.
 3. **C0704**
If N407 is present, then N404 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	N401	19	City Name Free-form text for city name <i>ALIAS: Response Contact City Name</i> <i>COMMENT: A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.</i>	O AN 2/30
REQUIRED	N402	156	State or Province Code Code (Standard State/Province) as defined by appropriate government agency <i>ALIAS: Response Contact State Code</i> SYNTAX: E0207 <i>COMMENT: N402 is required only if city name (N401) is in the U.S. or Canada.</i>	X ID 2/2
REQUIRED	N403	116	Postal Code Code defining international postal zone code excluding punctuation and blanks (zip code for United States) <i>ALIAS: Response Contact Postal Zone or ZIP Code</i> CODE SOURCE 51: ZIP Code	O ID 3/15
NOT USED	N404	26	Country Code	X ID 2/3
SITUATIONAL	N405	309	Location Qualifier Code identifying type of location SYNTAX: C0605 CODE SOURCE 206: Government Bill of Lading Office Code	X ID 1/2
			CODE	DEFINITION
			B1	Branch
			DP	Department This code could include a payer's review department or a separate organization.
SITUATIONAL	N406	310	Location Identifier Code which identifies a specific location <i>ALIAS: Response Contact Specific Location</i> SYNTAX: C0605 This is required if a value is present in N405. Use this element when the Response Contact needs to associate this response to a particular domain.	O AN 1/30
NOT USED	N407	1715	Country Subdivision Code	X ID 1/3

IMPLEMENTATION

SERVICE LINE INFORMATION

Loop: 2220E — SERVICE LINE INFORMATION Repeat: >1

Usage: SITUATIONAL

Repeat: 1

- Notes:
1. Use this segment to request additional information about a service line.
 2. This segment is required by ASC X12 syntax because it is the first segment in Loop ID-2200 (Service Line Information).
 3. Use this segment when the patient is someone other than the subscriber.
 4. For Medicare Institutional claims, SVC01 would be the Health Care Financing Administration (HCFA) Common Procedural Coding System (HCPCS) Code (see Code Source 130) and SVC04 would be the Revenue Code (see Code Source 132).

Example: SVC*NU:71X*15.61~ or SVC*HC:99213*35~

STANDARD

SVC Service Information

Level: Detail

Position: 1800

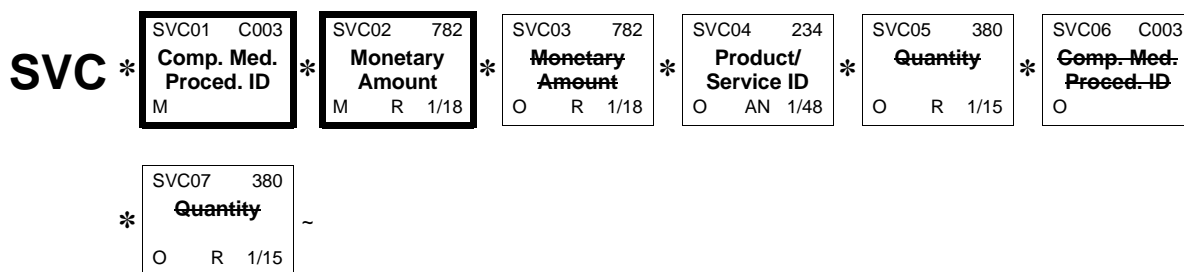
Loop: 2220 Repeat: >1

Requirement: Optional

Max Use: 1

Purpose: To supply payment and control information to a provider for a particular service

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	SVC01	C003	COMPOSITE MEDICAL PROCEDURE IDENTIFIER To identify a medical procedure by its standardized codes and applicable modifiers	M

REQUIRED **SVC01 - 1** **235** **Product/Service ID Qualifier** **M** **ID** **2/2**
 Code identifying the type/source of the descriptive number used in Product/Service ID (234)

CODE	DEFINITION
AD	American Dental Association Codes CODE SOURCE 135: American Dental Association Codes
HC	Health Care Financing Administration Common Procedural Coding System (HCPCS) Codes Procedural Coding System (HCPCS) Codes 110157 Because CPT codes of the American Medical Association are also Level 1 HCPCS codes, they are reported under the code HC. CODE SOURCE 130: Health Care Financing Administration Common Procedural Coding System
IV	Home Infusion EDI Coalition (HIEC) Product/Service Code CODE SOURCE 513: Home Infusion EDI Coalition (HIEC) Product/Service Code List
N1	National Drug Code in 4-4-2 Format CODE SOURCE 240: National Drug Code by Format
N2	National Drug Code in 5-3-2 Format CODE SOURCE 240: National Drug Code by Format
N3	National Drug Code in 5-4-1 Format CODE SOURCE 240: National Drug Code by Format
N4	National Drug Code in 5-4-2 Format CODE SOURCE 240: National Drug Code by Format
ND	National Drug Code (NDC) CODE SOURCE 134: National Drug Code
NH	National Health Related Item Code
NU	National Uniform Billing Committee (NUBC) UB92 Codes CODE SOURCE 132: National Uniform Billing Committee (NUBC) Codes
RB	National Uniform Billing Committee (NUBC) UB82 Codes CODE SOURCE 132: National Uniform Billing Committee (NUBC) Codes

REQUIRED **SVC01 - 2** **234** **Product/Service ID** **M** **AN** **1/48**
 Identifying number for a product or service

ALIAS: Service Identification Code

If the value used in SVC01-1 is NU, then this element is an NUBC Revenue Code. If the Revenue Code is present in SVC01-2, then SVC04 is not used.

SITUATIONAL **SVC01 - 3** **1339** **Procedure Modifier** **O** **AN** **2/2**
 This identifies special circumstances related to the performance of the service, as defined by trading partners

Required if submitted on the original claim service line.

SITUATIONAL	SVC01 - 4	1339	Procedure Modifier This identifies special circumstances related to the performance of the service, as defined by trading partners	O AN 2/2
Required if submitted on the original claim service line.				
SITUATIONAL	SVC01 - 5	1339	Procedure Modifier This identifies special circumstances related to the performance of the service, as defined by trading partners	O AN 2/2
Required if submitted on the original claim service line.				
SITUATIONAL	SVC01 - 6	1339	Procedure Modifier This identifies special circumstances related to the performance of the service, as defined by trading partners	O AN 2/2
Required if submitted on the original claim service line.				
NOT USED	SVC01 - 7	352	Description A free-form description to clarify the related data elements and their content	O AN 1/80
REQUIRED	SVC02	782	Monetary Amount Monetary amount <i>ALIAS: Line Item Charge Amount</i> <i>SEMANTIC: SVC02 is the submitted service charge.</i>	M R 1/18
NOT USED	SVC03	782	Monetary Amount	O R 1/18
SITUATIONAL	SVC04	234	Product/Service ID Identifying number for a product or service <i>ALIAS: Revenue Code</i> <i>SEMANTIC: SVC04 is the National Uniform Billing Committee Revenue Code.</i>	O AN 1/48
Required on institutional claims when the NUBC Revenue code is not reported in SVC01-2 and SVC01-1 is not NU.				
NOT USED	SVC05	380	Quantity	O R 1/15
NOT USED	SVC06	C003	COMPOSITE MEDICAL PROCEDURE IDENTIFIER	O
NOT USED	SVC07	380	Quantity	O R 1/15

IMPLEMENTATION

SERVICE LINE STATUS INFORMATION

Loop: 2220E — SERVICE LINE INFORMATION

Usage: MANDATORY

Repeat: >1

Notes: 1. Use this segment when the patient is someone other than the subscriber.

2. Questions regarding Service line level information will utilize the STC segment at the service line level. In those situations STC01-1 will contain an "Rx" (where "x" represents one of the valid sub-categories from the Health Care Claim Status Category Code list) and STC01-2 contains a LOINC code. The value "LOI" in STC01-4 qualifies STC01-2 as a LOINC code.

These same rules apply to STC10 and STC11 when these elements are utilized for claim level requests. When questions are only asked regarding specific service line information, the STC segment at the Claim Level only conveys the Status Information Effective Date. When this occurs STC01 is used. STC01-1 will only contain the value "R0" and STC01-2 will only contain "19016-5" and STC01-4 will always contain "LOI".

Example: STC*R0:19016-5::LOI*19980824~ or STC*R0:18682-5::LOI*19980824~ or STC*R4:18660-1::LOI*19980824****R4:19790-6:LOI~

STANDARD

STC Status Information

Level: Detail

Position: 1900

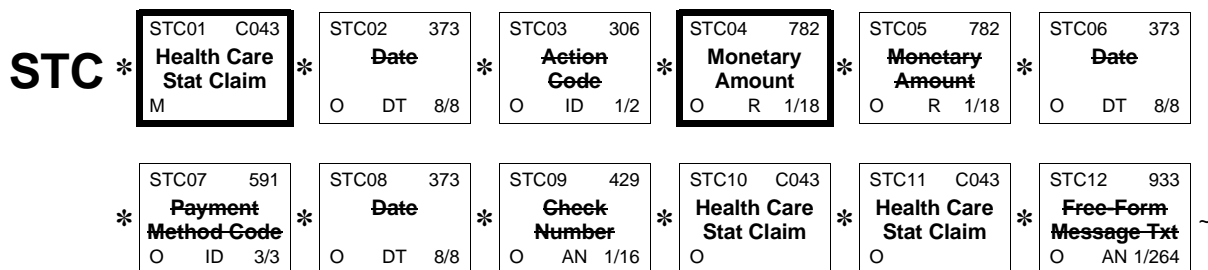
Loop: 2220

Requirement: Mandatory

Max Use: >1

Purpose: To report the status, required action, and paid information of a claim or service line

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	STC01	C043	HEALTH CARE CLAIM STATUS Used to convey status of the entire claim or a specific service line	M
REQUIRED	STC01 - 1	1271	Industry Code Code indicating a code from a specific industry code list <i>ALIAS: Health Care Claim Status Category Code</i> This is the Category Code and is required if STC01 is used.	M AN 1/30
REQUIRED	STC01 - 2	1271	Industry Code Code indicating a code from a specific industry code list <i>ALIAS: Additional Information Request Code</i> This is the LOINC code.	M AN 1/30
NOT USED	STC01 - 3	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual	O ID 2/3
REQUIRED	STC01 - 4	1270	Code List Qualifier Code Code identifying a specific industry code list	O ID 1/3
			CODE	DEFINITION
			LOI	Logical Observation Identifier Names and Codes (LOINC) Codes CODE SOURCE 663: Logical Observation Identifier Names and Codes (LOINC)
NOT USED	STC02	373	Date	O DT 8/8
NOT USED	STC03	306	Action Code	O ID 1/2
REQUIRED	STC04	782	Monetary Amount Monetary amount <i>ALIAS: Line Item Charge Amount</i> SEMANTIC: STC04 is the amount of original submitted charges. Use this element for the amount of submitted line item charges. Some HMO encounters may supply zero as the amount of the original line item charges.	O R 1/18
NOT USED	STC05	782	Monetary Amount	O R 1/18
NOT USED	STC06	373	Date	O DT 8/8
NOT USED	STC07	591	Payment Method Code	O ID 3/3
NOT USED	STC08	373	Date	O DT 8/8
NOT USED	STC09	429	Check Number	O AN 1/16
SITUATIONAL	STC10	C043	HEALTH CARE CLAIM STATUS Used to convey status of the entire claim or a specific service line Use this element if a second Health Care Claim Status is needed.	O

REQUIRED	STC10 - 1	1271	Industry Code	M AN 1/30
			Code indicating a code from a specific industry code list	
			<i>ALIAS: Health Care Claim Status Category Code</i>	
			This is the Category code and is required if STC10 is used. This data element must contain the same value as STC01-1.	
REQUIRED	STC10 - 2	1271	Industry Code	M AN 1/30
			Code indicating a code from a specific industry code list	
			<i>ALIAS: Additional Information Request Code Modifier NEW</i>	
			This is the LOINC code and is required if STC10 is used.	
NOT USED	STC10 - 3	98	Entity Identifier Code	O ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
REQUIRED	STC10 - 4	1270	Code List Qualifier Code	O ID 1/3
			Code identifying a specific industry code list	

CODE	DEFINITION
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LOI	Logical Observation Identifier Names and Codes (LOINC) Codes
	<i>CODE SOURCE 663: Logical Observation Identifier Names and Codes (LOINC)</i>

SITUATIONAL	STC11	C043	HEALTH CARE CLAIM STATUS	O
			Used to convey status of the entire claim or a specific service line	
			Use this element if a third Health Care Claim Status is needed.	
REQUIRED	STC11 - 1	1271	Industry Code	M AN 1/30
			Code indicating a code from a specific industry code list	
			<i>ALIAS: Health Care Claim Status Category Code</i>	
			This is the Category code and is required if STC11 is used.	
REQUIRED	STC11 - 2	1271	Industry Code	M AN 1/30
			Code indicating a code from a specific industry code list	
			<i>ALIAS: Additional Information Request Code Modifier NEW</i>	
			This is the Status code and is required if STC11 is used.	
NOT USED	STC11 - 3	98	Entity Identifier Code	O ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
REQUIRED	STC11 - 4	1270	Code List Qualifier Code	O ID 1/3
			Code identifying a specific industry code list	

CODE	DEFINITION
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LOI	Logical Observation Identifier Names and Codes (LOINC) Codes
	<i>CODE SOURCE 663: Logical Observation Identifier Names and Codes (LOINC)</i>

NOT USED	STC12	933	Free-Form Message Text	O AN 1/264
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IMPLEMENTATION

SERVICE LINE ITEM IDENTIFICATION

Loop: 2220E — SERVICE LINE INFORMATION

Usage: SITUATIONAL

Repeat: 1

Notes: 1. Required when submitted on the claim.

Example: REF*FJ*0001~

STANDARD

REF Reference Identification

Level: Detail

Position: 2000

Loop: 2220

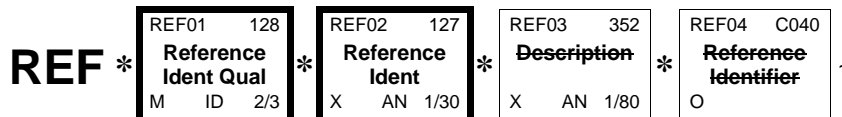
Requirement: Optional

Max Use: 1

Purpose: To specify identifying information

Syntax: 1. R0203
At least one of REF02 or REF03 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3
			CODE	DEFINITION
			FJ	Line Item Control Number This will be the sequence number of the line when the line item control number is not available.
REQUIRED	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X AN 1/30
			ALIAS: Line Item Control Number	
			SYNTAX: R0203	
NOT USED	REF03	352	Description	X AN 1/80
NOT USED	REF04	C040	REFERENCE IDENTIFIER	O

IMPLEMENTATION

SERVICE LINE DATE

Loop: 2220E — SERVICE LINE INFORMATION

Usage: SITUATIONAL

Repeat: 1

Notes: 1. Required when this is the date of service from the submitted claim for a specific line item.

Example: DTP*472*RD8*19980401-19980401~

STANDARD

DTP Date or Time or Period

Level: Detail

Position: 2100

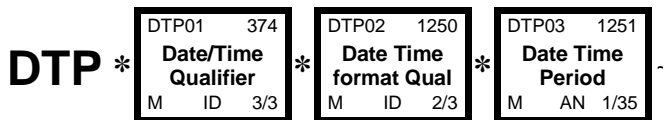
Loop: 2220

Requirement: Optional

Max Use: 1

Purpose: To specify any or all of a date, a time, or a time period

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	DTP01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time	M ID 3/3
			CODE	DEFINITION
			472	Service
REQUIRED	DTP02	1250	Date Time Period Format Qualifier Code indicating the date format, time format, or date and time format	M ID 2/3
			SEMANTIC: DTP02 is the date or time or period format that will appear in DTP03.	
			CODE	DEFINITION
			RD8	Range of Dates Expressed in Format CCYYMMDD-CCYYMMDD If there is a single date of service, the begin date equals the end date.
REQUIRED	DTP03	1251	Date Time Period Expression of a date, a time, or range of dates, times or dates and times	M AN 1/35
			ALIAS: <i>Service Line Date</i>	

IMPLEMENTATION

TRANSACTION SET TRAILER

Usage: MANDATORY

Repeat: 1

Example: SE*55*0001~

STANDARD

SE Transaction Set Trailer

Level: Detail

Position: 2700

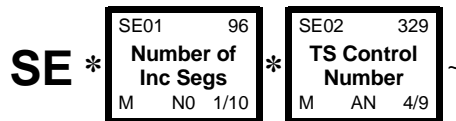
Loop: _____

Requirement: Mandatory

Max Use: 1

Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	SE01	96	Number of Included Segments Total number of segments included in a transaction set including ST and SE segments <i>ALIAS: Transaction Segment Count</i>	M NO 1/10
REQUIRED	SE02	329	Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M AN 4/9

4 EDI Transmission Examples for Business Usages

Overview

The 275 Additional Information to support a Health Care Claim or Encounter has been written to be able to send answers to standard attachments electronically. The following scenarios have used the Ambulance and Clinical Notes Attachment booklets as well as the HL7 documentation that accompanies this Implementation Guide. These two attachment examples are being used to show how to code the 277.

The following table contains the list of questions and associated LOINC codes used in the following scenarios.

Electronic Form	Attach. Element LOINC Code	Attachment Element Name	Response Codes	Code Description	Response Code Source
Operative Report	11504-8	Entire Operative Report		Narrative	
Service Line Level	19016-5	Request or Response is at the Service Line level			
Ambulance	A0001-0	ENTIRE AMBULANCE ATTACHMENT			
Question 1	18584-3	BODY WEIGHT AT EMS TRANSPORT (COMPOSITE)			
Question 2	15517-6	EMS TRANSPORT, TRANSPORT DIRECTION	Codes	Type of EMS transport. Code List is in HL7 Ambulance Attachment Documentation	HL79007
Question 3	15509-3	EMS TRANSPORT, RATIONALE FOR CHOICE OF DESTINATION	Numerous	Code indicates if patient was transported to the nearest facility or for other considerations. Code List is in HL7 Ambulance Attachment Documentation	HL79008
Question 4	15510-1	EMS TRANSPORT, DISTANCE TRANSPORTED	Mileage		
Question 5	15511-9	EMS TRANSPORT, ORIGINATION SITE INFORMATION (COMPOSITE)	Name & Address		
Question 6	15512-7	EMS TRANSPORT, DESTINATION SITE INFORMATION (COMPOSITE)	Name & Address		
Question 7	15513-5	EMS TRANSPORT, REASON FOR SCHEDULED TRIP (COMPOSITE)	Numerous Codes or Narrative	Can be a code from Code List or a Narrative explanation. Code List is in HL7 Ambulance Attachment Documentation	HL79000
Question 8	18588-4	EMS TRANSPORT, PURPOSE OF STRETCHER (NARRATIVE)	Narrative		
Question 9	18589-2	EMS TRANSPORT, ADMITTED AT DESTINATION FACILITY	Y or N	Yes or No	HL70136
Question 10	15514-3	EMS TRANSPORT, ORDERING PRACTITIONER (COMPOSITE)	Name		
Question 11	18591-8	CONFINED TO BED BEFORE EMS TRANSPORT	Y or N	Yes or No	HL70136
Question 12	18592-6	CONFINED TO BED AFTER EMS TRANSPORT	Y or N	Yes or No	HL70136
Question 13	18593-4	EMS TRANSPORT, DISCHARGED FROM ORIGIN INSTITUTION	Y or N	Yes or No	HL70136

Electronic Form	Attach. Element LOINC Code	Attachment Element Name	Response Codes	Code Description	Response Code Source
Question 14	15515-0	EMS TRANSPORT, MEDICAL REASON FOR UNSCHEDULED TRIP	Codes	Medical Reason for Unscheduled Trip. Code List is in HL7 Ambulance Attachment Documentation	HL79010
Question 15	15516-8	EMS TRANSPORT, JUSTIFICATION FOR EXTRA ATTENDANTS	Codes	Justification for Extra Attendants. Code List is in HL7 Ambulance Attachment Documentation	HL79001

Scenario One Description

Scenario One depicts the utilization of the ANSI ASC X12 275 in a Medicare Part A, governmental institutional claim environment. Two claims have been electronically transmitted to the Medicare Part A fiscal intermediary through the use of a third party billing service (clearinghouse). In this scenario, both claims have been accepted for submission to the claims adjudication system but have not been paid yet. Both claims are needing additional information in order finish processing the claims and a request for additional information is being sent to the provider. The provider is responding to a request that was received electronically giving the necessary information in order to be processed into the adjudication system for payment. The electronic request in this example was a 277 Request for Additional Information The 275 will be returned to the clearinghouse to be returned to the payer in this scenario.

Assumptions

ABC Insurance Company is located at PO Box 4321-9111, Miami, FL, 33131-9111 and has a payer ID of 05440. ABC Insurance Company, which is both a commercial insurance and a Medicare Intermediary, has received two electronic ASC X12 837 claim transmissions from XYZ Services on behalf of St. Holy Hill Hospital with Provider Number of 3999000B.

St. Holy Hill Hospital utilizes XYZ Services (Electronic Transmitter Identification Number of A222222221), an electronic clearinghouse, to help the hospital prepare and submit its electronic claims to payers.

The first transmission contains a claim submitted on behalf of Peter M. Jones. Mr. Jones is a commercial insurance enrollee with a health insurance claim number of 123456789A. The hospital's patient control number is JONES123.

St. Holy Hill Hospital has submitted a claim for an unlisted surgical procedure code rendered on October 3, 1997.

ABC Insurance Company would need to operative report to determine what surgical procedure was performed and the amount paid. Therefore St. Holy Hill Hospital sent the operative report in the ASC X12 275 within the same transmission as the ASC X12 837 claim.

The second transmission contains two claims. The first claim submitted is on behalf of Jack J. Jackson Mr. Jackson is a Medicare enrollee with a health insurance claim number of 649111111A. The hospital's patient control number is JACKSON123.

St. Holy Hill Hospital has submitted a claim for outpatient ambulance services (bill type 131) rendered on September 11, 1997.

ABC Insurance Company always wants an Ambulance certification on any ambulance runs so rather than wait for a request St. Holy Hills Hospital has sent the

ambulance certification in the ASC X12 275 within the same transmission as the ASC X12 837 claim.

The second claim submitted is on behalf of Joe Smith. Mr. Smith is a Medicare enrollee with a health insurance claim number of 123405074A. The hospital's patient control number is SMITH123.

St. Holy Hill Hospital has submitted a claim for outpatient services (bill type 131) rendered to Mr. Smith rendered on June 14, 1997.

Below is the 837 Health Care Claim transmissions and the 275 Additional Information to Support a Health Care Claim or Encounter transmissions that have been sent to ABC Insurance Company.

837 Health Care Claim Transmission

```
ISA*00**00**ZZ*A222222221*ZZ*05440*971015*0908*U*
00401*000001273*0*P*:~
GS*HC*A222222221*05440*971015*0908*1273*X*
004010X096~
ST*837*3456~
BHT*0019*00*0123*19971015*1023*CH~
REF*87*004010X096~
NM1*41*2*XYZ SERVICE*****46*A222222221~
PER*IC*Jane Doe*TE*8005551212~
NM1*40*2*ABC INSURANCE COMPANY*****46*05440~
HL*1**20*1~
NM1*85*2*XYZ SERVICE*****FI*222222221~
N3*234 MAIN ST~
N4*MIAMI*FL*331323111~
NM1*87*2*ST HOLY HILLS HOSPITAL*****XX*581234567~
N3*2345 WINTER BLVD~
N4*MIAMI*FL*331323111~
HL*2*1*22*1~
SBR*P*18*2222-SJ*****CI~
NM1*IL*1*JONES*PETER*M***HN*123456789A~
N3*623 N MAIN ST~
N4*MIAMI*FL*331323111~
DMG*D8*19430501*M~
NM1*PR*2*ABC INSURANCE COMPANY~
N3*PO BOX 4321-9111~
N4*MIAMI*FL*331319111~
REF*FY*000221111~
CLM*JONES123*5903.20***11:A:1*Y*A*Y*Y*****Y~
DTP*434*D8*19991010~
DTP*435*DT*199910020800~
CL1*3*1*01~
PWK*OB*EL***AC*987654~
```

HI*BK:0340*BJ:340~
HI*BF:V7389~
HI*BR:784:D8:19991003~
QTY*CA*8*DA~
NM1*71*1*FITCH*ROBERT*D***XX*KA6663~
PRV*AT*22*203BF0100Y~
NM1*72*1*FITCH*ROBERT*D***XX*KA6663~
LX*1~
SV2*0120*HC:44499*3328*DA*8*416~
LX*2~
SV2*0250**700*UN*20~
LX*3~
SV2*0361**1875.20*UN*17~
LX*4~
SV2*0001**5903.20~
DTP*472*D8*19971003~
SE*45*3456~
GE*1*1273~

275 Additional Information to Support a Health Care Claim or Encounter
transmission

GS*PI*A222222221*05440*971015*0908*1274*X*
004020X107~
ST*275*1002*004020X107~
BGN*11*0001*19971015~
NM1*PR*2*ABC INSURANCE COMPANY*****PI*05440~
NM1*41*2*XYZ SERVICE*****46*A22222221~
NM1*1P*1*FITCH*ROBERT*D***XX*KA6663~
NM1*QC*1*JONES*PETER*M***HN*123456789A~
REF*EJ*26463774~
LX*1~
TRN*2*987654~
REF*CPT*44499~
DTP*472*D8*19971003~
DTP*368*D8*19971015~
CAT*AE*HL~
EFI*05~
BIN*3231*MSH|^~\&|||19980919131523
|ORU^R01|A1234
9282|P|2.3||NE|NE<cr>
PID|||100928782^9^M11||JONES^PETER<cr>
OBR|||11504-8^OPERATIVE NOTE^LN<cr>
OBX|TX|11504-8||JONES, PETER~St Holy Hill
Hospital~

MRN: ABC123~Operative Report~ ATT: ROBERT DOUGLAS FITCH, M.D.~~Procedure: 08/13/96 DICT: SAMUEL DAVID STANLEY, M.D.~PREOPERATIVE DIAGNOSIS: Left leg length discrepancy.~~POSTOPERATIVE DIAGNOSIS: Left leg length discrepancy.~~OPERATION: Right distal femoral epiphysiodesis.~~SURGEON: Robert Douglas Fitch, M.D.~~ASSISTANTS: Samuel David Stanley, M.D.; James D. Davidson, M.D.~~ANESTHESIA: General endotracheal.~~ESTIMATED BLOOD LOSS: Minimal.~~TOURNIQUET TIME: 28 minutes.~~FLUIDS: 500 cc of lactated Ringer's.~~PATHOLOGY: None.~~DRAINS: None.~~COMPLICATIONS: None.~~DESCRIPTION OF PROCEDURE: The patient was brought to the operating room and placed supine on the operating table. Following

Scenario Two Description

Scenario Two depicts the utilization of the ANSI ASC X12 275 with both a professional and institutional 837 claim environment. The first example is a professional 837 claim with a 275 Additional Information being transmitted electronically to ABC Insurance Company through the use of a third party billing service (clearinghouse). The second example is two claims with one of the claims having a 275 Additional Information being transmitted electronically to the Medicare Part A fiscal intermediary through the use of a third party billing service (clearinghouse).

Assumptions

ABC Insurance Company is located at PO Box 4321-9111, Miami, FL, 33131-9111 and has a payer ID of 05440. ABC Insurance Company, which is both a commercial insurance and a Medicare Intermediary, has received two electronic ASC X12 837 claim transmissions from XYZ Services on behalf of St. Holy Hill Hospital with Provider Number of 3999000B.

St. Holy Hill Hospital utilizes XYZ Services (Electronic Transmitter Identification Number of A222222221), an electronic clearinghouse, to help the hospital prepare and submit its electronic claims to payers.

The first transmission contains a claim submitted on behalf of Peter M. Jones. Mr. Jones is a commercial insurance enrollee with a health insurance claim number of 123456789A. The hospital's patient control number is JONES123.

St. Holy Hill Hospital has submitted a claim for an unlisted surgical procedure code rendered on October 3, 1997.

ABC Insurance Company would need to operative report to determine what surgical procedure was performed and the amount paid. Therefore St. Holy Hill Hospital sent the operative report in the ASC X12 275 within the same transmission as the ASC X12 837 claim.

The second transmission contains two claims. The first claim submitted is on behalf of Jack J. Jackson Mr. Jackson is a Medicare enrollee with a health insurance claim number of 649111111A. The hospital's patient control number is JACKSON123.

St. Holy Hill Hospital has submitted a claim for outpatient ambulance services (bill type 131) rendered on September 11, 1997.

ABC Insurance Company always wants an Ambulance certification on any ambulance runs so rather than wait for a request St. Holy Hills Hospital has sent the

ambulance certification in the ASC X12 275 within the same transmission as the ASC X12 837 claim.

The second claim submitted is on behalf of Joe Smith. Mr. Smith is a Medicare enrollee with a health insurance claim number of 123405074A. The hospital's patient control number is SMITH123.

St. Holy Hill Hospital has submitted a claim for outpatient services (bill type 131) rendered to Mr. Smith rendered on June 14, 1997.

Below is the 837 Health Care Claim transmissions and the 275 Additional Information to Support a Health Care Claim or Encounter transmissions that have been sent to ABC Insurance Company.

```
ISA*00**00**ZZ*A222222221*ZZ*05440*971015*
0908*U*00401*000001273*0*P*:~
GS*HC*A222222221*05440*971015*0908*1273*X*
004010X096~
ST*837*3456~
BHT*0019*00*0123*19971015*1023*CH~
REF*87*004010X096~
NM1*41*2*XYZ SERVICE*****46*A222222221~
PER*IC*Jane Doe*TE*8005551212~
NM1*40*2*ABC INSURANCE COMPANY*****46*05440~
HL*1**20*1~
NM1*85*2*XYZ SERVICE*****FI*222222221~
N3*234 MAIN ST~
N4*MIAMI*FL*331323111~
NM1*87*2*ST HOLY HILLS HOSPITAL*****XX*581234567~
N3*2345 WINTER BLVD~
N4*MIAMI*FL*331323111~
HL*2*1*22*1~
SBR*P*18*2222-SJ*****CI~
NM1*IL*1*JONES*PETER*M***HN*123456789A~
N3*623 N MAIN ST~
N4*MIAMI*FL*331323111~
DMG*D8*19430501*M~
NM1*PR*2*ABC INSURANCE COMPANY~
N3*PO BOX 4321-9111~
N4*MIAMI*FL*331319111~
REF*FY*000221111~
CLM*JONES123*5903.20***11:A:1*Y*A*Y*Y*****Y~
DTP*434*D8*19991010~
DTP*435*DT*199910020800~
CL1*3*1*01~
PWK*OB*EL***AC*987654~
HI*BK:0340*BJ:340~
```

HI*BF:V7389~
HI*BR:784:D8:19991003~
QTY*CA*8*DA~
NM1*71*1*FITCH*ROBERT*D***XX*KA6663~
PRV*AT*22*203BF0100Y~
NM1*72*1*FITCH*ROBERT*D***XX*KA6663~
LX*1~
SV2*0120*HC:44499*3328*DA*8*416~
LX*2~
SV2*0250**700*UN*20~
LX*3~
SV2*0361**1875.20*UN*17~
LX*4~
SV2*0001**5903.20~
DTP*472*D8*19971003~
SE*45*3456~
GE*1*1273~
GS*PI*A222222221*05440*971015*0908*1274*
X*004020X107~
ST*275*1002*004020X107~
BGN*11*0001*19971015~
NM1*PR*2*ABC INSURANCE COMPANY*****PI*05440~
NM1*41*2*XYZ SERVICE*****46*A222222221~
NM1*1P*1*FITCH*ROBERT*D**XX*KA6663~
NM1*QC*1*JONES*PETER*M***HN*123456789A~
REF*EJ*26463774~
LX*1~
TRN*2*987654~
REF*CPT*44499~
DTP*472*D8*19971003~
DTP*368*D8*19971015~
CAT*AE*HL~
EFI*05~
BIN*3231*MSH|^~\&|||19980919131523
||ORU^R01|A1234
9282|P|2.3||NE|NE<cr>
PID||100928782^9^M11||JONES^PETER<cr>
OBR||11504-8^OPERATIVE NOTE^LN<cr>
OBX|TX|11504-8||JONES, PETER~St Holy Hill
Hospital~
MRN: ABC123~Operative Report~ ATT: ROBERT DOUGLAS
FITCH, M.D.~Procedure: 08/13/96 DICT: SAMUEL
DAVID STANLEY, M.D.~PREOPERATIVE DIAGNOSIS: Left
leg length discrepancy.~POSTOPERATIVE DIAGNOSIS:
Left leg length discrepancy.~OPERATION: Right

distal femoral epiphysiodesis.~~SURGEON: Robert Douglas Fitch, M.D.~~ASSISTANTS: Samuel David Stanley, M.D.; James D. Davidson, M.D.~~ANESTHESIA: General endotracheal.~~ESTIMATED BLOOD LOSS: Minimal.~~TOURNIQUET TIME: 28 minutes.~~FLUIDS: 500 cc of lactated Ringer's.~~PATHOLOGY: None.~~DRAINS: None.~~COMPLICATIONS: None.~~DESCRIPTION OF PROCEDURE: The patient was brought to the operating room and placed supine on the operating table. Following the admin

Institutional Transmission

ISA*00**00**ZZ*A222222221*ZZ*05440*970918*0908*
U*00401*000001173*0*P*:~

GS*HC*A222222221*05440*970918*0908*1173*X*
004010X096~

ST*837*987654~

BHT*0019*00*0123*19970918*0932CH~

REF*87*004010X096~

NM1*41*2*XYZ SERVICE*****46*A222222221~

PER*IC*JANE DOE*TE*8005551212~

NM1*40*2*ABC INSURANCE COMPANY*****46*05440~

HL*1**20*1~

PRV*BI*ZZ*609TL0100Y~

NM1*85*2*ST HOLY HILL HOSPITAL*****XX*3999000B~

N3*225 MAIN STREET BARRLEY BUILDING~

N4*MIAMI*FL*331323111~

PER*IC**TE*8007775555~

HL*2*1*22*1~

SBR*P*18*****MA~

NM1*IL*1*JACKSON*JACK*J***MI*649111111A~

N3*125 CITY AVENUE~

N4*MIAMI*FL*331323111~

DMG*D8*19261111*M~

NM1*PR*2*ABC INSURANCE COMPANY*****PI*05440~

CLM*JACKSON123*89.93***13:A:1*Y*Y*****Y~

DTP*434*D8*19970911~

DTP*233*D8*19970911~

DTP*435*DT*199709191400~

CL1*3*1~

PWK*OB*EL***AC*986543~

HI*BK:3669*BJ:4019~

HI*BF:79431~

QTY*CA*1*DA~

NM1*71*1*JONES*JOHN*J***XX*B99937~

SBR*S*01*351630*STATE TEACHERS*SP*****CI~

OI***Y***Y~

NM1*IL*1*JACKSON*JACK*J***MI*649111111~
N3*125 CITY AVENUE~
N4*MIAMI*FL*331323111~
NM1*PR*2*STATE TEACHERS*****PI*1135~
LX*1~
SV2*0540*HC:A0030:RH:QN*150*UN*1~
DTP*472*D8*19970911~
LX*2~
SV2*0540*HC:A0380:RH:QN*100*UN*10~
DTP*472*D8*19970911~
LX*3~
SV2*0540*HC:A0030:HR:QN*150*UN*1~
DTP*472*D8*19970911~
LX*4~
SV2*0540*HC:A0380:HR:QN*100*UN*10~
DTP*472*D8*19970911~
LX*5~
SV2*0001*500~
DTP*472*D8*19970911~
HL*3*1*22*1~
SBR*P*18*****MA~
NM1*IL*1*SMITH*JOE***MI*123405074A~
N3*5 MAIN STREET~
N4*MIAMI*FL*331323111~
DMG*D8*19120512*M~
NM1*PR*2*ABC INSURANCE COMPANY*****PI*05440~
CLM*SMITH123*50***13:A:1***Y*Y~
DTP*232*D8*19970614~
DTP*233*D8*19970614~
CL1*3*1~
HI*BK:30000~
NM1*71*1*JONES*JOHN*J***UP*B99937~
LX*1~
SV2*300*HC:85087*50*ON*1~
DTP*472*D8*19970614~
SE*65*987654~
GE*1*1173~
GS*PI*A222222221*05440*970918*0908*1174*
X*004020X107~
ST*275*1001*004020X107~
BGN*11*0001*19970918~
NM1*PR*2*ABC INSURANCE COMPANY*****PI*05440~
PER*IC*MEDICAL REVIEW DEPARTMENT~

NM1*41*2*XYZ SERVICE*****46*A22222221~
NM1*1P*2*ST HOLY HILL HOSPITAL*****SV*3999000B~
NM1*QC*1*JACKSON*JACK*J***HN*649111111A~
REF*EJ*JACKSON123~
REF*BLT*131~
DTP*232*RD8*19970911-19970911~
LX*1~
TRN*986543~
DTP*368*D8*19970918~
CAT*AE*HL~
EFI*05~
BIN*873*MSH|^-\&|||
19981105131523||ORU^R01|A12349282
|P|2.3||NE|NE<Cr>
PID|||100928782^9^MOD11||Jackson^Jack^J<cr>
OBR|||18584-3<cr>
OBX|NM|8335-2||143|lb^^ans+||||F<cr>
OBR|||15517-6<cr>
OBX|CE|15517-6||I^^HL79007||||F<cr>
OBR|||15509-3<cr>
OBX|CE|15509-3||A^^HL79008||||F<cr>
OBR|||15510-1<cr>
OBX|NM|15510-1||17|mi^^ANS+||||F<cr>
OBR|||15511-9<cr>
OBX|ST|15511-9||HOME||||F<cr>
OBX|XAD|30085-0||11073 S. Mission
St^^MIAMI^FL^543219111^USA^P||||F<cr>
OBR|||15512-7<cr>
OBX|ST|15512-7||HOSPITAL||||F<cr>
OBX|XAD|30094-0||933 Fortner
St^^MIAMI^FL^543219111^USA^P||||F<cr>
OBR|||18588-4<cr>
OBX|ST|18588-4||Patient unconcscious||||F<cr>
OBR|||18589-2<cr>

A ASC X12 Nomenclature

A.1 Interchange and Application Control Structures

A.1.1 Interchange Control Structure

The transmission of data proceeds according to very strict format rules to ensure the integrity and maintain the efficiency of the interchange. Each business grouping of data is called a transaction set. For instance, a group of benefit enrollments sent from a sponsor to a payer is considered a transaction set.

Each transaction set contains groups of logically related data in units called segments. For instance, the N4 segment used in the transaction set conveys the city, state, ZIP Code, and other geographic information. A transaction set contains multiple segments, so the addresses of the different parties, for example, can be conveyed from one computer to the other. An analogy would be that the transaction set is like a freight train; the segments are like the train's cars; and each segment can contain several data elements the same as a train car can hold multiple crates.

The sequence of the elements within one segment is specified by the ASC X12 standard as well as the sequence of segments in the transaction set. In a more conventional computing environment, the segments would be equivalent to records, and the elements equivalent to fields.

Similar transaction sets, called "functional groups," can be sent together within a transmission. Each functional group is prefaced by a group start segment; and a functional group is terminated by a group end segment. One or more functional groups are prefaced by an interchange header and followed by an interchange trailer. Figure A1, Transmission Control Schematic, illustrates this interchange control.

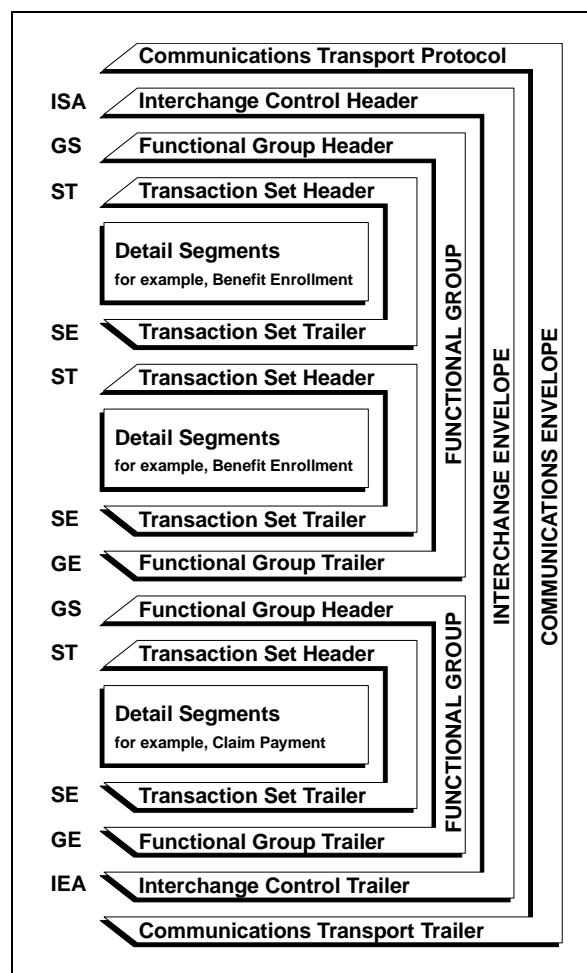


Figure A1. Transmission Control Schematic

The interchange header and trailer segments envelop one or more functional groups or interchange-related control segments and perform the following functions:

1. Define the data element separators and the data segment terminator.
2. Identify the sender and receiver.
3. Provide control information for the interchange.
4. Allow for authorization and security information.

A.1.2 Application Control Structure Definitions and Concepts

A.1.2.1 Basic Structure

A data element corresponds to a data field in data processing terminology. The data element is the smallest named item in the ASC X12 standard. A data segment corresponds to a record in data processing terminology. The data segment begins with a segment ID and contains related data elements. A control segment has the same structure as a data segment; the distinction is in the use. The data segment is used primarily to convey user information, but the control segment is used primarily to convey control information and to group data segments.

A.1.2.2 Basic Character Set

The section that follows is designed to have representation in the common character code schemes of EBCDIC, ASCII, and CCITT International Alphabet 5. The ASC X12 standards are graphic-character-oriented; therefore, common character encoding schemes other than those specified herein may be used as long as a common mapping is available. Because the graphic characters have an implied mapping across character code schemes, those bit patterns are not provided here.

The basic character set of this standard, shown in figure A2, Basic Character Set, includes those selected from the uppercase letters, digits, space, and special characters as specified below.

A...Z	0...9	!	“	&	'	()	*	+
,	-	.	/	:	;	?	=	“ ” (space)	

Figure A2. Basic Character Set

A.1.2.3 Extended Character Set

An extended character set may be used by negotiation between the two parties and includes the lowercase letters and other special characters as specified in figure A3, Extended Character Set.

a..z	%	~	@	[]	_	{
}	\		<	>	#	\$	

Figure A3. Extended Character Set

Note that the extended characters include several character codes that have multiple graphical representations for a specific bit pattern. The complete list appears

in other standards such as CCITT S.5. Use of the USA graphics for these codes presents no problem unless data is exchanged with an international partner. Other problems, such as the translation of item descriptions from English to French, arise when exchanging data with an international partner, but minimizing the use of codes with multiple graphics eliminates one of the more obvious problems.

A.1.2.4 Control Characters

Two control character groups are specified; they have only restricted usage. The common notation for these groups is also provided, together with the character coding in three common alphabets. In the matrix A1, Base Control Set, the column IA5 represents CCITT V.3 International Alphabet 5.

A.1.2.5 Base Control Set

The base control set includes those characters that will not have a disruptive effect on most communication protocols. These are represented by:

<u>NOTATION</u>	<u>NAME</u>	<u>EBCDIC</u>	<u>ASCII</u>	<u>IA5</u>
BEL	bell	2F	07	07
HT	horizontal tab	05	09	09
LF	line feed	25	0A	0A
VT	vertical tab	0B	0B	0B
FF	form feed	0C	0C	0C
CR	carriage return	0D	0D	0D
FS	file separator	1C	1C	1C
GS	group separator	1D	1D	1D
RS	record separator	1E	1E	1E
US	unit separator	1F	1F	1F
NL	new line	15		

Matrix A1. Base Control Set

The Group Separator (GS) may be an exception in this set because it is used in the 3780 communications protocol to indicate blank space compression.

A.1.2.6 Extended Control Set

The extended control set includes those that may have an effect on a transmission system. These are shown in matrix A2, Extended Control Set.

<u>NOTATION</u>	<u>NAME</u>	<u>EBCDIC</u>	<u>ASCII</u>	<u>IA5</u>
SOH	start of header	01	01	01
STX	start of text	02	02	02
ETX	end of text	03	03	03
EOT	end of transmission	37	04	04
ENQ	enquiry	2D	05	05
ACK	acknowledge	2E	06	06
DC1	device control 1	11	11	11
DC2	device control 2	12	12	12
DC3	device control 3	13	13	13
DC4	device control 4	3C	14	14
NAK	negative acknowledge	3D	15	15
SYN	synchronous idle	32	16	16
ETB	end of block	26	17	17

Matrix A2. Extended Control Set

A.1.2.7

Delimiters

A delimiter is a character used to separate two data elements (or subelements) or to terminate a segment. The delimiters are an integral part of the data.

Delimiters are specified in the interchange header segment, ISA. The ISA segment is a 105 byte fixed length record. The data element separator is byte number 4; the component element separator is byte number 105; and the segment terminator is the byte that immediately follows the component element separator.

Once specified in the interchange header, the delimiters are not to be used in a data element value elsewhere in the interchange. For consistency, this implementation guide uses the delimiters shown in matrix A3, Delimiters, in all examples of EDI transmissions.

<u>CHARACTER</u>	<u>NAME</u>	<u>DELIMITER</u>
*	Asterisk	Data Element Separator
:	Colon	Subelement Separator
~	Tilde	Segment Terminator

Matrix A3. Delimiters

The delimiters above are for illustration purposes only and are not specific recommendations or requirements. Users of this implementation guide should be aware that an application system may use some valid delimiter characters within the application data. Occurrences of delimiter characters in transmitted data within a data element can result in errors in translation programs. The existence of asterisks (*) within transmitted application data is a known issue that can affect translation software.

A.1.3

Business Transaction Structure Definitions and Concepts

The ASC X12 standards define commonly used business transactions (such as a health care claim) in a formal structure called “transaction sets.” A transaction set is composed of a transaction set header control segment, one or more data segments, and a transaction set trailer control segment. Each segment is composed of the following:

- A unique segment ID
- One or more logically related data elements each preceded by a data element separator
- A segment terminator

A.1.3.1

Data Element

The data element is the smallest named unit of information in the ASC X12 standard. Data elements are identified as either simple or component. A data element that occurs as an ordinal member of a composite data structure is identified as a component data element. A data element that occurs in a segment outside the defined boundaries of a composite data structure is identified as a simple data element. The distinction between simple and component data elements is strictly a matter of context because a data element can be used in either capacity.

Data elements are assigned a unique reference number. Each data element has a name, description, type, minimum length, and maximum length. For ID type data elements, this guide provides the applicable ASC X12 code values and their descriptions or references where the valid code list can be obtained.

Each data element is assigned a minimum and maximum length. The length of the data element value is the number of character positions used except as noted for numeric, decimal, and binary elements.

The data element types shown in matrix A4, Data Element Types, appear in this implementation guide.

SYMBOL	TYPE
Nn	Numeric
R	Decimal
ID	Identifier
AN	String
DT	Date
TM	Time
B	Binary

Matrix A4. Data Element Types

A.1.3.1.1

Numeric

A numeric data element is represented by one or more digits with an optional leading sign representing a value in the normal base of 10. The value of a numeric data element includes an implied decimal point. It is used when the position of the decimal point within the data is permanently fixed and is not to be transmitted with the data.

This set of guides denotes the number of implied decimal positions. The representation for this data element type is “Nn” where N indicates that it is numeric and n indicates the number of decimal positions to the right of the implied decimal point.

If n is 0, it need not appear in the specification; N is equivalent to N0. For negative values, the leading minus sign (-) is used. Absence of a sign indicates a positive value. The plus sign (+) should not be transmitted.

EXAMPLE

A transmitted value of 1234, when specified as numeric type N2, represents a value of 12.34.

Leading zeros should be suppressed unless necessary to satisfy a minimum length requirement. The length of a numeric type data element does not include the optional sign.

A.1.3.1.2

Decimal

A decimal data element may contain an explicit decimal point and is used for numeric values that have a varying number of decimal positions. This data element type is represented as “R.”

The decimal point always appears in the character stream if the decimal point is at any place other than the right end. If the value is an integer (decimal point at the right end) the decimal point should be omitted. For negative values, the leading minus sign (-) is used. Absence of a sign indicates a positive value. The plus sign (+) should not be transmitted.

Leading zeros should be suppressed unless necessary to satisfy a minimum length requirement. Trailing zeros following the decimal point should be suppressed unless necessary to indicate precision. The use of triad separators (for example, the commas in 1,000,000) is expressly prohibited. The length of a decimal type data element does not include the optional leading sign or decimal point.

EXAMPLE

A transmitted value of 12.34 represents a decimal value of 12.34.

A.1.3.1.3

Identifier

An identifier data element always contains a value from a predefined list of codes that is maintained by the ASC X12 Committee or some other body recognized by the Committee. Trailing spaces should be suppressed unless they are necessary to satisfy a minimum length. An identifier is always left justified. The representation for this data element type is "ID."

A.1.3.1.4

String

A string data element is a sequence of any characters from the basic or extended character sets. The significant characters shall be left justified. Leading spaces, when they occur, are presumed to be significant characters. Trailing spaces should be suppressed unless they are necessary to satisfy a minimum length. The representation for this data element type is "AN."

A.1.3.1.5

Date

A date data element is used to express the standard date in either YYMMDD or CCYYMMDD format in which CC is the first two digits of the calendar year, YY is the last two digits of the calendar year, MM is the month (01 to 12), and DD is the day in the month (01 to 31). The representation for this data element type is "DT." Users of this guide should note that all dates within transactions are 8-character dates (millennium compliant) in the format CCYYMMDD. The only date data element that is in format YYMMDD is the Interchange Date data element in the ISA segment, and also used in the TA1 Interchange Acknowledgment, where the century can be readily interpolated because of the nature of an interchange header.

A.1.3.1.6

Time

A time data element is used to express the ISO standard time HHMMSSd.d format in which HH is the hour for a 24 hour clock (00 to 23), MM is the minute (00 to 59), SS is the second (00 to 59) and d.d is decimal seconds. The representation for this data element type is "TM." The length of the data element determines the format of the transmitted time.

EXAMPLE

Transmitted data elements of four characters denote HHMM. Transmitted data elements of six characters denote HHMMSS.

A.1.3.2

Composite Data Structure

The composite data structure is an intermediate unit of information in a segment. Composite data structures are composed of one or more logically related simple data elements, each, except the last, followed by a sub-element separator. The final data element is followed by the next data element separator or the segment terminator. Each simple data element within a composite is called a component.

Each composite data structure has a unique four-character identifier, a name, and a purpose. The identifier serves as a label for the composite. A composite data structure can be further defined through the use of syntax notes, semantic notes, and comments. Each component within the composite is further characterized by a reference designator and a condition designator. The reference designators and the condition designators are described below.

A.1.3.3 Data Segment

The data segment is an intermediate unit of information in a transaction set. In the data stream, a data segment consists of a segment identifier, one or more composite data structures or simple data elements each preceded by a data element separator and succeeded by a segment terminator.

Each data segment has a unique two- or three-character identifier, a name, and a purpose. The identifier serves as a label for the data segment. A segment can be further defined through the use of syntax notes, semantic notes, and comments. Each simple data element or composite data structure within the segment is further characterized by a reference designator and a condition designator.

A.1.3.4 Syntax Notes

Syntax notes describe relational conditions among two or more data segment units within the same segment, or among two or more component data elements within the same composite data structure. For a complete description of the relational conditions, See A.1.3.8, Condition Designator.

A.1.3.5 Semantic Notes

Simple data elements or composite data structures may be referenced by a semantic note within a particular segment. A semantic note provides important additional information regarding the intended meaning of a designated data element, particularly a generic type, in the context of its use within a specific data segment. Semantic notes may also define a relational condition among data elements in a segment based on the presence of a specific value (or one of a set of values) in one of the data elements.

A.1.3.6 Comments

A segment comment provides additional information regarding the intended use of the segment.

A.1.3.7 Reference Designator

Each simple data element or composite data structure in a segment is provided a structured code that indicates the segment in which it is used and the sequential position within the segment. The code is composed of the segment identifier followed by a two-digit number that defines the position of the simple data element or composite data structure in that segment.

For purposes of creating reference designators, the composite data structure is viewed as the hierarchical equal of the simple data element. Each component data element in a composite data structure is identified by a suffix appended to the reference designator for the composite data structure of which it is a member.

This suffix is a two-digit number, prefixed with a hyphen, that defines the position of the component data element in the composite data structure.

EXAMPLE

- The first simple element of the CLP segment would be identified as CLP01.
- The first position in the SVC segment is occupied by a composite data structure that contains seven component data elements, the reference designator for the second component data element would be SVC01-02.

A.1.3.8 Condition Designator

This section provides information about X12 standard conditions designators. It is provided so that users will have information about the general standard. Implementation guides may impose other conditions designators. See implementation guide section 3.1 Presentation Examples for detailed information about the implementation guide Industry Usage requirements for compliant implementation.

Data element conditions are of three types: mandatory, optional, and relational. They define the circumstances under which a data element may be required to be present or not present in a particular segment.

DESIGNATOR	DESCRIPTION										
M- Mandatory	The designation of mandatory is absolute in the sense that there is no dependency on other data elements. This designation may apply to either simple data elements or composite data structures. If the designation applies to a composite data structure, then at least one value of a component data element in that composite data structure shall be included in the data segment.										
O- Optional	The designation of optional means that there is no requirement for a simple data element or composite data structure to be present in the segment. The presence of a value for a simple data element or the presence of value for any of the component data elements of a composite data structure is at the option of the sender.										
X- Relational	Relational conditions may exist among two or more simple data elements within the same data segment based on the presence or absence of one of those data elements (presence means a data element must not be empty). Relational conditions are specified by a condition code (see table below) and the reference designators of the affected data elements. A data element may be subject to more than one relational condition. The definitions for each of the condition codes used within syntax notes are detailed below:										
	<table border="1"> <thead> <tr> <th>CONDITION CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>P- Paired or Multiple</td> <td>If any element specified in the relational condition is present, then all of the elements specified must be present.</td> </tr> <tr> <td>R- Required</td> <td>At least one of the elements specified in the condition must be present.</td> </tr> <tr> <td>E- Exclusion</td> <td>Not more than one of the elements specified in the condition may be present.</td> </tr> <tr> <td>C- Conditional</td> <td>If the first element specified in the condition is present, then all other elements must be present. However, any or all of the elements not specified as the first element in the condition may appear without requiring that the first element be present. The order of the elements in the condition does not have to be the same as the order of the data elements in the data segment.</td> </tr> </tbody> </table>	CONDITION CODE	DEFINITION	P- Paired or Multiple	If any element specified in the relational condition is present, then all of the elements specified must be present.	R- Required	At least one of the elements specified in the condition must be present.	E- Exclusion	Not more than one of the elements specified in the condition may be present.	C- Conditional	If the first element specified in the condition is present, then all other elements must be present. However, any or all of the elements not specified as the first element in the condition may appear without requiring that the first element be present. The order of the elements in the condition does not have to be the same as the order of the data elements in the data segment.
CONDITION CODE	DEFINITION										
P- Paired or Multiple	If any element specified in the relational condition is present, then all of the elements specified must be present.										
R- Required	At least one of the elements specified in the condition must be present.										
E- Exclusion	Not more than one of the elements specified in the condition may be present.										
C- Conditional	If the first element specified in the condition is present, then all other elements must be present. However, any or all of the elements not specified as the first element in the condition may appear without requiring that the first element be present. The order of the elements in the condition does not have to be the same as the order of the data elements in the data segment.										

L- List

Conditional

If the first element specified in the condition is present, then at least one of the remaining elements must be present. However, any or all of the elements not specified as the first element in the condition may appear without requiring that the first element be present. The order of the elements in the condition does not have to be the same as the order of the data elements in the data segment.

Table A5. Condition Designator

A.1.3.9 Absence of Data

Any simple data element that is indicated as mandatory must not be empty if the segment is used. At least one component data element of a composite data structure that is indicated as mandatory must not be empty if the segment is used. Optional simple data elements and/or composite data structures and their preceding data element separators that are not needed should be omitted if they occur at the end of a segment. If they do not occur at the end of the segment, the simple data element values and/or composite data structure values may be omitted. Their absence is indicated by the occurrence of their preceding data element separators, in order to maintain the element's or structure's position as defined in the data segment.

Likewise, when additional information is not necessary within a composite, the composite may be terminated by providing the appropriate data element separator or segment terminator.

A.1.3.10 Control Segments

A control segment has the same structure as a data segment, but it is used for transferring control information rather than application information.

A.1.3.10.1 Loop Control Segments

Loop control segments are used only to delineate bounded loops. Delineation of the loop shall consist of the loop header (LS segment) and the loop trailer (LE segment). The loop header defines the start of a structure that must contain one or more iterations of a loop of data segments and provides the loop identifier for this loop. The loop trailer defines the end of the structure. The LS segment appears only before the first occurrence of the loop, and the LE segment appears only after the last occurrence of the loop. Unbounded looping structures do not use loop control segments.

A.1.3.10.2 Transaction Set Control Segments

The transaction set is delineated by the transaction set header (ST segment) and the transaction set trailer (SE segment). The transaction set header identifies the start and identifier of the transaction set. The transaction set trailer identifies the end of the transaction set and provides a count of the data segments, which includes the ST and SE segments.

A.1.3.10.3 Functional Group Control Segments

The functional group is delineated by the functional group header (GS segment) and the functional group trailer (GE segment). The functional group header starts

and identifies one or more related transaction sets and provides a control number and application identification information. The functional group trailer defines the end of the functional group of related transaction sets and provides a count of contained transaction sets.

A.1.3.10.4

Relations among Control Segments

The control segment of this standard must have a nested relationship as is shown and annotated in this subsection. The letters preceding the control segment name are the segment identifier for that control segment. The indentation of segment identifiers shown below indicates the subordination among control segments.

GS Functional Group Header, starts a group of related transaction sets.

ST Transaction Set Header, starts a transaction set.

LS Loop Header, starts a bounded loop of data segments but is not part of the loop.

LS Loop Header, starts an inner, nested, bounded loop.

LE Loop Trailer, ends an inner, nested bounded loop.

LE Loop Trailer, ends a bounded loop of data segments but is not part of the loop.

SE Transaction Set Trailer, ends a transaction set.

GE Functional Group Trailer, ends a group of related transaction sets.

More than one ST/SE pair, each representing a transaction set, may be used within one functional group. Also more than one LS/LE pair, each representing a bounded loop, may be used within one transaction set.

A.1.3.11

Transaction Set

The transaction set is the smallest meaningful set of information exchanged between trading partners. The transaction set consists of a transaction set header segment, one or more data segments in a specified order, and a transaction set trailer segment. See figure A1, Transmission Control Schematic.

A.1.3.11.1

Transaction Set Header and Trailer

A transaction set identifier uniquely identifies a transaction set. This identifier is the first data element of the Transaction Set Header Segment (ST). A user assigned transaction set control number in the header must match the control number in the Trailer Segment (SE) for any given transaction set. The value for the number of included segments in the SE segment is the total number of segments in the transaction set, including the ST and SE segments.

A.1.3.11.2

Data Segment Groups

The data segments in a transaction set may be repeated as individual data segments or as unbounded or bounded loops.

A.1.3.11.3

Repeated Occurrences of Single Data Segments

When a single data segment is allowed to be repeated, it may have a specified maximum number of occurrences defined at each specified position within a

given transaction set standard. Alternatively, a segment may be allowed to repeat an unlimited number of times. The notation for an unlimited number of repetitions is ">1."

A.1.3.11.4 Loops of Data Segments

Loops are groups of semantically related segments. Data segment loops may be unbounded or bounded.

A.1.3.11.4.1 Unbounded Loops

To establish the iteration of a loop, the first data segment in the loop must appear once and only once in each iteration. Loops may have a specified maximum number of repetitions. Alternatively, the loop may be specified as having an unlimited number of iterations. The notation for an unlimited number of repetitions is ">1."

A specified sequence of segments is in the loop. Loops themselves are optional or mandatory. The requirement designator of the beginning segment of a loop indicates whether at least one occurrence of the loop is required. Each appearance of the beginning segment defines an occurrence of the loop.

The requirement designator of any segment within the loop after the beginning segment applies to that segment for each occurrence of the loop. If there is a mandatory requirement designator for any data segment within the loop after the beginning segment, that data segment is mandatory for each occurrence of the loop. If the loop is optional, the mandatory segment only occurs if the loop occurs.

A.1.3.11.4.2 Bounded Loops

The characteristics of unbounded loops described previously also apply to bounded loops. In addition, bounded loops require a Loop Start Segment (LS) to appear before the first occurrence and a Loop End Segment (LE) to appear after the last occurrence of the loop. If the loop does not occur, the LS and LE segments are suppressed.

A.1.3.11.5 Data Segments in a Transaction Set

When data segments are combined to form a transaction set, three characteristics are applied to each data segment: a requirement designator, a position in the transaction set, and a maximum occurrence.

A.1.3.11.6 Data Segment Requirement Designators

A data segment, or loop, has one of the following requirement designators for health care and insurance transaction sets, indicating its appearance in the data stream of a transmission. These requirement designators are represented by a single character code.

<u>DESIGNATOR</u>	<u>DESCRIPTION</u>
M- Mandatory	This data segment must be included in the transaction set. (Note that a data segment may be mandatory in a loop of data segments, but the loop itself is optional if the beginning segment of the loop is designated as optional.)
O- Optional	The presence of this data segment is the option of the sending party.

A.1.3.11.7 Data Segment Position

The ordinal positions of the segments in a transaction set are explicitly specified for that transaction. Subject to the flexibility provided by the optional requirement designators of the segments, this positioning must be maintained.

A.1.3.11.8 Data Segment Occurrence

A data segment may have a maximum occurrence of one, a finite number greater than one, or an unlimited number indicated by ">1."

A.1.3.12 Functional Group

A functional group is a group of similar transaction sets that is bounded by a functional group header segment and a functional group trailer segment. The functional identifier defines the group of transactions that may be included within the functional group. The value for the functional group control number in the header and trailer control segments must be identical for any given group. The value for the number of included transaction sets is the total number of transaction sets in the group. See figure A1, Transmission Control Schematic.

A.1.4 Envelopes and Control Structures

A.1.4.1 Interchange Control Structures

Typically, the term "interchange" connotes the ISA/IEA envelope that is transmitted between trading/business partners. Interchange control is achieved through several "control" components. The interchange control number is contained in data element ISA13 of the ISA segment. The identical control number must also occur in data element 02 of the IEA segment. Most commercial translation software products will verify that these two fields are identical. In most translation software products, if these fields are different the interchange will be "suspended" in error.

There are many other features of the ISA segment that are used for control measures. For instance, the ISA segment contains data elements such as authorization information, security information, sender identification, and receiver identification that can be used for control purposes. These data elements are agreed upon by the trading partners prior to transmission and are contained in the written trading partner agreement. The interchange date and time data elements as well as the interchange control number within the ISA segment are used for debugging purposes when there is a problem with the transmission or the interchange.

Data Element ISA12, Interchange Control Version Number, indicates the version of the ISA/IEA envelope. The ISA12 does not indicate the version of the transaction set that is being transmitted but rather the envelope that encapsulates the transaction. An Interchange Acknowledgment can be denoted through data element ISA14. The acknowledgment that would be sent in reply to a "yes" condition in data element ISA14 would be the TA1 segment. Data element ISA15, Test Indicator, is used between trading partners to indicate that the transmission is in a "test" or "production" mode. This becomes significant when the production phase of the project is to commence. Data element ISA16, Subelement Separator, is used by the translator for interpretation of composite data elements.

The ending component of the interchange or ISA/IEA envelope is the IEA segment. Data element IEA01 indicates the number of functional groups that are included within the interchange. In most commercial translation software products, an aggregate count of functional groups is kept while interpreting the interchange. This count is then verified with data element IEA01. If there is a discrepancy

ancy, in most commercial products, the interchange is suspended. The other data element in the IEA segment is IEA02 which is referenced above.

See the Appendix B, EDI Control Directory, for a complete detailing of the interchange control header and trailer.

A.1.4.2 Functional Groups

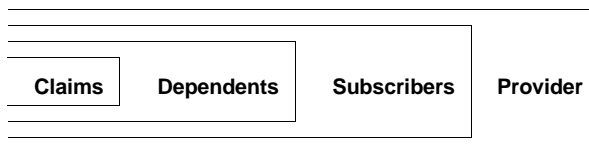
Control structures within the functional group envelope include the functional identifier code in GS01. The Functional Identifier Code is used by the commercial translation software during interpretation of the interchange to determine the different transaction sets that may be included within the functional group. If an inappropriate transaction set is contained within the functional group, most commercial translation software will suspend the functional group within the interchange. The Application Sender's Code in GS02 can be used to identify the sending unit of the transmission. The Application Receiver's Code in GS03 can be used to identify the receiving unit of the transmission. For health care, this unit identification can be used to differentiate between managed care, indemnity, and Medicare. The functional group contains a creation date (GS04) and creation time (GS05) for the functional group. The Group Control Number is contained in GS06. These data elements (GS04, GS05, AND GS06) can be used for debugging purposes during problem resolution. GS08, Version/Release/Industry Identifier Code is the version/release/sub-release of the transaction sets being transmitted in this functional group. Appendix B provides guidance for the value for this data element. The GS08 does not represent the version of the interchange (ISA/IEA) envelope but rather the version/release/sub-release of the transaction sets that are encompassed within the GS/GE envelope.

The Functional Group Control Number in GS06 must be identical to data element 02 of the GE segment. Data element GE01 indicates the number of transaction sets within the functional group. In most commercial translation software products, an aggregate count of the transaction sets is kept while interpreting the functional group. This count is then verified with data element GE01.

See the Appendix B, EDI Control Directory, for a complete detailing of the functional group header and trailer.

A.1.4.3 HL Structures

The HL segment is used in several X12 transaction sets to identify levels of detail information using a hierarchical structure, such as relating dependents to a subscriber. Hierarchical levels may differ from guide to guide. The following diagram, from transaction set 837, illustrates a typical hierarchy.



Each provider can bill for one or more subscribers, each subscriber can have one or more dependents and the subscriber and the dependents can make one or more claims. Each guide states what levels are available, the level's requirement, a repeat value, and whether that level has subordinate levels within a transmission.

A.1.5 Acknowledgments

A.1.5.1 Interchange Acknowledgment, TA1

The Interchange or TA1 Acknowledgment is a means of replying to an interchange or transmission that has been sent. The TA1 verifies the envelopes only. Transaction set-specific verification is accomplished through use of the Functional Acknowledgment Transaction Set, 997. See A.1.5.2, Functional Acknowledgment, 997, for more details. The TA1 is a single segment and is unique in the sense that this single segment is transmitted without the GS/GE envelope structures. A TA1 can be included in an interchange with other functional groups and transactions.

Encompassed in the TA1 are the interchange control number, interchange date and time, interchange acknowledgment code, and the interchange note code. The interchange control number, interchange date and time are identical to those that were present in the transmitted interchange from the sending trading partner. This provides the capability to associate the TA1 with the transmitted interchange. TA104, Interchange Acknowledgment Code, indicates the status of the interchange control structure. This data element stipulates whether the transmitted interchange was accepted with no errors, accepted with errors, or rejected because of errors. TA105, Interchange Note Code, is a numerical code that indicates the error found while processing the interchange control structure. Values for this data element indicate whether the error occurred at the interchange or functional group envelope.

The TA1 segment provides the capability for the receiving trading partner to notify the sending trading partner of problems that were encountered in the interchange control structure.

Due to the uniqueness of the TA1, implementation should be predicated upon the ability for the sending and receiving trading partners commercial translators to accommodate the uniqueness of the TA1. Unless named as mandatory in the Federal Rules implementing HIPAA, use of the TA1, although urged by the authors, is not mandated.

See the Appendix B, EDI Control Directory, for a complete detailing of the TA1 segment.

A.1.5.2 Functional Acknowledgment, 997

The Functional Acknowledgment Transaction Set, 997, has been designed to allow trading partners to establish a comprehensive control function as a part of their business exchange process. This acknowledgment process facilitates control of EDI. There is a one-to-one correspondence between a 997 and a functional group. Segments within the 997 can identify the acceptance or rejection of the functional group, transaction sets or segments. Data elements in error can also be identified. There are many EDI implementations that have incorporated the acknowledgment process in all of their electronic communications. Typically, the 997 is used as a functional acknowledgment to a previously transmitted functional group. Many commercially available translators can automatically generate this transaction set through internal parameter settings. Additionally translators will automatically reconcile received acknowledgments to functional groups that have been sent. The benefit to this process is that the sending trading partner

can determine if the receiving trading partner has received ASC X12 transaction sets through reports that can be generated by the translation software to identify transmissions that have not been acknowledged.

As stated previously the 997 is a transaction set and thus is encapsulated within the interchange control structure (envelopes) for transmission.

As with any information flow, an acknowledgment process is essential. If an “automatic” acknowledgment process is desired between trading partners then it is recommended that the 997 be used. Unless named as mandatory in the Federal Rules implementing HIPAA, use of the 997, although recommended by the authors, is not mandated.

See Appendix B, EDI Control Directory, for a complete detailing of transaction set 997.

B EDI Control Directory

B.1 Control Segments

- **ISA**
Interchange Control Header Segment
- **IEA**
Interchange Control Trailer Segment
- **GS**
Functional Group Header Segment
- **GE**
Functional Group Trailer Segment
- **TA1**
Interchange Acknowledgment Segment

B.2 Functional Acknowledgment Transaction Set, 997

IMPLEMENTATION

INTERCHANGE CONTROL HEADER

Notes: 1. The ISA is a fixed record length segment and all positions within each of the data elements must be filled. The first element separator defines the element separator to be used through the entire interchange. The segment terminator used after the ISA defines the segment terminator to be used throughout the entire interchange. Spaces in the example are represented by "." for clarity.

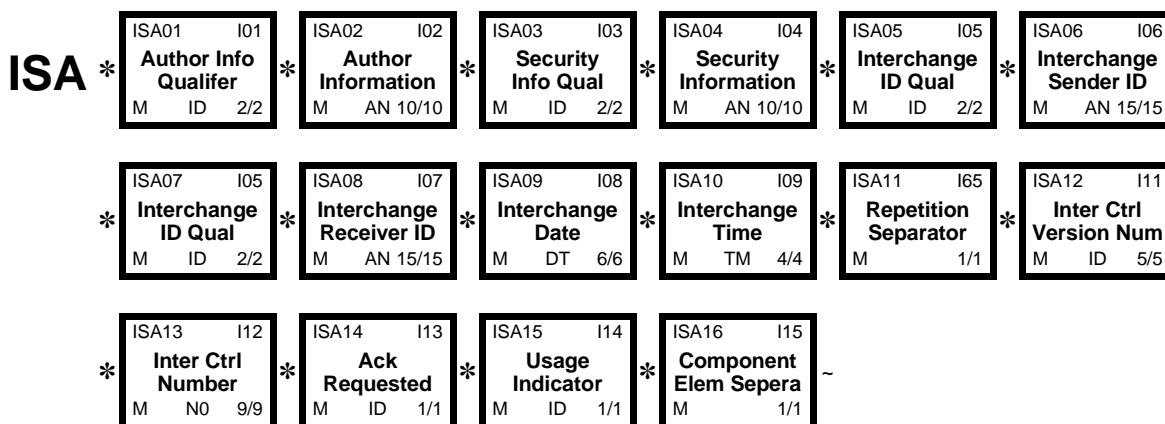
Example: ISA* 00** 01* SECRET...* ZZ* SUBMITTERS.ID...* ZZ* RECEIVERS.ID...* 930602* 1253* U* 00402* 000000905* 1* T* :~

STANDARD

ISA Interchange Control Header

Purpose: To start and identify an interchange of zero or more functional groups and interchange-related control segments

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	ISA01	I01	Authorization Information Qualifier Code identifying the type of information in the Authorization Information	M ID 2/2
			CODE	DEFINITION
			00	No Authorization Information Present (No Meaningful Information in I02) ADVISED
			03	Additional Data Identification
REQUIRED	ISA02	I02	Authorization Information Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01)	M AN 10/10

REQUIRED	ISA	ID	Segment Name	M	AN	ID	2/2
REQUIRED	ISA03	I03	Security Information Qualifier Code identifying the type of information in the Security Information				
			00				No Security Information Present (No Meaningful Information in I04) ADVISED
			01				Password
REQUIRED	ISA04	I04	Security Information This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (I03)	M	AN		10/10
REQUIRED	ISA05	I05	Interchange ID Qualifier Code indicating the system/method of code structure used to designate the sender or receiver ID element being qualified	M	ID		2/2
			This ID qualifies the Sender in ISA06.				
			01				Duns (Dun & Bradstreet)
			14				Duns Plus Suffix
			20				Health Industry Number (HIN) CODE SOURCE 121: Health Industry Number
			27				Carrier Identification Number as assigned by Health Care Financing Administration (HCFA)
			28				Fiscal Intermediary Identification Number as assigned by Health Care Financing Administration (HCFA)
			29				Medicare Provider and Supplier Identification Number as assigned by Health Care Financing Administration (HCFA)
			30				U.S. Federal Tax Identification Number
			33				National Association of Insurance Commissioners Company Code (NAIC)
			ZZ				Mutually Defined
REQUIRED	ISA06	I06	Interchange Sender ID Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element	M	AN		15/15
REQUIRED	ISA07	I05	Interchange ID Qualifier Code indicating the system/method of code structure used to designate the sender or receiver ID element being qualified	M	ID		2/2
			This ID qualifies the Receiver in ISA08.				
			01				Duns (Dun & Bradstreet)

			14	Duns Plus Suffix			
			20	Health Industry Number (HIN)			
				CODE SOURCE 121: Health Industry Number			
			27	Carrier Identification Number as assigned by Health Care Financing Administration (HCFA)			
			28	Fiscal Intermediary Identification Number as assigned by Health Care Financing Administration (HCFA)			
			29	Medicare Provider and Supplier Identification Number as assigned by Health Care Financing Administration (HCFA)			
			30	U.S. Federal Tax Identification Number			
			33	National Association of Insurance Commissioners Company Code (NAIC)			
			ZZ	Mutually Defined			
REQUIRED	ISA08	I07		Interchange Receiver ID	M	AN	15/15
				Identification code published by the receiver of the data; When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them			
REQUIRED	ISA09	I08		Interchange Date	M	DT	6/6
				Date of the interchange			
				The date format is YYMMDD.			
REQUIRED	ISA10	I09		Interchange Time	M	TM	4/4
				Time of the interchange			
				The time format is HHMM.			
REQUIRED	ISA11	I65		Repetition Separator	M		1/1
				Type is not applicable; the repetition separator is a delimiter and not a data element; this field provides the delimiter used to separate repeated occurrences of a simple data element or a composite data structure; this value must be different than the data element separator, component element separator, and the segment terminator			
REQUIRED	ISA12	I11		Interchange Control Version Number	M	ID	5/5
				Code specifying the version number of the interchange control segments			
				CODE	DEFINITION		
			00402	Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1998, Version 4, Release 2			
REQUIRED	ISA13	I12		Interchange Control Number	M	NO	9/9
				A control number assigned by the interchange sender			
				The Interchange Control Number, ISA13, must be identical to the associated Interchange Trailer IEA02.			

CONTROL SEGMENTS

REQUIRED **ISA14** **I13** **Acknowledgment Requested** **M** **ID** **1/1**
Code indicating sender's request for an interchange acknowledgment

See Section A.1.5.1 for interchange acknowledgment information.

CODE	DEFINITION
------	------------

0	No Acknowledgment Requested
----------	------------------------------------

1	Interchange Acknowledgment Requested
----------	---

REQUIRED **ISA15** **I14** **Usage Indicator** **M** **ID** **1/1**
Code indicating whether data enclosed by this interchange envelope is test, production or information

CODE	DEFINITION
------	------------

P	Production Data
----------	------------------------

T	Test Data
----------	------------------

REQUIRED **ISA16** **I15** **Component Element Separator** **M** **1/1**
Type is not applicable; the component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure; this value must be different than the data element separator and the segment terminator

IMPLEMENTATION

INTERCHANGE CONTROL TRAILER

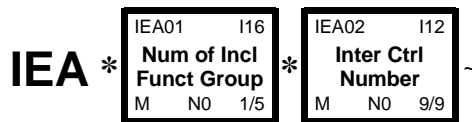
Example: IEA*1*000000905~

STANDARD

IEA Interchange Control Trailer

Purpose: To define the end of an interchange of zero or more functional groups and interchange-related control segments

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	IEA01	I16	Number of Included Functional Groups A count of the number of functional groups included in an interchange	M NO 1/5
REQUIRED	IEA02	I12	Interchange Control Number A control number assigned by the interchange sender	M NO 9/9

IMPLEMENTATION

FUNCTIONAL GROUP HEADER

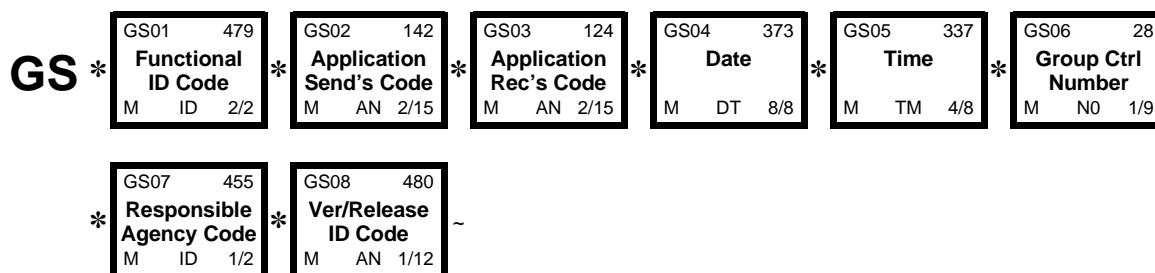
Example: **GS*HN*SENDER CODE*RECEIVER
CODE*19980331*0802*1*X*004020X104~**

STANDARD

GS Functional Group Header

Purpose: To indicate the beginning of a functional group and to provide control information

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	GS01	479	Functional Identifier Code Code identifying a group of application related transaction sets	M ID 2/2
			CODE	DEFINITION
			HN	Health Care Claim Status Notification (277)
REQUIRED	GS02	142	Application Sender's Code Code identifying party sending transmission; codes agreed to by trading partners	M AN 2/15
				Use this code to identify the unit sending the information.
REQUIRED	GS03	124	Application Receiver's Code Code identifying party receiving transmission; codes agreed to by trading partners	M AN 2/15
				Use this code to identify the unit receiving the information.
REQUIRED	GS04	373	Date Date expressed as CCYYMMDD	M DT 8/8
			SEMANTIC: GS04 is the group date.	
				Use this date for the functional group creation date.
REQUIRED	GS05	337	Time Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	M TM 4/8
			SEMANTIC: GS05 is the group time.	
				Use this time for the creation time. The recommended format is HHMM.

REQUIRED	GS06	28	Group Control Number	M NO 1/9
-----------------	-------------	-----------	-----------------------------	-----------------

Assigned number originated and maintained by the sender

SEMANTIC: The data interchange control number GS06 in this header must be identical to the same data element in the associated functional group trailer, GE02.

REQUIRED	GS07	455	Responsible Agency Code	M ID 1/2
-----------------	-------------	------------	--------------------------------	-----------------

Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480

CODE	DEFINITION
-------------	-------------------

X	Accredited Standards Committee X12
----------	---

REQUIRED	GS08	480	Version / Release / Industry Identifier Code	M AN 1/12
-----------------	-------------	------------	---	------------------

Code indicating the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments; if code in DE455 in GS segment is X, then in DE 480 positions 1-3 are the version number; positions 4-6 are the release and subrelease, level of the version; and positions 7-12 are the industry or trade association identifiers (optionally assigned by user); if code in DE455 in GS segment is T, then other formats are allowed

CODE	DEFINITION
-------------	-------------------

004020X104	Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1998, Version 4, Release 2.
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IMPLEMENTATION

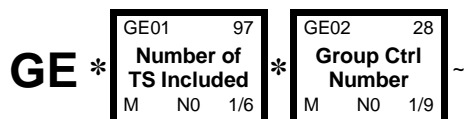
FUNCTIONAL GROUP TRAILER

Example: GE*1*1~

STANDARD

GE Functional Group Trailer**Purpose:** To indicate the end of a functional group and to provide control information

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	GE01	97	Number of Transaction Sets Included Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	M NO 1/6
REQUIRED	GE02	28	Group Control Number Assigned number originated and maintained by the sender	M NO 1/9

SEMANTIC: The data interchange control number GE02 in this trailer must be identical to the same data element in the associated functional group header, GS06.

IMPLEMENTATION

INTERCHANGE ACKNOWLEDGMENT

- Notes:
1. All fields must contain data.
 2. This segment acknowledges the reception of an X12 interchange header and trailer from a previous interchange. If the header/trailer pair was received correctly, the TA1 reflects a valid interchange, regardless of the validity of the contents of the data included inside the header/trailer envelope.
 3. See A.1.5.1, Interchange Acknowledgment, TAI, for interchange acknowledgment.
 4. Use of TA1 is subject to trading partner agreement and is neither mandated or prohibited in the Appendix.

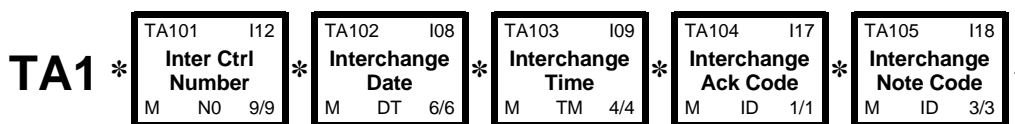
Example: TA1*000000905*940101*0100*A*001~

STANDARD

TA1 Interchange Acknowledgment

Purpose: To report the status of processing a received interchange header and trailer or the non-delivery by a network provider

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	TA101	I12	Interchange Control Number A control number assigned by the interchange sender This number uniquely identifies the interchange data to the sender. It is assigned by the sender. Together with the sender ID it uniquely identifies the interchange data to the receiver. It is suggested that the sender, receiver, and all third parties be able to maintain an audit trail of interchanges using this number. In the TA1, this should be the interchange control number of the original interchange that this TA1 is acknowledging.	M NO 9/9
REQUIRED	TA102	I08	Interchange Date Date of the interchange This is the date of the original interchange being acknowledged. (YYMMDD)	M DT 6/6

CONTROL SEGMENTS

REQUIRED TA103 I09 **Interchange Time** M TM 4/4
Time of the interchange

This is the time of the original interchange being acknowledged. (HHMM)

REQUIRED TA104 I17 **Interchange Acknowledgment Code** M ID 1/1
Code indicating the status of the receipt of the interchange control structure

CODE	DEFINITION
------	------------

A	The Transmitted Interchange Control Structure Header and Trailer Have Been Received and Have No Errors.
---	---

E	The Transmitted Interchange Control Structure Header and Trailer Have Been Received and Are Accepted But Errors Are Noted. This Means the Sender Must Not Resend This Data.
---	---

R	The Transmitted Interchange Control Structure Header and Trailer are Rejected Because of Errors.
---	--

REQUIRED TA105 I18 **Interchange Note Code** M ID 3/3
Code specifying the error found processing the interchange control structure

CODE	DEFINITION
------	------------

000	No error
-----	----------

001	The Interchange Control Number in the Header and Trailer Do Not Match. The Value From the Header is Used in the Acknowledgment.
-----	---

002	This Standard as Noted in the Control Standards Identifier is Not Supported.
-----	--

003	This Version of the Controls is Not Supported
-----	---

004	The Segment Terminator is Invalid
-----	-----------------------------------

005	Invalid Interchange ID Qualifier for Sender
-----	---

006	Invalid Interchange Sender ID
-----	-------------------------------

007	Invalid Interchange ID Qualifier for Receiver
-----	---

008	Invalid Interchange Receiver ID
-----	---------------------------------

009	Unknown Interchange Receiver ID
-----	---------------------------------

010	Invalid Authorization Information Qualifier Value
-----	---

011	Invalid Authorization Information Value
-----	---

012	Invalid Security Information Qualifier Value
-----	--

013	Invalid Security Information Value
-----	------------------------------------

014	Invalid Interchange Date Value
-----	--------------------------------

015	Invalid Interchange Time Value
-----	--------------------------------

016	Invalid Interchange Standards Identifier Value
-----	--

017	Invalid Interchange Version ID Value
018	Invalid Interchange Control Number Value
019	Invalid Acknowledgment Requested Value
020	Invalid Test Indicator Value
021	Invalid Number of Included Groups Value
022	Invalid Control Structure
023	Improper (Premature) End-of-File (Transmission)
024	Invalid Interchange Content (e.g., Invalid GS Segment)
025	Duplicate Interchange Control Number
026	Invalid Data Element Separator
027	Invalid Component Element Separator
028	Invalid Delivery Date in Deferred Delivery Request
029	Invalid Delivery Time in Deferred Delivery Request
030	Invalid Delivery Time Code in Deferred Delivery Request
031	Invalid Grade of Service Code

STANDARD

997 Functional Acknowledgment

Functional Group ID: **FA**

This Draft Standard for Trial Use contains the format and establishes the data contents of the Functional Acknowledgment Transaction Set (997) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to define the control structures for a set of acknowledgments to indicate the results of the syntactical analysis of the electronically encoded documents. The encoded documents are the transaction sets, which are grouped in functional groups, used in defining transactions for business data interchange. This standard does not cover the semantic meaning of the information encoded in the transaction sets.

Table 1 - Header

POS. #	SEG. ID	NAME	REQ. DES.	MAX USE	LOOP REPEAT
0100	ST	Transaction Set Header	M	1	
0200	AK1	Functional Group Response Header	M	1	
LOOP ID - AK2					999999
0300	AK2	Transaction Set Response Header	O	1	
LOOP ID - AK2/AK3					999999
0400	AK3	Data Segment Note	O	1	
0500	AK4	Data Element Note	O	99	
0600	AK5	Transaction Set Response Trailer	M	1	
0700	AK9	Functional Group Response Trailer	M	1	
0800	SE	Transaction Set Trailer	M	1	

NOTES:

- 1/0100 These acknowledgments shall not be acknowledged, thereby preventing an endless cycle of acknowledgments of acknowledgments. Nor shall a Functional Acknowledgment be sent to report errors in a previous Functional Acknowledgment.
- 1/0100 The Functional Group Header Segment (GS) is used to start the envelope for the Functional Acknowledgment Transaction Sets. In preparing the functional group of acknowledgments, the application sender's code and the application receiver's code, taken from the functional group being acknowledged, are exchanged; therefore, one acknowledgment functional group responds to only those functional groups from one application receiver's code to one application sender's code.
- 1/0100 There is only one Functional Acknowledgment Transaction Set per acknowledged functional group.
- 1/0200 AK1 is used to respond to the functional group header and to start the acknowledgment for a functional group. There shall be one AK1 segment for the functional group that is being acknowledged.
- 1/0300 AK2 is used to start the acknowledgment of a transaction set within the received functional group. The AK2 segments shall appear in the same order as the transaction sets in the functional group that has been received and is being acknowledged.
- 1/0400 The data segments of this standard are used to report the results of the syntactical analysis of the functional groups of transaction sets; they report the extent to which the syntax complies with the standards for transaction sets and functional groups. They do not report on the semantic meaning of the transaction sets (for example, on the ability of the receiver to comply with the request of the sender).

IMPLEMENTATION

TRANSACTION SET HEADER

Usage: REQUIRED

Repeat: 1

Notes: 1. Use of the 997 transaction is subject to trading partner agreement or accepted usage and is neither mandated nor prohibited in this Appendix.

Example: ST*997*1234~

STANDARD

ST Transaction Set Header

Level: Header

Position: 0100

Loop: _____

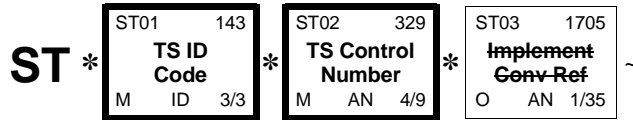
Requirement: Mandatory

Max Use: 1

Purpose: To indicate the start of a transaction set and to assign a control number

- Set Notes:**
1. These acknowledgments shall not be acknowledged, thereby preventing an endless cycle of acknowledgments of acknowledgments. Nor shall a Functional Acknowledgment be sent to report errors in a previous Functional Acknowledgment.
 2. The Functional Group Header Segment (GS) is used to start the envelope for the Functional Acknowledgment Transaction Sets. In preparing the functional group of acknowledgments, the application sender's code and the application receiver's code, taken from the functional group being acknowledged, are exchanged; therefore, one acknowledgment functional group responds to only those functional groups from one application receiver's code to one application sender's code.
 3. There is only one Functional Acknowledgment Transaction Set per acknowledged functional group.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES				
REQUIRED	ST01	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set	M ID 3/3				
<p>SEMANTIC: The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).</p> <table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>997</td> <td>Functional Acknowledgment</td> </tr> </tbody> </table>					CODE	DEFINITION	997	Functional Acknowledgment
CODE	DEFINITION							
997	Functional Acknowledgment							
REQUIRED	ST02	329	Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M AN 4/9				
<p>The Transaction Set Control Numbers in ST02 and SE02 must be identical. The number is assigned by the originator and must be unique within a functional group (GS-GE). The number also aids in error resolution research. For example, start with the number 0001 and increment from there.</p>								
<p>Use the corresponding value in ST02 for this transaction set.</p>								
NOT USED	ST03	1705	Implementation Convention Reference	O AN 1/35				

IMPLEMENTATION

FUNCTIONAL GROUP RESPONSE HEADER

Usage: REQUIRED

Repeat: 1

Example: AK1*HN*1~

STANDARD

AK1 Functional Group Response Header

Level: Header

Position: 0200

Loop: _____

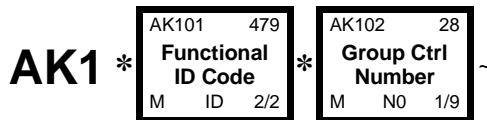
Requirement: Mandatory

Max Use: 1

Purpose: To start acknowledgment of a functional group

Set Notes: 1. AK1 is used to respond to the functional group header and to start the acknowledgment for a functional group. There shall be one AK1 segment for the functional group that is being acknowledged.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	AK101	479	Functional Identifier Code Code identifying a group of application related transaction sets SEMANTIC: AK101 is the functional ID found in the GS segment (GS01) in the functional group being acknowledged.	M ID 2/2
			CODE DEFINITION	
			HN Health Care Claim Status Notification (277)	
REQUIRED	AK102	28	Group Control Number Assigned number originated and maintained by the sender SEMANTIC: AK102 is the functional group control number found in the GS segment in the functional group being acknowledged.	M NO 1/9

IMPLEMENTATION

TRANSACTION SET RESPONSE HEADER

Loop: AK2 — TRANSACTION SET RESPONSE HEADER Repeat: 999999

Usage: SITUATIONAL

Repeat: 1

Notes: 1. Required when communicating information about a transaction set within a functional group identified in AK1.

Example: AK2*277*000000905~

STANDARD

AK2 Transaction Set Response Header

Level: Header

Position: 0300

Loop: AK2 Repeat: 999999

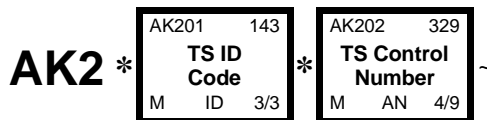
Requirement: Optional

Max Use: 1

Purpose: To start acknowledgment of a single transaction set

Set Notes: 1. AK2 is used to start the acknowledgment of a transaction set within the received functional group. The AK2 segments shall appear in the same order as the transaction sets in the functional group that has been received and is being acknowledged.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	AK201	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set SEMANTIC: AK201 is the transaction set ID found in the ST segment (ST01) in the transaction set being acknowledged.	M ID 3/3
			CODE	DEFINITION
		277	Health Care Claim Status Notification	
REQUIRED	AK202	329	Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set SEMANTIC: AK202 is the transaction set control number found in the ST segment in the transaction set being acknowledged.	M AN 4/9

IMPLEMENTATION

DATA SEGMENT NOTE

Loop: AK2/AK3 — DATA SEGMENT NOTE Repeat: 999999

Usage: SITUATIONAL

Repeat: 1

Notes: 1. Used when there are errors to report in a transaction.

Example: AK3*NM1*37*CLP*7~

STANDARD

AK3 Data Segment Note

Level: Header

Position: 0400

Loop: AK2/AK3 Repeat: 999999

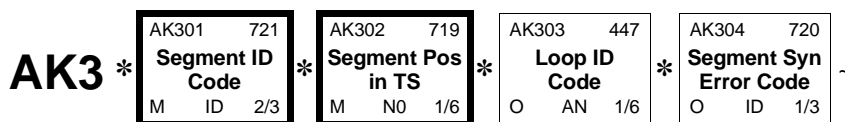
Requirement: Optional

Max Use: 1

Purpose: To report errors in a data segment and identify the location of the data segment

Set Notes: 1. The data segments of this standard are used to report the results of the syntactical analysis of the functional groups of transaction sets; they report the extent to which the syntax complies with the standards for transaction sets and functional groups. They do not report on the semantic meaning of the transaction sets (for example, on the ability of the receiver to comply with the request of the sender).

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	AK301	721	Segment ID Code Code defining the segment ID of the data segment in error (See Appendix A - Number 77) CODE SOURCE 77: X12 Directories This is the 2 or 3 characters which occur at the beginning of a segment.	M ID 2/3
REQUIRED	AK302	719	Segment Position in Transaction Set The numerical count position of this data segment from the start of the transaction set: the transaction set header is count position 1 This is a data count, not a segment position in the standard description.	M NO 1/6

SITUATIONAL	AK303	447	Loop Identifier Code The loop ID number given on the transaction set diagram is the value for this data element in segments LS and LE	O AN 1/6
Code identifying a loop within the transaction set which is bounded by the related LS and LE segments (corresponding LS and LE segments must have the same value for loop identifier). (Note: The loop ID number given on the transaction set diagram is recommended as the value for this data element in the segments LS and LE.)				

SITUATIONAL	AK304	720	Segment Syntax Error Code Code indicating error found based on the syntax editing of a segment	O ID 1/3																		
Required if error exists																						
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">CODE</th> <th style="text-align: center;">DEFINITION</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>Unrecognized segment ID</td> </tr> <tr> <td style="text-align: center;">2</td> <td>Unexpected segment</td> </tr> <tr> <td style="text-align: center;">3</td> <td>Mandatory segment missing</td> </tr> <tr> <td style="text-align: center;">4</td> <td>Loop Occurs Over Maximum Times</td> </tr> <tr> <td style="text-align: center;">5</td> <td>Segment Exceeds Maximum Use</td> </tr> <tr> <td style="text-align: center;">6</td> <td>Segment Not in Defined Transaction Set</td> </tr> <tr> <td style="text-align: center;">7</td> <td>Segment Not in Proper Sequence</td> </tr> <tr> <td style="text-align: center;">8</td> <td>Segment Has Data Element Errors</td> </tr> </tbody> </table>					CODE	DEFINITION	1	Unrecognized segment ID	2	Unexpected segment	3	Mandatory segment missing	4	Loop Occurs Over Maximum Times	5	Segment Exceeds Maximum Use	6	Segment Not in Defined Transaction Set	7	Segment Not in Proper Sequence	8	Segment Has Data Element Errors
CODE	DEFINITION																					
1	Unrecognized segment ID																					
2	Unexpected segment																					
3	Mandatory segment missing																					
4	Loop Occurs Over Maximum Times																					
5	Segment Exceeds Maximum Use																					
6	Segment Not in Defined Transaction Set																					
7	Segment Not in Proper Sequence																					
8	Segment Has Data Element Errors																					

IMPLEMENTATION

DATA ELEMENT NOTE

Loop: AK2/AK3 — DATA SEGMENT NOTE

Usage: SITUATIONAL

Repeat: 99

Notes: 1. Used when there are errors to report in a data element or composite data structure.

Example: AK4*1*98*7~

STANDARD

AK4 Data Element Note

Level: Header

Position: 0500

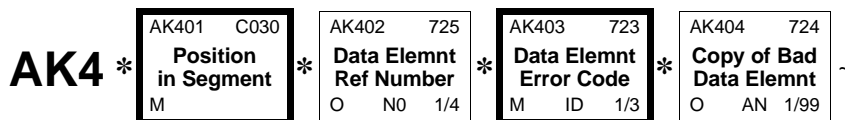
Loop: AK2/AK3

Requirement: Optional

Max Use: 99

Purpose: To report errors in a data element or composite data structure and identify the location of the data element

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	AK401	C030	POSITION IN SEGMENT	M Code indicating the relative position of a simple data element, or the relative position of a composite data structure combined with the relative position of the component data element within the composite data structure, in error; the count starts with 1 for the simple data element or composite data structure immediately following the segment ID
REQUIRED	AK401 - 1	722	Element Position in Segment	M NO 1/2 This is used to indicate the relative position of a simple data element, or the relative position of a composite data structure with the relative position of the component within the composite data structure, in error; in the data segment the count starts with 1 for the simple data element or composite data structure immediately following the segment ID
SITUATIONAL	AK401 - 2	1528	Component Data Element Position in Composite	O NO 1/2 To identify the component data element position within the composite that is in error

Used when an error occurs in a composite data element and the composite data element position can be determined.

SITUATIONAL	AK401 - 3	1686	Repeating Data Element Position	O NO 1/4
			To identify the specific repetition of a data element that is in error	
SITUATIONAL	AK402 725	725	Data Element Reference Number	O NO 1/4
			Reference number used to locate the data element in the Data Element Dictionary	
			ADVISORY: Under most circumstances, this element is expected to be sent.	
			CODE SOURCE 77: X12 Directories	
			The Data Element Reference Number for this data element is 725. All reference numbers are found with the segment descriptions in this guide.	
REQUIRED	AK403 723	723	Data Element Syntax Error Code	M ID 1/3
			Code indicating the error found after syntax edits of a data element	
			CODE	DEFINITION
			1	Mandatory data element missing
			2	Conditional required data element missing.
			3	Too many data elements.
			4	Data element too short.
			5	Data element too long.
			6	Invalid character in data element.
			7	Invalid code value.
			8	Invalid Date
			9	Invalid Time
			10	Exclusion Condition Violated
SITUATIONAL	AK404 724	724	Copy of Bad Data Element	O AN 1/99
			This is a copy of the data element in error	
			SEMANTIC: In no case shall a value be used for AK404 that would generate a syntax error, e.g., an invalid character.	
			Used to provide copy of erroneous data to the original submitter, but this is not used if the error reported in an invalid character.	

IMPLEMENTATION

TRANSACTION SET RESPONSE TRAILER

Loop: AK2/AK3 — DATA SEGMENT NOTE

Usage: REQUIRED

Repeat: 1

Example: AK5*E*5~

STANDARD

AK5 Transaction Set Response Trailer

Level: Header

Position: 0600

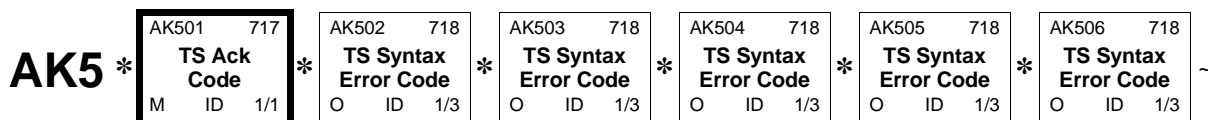
Loop: AK2

Requirement: Mandatory

Max Use: 1

Purpose: To acknowledge acceptance or rejection and report errors in a transaction set

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES								
REQUIRED	AK501	717	Transaction Set Acknowledgment Code Code indicating accept or reject condition based on the syntax editing of the transaction set	M ID 1/1								
			<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Accepted ADVISED</td> </tr> <tr> <td>E</td> <td>Accepted But Errors Were Noted</td> </tr> <tr> <td>R</td> <td>Rejected ADVISED</td> </tr> </tbody> </table>	CODE	DEFINITION	A	Accepted ADVISED	E	Accepted But Errors Were Noted	R	Rejected ADVISED	
CODE	DEFINITION											
A	Accepted ADVISED											
E	Accepted But Errors Were Noted											
R	Rejected ADVISED											
SITUATIONAL	AK502	718	Transaction Set Syntax Error Code Code indicating error found based on the syntax editing of a transaction set	O ID 1/3								
			Required if error exists									
			<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Transaction Set Not Supported</td> </tr> <tr> <td>2</td> <td>Transaction Set Trailer Missing</td> </tr> </tbody> </table>	CODE	DEFINITION	1	Transaction Set Not Supported	2	Transaction Set Trailer Missing			
CODE	DEFINITION											
1	Transaction Set Not Supported											
2	Transaction Set Trailer Missing											

			3	Transaction Set Control Number in Header and Trailer Do Not Match			
			4	Number of Included Segments Does Not Match Actual Count			
			5	One or More Segments in Error			
			6	Missing or Invalid Transaction Set Identifier			
			7	Missing or Invalid Transaction Set Control Number			
			23	Transaction Set Control Number Not Unique within the Functional Group			
SITUATIONAL	AK503	718		Transaction Set Syntax Error Code	O	ID	1/3
				Code indicating error found based on the syntax editing of a transaction set			
				Use the same codes indicated in AK502.			
SITUATIONAL	AK504	718		Transaction Set Syntax Error Code	O	ID	1/3
				Code indicating error found based on the syntax editing of a transaction set			
				Use the same codes indicated in AK502.			
SITUATIONAL	AK505	718		Transaction Set Syntax Error Code	O	ID	1/3
				Code indicating error found based on the syntax editing of a transaction set			
				Use the same codes indicated in AK502.			
SITUATIONAL	AK506	718		Transaction Set Syntax Error Code	O	ID	1/3
				Code indicating error found based on the syntax editing of a transaction set			
				Use the same codes indicated in AK502.			

IMPLEMENTATION

FUNCTIONAL GROUP RESPONSE TRAILER

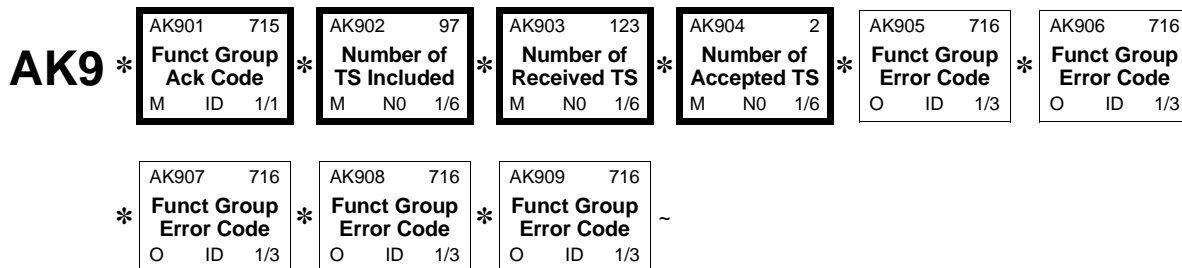
Usage: REQUIRED
Repeat: 1
Example: AK9*A*1*1*1~

STANDARD

AK9 Functional Group Response Trailer

Level: Header
Position: 0700
Loop: _____
Requirement: Mandatory
Max Use: 1
Purpose: To acknowledge acceptance or rejection of a functional group and report the number of included transaction sets from the original trailer, the accepted sets, and the received sets in this functional group

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	AK901	715	Functional Group Acknowledge Code Code indicating accept or reject condition based on the syntax editing of the functional group COMMENT: If AK901 contains the value "A" or "E", then the transmitted functional group is accepted.	M ID 1/1
			CODE	DEFINITION
			A	Accepted ADVISED
			E	Accepted, But Errors Were Noted.
			P	Partially Accepted, At Least One Transaction Set Was Rejected ADVISED

			R	Rejected ADVISED		
REQUIRED	AK902	97	Number of Transaction Sets Included	M	NO	1/6
Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element						
This is the value in the original GE01.						
REQUIRED	AK903	123	Number of Received Transaction Sets	M	NO	1/6
Number of Transaction Sets received						
REQUIRED	AK904	2	Number of Accepted Transaction Sets	M	NO	1/6
Number of accepted Transaction Sets in a Functional Group						
SITUATIONAL	AK905	716	Functional Group Syntax Error Code	O	ID	1/3
Code indicating error found based on the syntax editing of the functional group header and/or trailer						
Required if error exists						
		CODE	DEFINITION			
		1	Functional Group Not Supported			
		2	Functional Group Version Not Supported			
		3	Functional Group Trailer Missing			
		4	Group Control Number in the Functional Group Header and Trailer Do Not Agree			
		5	Number of Included Transaction Sets Does Not Match Actual Count			
		6	Group Control Number Violates Syntax			
SITUATIONAL	AK906	716	Functional Group Syntax Error Code	O	ID	1/3
Code indicating error found based on the syntax editing of the functional group header and/or trailer						
Use the same codes indicated in AK905.						
SITUATIONAL	AK907	716	Functional Group Syntax Error Code	O	ID	1/3
Code indicating error found based on the syntax editing of the functional group header and/or trailer						
Use the same codes indicated in AK905.						
SITUATIONAL	AK908	716	Functional Group Syntax Error Code	O	ID	1/3
Code indicating error found based on the syntax editing of the functional group header and/or trailer						
Use the same codes indicated in AK905.						
SITUATIONAL	AK909	716	Functional Group Syntax Error Code	O	ID	1/3
Code indicating error found based on the syntax editing of the functional group header and/or trailer						
Use the same codes indicated in AK905.						

IMPLEMENTATION

TRANSACTION SET TRAILER

Usage: MANDATORY

Repeat: 1

Example: SE*27*1234~

STANDARD

SE Transaction Set Trailer

Level: Header

Position: 0800

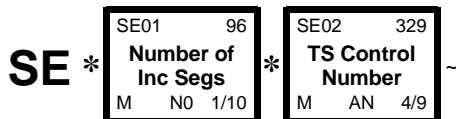
Loop: _____

Requirement: Mandatory

Max Use: 1

Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	SE01	96	Number of Included Segments Total number of segments included in a transaction set including ST and SE segments	M NO 1/10
REQUIRED	SE02	329	Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M AN 4/9

The Transaction Set Control Numbers in ST02 and SE02 must be identical. The number is assigned by the originator and must be unique within a functional group (GS-GE). The number also aids in error resolution research. For example, start with the number 0001 and increment from there.

C External Code Sources

22 States and Outlying Areas of the U.S.

SIMPLE DATA ELEMENT/CODE REFERENCES

66/SJ, 771/009, 235/A5, 156

SOURCE

National Zip Code and Post Office Directory

AVAILABLE FROM

U.S. Postal Service
National Information Data Center
P.O. Box 2977
Washington, DC 20013

ABSTRACT

Provides names, abbreviations, and codes for the 50 states, the District of Columbia, and the outlying areas of the U.S. The entities listed are considered to be the first order divisions of the U.S.

Microfiche available from NTIS (same as address above).

The Canadian Post Office lists the following as "official" codes for Canadian Provinces:

AB - Alberta
BC - British Columbia
MB - Manitoba
NB - New Brunswick
NF - Newfoundland
NS - Nova Scotia
NT - North West Territories
ON - Ontario
PE - Prince Edward Island
PQ - Quebec
SK - Saskatchewan
YT - Yukon

51 ZIP Code

SIMPLE DATA ELEMENT/CODE REFERENCES

66/16, 309/PQ, 309/PR, 309/PS, 771/010, 116

SOURCE

National ZIP Code and Post Office Directory, Publication 65

The USPS Domestic Mail Manual

AVAILABLE FROM

U.S. Postal Service
Washington, DC 20260

New Orders
Superintendent of Documents
P.O. Box 371954
Pittsburgh, PA 15250-7954

ABSTRACT

The ZIP Code is a geographic identifier of areas within the United States and its territories for purposes of expediting mail distribution by the U.S. Postal Service. It is five or nine numeric digits. The ZIP Code structure divides the U.S. into ten large groups of states. The leftmost digit identifies one of these groups. The next two digits identify a smaller geographic area within the large group. The two rightmost digits identify a local delivery area. In the nine-digit ZIP Code, the four digits that follow the hyphen further subdivide the delivery area. The two leftmost digits identify a sector which may consist of several large buildings, blocks or groups of streets. The rightmost digits divide the sector into segments such as a street, a block, a floor of a building, or a cluster of mailboxes.

The USPS Domestic Mail Manual includes information on the use of the new 11-digit zip code.

121 Health Industry Identification Number

SIMPLE DATA ELEMENT/CODE REFERENCES

128/HI, 66/21, I05/20, 1270/HI

SOURCE

Health Industry Number Database

AVAILABLE FROM

Health Industry Business Communications Council
5110 North 40th Street
Phoenix, AZ 85018

ABSTRACT

The HIN is a coding system, developed and administered by the Health Industry Business Communications Council, that assigns a unique code number to hospitals and other provider organizations - the customers of health industry manufacturers and distributors.

130 Health Care Financing Administration Common Procedural Coding System

SIMPLE DATA ELEMENT/CODE REFERENCES

235/HC, 1270/BO, 1270/BP

SOURCE

Health Care Finance Administration Common Procedural Coding System

AVAILABLE FROM

Health Care Financing Administration
6325 Security Boulevard
Baltimore, MD 21207

- 132** **ABSTRACT**
HCPCS is Health Care Finance Administration's (HFCA) coding scheme to group procedures performed for payment to providers.
- 132** **National Uniform Billing Committee (NUBC) Codes**
- SIMPLE DATA ELEMENT/CODE REFERENCES**
235/RB, 235/NU, 1270/BE, 1270/BG, 1270/BH, 1270/BI
- SOURCE**
National Uniform Billing Data Element Specifications
- AVAILABLE FROM**
National Uniform Billing Committee
American Hospital Association
840 Lake Shore Drive
Chicago, IL 60697
- 133** **ABSTRACT**
Revenue codes are a classification of hospital charges in a standard grouping that is controlled by the National Uniform Billing Committee.
- 133** **Current Procedural Terminology (CPT) Codes**
- SIMPLE DATA ELEMENT/CODE REFERENCES**
235/CJ, 1270/BS, 128/CPT
- SOURCE**
Physicians' Current Procedural Terminology (CPT) Manual
- AVAILABLE FROM**
Order Department
American Medical Association
515 North State Street
Chicago, IL 60610
- 134** **ABSTRACT**
A listing of descriptive terms and identifying codes for reporting medical services and procedures performed by physicians.
- 134** **National Drug Code**
- SIMPLE DATA ELEMENT/CODE REFERENCES**
235/ND, 1270/NDC
- SOURCE**
Blue Book, Price Alert, National Drug Data File
- AVAILABLE FROM**
First Databank, The Hearst Corporation
1111 Bayhill Drive
San Bruno, CA 94066
- ABSTRACT**
The National Drug Code is a coding convention established by the Food and Drug Administration to identify the labeler, product number, and package sizes of

135

American Dental Association Codes

SIMPLE DATA ELEMENT/CODE REFERENCES

235/AD, 1270/JO, 1270/JP

SOURCE

Current Dental Terminology (CDT) Manual

AVAILABLE FROM

Salable Materials
American Dental Association
211 East Chicago Avenue
Chicago, IL 60611-2678

ABSTRACT

The CDT contains the American Dental Association's codes for dental procedures and nomenclature and is the nationally accepted set of numeric codes and descriptive terms for reporting dental treatments.

240

National Drug Code by Format

SIMPLE DATA ELEMENT/CODE REFERENCES

235/N1, 235/N2, 235/N3, 235/N4, 1270/NDC, 235/N5, 235/N6

SOURCE

Drug Establishment Registration and Listing Instruction Booklet

AVAILABLE FROM

Federal Drug Listing Branch HFN-315
5600 Fishers Lane
Rockville, MD 20857

ABSTRACT

Publication includes manufacturing and labeling information as well as drug packaging sizes.

464

Health Industry Level 7 (HL7)

SIMPLE DATA ELEMENT/CODE REFERENCES

756/HL

SOURCE

Health Industry Level 7 Interface Standards Publication

AVAILABLE FROM

Health Level 7 (HL7)
Suite 227
3300 Washtenaw Avenue
Ann Arbor, MI 48104-4250

ABSTRACT

The Health Industry Level 7 Interface Standards (HL7) describes standards for interfacing health care industry institutional computer applications.

507

Health Care Claim Status Category Code

SIMPLE DATA ELEMENT/CODE REFERENCES

1271

SOURCE

Health Care Claim Status Category Code

AVAILABLE FROM

Electronic:

Washington Publishing Company

WorldWide Web Site -- www.wpc-edi.com

Paper:

The Blue Cross Blue Shield Association
Interplan Teleprocessing Services Division
676 North St. Clair Street
Chicago, IL 60611

ABSTRACT

Code used to organize the Health Care Claim Status Codes into logical groupings

508

Health Care Claim Status Code

SIMPLE DATA ELEMENT/CODE REFERENCES

1271

SOURCE

Health Care Claim Status Code

AVAILABLE FROM

Electronic:

Washington Publishing Company

World Wide Web Site -- www.wpc-edi.com

Paper:

The Blue Cross Blue Shield Association
Interplan Teleprocessing Services Division
676 North St. Clair Street
Chicago, IL 60611

ABSTRACT

Code identifying the status of an entire claim or service line

513

Home Infusion EDI Coalition (HIEC) Product/Service Code List

SIMPLE DATA ELEMENT/CODE REFERENCES

235/IV

SOURCE

Home Infusion EDI Coalition (HIEC) Coding System

540

AVAILABLE FROM

HIEC Chairperson
HIBCC (Health Industry Business Communications Council)
5110 North 40th Street
Suite 250
Phoenix, AZ 85018

ABSTRACT

This list contains codes identifying home infusion therapy products/services.

**Health Care Financing Administration National
PAYERID**

SIMPLE DATA ELEMENT/CODE REFERENCES

66/XV

SOURCE

PAYERID Database

AVAILABLE FROM

Health Care Financing Administration
Bureau of Program Operations
Chief, Benefit Coordination
S1-03-08
7500 Security Boulevard
Baltimore, MD 21244-1850

ABSTRACT

The Health Care Financing Administration has joined with other payers to develop a unique national payer identification number. The Health Care Financing Administration is the authorizing agent for enumerating payers through the services of a PAYERID Registrar. It may also be used by other payers on a voluntary basis.

663

**Logical Observation Identifier Names and Codes
(LOINC)**

SIMPLE DATA ELEMENT/CODE REFERENCES

SOURCE

Logical Observation Identifier Names and Codes (LOINC)

AVAILABLE FROM

Reginstriff Institute
Indiana School of Medicine
1001 West 10th Street
5th Floor RHC
Indianapolis, IN 46202

ABSTRACT

List of descriptive terms and identifying codes for reporting precise test methods in medicine.

D Change Summary

This is the first ASC X12N implementation guide for the Health Care Claim Request for Additional Information business use of the 277. In future guides, this section will contain a summary and detail of all changes since the previous guide.

**National Electronic Data Interchange
Transaction Set Implementation Guide**

**Additional
Information to
Support a Health
Care Claim or
Encounter**

275

ASC X12N 275 (004020X107)

February 2000 • Preliminary 8

\$\$\$ - Bound Document
\$30.00 - Downloaded Portable Document (PDF)
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Contact **Washington Publishing Company** for more Information.

1.800.972.4334
www.wpc-edi.com

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1 Purpose and Business Overview

1.1 Document Purpose

For the health care industry to achieve the potential administrative cost savings associated with Electronic Data Interchange (EDI), standards have been developed and need to be implemented consistently by all organizations. To facilitate a smooth transition into the EDI environment, uniform implementation is critical.

The purpose of this implementation guide is to provide standardized data requirements and content to all users of ANSI ASC X12.315 **Additional Information to Support a Health Care Claim or Encounter (275)**. This Implementation guide focuses on the use of the 275 to send additional information about a claim or encounter. This implementation guide provides a detailed explanation of the transaction set by defining uniform data content, identifying valid code tables, and specifying values applicable for the business use of the **275 Additional Information to Support a Health Care Claim or Encounter**. The intention of the developers of the 275 is represented in the guide.

This implementation guide will depict the encapsulation of an HL7 (Health Level Seven) Standard within the 275 transaction. HL7 is a standard that is used widely within the health care industry. Therefore the additional information that is sent to support a claim or encounter will not have to be translated into another standard. Rather the HL7 messages will be delivered within the 275 transaction in the BIN segment. Please refer to the companion documents for a further explanation of HL7 messaging associated with this business purpose.

This implementation guide is designed to assist those who send additional supporting information or who receive additional supporting information to a claim or encounter using the 275 format.

Entities that use this implementation of the 275 include insurance companies, third party administrators (TPAs), managed care service organizations, state and federal agencies and their contractors, plan purchasers, and any other entity that processes health care claims, manages the delivery of health care services, or collects healthcare data. Other business partners affiliated with the 275 include billing services; consulting services; vendors of systems; software and EDI translators; and EDI network intermediaries such as Automated Clearing Houses (ACHs), Value Added Networks (VANs), and telecommunications services.

1.1.1 Trading Partner Agreements

It is appropriate and prudent for payers to have trading partner agreements that go with the standard Implementation Guides. This is because there are 2 levels of scrutiny that all electronic transactions must go through.

First is standards compliance. These requirements **MUST** be completely described in the Implementation Guides for the standards, and **NOT** modified by specific trading partners.

Second is the specific processing, or adjudication, of the transactions in each trading partner's individual system. Since this will vary from site to site (e.g.,

payer to payer), additional documentation which gives information regarding the processing, or adjudication, will prove helpful to each site's trading partners (e.g., providers), and will simplify implementation.

It is important that these trading partner agreements NOT:

- Modify the definition, condition, or use of a data element or segment in the standard Implementation Guide
- Add any additional data elements or segments to this Implementation Guide
- Utilize any code or data values which are not valid in this Implementation Guide
- Change the meaning or intent of this Implementation Guide

These types of companion documents should exist solely for the purpose of clarification, and should not be required for acceptance of a transaction as valid.

1.1.2 HIPAA Role in Implementation Guides

The Health Insurance Portability and Accountability Act of 1996 (P.L. 104-191-known as HIPAA) includes provisions for Administrative Simplification, which require the Secretary of Department of Health and Human Services to adopt standards to support the electronic exchange of administrative and financial health care transactions primarily between health care providers and plans. HIPAA directs the Secretary to adopt standards for transactions to enable health information to be exchanged electronically and to adopt specifications for implementing each standard.

Detailed Implementation Guides for each standard must be available at the time of the adoption of HIPAA standards so that health plans, providers, clearing-houses, and software vendors can ready their information systems and application software for compliance with the standards. Consistent usage of the standards, including loops, segments, data elements, etc., across all guides is mandatory to support the Secretary's commitment to standardization.

This Implementation Guide has been developed for use as a HIPAA Implementation Guide for Health claims or equivalent encounter information. Should the Secretary adopt the X12 275 Additional Information to Support a Health Care Claim or Encounter transaction as an industry standard, this Implementation Guide describes the consistent industry usage called for by HIPAA. If adopted under HIPAA, the X12 275 Additional Information to Support a Health Care Claim or Encounter transaction cannot be implemented except as described in this Implementation Guide.

This implementation guide references the ASC X12N 277 **Health Care Claim Request for Additional Information** implementation guide for the electronic request for additional information and the 277 transaction.

Should the Secretary also adopt the 277 guide, it will be part of the HIPAA standard. These references are intended to identify business requirements within the information request and may be applied equally to any request via paper. The phrase "Request for Additional Information" pertains to electronic formats and may include paper formats. When 277 appears it is specific to the HIPAA X12N guide.

It is acceptable to use this guide for purposes outside the scope of HIPAA. Such usage is trading partner specific and should be considered proprietary.

1.2 Version and Release

This implementation guide is based on the October, 1998 ASC X12 standards, referred to as Version 4, Release 2 (004020). This is the first ASC X12N Implementation guide for this business function of this transaction set. Earlier documentation for this transaction set includes a tutorial based upon a **1997 275 Patient Information Tutorial** guide X12.315.

This implementation guide will incorporate the use of the ANSI accredited Standard Development Organization (SDO) HL7 standard Version 2.3 in the Binary Data Segment (BIN) within the 275 transaction. Use of other ANSI approved standards within the BIN segment may also be accommodated by this transaction.

1.3 Business Use and Definition

The 275 transaction set is intended to meet the particular needs of the health care industry to send additional information about a claim or encounter when a) responding to a payer's request for additional information or b) accompanying the submission of an original claim for payment. This implementation guide addresses how to use the 275 in those situations. There is a second intended use of the 275 transaction set which is not expressed in this implementation guide, but rather it is expressed in the **1997 275 Patient Information Tutorial** guide X12.315. The tutorial explains the use of the 275 transaction set as a request and response for patient information from **provider to provider**. The following represents uses of the 275 transaction set:

- response to a **277 Health Care Claim Request for Additional Information** or paper request for additional information.
- unsolicited additional information to support an 837 Health Care Claim or Encounter sent within the same transmission.
- request and response of patient information from provider to provider (not expressed in this implementation guide and not covered by HIPAA).
- unsolicited additional information to support an **837 Health Care Claim or Encounter** in support of statistical reporting and regulatory requirements with the same transmission (not expressed in this implementation guide and not covered by HIPAA).

The **275 Additional Information to Support a Health Care Claim or Encounter** is used to send specific information to supplement an initial billing (275 sent with the 837 in the same transmission), or to provide information for suspended/pended claims which require additional information. In either case, the additional information is required for the adjudication process to complete.

This implementation guide ONLY addresses using the **275 Additional Information to Support a Health Care Claim or Encounter**. As stated previously, a separate tutorial guide was developed to demonstrate the use of the **275 Patient Information** as a request and response of patient information from provider to provider.

1.3.1 Response to a Health Care Request for Additional Information

When a medical or utilization review is performed during the adjudication process, a claim that comes under such review is typically suspended. The payer then requests specific information to supplement or support the providers request for payment of the services under review. The payer's request for additional information may be service specific or apply to the entire claim, the **277 Request for Additional Information** is used to transmit the request. The provider uses the 275 to respond to the previously mentioned request.

The payer will likely specify to the provider the period of time in which they have to respond to the request for additional information. The 275 response must be received by the payer within the specified timeframe, or the claim in question will proceed to the next phase of the payer's adjudication cycle. The ultimate disposition of the claim can include, but is not limited to, rejection, or denial.

1.3.2 Unsolicited Additional Information to Support an 837 Health Care Claim sent within the same transmission

In situations where certain additional information is required by the payer in order to complete the claim or encounter adjudication process, the provider may include a **275 Additional Information to Support a Claim or Encounter** within the same transmission of the initial 837. This eliminates the need for the payer to request additional information via the **277 Request for Additional Information**. See Section 4, Transmission Examples.

1.4 Information Flows

Figure 1 illustrates the flow of information related to all uses of the **275 Additional Information to Support a Health Care Claim or Encounter**.

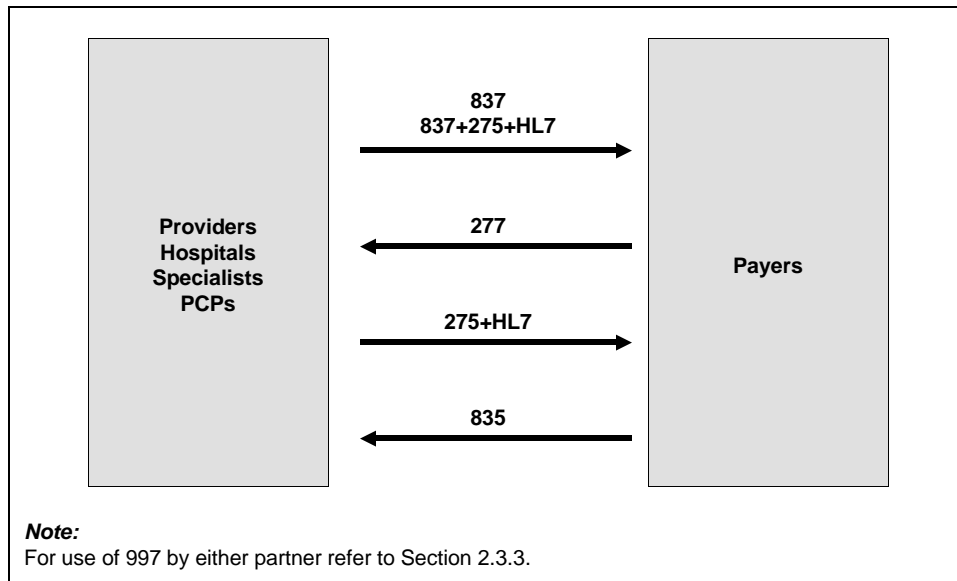


Figure 1. ANSI Standard EDI Healthcare Transaction Flow

Arrow 1

Shows that claims can be transmitted in either of two methods, with or without an attachment.

837 Standalone Claim

or

837 + 275 + HL7 Claim plus attachment information in same transmission with HL7 Messages.

Arrow 2

Some claims will require additional information to be sent to the payer before the adjudication cycle can be completed. If that information was not sent with the claim, the request for additional information will be made by the payer using the **277 Health Care Claim Request for Additional Information** transaction set.

Arrow 3

The provider will respond to the request for additional information by sending the 275 transaction set to the payer. This transaction will contain the Additional Information to Support a Claim Encounter, which will be expressed as HL7 messages.

Arrow 4

The 835 Health Care Claim Remittance Transaction set is sent to the provider once the claim has completed the adjudication process.

2 Data Overview

This section introduces the structure of the **275 Additional Information to Support a Health Care Claim or Encounter** and describes the positioning of the business data within that structure. Familiarity with ASC X12 nomenclature, segments, data elements, hierarchical levels, and looping structures is recommended. For a review, see Appendix A, ASC X12 Nomenclature, and Appendix B, EDI Control Directory.

Note: Data Requirements on the request for additional information are consistent between a paper or 277 electronic request. Within this guide, these data requirements are frequently identified in terms of the ASC X12N **277 Health Care Claim Request for Additional Information** transaction set. When necessary, reference that guide for details about that data. The **275 Additional Information to Support a Health Care Claim or Encounter** transaction uses much of this data on the response.

2.1 Overall Data Architecture

Two formats or views are used to present the transaction set: the implementation view and the standard view. Figure 2., 275 Transaction Set Listing, shows the implementation view. This view displays only the segments and their designated health care names described in this implementation guide. The intent of the implementation view is to clarify the purpose and use of the segments by restricting the view to display only those segments used with their assigned health care names. This implementation view is also repeated in Section 3.

The standard view is presented in Section 3, Transaction Set. The standard view displays all segments available within the transaction set with their assigned ASC X12 names.

Table 1 - Header					
POS. #	SEG. ID	NAME	USAGE	REPEAT	LOOP REPEAT
010	ST	275 Transaction Header	R	1	
0200	BGN	Beginning Segment	R	1	
LOOP ID - 1000A TRANSACTION RECEIVER					1
0500	NM1	Transaction Receiver	R	1	
0900	PER	Response Contact	S	1	
LOOP ID - 1000B SUBMITTER INFORMATION					1
0500	NM1	Submitter Information	R	1	
LOOP ID - 1000C PROVIDER INFORMATION					1
0500	NM1	Provider Information	R	1	
LOOP ID - 1000D PATIENT NAME					1
0500	NM1	Patient Name	R	1	
1000	REF	Patient Account Number	R	1	
1000	REF	Institutional Type of Bill	S	1	
1050	DTP	Institutional Claim Service Date	S	1	

Table 2 - Detail					
POS. #	SEG. ID	NAME	USAGE	REPEAT	LOOP REPEAT
LOOP ID - 2000 ASSIGNED NUMBER					>1
0100	LX	Assigned Number	R	1	
0150	TRN	Payer's Control Number/Provider's Control Number	R	1	
0170	STC	Claim Status Information	S	1	
0500	REF	Procedure or Revenue Code	S	1	
0500	REF	Service Line Item Identification	S	1	
LOOP ID - 2100A PROFESSIONAL DATE OF SERVICE					1
0600	DTP	Professional Date of Service	S	1	
LOOP ID - 2100B DATE ADDITIONAL INFORMATION WAS SUBMITTED					1
0600	DTP	Date Additional Information Was Submitted	R	1	
0700	CAT	Category of Patient Information Service	R	1	
LOOP ID - 2110B ELECTRONIC FORMAT IDENTIFICATION					1
0900	EFI	Electronic Format Identification	R	1	
1000	BIN	Binary Data	R	1	
1100	SE	275 Transaction Set Trailer	R	1	

Figure 2. 275 Transaction Set Listing

2.2 Data Use by Business Use

The 275 is divided into two tables. Table 1 contains transaction control information and is presented in 2.2.1. Table 2 contains the detail information for the business function of the transaction and is presented in 2.2.2.

When a request for additional information is made, the payer supplies the parameters that assist the provider in locating the claim. These parameters are frequently the patient account number, type of bill, medical record number, procedure code or revenue code, and the date of service. The provider is the source of this information. If the information is found on the original billed claim, the payer returns these data elements in the **Request for Additional Information**.

When the Additional Information is returned in the 275, it will either be related to the entire claim or for a specific revenue line or service line. The segments used

to return the requested information are more clearly identified by specifying whether the information is related to the claim level or service line level.

The following table presents the developers view of which segments are required to be returned for claim level information.

Loop ID	Segment ID	Segment Name	Business Purpose
1000D Patient Name	NM1	Patient Name	Name of Patient
	REF	Patent Account Number	Provider's Patient Account Number
	REF	Institutional Type Of Bill	Institutional Type of Bill
	DTP	Institutional Claim Service Date	Institutional Claim Service Date
2000 Assigned Number	LX	Assigned Number	A sequence number that starts at 1 and is incremented by 1 when the loop is repeated.
	TRN	Payer's Control Number/ Provider's Control Number	Control Number assigned by either the Payer or Provider.
	STC	Claim Status Information	Echo back the STC segment that was given in the 277
2100B Date Additional Information Submitted	DTP	Date Additional Information Was Submitted	The 275 Submittal Date. Needed in order to use the BIN Segment
	CAT	Catagory of Patient Information Service	Used to identify the type of information that will be in the BIN
2110 Electronic Format Identification		Electronic Format Identification	Security Level of Data. Nedded in order to use BIN Segment
	BIN	Binary Data	Data in HL7 standard

The following table presents the developers view of which segments are required to be returned for line level information.

Loop ID	Segment ID	Segment Name	Business Purpose
1000D Patient Name	NM1	Patient Name	Name of Patient
	REF	Patent Account Number	Provider's Patient Account Number
	REF	Institutional Type Of Bill	Institutional Type of Bill
	DTP	Institutional Claim Service Date	Institutional Claim Service Date
2000 Assigned Number	LX	Assigned Number	A sequence number that starts at 1 and is incremented by 1 when the loop is repeated.
	TRN	Payer's Control Number/ Provider's Control Number	Control Number assigned by either the Payer or Provider.
	STC	Claim Status Information	Echo back the STC segment that was given in the 277
	REF	Procedure or Revenue Code	Specific Revenue Code or Procedure Code that additional information supports
	REF	Service Line Item Identification	Line Item control number
	DTP	Professional Date of Service	Professional Service Line Date of Service
2100A Professional Date of Service	DTP	Date Additional Information Was Submitted	The 275 Submittal Date. Needed in order to use the BIN Segment
	CAT	Catagory of Patient Information Service	Used to identify the type of information that will be in the BIN
2100B Date Additional Information Submitted	DTP	Date Additional Information Was Submitted	The 275 Submittal Date. Needed in order to use the BIN Segment
	CAT	Catagory of Patient Information Service	Used to identify the type of information that will be in the BIN
2110 Electronic Format Identification	EFI	Electronic Format Identification	Security Level of Data. Nedded in order to use BIN Segment
	BIN	Binary Data	Data in HL7 standard

2.2.1 Table 1 Transaction Control Information

Table 1 is named the Header Level. The purpose of Table 1 is to identify the transaction, distinguish the business purpose, and identify the participants. See Figure 3 for an example of Table 1.

Table 1 - Header					
POS. #	SEG. ID	NAME	USAGE	REPEAT	LOOP REPEAT
0100	ST	275 Transaction Header	R	1	
0200	BGN	Beginning Segment	R	1	
LOOP ID - 1000A TRANSACTION RECEIVER					1
0500	NM1	Transaction Receiver	R	1	
0900	PER	Response Contact	S	1	
LOOP ID - 1000B SUBMITTER INFORMATION					1
0500	NM1	Submitter Information	R	1	
LOOP ID - 1000C PROVIDER INFORMATION					1
0500	NM1	Provider Information	R	1	
LOOP ID - 1000D PATIENT NAME					1
0500	NM1	Patient Name	R	1	
1000	REF	Patient Account Number	R	1	
1000	REF	Institutional Type of Bill	S	1	
1050	DTP	Institutional Claim Service Date	S	1	

Figure 3. Table 1 - Header Level

2.2.1.1 Transaction Identification and Purpose

The Transaction Set Header Segment (ST) identifies the transaction set by using 275 as the data value for the transaction set identifier code data element, ST01. The originator of the transaction set assigns the unique control number ST02 which is shown here as 1001. In this example, the originator is the provider. ST03 carries the same value that is populated in GS08 which is the Implementation Version Identifier. For the 275 transaction this is 004020X107.

The Beginning Segment (BGN) indicates the transaction use. The Transaction Set Purpose Code value of "11" in the BGN01 indicates that this 275 is a response to a **Request for Additional Information**. A value of "02" indicates that this 275 is additional information for an 837 claim or encounter in the same transmission. The originator of the transaction set assigns the unique reference number in BGN02 and the date of creation in BGN03. The Functional Group Header Segment (GS) provides additional identification of the business purpose of multi-functional transaction sets. See Appendix B, EDI Control Directory, for a detailed description of the elements in the GS segment.

A coding example of Table 1 in the **275 Additional Information to Support a Claim or Encounter** follows. See Appendix A, ASC X12 Nomenclature, for descriptions of data element separators (e.g., *) and segment terminators (e.g., ~). See the HL7 companion document for HL7 descriptions of delimiters & separators used in the BIN segment.

```
ST*275*1001*004020X107~
BGN*11*0001*19971024~
```

2.2.1.2 NM1 Loop Participants Identification Structure

The Loop ID: 1000 is repeated to define the participants involved in the transaction. The participants identified in the 275 are generally the transaction receiver (payer), submitter (e.g., service bureau, Claims Clearinghouse, provider groups), provider of service, and patient. The implementation guide specifies the partici-

pants in the subsequent loops within the transaction set and refers to these participants, respectively, in the following order and terms:

- Transaction Receiver - This entity is the decision maker in the business transaction. For this business use, this entity is the payer, even when the transaction is sent to a clearinghouse for forwarding to a payer.
- Submitter - This entity is the sender of the transaction. For this business use, this entity can be a provider, a provider group, a Claims Clearinghouse, a service bureau, an agency, an employer, etc.
- Provider - This entity delivered the health care service.
- Patient - This is the person who received the services. The additional information is being sent to support the claim or encounter related to those services.

Transaction Participants

A detailed view of the segments and data elements used to describe the participants and their relationships is presented here. The segments and data elements are found in the 1000 Loop and the 2000 Loop. The coding examples are presented sequentially as found within an actual transaction set; however, for reading ease each segment begins on a new line.

The following example demonstrates coding for segments and data elements:

Transaction Receiver

```
NM1*PR*2*ABC INSURANCE COMPANY*****PI*12345~
PER*IC*MEDICAL REVIEW DEPARTMENT~
```

Submitter

```
NM1*41*2*XYZ BILLING SERVICE*****46*X100~
```

Provider

```
NM1*1P*2*ST HOLY HILLS JOSEPH HOSPI-
TAL*****SV*399999~
```

Patient

```
NM1*QC*1*SMITH*JOHN****MI*111223333A~
REF*EJ*JS960503LAB~
DTP*232*RD8*19970501-19970515~
```

NM1 Segment

The NM1 segment is mandatory and is used to identify the transaction participants (see NM108 and NM109).

```
NM1*PR*2*ABC INSURANCE COMPANY*****PI*12345~
```

Within the NM1 segment,

NM101 = PR

This value indicates that the participant is a payer.

NM102 = 2

This value indicates that the entity is a nonperson. An entity that is a person is identified with a value of "1". When the entity is a person, NM103 and NM104 contain the last and first names, respectively.

NM103 = ABC INSURANCE COMPANY

This value identifies the Information Source as "ABC INSURANCE COMPANY"
Although the name is not required, the developers of this implementation guide
recommend using it.

NM108 = PI

This value identifies the next data element as the assigned Payer Identification.

NM109 = 12345

The NM109 value is the actual identification code associated with NM108 (e.g.,
PI). The identification code listed in NM109 refers to ABC INSURANCE Company
in this example.

PER Segment

The payer uses the PER segment in the **277 Request for Additional Informa-
tion** to specify the administrative communications contact who should receive the
additional information when sent back by the provider. The PER segment of the
Transaction Receiver NM1 Loop in the 275 is used to identify the entity who is ex-
pecting to receive the additional information from the provider.

The following example demonstrates the identification of the entity to whom the
provider should return the additional information:

PER*IC*MEDICAL REVIEW DEPARTMENT~

Within the PER,

PER01 = IC

This value indicates that the person or group named is the Information Contact.

PER02 = MEDICAL REVIEW DEPARTMENT

This value is the person or group name.

REF Segment at the NM1 Level

The REF segment can be repeated a maximum of two times at the Patient NM1
loop level for this implementation. The providers patient account number, and the
institutional Type of Bill, which is a supplemental identifier, are found in the REF
segment. The Patient Account number is a supplemental identifier for the
provider's use and is also located in the REF segment.

The following are coding examples of the REF segment:

REF*EJ*JS960503LAB~

REF*BLT*131~

Within the REF,

REF01 = EJ

This value indicates that the next data element contains the Patient Account
Number.

REF02 = JS960503LAB

The value shown is the actual Patient Account Number assigned by the provider
for the claim.

When REF01 is BLT, REF02 contains the institutional type of bill (e.g., 131).

The order of the REF segments is not significant.

DTP Segment at the NM1 Level

This segment occurs once at the Patient NM1 loop level for this implementation. The occurrence specifies the Claim Statement Period as supplied by the claim originator and is only required for institutional claims. The dates must be returned by the provider to the payer.

The following is a coding example of the DTP segment:

DTP*232*RD8*19970505-19970515~

Within the DTP,

DTP01 = 232

This value indicates Claim Statement Period Start. This means that the data element found in DTP03 represents the statement from and through dates for the claim.

DTP02 = RD8

This value indicates that the next data element, DTP03, is a range of dates expressed in the format CCYYMMDD-CCYYMMDD.

DTP03 = 19970505-19970515

This represents the actual statement from and through Dates found on the original claim.

2.2.2 Table 2 Detail Information

The structure used in Table 2 is based on the LX loop 2000A. The LX Loops (loops 2000A) and its subordinate loops (loops 2100A, 2100B, 2110B) specify the additional information provided to support a claim or encounter.

Figure 4, Table 2 - Detail Level, presents the segments used in Table 2 of the 275. These segments define the specific information that is being sent.

POS.#	SEG.ID	NAME	USAGE	REPEAT	LOOP REPEAT
LOOP ID - 2000 ASSIGNED NUMBER					>1
0100	LX	Assigned Number	R	1	
0150	TRN	Payer's Control Number/Provider's Control Number	R	1	
0170	STC	Claim Status Information	S	1	
0500	REF	Procedure or Revenue Code	S	1	
0500	REF	Service Line Item Identification	S	1	
LOOP ID - 2100A PROFESSIONAL DATE OF SERVICE					1
0600	DTP	Professional Date of Service	S	1	
LOOP ID - 2100B DATE ADDITIONAL INFORMATION WAS SUBMITTED					1
0600	DTP	Date Additional Information Was Submitted	R	1	
0700	CAT	Category of Patient Information Service	R	1	
LOOP ID - 2110B ELECTRONIC FORMAT IDENTIFICATION					1
0900	EFI	Electronic Format Identification	R	1	
1000	BIN	Binary Data	R	1	
1100	SE	275 Transaction Set Trailer	R	1	

Figure 4. Table 2 - Detail Level

2.2.2.1 Claim Level Additional Information

The following is a coding example of the **275 Additional Information to Support a Claim or Encounter** when providing claim level additional information.

```
LX*1~  
TRN*2*1722634842~  
STC*R3:A0001-0::LOI~  
DTP*368*D8*19971024~  
CAT*AE*HL~  
EFI*05~  
BIN*291*XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX  
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX~
```

LX Segment

The LX segment begins the detailed additional information that is being sent to the payer. The occurrence is 1 or more. The LX loop will begin each time the provider is starting another response to a different STC or sending another type of additional information for the patient or claim.

The following is a coding example of the LX segment:

```
LX*1~
```

Within the LX, LX01 is the sequence number assigned to identify the group of segments that follow. It is recommended that the LX01 sequence number start at 1 and incremented by 1.

TRN Segment

The Trace Segment (TRN) is a mandatory segment. The TRN segment serves two scenarios. First, the attachment control number, when transmitted in the unsolicited 275 transaction will contain the key information the provider utilizes to extract patient medical record information or attachment data needed to fill the claim or encounter. The second scenario involves a solicited response to a request for additional information from a payer. In this situation, the attachment control number contains the key in the payer's system to trace & match the response back to the appropriate request for additional information.

The following is a coding example of the TRN segment:

```
TRN*2*1722634842~
```

TRN01 = 2

The value in TRN01 will be "2" when this transaction is a response to a **Request for Additional Information**.

TRN01 will be "1" when this transaction is additional information for an **837 Claim or Encounter**.

TRN02 = 1722634842

The value shown is the actual control number assigned by the payer for this claim. This was given in previous transaction set exchanges involving this claim

The provider will return the value found in this element to the payer. The payer locates the "key" data element (e.g., the control number in this element) for his or her data files/databases.

When submitting additional information to support an 837 claim within the same transmission, the originator of the transaction will place the Attachment Control Number that was given in the PWK segment of the 837 claim or encounter.

STC Segment

The purpose of the STC segment in Loop 2000 is for the provider to return the question received from the payer in the **277 Health Care Claim Request for Additional Information** STC segment. For further details on the STC segment, please refer to the ASC X12N **277 Health Care Claim Request for Additional Information** (X104).

The following is a coding example of requested additional information at the **claim level**:

STC*R3:A0001-0::LOI~

Within the STC,

STC01-1 = R3

This value indicates that the claim has been suspended for additional information/documentation.

STC01-2 = A0001-0

This value indicates ambulance certification.

STC01-4 = LOI

This value indicates the table used for STC01-2 was the Logical Observation Identifier Names and Codes (LOINC) Code List

DTP Segment

The DTP segment at the start of the 2100B loop is an important segment. At this location, the DTP segment identifies the date that the information was gathered and sent. This segment is required in order to use the BIN segment.

The following is a coding example of the DTP segment at the **claim level**:

DTP*368*D8*19971024~

Within the DTP segment at the 2100B loop,

DTP01 = 368

This value is the date/time qualifier element. When the value is "368", the date found in DTP03 is known to be the submitted date.

DTP02 = D8

This value is the date/time period format qualifier. When this value is "D8", the format of the date in DTP03 is known to be CCYYMMDD.

DTP03 = 19971024

The date range, represented in DTP03, is the submitted date for this information, as defined by the prior qualifiers.

CAT Segment

The CAT segment in Loop 2100B conveys the type of information and the format type of the information that will be in the BIN segment.

The following is a coded example of the CAT segment at the **claim level**:

CAT*AE*HL~

Within the CAT,

CAT01 = AE

This value indicates that the data that will be in the BIN segment will be an attachment

CAT02 = HL

The value shown indicates that data within the BIN will be in HL7 messages.

EFI Segment

The EFI segment is required in order to use the BIN segment. It is used to convey the level of confidentiality assigned by the sender to the information that will be following in the BIN segment.

The following is a coding example of the EFI segment at the **claim level**:

EFI*05~

Within the EFI,

EFI01 = 05

This value represents that the security level has been defined as personal.

BIN Segment

The BIN segment is used to place additional information. It allows for the use of HL7 messages using the 275 transaction as the envelope.

**BIN*291*XX
XX
XX
XX
XX
XX~**

Within the BIN,

BIN01 = 285

This represents the number of bytes of data that will follow. BIN02 is where the HL7 Messages begin and will be ended by the segment delimiter.

NOTE:

For complete details on HL7 messaging, please see the companion documents accompanying this implementation guide.

2.2.2.2

Revenue or Service Line Level Additional Information

The following is a coding example of the **275 Additional Information to Support a Claim or Encounter** when providing service line level additional information.

LX*1~

TRN*2*1722634842~

STC*R3:11504-8::LOI~

REF*FJ*1234~

REF*CPT*44499~

DTP*472*D8*19970504~

DTP*368*D8*19971024~

CAT*AE*HL~

EFI*05~

BIN*52*XX
XXXXXXXX~

LX Segment

The LX segment begins the detailed additional information that is being sent to the payer. The occurrence is 1 or more. The LX loop will begin each time the provider is starting another response to a different STC or sending another type of additional information for the patient or claim.

The following is a coding example of the LX segment:

LX*1~

Within the LX, LX01 is the sequence number assigned to identify the group of segments that follow. It is recommended that the LX01 sequence number start at 1 and incremented by 1.

TRN Segment

The Trace Segment (TRN) is a mandatory segment. The TRN segment serves two scenarios. First, the attachment control number, when transmitted in the unsolicited 275 transaction will contain the key information the provider utilizes to extract patient medical record information or attachment data needed to fill the claim or encounter. The second scenario involves a solicited response to a request for additional information from a payer. In this situation, the attachment control number contains the key in the payer's system to trace & match the response back to the appropriate request for additional information.

The following is a coding example of the TRN segment:

TRN*2*1722634842~

TRN01 = 2

The value in TRN01 will be "2" when this transaction is a response to a **Request for Additional Information**.

TRN01 will be "1" when this transaction is additional information for an **837 Claim or Encounter**.

TRN02 = 1722634842

The value shown is the actual control number assigned by the payer for this claim. This was given in previous transaction set exchanges involving this claim

The provider will return the value found in this element to the payer. The payer locates the “key” data element (e.g., the control number in this element) for his or her data files/databases.

When submitting additional information to support an 837 claim within the same transmission, the originator of the transaction will replicate the Attachment Control Number that was given in the PWK segment of the 837 claim or encounter.

STC Segment

The purpose of the STC segment in Loop 2000 is for the provider to return the question received from the payer in the **277 Health Care Claim Request for Additional Information** STC segment. For further details on the STC segment, please refer to the ASC X12N **277 Health Care Claim Request for Additional Information** (X104).

The following is a coding example of requested additional information at the **service line level**:

STC*R3:11504-8::LOI~

Within the STC,

STC01-1 = R3

This value indicates that the claim has been suspended for additional information/documentation.

STC01-2 = 11504-8

This value is asking for the Description of a surgical procedure.

STC01-4 = LOI

This value indicates the table used for STC01-2 was the Logical Observation Identifier Names and Codes (LOINC™) Code List.

REF Segment at Loop 2000

The REF segment identifies the specific revenue/service line in question or it can be used to identify the line item control number. On both institutional and professional claims there could be additional information that is sent for multiple services. The REF will identify what revenue/service line that the additional information is being submitted for in the BIN.

The following are coding examples of the REF segment: Identifying a specific revenue/service line by its Line Item Control Number

REF*FJ*1234~

Identifying a specific revenue/service line by its procedure code.

REF*CPT*44499~

Within the REF,

REF01 = CPT

This value indicates that the next data element contains the procedure code.

REF02 = 44499

The value shown is the procedure code that was submitted on the claim in question. This was given in previous transaction set exchanges involving this claim, the provider returns the value found in SVC segment of the 277 to the payer. It is also used by the provider when submitting additional information to an 837 claim

or encounter. It is a key to match the additional information to a particular revenue/service line.

When REF01 is FJ, REF02 contains the Line Item Control Number

DTP Segment - Date of Service

This DTP segment is at the 2100A loop. At this location and in this example, the DTP segment identifies the date that the service was performed and is only used when the additional information is on a specific **service line**.

The following is a coded example of the DTP segment at the **service line level**:

DTP*472*D8*19970504~

Within the DTP segment at the 2100A loop,

DTP01 = 472

This value is the date/time qualifier element. When the value is "472", the date found in DTP03 is known to be the date of service.

DTP02 = D8

This value is the date/time period format qualifier. When this value is "D8", the format of the date in DTP03 is known to be CCYYMMDD.

DTP03 = 19970504

The date range, represented in DTP03, is the date of service, as defined by the prior qualifiers.

DTP Segment - Date Additional Information was Gathered

The DTP segment at the start of the 2100B loop is an important segment. At this location, the DTP segment identifies the date that the information was Submitted. This segment is required in order to use the BIN segment.

The following is a coded example of the DTP segment at the **service line level**:

DTP*368*D8*19971024~

Within the DTP segment at the 2100B loop,

DTP01 = 368

This value is the date/time qualifier element. When the value is "368", the date found in DTP03 is known to be the submitted date.

DTP02 = D8

This value is the date/time period format qualifier. When this value is "D8", the format of the date in DTP03 is known to be CCYYMMDD.

DTP03 = 19971024

The date range, represented in DTP03, is the submitted date for this information, as defined by the prior qualifiers.

CAT Segment

The CAT segment conveys the type of information and the format type of the information that will be in the BIN segment.

The following is a coded example of the CAT segment at the **service line level**:

CAT*AE*HL~

Within the CAT,

CAT01 = AE

This value indicates that the data that will be in the BIN segment will an attachment

CAT02 = HL

The value shown indicates that data within the BIN will be in HL7 messages.

EFI Segment

The EFI segment is required in order to use the BIN segment. It is used to convey the level of confidentiality assigned by the sender to the information that will be following in the BIN segment.

The following is a coded example of the EFI segment at the **service line level**:

EFI*05~

Within the EFI,

EFI01 = 05

This value represents that the security level has been defined as personal.

BIN Segment

The BIN segment is used to place additional information. It allows for the use of HL7 messages using the 275 transaction as the envelope.

**BIN*52*XX
XXXXXXXX~**

Within the BIN,

BIN01 = 52

This represents the number of bytes of data that will follow.

BIN02 is where the HL7 Message begins and will be ended by the segment delimiter.

NOTE:

For complete details on HL7 messaging, please see the companion documents accompanying this implementation guide.

2.3 Interaction with Other Transaction Sets

This section presents an overview of related ASC X12N transaction sets and discusses their direct or indirect interaction with the **275 Additional Information to Support a Health Care Claim or Encounter (X107)**.

2.3.1 The Request for Additional Information (277)

Submitting a claim, whether by using the 837 or another format, is the first step in the claim adjudication process. All data elements found on the original bill have their source from the provider's billing system. When a claim fails to complete the payer's adjudication process, the payer can develop the claim electronically by requesting information from the provider using the **277 Health Care Claim Request for Additional Information (X104)**. Data from the original claim is returned to the provider on the 277 to facilitate locating the claim or the supporting information. The reasons for the claim failing to complete the payer's adjudication process are related to specific data from the original billed claim. The failure can

result from data determined to be missing, incorrect, or incomplete as well as from adjudication situations requiring supporting information.

2.3.2 The Claim (837)

Submitting a claim, whether by using the 837 or another format, is the first step in the claim adjudication process. All data elements found on the original bill have their source from the provider's billing system. When a claim needs additional information to complete the adjudication process, the provider can send a **275 Additional Information to Support a Health Care Claim or Encounter (X107)**.

2.3.3 The Functional Acknowledgment (997)

The Functional Acknowledgment (997) transaction is used upon request by one of the trading partners. As shown in figure 1, General Claim Status Information Flow, the provider and the payer use the 997 in both the send and the receive modes.

A 997 can be used by the following:

- the payer to acknowledge claim receipt (837)
- the payer to acknowledge claim receipt (837) and **Additional Information to Support a Health Care Claim or Encounter (275)**
- the provider to acknowledge receipt of a **Health Care Claim Request for Additional Information (277)**
- the payer to acknowledge the receipt of an **Additional Information to Support a Health Care Claim or Encounter (275)**
- the provider to acknowledge receipt of a **Health Care Claim Payment Advice (835)**

3 Transaction Set

NOTE

See Appendix A, ASC X12 Nomenclature, to review the transaction set structure, including descriptions of segments, data elements, levels, and loops.

3.1 Presentation Examples

The ASC X12 standards are generic. For example, multiple trading communities use the same PER segment to specify administrative communication contacts. Each community decides which elements to use and which code values in those elements are applicable. This implementation guide uses a format that depicts both the generalized standard and the trading community-specific implementation.

The transaction set detail is comprised of two main sections with subsections within the main sections.

Transaction Set Listing

- Implementation

- Standard

Segment Detail

- Implementation

- Standard

- Diagram

- Element Summary

The examples in figures 5 through 10 define the presentation of the transaction set which follows.

The following pages provide illustrations, in the same order they appear in this implementation guide, to describe the format.

IMPLEMENTATION

Indicates that this section is the implementation and not the standard

835 Health Care Claim Payment/Advice

Table 1 - Header

PAGE #	POS. #	SEG. ID	NAME	USAGE	REPEAT	LOOP REPEAT
53	010	ST	835 Header	R	1	
54	020	BPR	Financial Information	R	1	
60	040	TRN	Reassociation Key	R	1	
62	050	CUR	Non-US Dollars Currency	S	1	
65	060	REF	Receiver ID	S	1	
66	060	REF	Version Number	S	1	
68	070	DTM	Production Date	S	1	
PAYER NAME						1
70	080	N1	Payer Name	R	1	
72	100	N3	Payer Address	S	1	
75	110	N4	Payer City, State, Zip	S	1	
76	120	REF	Additional Payer Reference Number	S	1	
78	130	PER	Payer Contact	S	1	
PAYEE NAME						1
79	080	N1	Payee Name	R	1	
81	100	N3	Payee Address	S	1	
82	110	N4	Payee City, State, Zip	S	1	
84	120	REF	Payee Additional Reference Number	S	>1	

Each segment is assigned an industry specific name. Not used segments do not appear

Each loop is assigned an industry specific name

Segment repeats and loop repeats reflect actual usage

R=Required
S=Situational

Position Numbers and Segment IDs retain their X12 values

Individual segments and entire loops are repeated

Figure 5. Transaction Set Key — Implementation

STANDARD

Indicates that this section is identical to the ASC X12 standard

835 Health Care Claim Payment/Advice

Functional Group ID: **HP**

This Draft Standard for Trial Use contains the format and establishes the data contents of the Health Care Claim Payment/Advice Transaction Set (835) within the context of the Electronic Data Interchange (EDI) environment. This transaction set can be used to make a payment, send an Explanation of Benefits (EOB) remittance advice, or make a payment and send an EOB remittance advice only from a health insurer to a health care provider either directly or via a financial institution.

See Appendix A, ASC X12 Nomenclature for a complete description of the standard

Table 1 - Header

POS. #	SEG. ID	NAME	REQ. DES.	MAX USE	LOOP REPEAT
010	ST	Transaction Set Header	M	1	
020	BPR	Beginning Segment for Payment Order/Remittance Advice	M	1	
030	NTE	Note/Special Instruction	O	>1	
040	TRN	Trace	O	1	

Figure 6. Transaction Set Key — Standard

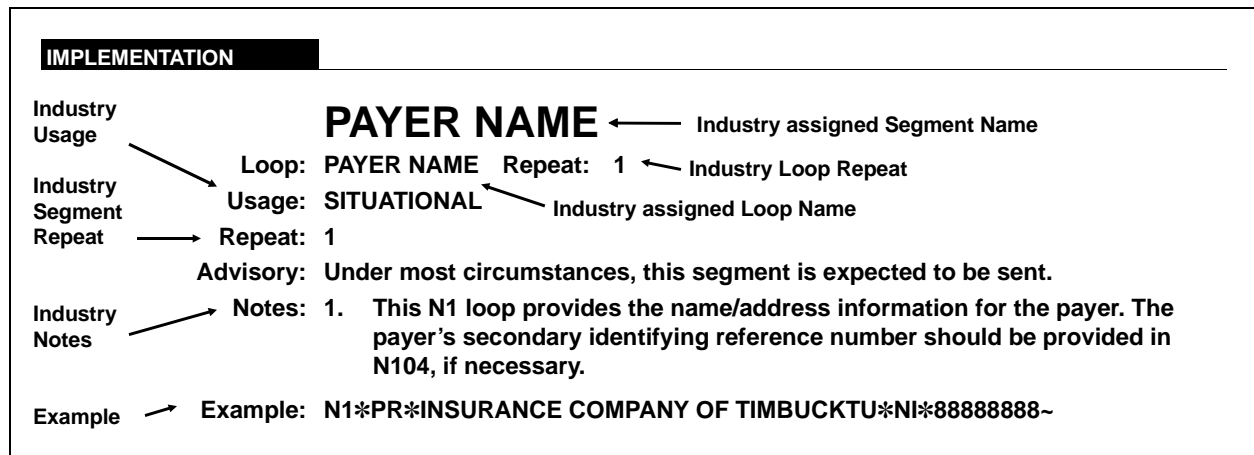


Figure 7. Segment Key — Implementation

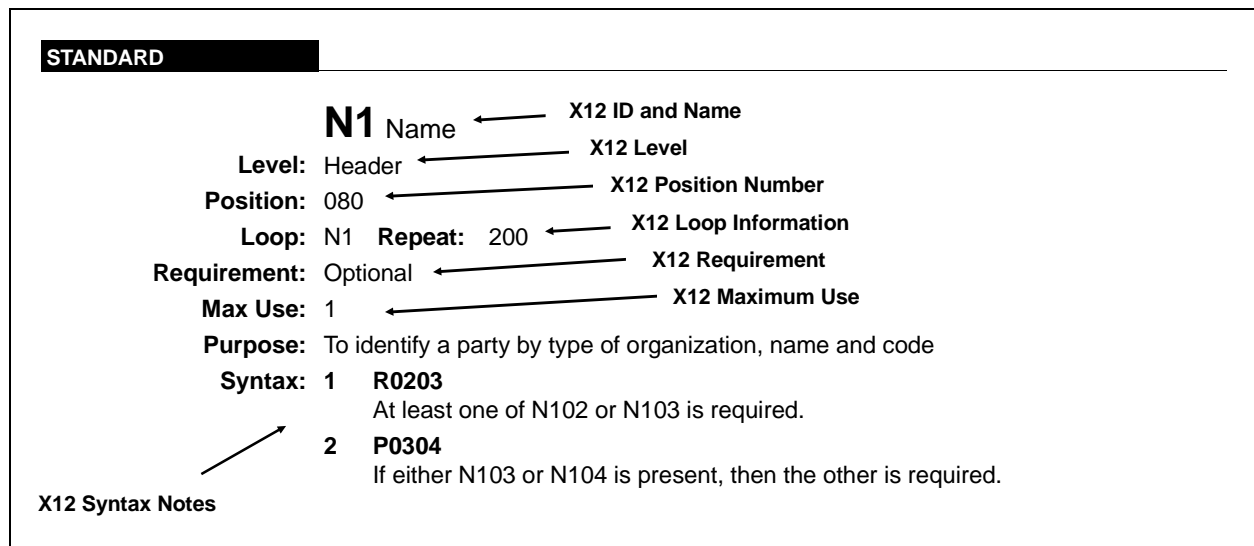


Figure 8. Segment Key — Standard

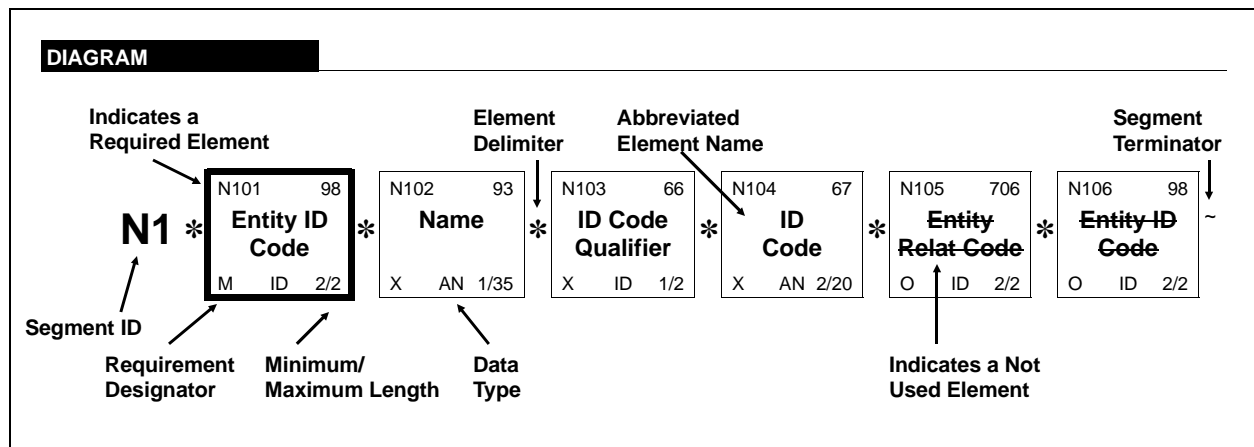


Figure 9. Segment Key — Diagram

ELEMENT SUMMARY									
USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES					
REQUIRED	SVC01	C003	COMPOSITE MEDICAL PROCEDURE IDENTIFIER	M					
Industry Usages: See the following page for complete descriptions ↑ X12 Semantic Note → Industry Note →			To identify a medical procedure by its standardized codes and applicable modifiers SEMANTIC NOTES 03 C003-03 modifies the value in C003-02. 04 C003-04 modifies the value in C003-02. 05 C003-05 modifies the value in C003-02. 06 C003-06 modifies the value in C003-02. 07 C003-07 is the description of the procedure identified in C003-02. Use the adjudicated Medical Procedure Code.						
REQUIRED	SVC01 - 1	235	Product/Service ID Qualifier	M ID	2/2				
Selected Code Values See Appendix C for external code source reference			Code identifying the type/source of the descriptive number used in Product/Service ID (234) <table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>AD</td> <td>American Dental Association Codes</td> </tr> </tbody> </table> CODE SOURCE 135: American Dental Association Codes			CODE	DEFINITION	AD	American Dental Association Codes
CODE	DEFINITION								
AD	American Dental Association Codes								

ELEMENT SUMMARY					
USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES	
REQUIRED	N101	98	Entity Identifier Code	M ID	2/3
Reference Designator SITUATIONAL N102 → Data Element Number →			Code identifying an organizational entity, a physical location, property or an individual Name Free-form name SYNTAX: R0203		
NOT USED	N103	66	Identification Code Qualifier	X ID	1/2
X12 Syntax Note → X12 Comment →			Code designating the system/method of code structure used for Identification Code (67) Identification Code Code identifying a party or other code SYNTAX: P0304 ADVISORY: Under most circumstances, this element is expected to be sent. COMMENT: This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.		

Figure 10. Segment Key — Element Summary

Industry Usages:

Required This item must be used to be compliant with this implementation guide.

Not Used This item should not be used when complying with this implementation guide.

Situational The use of this item varies, depending on data content and business context. The defining rule is generally documented in a syntax or usage note attached to the item.* The item should be used whenever the situation defined in the note is true; otherwise, the item should not be used.

NOTE:

If no rule appears in the notes, the item should be sent if the data is available to the sender.

IMPLEMENTATION

275 Patient Information

1. Additional Information to Support a Health Care Claim or Encounter
Additional Information to Support a Health Care Claim or Encounter

Table 1 - Header

PAGE #	POS. #	SEG. ID	NAME	USAGE	REPEAT	LOOP REPEAT
34	0100	ST	275 Transaction Header	R	1	
36	0200	BGN	Beginning Segment	R	1	
LOOP ID - 1000A TRANSACTION RECEIVER						1
38	0500	NM1	Transaction Receiver	R	1	
41	0900	PER	Response Contact	R	1	
LOOP ID - 1000B SUBMITTER INFORMATION						1
44	0500	NM1	Submitter Information	R	1	
LOOP ID - 1000C PROVIDER INFORMATION						1
46	0500	NM1	Provider Information	R	1	
LOOP ID - 1000D PATIENT NAME						1
49	0500	NM1	Patient Name	R	1	
52	1000	REF	Patient Account Number	R	1	
53	1000	REF	Institutional Type of Bill	S	1	
55	1050	DTP	Institutional Claim Service Date	S	1	

Table 2 - Detail

PAGE #	POS. #	SEG. ID	NAME	USAGE	REPEAT	LOOP REPEAT
LOOP ID - 2000A ASSIGNED NUMBER						>1
57	0100	LX	Assigned Number	R	1	
58	0150	TRN	Payer's Control Number/Provider's Control Number	R	1	
60	0170	STC	Status Information	S	1	
63	0500	REF	Procedure or Revenue Code	S	1	
65	0500	REF	Service Line Item Identification	S	1	
LOOP ID - 2100A PROFESSIONAL DATE OF SERVICE						1
67	0600	DTP	Professional Date of Service	S	1	
LOOP ID - 2100B DATE ADDITIONAL INFORMATION WAS SUBMITTED						1
69	0600	DTP	Date Additional Information Was Submitted	R	1	
71	0700	CAT	Category of Patient Information Service	R	1	
LOOP ID - 2110B ELECTRONIC FORMAT IDENTIFICATION						1
73	0900	EFI	Electronic Format Identification	R	1	
75	1000	BIN	Binary Data	R	1	
76	1100	SE	275 Transaction Set Trailer	R	1	

STANDARD

275 Patient Information

Functional Group ID: **PI**

This Draft Standard for Trial Use contains the format and establishes the data contents of the Patient Information Transaction Set (275) for use within the context of an Electronic Data Interchange (EDI) environment. This transaction set can be used to communicate individual patient information requests and patient information (either solicited or unsolicited) between separate health care entities in a variety of settings to be consistent with confidentiality and use requirements. Patient information consists of demographic, clinical, and other supporting data.

Table 1 - Header

POS. #	SEG. ID	NAME	REQ. DES.	MAX USE	LOOP REPEAT
0100	ST	Transaction Set Header	M	1	
0200	BGN	Beginning Segment	O	1	
0300	DTM	Date/Time Reference	O	3	
0400	TRN	Trace	O	5	
LOOP ID - NM1					>1
0500	NM1	Individual or Organizational Name	O	1	
0600	IN1	Individual Identification	O	1	
0700	DMG	Demographic Information	O	3	
0800	PRV	Provider Information	O	1	
0900	PER	Administrative Communications Contact	O	2	
1000	REF	Reference Identification	O	5	
1050	DTP	Date or Time or Period	O	1	
LOOP ID - NM1/NX1					5
1100	NX1	Property or Entity Identification	O	1	
1200	N3	Address Information	O	1	
1300	N4	Geographic Location	O	1	

Table 2 - Detail

POS. #	SEG. ID	NAME	REQ. DES.	MAX USE	LOOP REPEAT
LOOP ID - LX					>1
0100	LX	Assigned Number	O	1	
0150	TRN	Trace	O	1	
0170	STC	Status Information	O	1	
0200	NM1	Individual or Organizational Name	O	1	
0300	PRV	Provider Information	O	1	
0400	PER	Administrative Communications Contact	O	1	
0500	REF	Reference Identification	O	5	
LOOP ID - LX/DTP					>1
0600	DTP	Date or Time or Period	O	1	
0700	CAT	Category of Patient Information Service	O	1	

0800	PID	Product/Item Description	O	1	
LOOP ID - LX/DTP/EFI					1
0900	EFI	Electronic Format Identification	O	1	
1000	BIN	Binary Data	M	1	
1100	SE	Transaction Set Trailer	M	1	

NOTES:

- 1/0500** Loop NM1 identifies a single patient; it also identifies other entities or individuals which include the requester, responder or other organizations.
- 1/0800** The PRV segment is only used in Loop NM1 when identifying a requestor or responder who is also a provider.
- 2/0150** The TRN segment in Loop LX identifies a previously sent transaction set. The LX loop provides supporting or additional information for that item when TRN is used.
- 2/0175** The STC segment in LX loop identifies the status and action requested in a prior transaction when the response is provided in this transaction.
- 2/0200** The NM1 segment in loop LX identifies an individual provider within a responder group.

IMPLEMENTATION

275 TRANSACTION HEADER

Usage: REQUIRED

Repeat: 1

Example: ST*275*1001*004020X107~

STANDARD

ST Transaction Set Header

Level: Header

Position: 0100

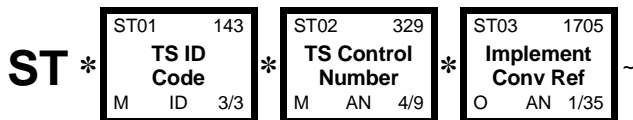
Loop: _____

Requirement: Mandatory

Max Use: 1

Purpose: To indicate the start of a transaction set and to assign a control number

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	ST01	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set	M ID 3/3
<p>SEMANTIC: The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).</p> <p>Use this code to identify the transaction set ID for the transaction set that will follow the ST segment. Each X12 standard has a transaction set identifier code that is unique to that transaction set.</p>				
			CODE	DEFINITION
			275	Patient Information
REQUIRED	ST02	329	Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M AN 4/9
<p>The transaction Control Number in ST02 and SE02 must be identical. This unique number also aids in error resolution research. Submitters could begin sending transactions using the number 0001 in this element and increment from there. The number must be unique within a specific functional group (GS-GE) and interchange (ISA-IEA), but can repeat in other groups and interchanges.</p>				

REQUIRED	ST03	1705	Implementation Convention Reference	O	AN	1/35
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Reference assigned to identify Implementation Convention

SEMANTIC: The implementation convention reference (ST03) is used by the translation routines of the interchange partners to select the appropriate implementation convention to match the transaction set definition.

INDUSTRY: *Implementation Convention Reference Identifier*

004020X107

This field contains the same value as GS08. Some translator products strip off the ISA and GS segments prior to application (ST-SE) processing. Providing the information from the GS08 at this level will ensure that the appropriate application mapping is utilized at translation time.

IMPLEMENTATION

BEGINNING SEGMENT

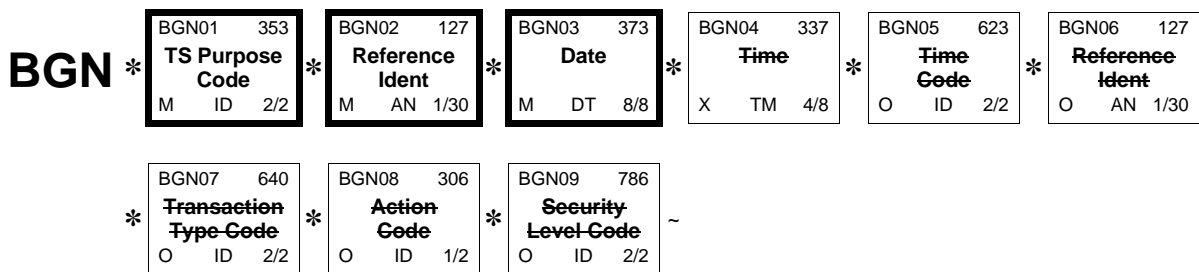
Usage: REQUIRED
Repeat: 1
Example: BGN*11*0001*19971024~

STANDARD

BGN Beginning Segment

Level: Header
Position: 0200
Loop: _____
Requirement: Optional
Max Use: 1
Purpose: To indicate the beginning of a transaction set
Syntax: 1. C0504
If BGN05 is present, then BGN04 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	BGN01	353	Transaction Set Purpose Code Code identifying purpose of transaction set	M ID 2/2
			CODE	DEFINITION
			02	Add Used when submitting an attachment to an 837 claim/encounter transmitted within the same transmission.
			11	Response Used when submitting information in response to a Health Care Claim 277 Request for Additional Information.

			22	Information Copy			
			Used when submitting supplemental information related to a claim or encounter for purposes other than claim payment.				
REQUIRED	BGN02	127	Reference Identification	M	AN	1/30	
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				
			SEMANTIC: BGN02 is the transaction set reference number.				
			INDUSTRY: <i>Submission Identifier Code</i>				
REQUIRED	BGN03	373	Date	M	DT	8/8	
			Date expressed as CCYYMMDD				
			INDUSTRY: <i>Transaction Set Creation Date</i>				
			SEMANTIC: BGN03 is the transaction set date.				
NOT USED	BGN04	337	Time	X	TM	4/8	
NOT USED	BGN05	623	Time Code	O	ID	2/2	
NOT USED	BGN06	127	Reference Identification	O	AN	1/30	
NOT USED	BGN07	640	Transaction Type Code	O	ID	2/2	
NOT USED	BGN08	306	Action Code	O	ID	1/2	
NOT USED	BGN09	786	Security Level Code	O	ID	2/2	

IMPLEMENTATION

TRANSACTION RECEIVER

Loop: 1000A — TRANSACTION RECEIVER Repeat: 1

Usage: REQUIRED

Repeat: 1

Example: NM1*PR*2*ABC INSURANCE COMPANY*****PI*12345~

STANDARD

NM1 Individual or Organizational Name

Level: Header

Position: 0500

Loop: NM1 Repeat: >1

Requirement: Optional

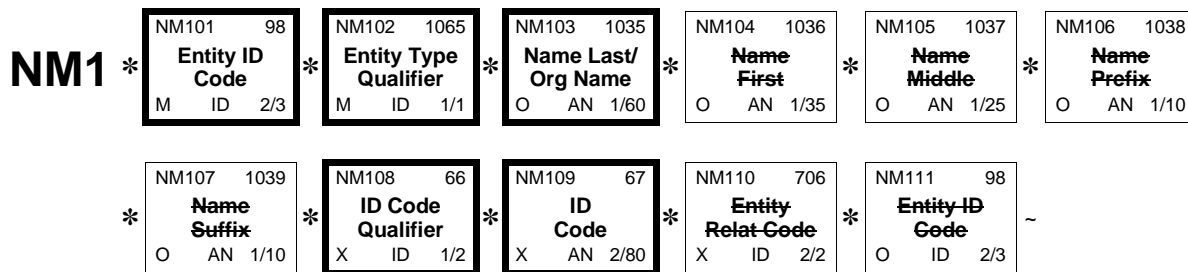
Max Use: 1

Purpose: To supply the full name of an individual or organizational entity

Set Notes: 1. Loop NM1 identifies a single patient; it also identifies other entities or individuals which include the requester, responder or other organizations.

Syntax: 1. **P0809**
If either NM108 or NM109 is present, then the other is required.
2. **C1110**
If NM111 is present, then NM110 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	NM101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			CODE	DEFINITION
			ABG	Organization Used when the final receiver of this transaction is not a payer (i.e., for data gathering purposes).

REQUIRED	CODE	DEFINITION	DATA TYPE	LENGTH
	PR	Payer Used when the final receiver of this transaction is a payer.		
REQUIRED	NM102	1065 Entity Type Qualifier Code qualifying the type of entity SEMANTIC: NM102 qualifies NM103.	M ID	1/1
	2	Non-Person Entity		
REQUIRED	NM103	1035 Name Last or Organization Name Individual last name or organizational name <i>INDUSTRY: Receiver Name</i>	O AN	1/60
NOT USED	NM104	1036 Name First	O AN	1/35
NOT USED	NM105	1037 Name Middle	O AN	1/25
NOT USED	NM106	1038 Name Prefix	O AN	1/10
NOT USED	NM107	1039 Name Suffix	O AN	1/10
REQUIRED	NM108	66 Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67) SYNTAX: P0809	X ID	1/2
	21	Health Industry Number (HIN) CODE SOURCE 121: Health Industry Number		
	94	Code assigned by the organization that is the ultimate destination of the transaction set Used when BGN01 equals 22 and other selected codes do not identify the organization to receive the file.		
	AD	Blue Cross Blue Shield Association Plan Code		
	FI	Federal Taxpayer's Identification Number		
	NI	National Association of Insurance Commissioners (NAIC) Identification		
	PI	Payor Identification		
	PP	Pharmacy Processor Number		
	XV	Health Care Financing Administration National Payer Identification Number (PAYERID) CODE SOURCE 540: Health Care Financing Administration National PAYERID		
REQUIRED	NM109	67 Identification Code Code identifying a party or other code <i>INDUSTRY: Receiver Identifier</i> SYNTAX: P0809	X AN	2/80
NOT USED	NM110	706 Entity Relationship Code	X ID	2/2

NOT USED	NM111	98	Entity Identifier Code	O	ID	2/3
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IMPLEMENTATION

RESPONSE CONTACT

Loop: 1000A — TRANSACTION RECEIVER

Usage: REQUIRED

Repeat: 1

Notes: 1. Required when the value in BGN01=11 and the Health Care Claim 277 Request for Additional Information designated a specific contact for the return of the requested information. This is the person/department to whom the information should be returned.

Example: PER*IC*MEDICAL REVIEW DEPARTMENT~

STANDARD

PER Administrative Communications Contact

Level: Header

Position: 0900

Loop: NM1

Requirement: Optional

Max Use: 2

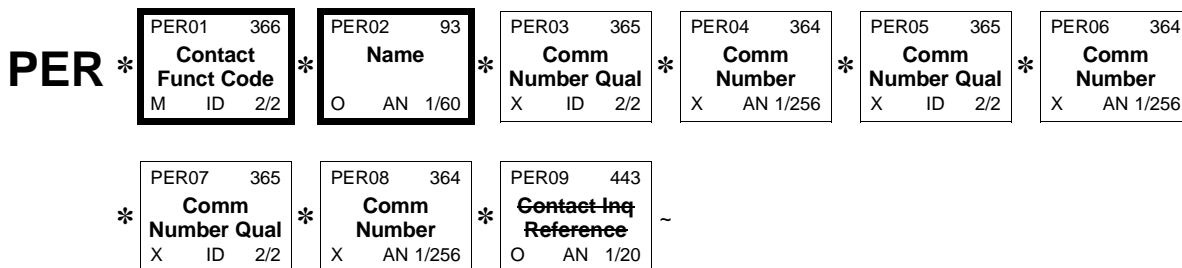
Purpose: To identify a person or office to whom administrative communications should be directed

Syntax: 1. **P0304**
If either PER03 or PER04 is present, then the other is required.

2. **P0506**
If either PER05 or PER06 is present, then the other is required.

3. **P0708**
If either PER07 or PER08 is present, then the other is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	PER01	366	Contact Function Code Code identifying the major duty or responsibility of the person or group named	M ID 2/2
			CODE	DEFINITION
			IC	Information Contact
REQUIRED	PER02	93	Name Free-form name	O AN 1/60
			<i>INDUSTRY: Information Receiver Contact Name</i>	
			Used if information was given at the 2100A, 2210D, or 2210E loops of the 277 Health Care Claim Request for Additional Information.	
SITUATIONAL	PER03	365	Communication Number Qualifier Code identifying the type of communication number	X ID 2/2
			SYNTAX: P0304	
			Used if information was given at the 2100A, 2210D, or 2210E loops of the 277 Health Care Claim Request for Additional Information.	
			CODE	DEFINITION
			ED	Electronic Data Interchange Access Number
			EM	Electronic Mail
			FX	Facsimile
			TE	Telephone
SITUATIONAL	PER04	364	Communication Number Complete communications number including country or area code when applicable	X AN 1/256
			SYNTAX: P0304	
			Used if information was given at the 2100A, 2210D, or 2210E loops of the 277 Health Care Claim Request for Additional Information.	
SITUATIONAL	PER05	365	Communication Number Qualifier Code identifying the type of communication number	X ID 2/2
			SYNTAX: P0506	
			Used if information was given at the 2100A, 2210D, or 2210E loops of the 277 Health Care Claim Request for Additional Information.	
			CODE	DEFINITION
			ED	Electronic Data Interchange Access Number
			EM	Electronic Mail
			EX	Telephone Extension
			FX	Facsimile
			TE	Telephone

SITUATIONAL PER06 364 **Communication Number** X AN 1/256
Complete communications number including country or area code when applicable

SYNTAX: P0506

Used if information was given at the 2100A, 2210D, or 2210E loops of the 277 Health Care Claim Request for Additional Information.

SITUATIONAL PER07 365 **Communication Number Qualifier** X ID 2/2
Code identifying the type of communication number

SYNTAX: P0708

Used if information was given at the 2100A, 2210D, or 2210E loops of the 277 Health Care Claim Request for Additional Information.

CODE	DEFINITION
ED	Electronic Data Interchange Access Number
EM	Electronic Mail
EX	Telephone Extension
FX	Facsimile
TE	Telephone

SITUATIONAL PER08 364 **Communication Number** X AN 1/256
Complete communications number including country or area code when applicable

SYNTAX: P0708

Used if information was given at the 2100A, 2210D, or 2210E loops of the 277 Health Care Claim Request for Additional Information.

NOT USED PER09 443 **Contact Inquiry Reference** O AN 1/20

IMPLEMENTATION

SUBMITTER INFORMATION

Loop: 1000B — SUBMITTER INFORMATION Repeat: 1

Usage: REQUIRED

Repeat: 1

Notes: 1. This segment is used to provide the submitter information.

Example: NM1*41*2*ABC BILLING SERVICE*****46*X100~

STANDARD

NM1 Individual or Organizational Name

Level: Header

Position: 0500

Loop: NM1 Repeat: >1

Requirement: Optional

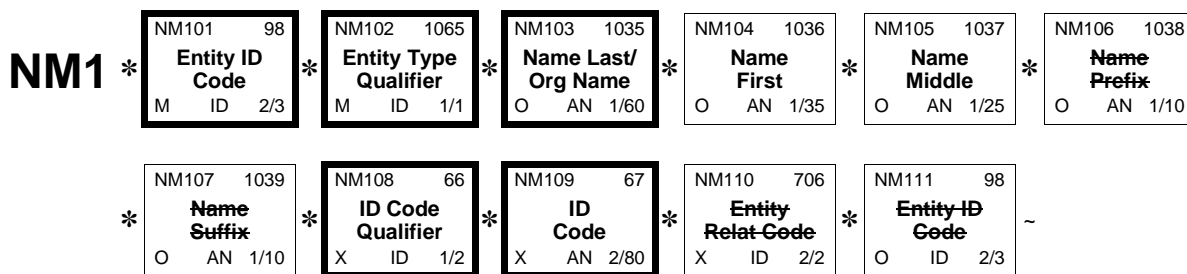
Max Use: 1

Purpose: To supply the full name of an individual or organizational entity

Set Notes: 1. Loop NM1 identifies a single patient; it also identifies other entities or individuals which include the requester, responder or other organizations.

Syntax: 1. **P0809**
 If either NM108 or NM109 is present, then the other is required.
 2. **C1110**
 If NM111 is present, then NM110 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	NM101	98	Entity Identifier Code Code identifying an organizational entity, a physical location, property or an individual	M ID 2/3
			CODE	DEFINITION
			41	Submitter

REQUIRED	NM102	1065	Entity Type Qualifier Code qualifying the type of entity SEMANTIC: NM102 qualifies NM103.	M	ID	1/1
			CODE		DEFINITION	
			1		Person	
			2		Non-Person Entity	
REQUIRED	NM103	1035	Name Last or Organization Name Individual last name or organizational name <i>INDUSTRY: Submitter Last or Organization Name</i>	O	AN	1/60
SITUATIONAL	NM104	1036	Name First Individual first name <i>INDUSTRY: Submitter First Name</i>	O	AN	1/35
			This field is required when the value in NM102 equals 1, and the person has a first name.			
SITUATIONAL	NM105	1037	Name Middle Individual middle name or initial <i>INDUSTRY: Submitter Middle Name</i>	O	AN	1/25
			Required if NM102 = 1 and the middle name/initial of the person is known.			
NOT USED	NM106	1038	Name Prefix	O	AN	1/10
NOT USED	NM107	1039	Name Suffix	O	AN	1/10
REQUIRED	NM108	66	Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67) SYNTAX: P0809	X	ID	1/2
			CODE		DEFINITION	
			46		Electronic Transmitter Identification Number (ETIN)	
			FI		Federal Taxpayer's Identification Number	
REQUIRED	NM109	67	Identification Code Code identifying a party or other code <i>INDUSTRY: Submitter Identifier</i> SYNTAX: P0809	X	AN	2/80
NOT USED	NM110	706	Entity Relationship Code	X	ID	2/2
NOT USED	NM111	98	Entity Identifier Code	O	ID	2/3

IMPLEMENTATION

PROVIDER INFORMATION

Loop: 1000C — PROVIDER INFORMATION Repeat: 1

Usage: REQUIRED

Repeat: 1

Example: NM1*1P*2*ST JOSEPH HOSPITAL*****SV*159999~

STANDARD

NM1 Individual or Organizational Name

Level: Header

Position: 0500

Loop: NM1 Repeat: >1

Requirement: Optional

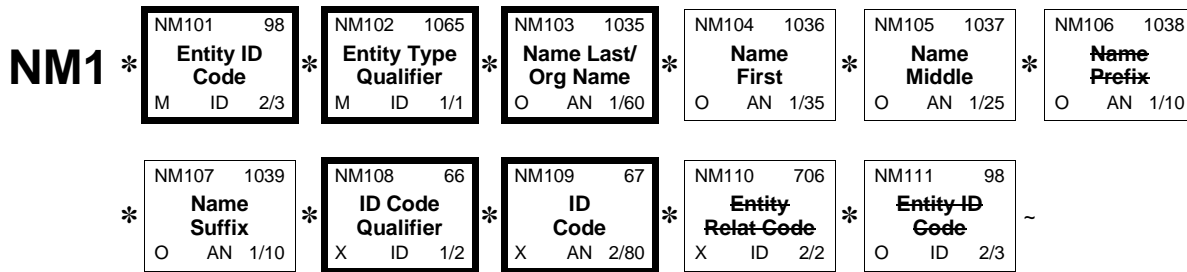
Max Use: 1

Purpose: To supply the full name of an individual or organizational entity

Set Notes: 1. Loop NM1 identifies a single patient; it also identifies other entities or individuals which include the requester, responder or other organizations.

Syntax: 1. **P0809**
 If either NM108 or NM109 is present, then the other is required.
 2. **C1110**
 If NM111 is present, then NM110 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	NM101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			CODE	DEFINITION
			1P	Provider

REQUIRED	NM102	1065	Entity Type Qualifier Code qualifying the type of entity SEMANTIC: NM102 qualifies NM103.	M	ID	1/1												
			<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Person</td> </tr> <tr> <td>2</td> <td>Non-Person Entity</td> </tr> </tbody> </table>	CODE	DEFINITION	1	Person	2	Non-Person Entity									
CODE	DEFINITION																	
1	Person																	
2	Non-Person Entity																	
REQUIRED	NM103	1035	Name Last or Organization Name Individual last name or organizational name <i>INDUSTRY: Provider Last or Organization Name</i>	O	AN	1/60												
SITUATIONAL	NM104	1036	Name First Individual first name <i>INDUSTRY: Provider First Name</i>	O	AN	1/35												
			This field is required when the value in NM102 equals 1 and the person has a first name.															
SITUATIONAL	NM105	1037	Name Middle Individual middle name or initial <i>INDUSTRY: Provider Middle Name</i>	O	AN	1/25												
			This field is required when the value in NM102 equals 1 and the middle name or initial of the person is known.															
NOT USED	NM106	1038	Name Prefix	O	AN	1/10												
SITUATIONAL	NM107	1039	Name Suffix Suffix to individual name <i>INDUSTRY: Provider Name Suffix</i>	O	AN	1/10												
			Required if known and NM102 equals 1.															
REQUIRED	NM108	66	Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67) SYNTAX: P0809	X	ID	1/2												
			<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>BD</td> <td>Blue Cross Provider Number Used only when BGN01 equals 02 and code was used in the 837 claim/encounter NM108.</td> </tr> <tr> <td>BS</td> <td>Blue Shield Provider Number Used only when BGN01 equals 02 and code was used in the 837 claim/encounter NM108.</td> </tr> <tr> <td>CI</td> <td>CHAMPUS (Civilian Health and Medical Program of the Uniformed Services) Identification Number Used only when BGN01 equals 02 and code was used in the 837 claim/encounter NM108.</td> </tr> <tr> <td>FI</td> <td>Federal Taxpayer's Identification Number Used only when BGN01 equals 02 and code was used in the 837 claim/encounter NM108.</td> </tr> <tr> <td>MC</td> <td>Medicaid Provider Number</td> </tr> </tbody> </table>	CODE	DEFINITION	BD	Blue Cross Provider Number Used only when BGN01 equals 02 and code was used in the 837 claim/encounter NM108.	BS	Blue Shield Provider Number Used only when BGN01 equals 02 and code was used in the 837 claim/encounter NM108.	CI	CHAMPUS (Civilian Health and Medical Program of the Uniformed Services) Identification Number Used only when BGN01 equals 02 and code was used in the 837 claim/encounter NM108.	FI	Federal Taxpayer's Identification Number Used only when BGN01 equals 02 and code was used in the 837 claim/encounter NM108.	MC	Medicaid Provider Number			
CODE	DEFINITION																	
BD	Blue Cross Provider Number Used only when BGN01 equals 02 and code was used in the 837 claim/encounter NM108.																	
BS	Blue Shield Provider Number Used only when BGN01 equals 02 and code was used in the 837 claim/encounter NM108.																	
CI	CHAMPUS (Civilian Health and Medical Program of the Uniformed Services) Identification Number Used only when BGN01 equals 02 and code was used in the 837 claim/encounter NM108.																	
FI	Federal Taxpayer's Identification Number Used only when BGN01 equals 02 and code was used in the 837 claim/encounter NM108.																	
MC	Medicaid Provider Number																	

MP	Medicare Provider Number Used only when BGN01 equals 02 and code was used in the 837 claim/encounter NM108.
PC	Provider Commercial Number Used only when BGN01 equals 02 and code was used in the 837 claim/encounter NM108.
SV	Service Provider Number Used when BGN01 equals 11. Return provider number given in the 277 Health Care Claim Request for Additional Information.
XX	Health Care Financing Administration National Provider Identifier

REQUIRED	NM109	67	Identification Code Code identifying a party or other code <i>INDUSTRY: Provider Identifier</i> SYNTAX: P0809	X	AN	2/80
NOT USED	NM110	706	Entity Relationship Code	X	ID	2/2
NOT USED	NM111	98	Entity Identifier Code	O	ID	2/3

IMPLEMENTATION

PATIENT NAME

Loop: 1000D — PATIENT NAME Repeat: 1

Usage: REQUIRED

Repeat: 1

Example: NM1*QC*1*SMITH*JOHN*H***MI*111222333A~

STANDARD

NM1 Individual or Organizational Name

Level: Header

Position: 0500

Loop: NM1 Repeat: >1

Requirement: Optional

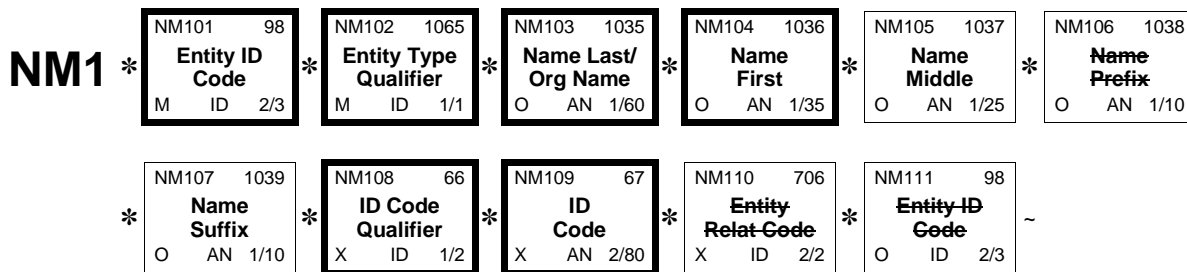
Max Use: 1

Purpose: To supply the full name of an individual or organizational entity

Set Notes: 1. Loop NM1 identifies a single patient; it also identifies other entities or individuals which include the requester, responder or other organizations.

Syntax: 1. **P0809**
If either NM108 or NM109 is present, then the other is required.
2. **C1110**
If NM111 is present, then NM110 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	NM101	98	Entity Identifier Code	M ID 2/3
			Code identifying an organizational entity, a physical location, property or an individual	
			CODE	DEFINITION
			QC	Patient

REQUIRED	NM102	1065	Entity Type Qualifier Code qualifying the type of entity SEMANTIC: NM102 qualifies NM103.	M	ID	1/1
			CODE	DEFINITION		
			1	Person		
REQUIRED	NM103	1035	Name Last or Organization Name Individual last name or organizational name <i>INDUSTRY: Patient Last Name</i>	O	AN	1/60
REQUIRED	NM104	1036	Name First Individual first name <i>INDUSTRY: Patient First Name</i>	O	AN	1/35
SITUATIONAL	NM105	1037	Name Middle Individual middle name or initial <i>INDUSTRY: Patient Middle Name</i>	O	AN	1/25
			This field is required when the value in NM102 equals 1 and the middle name or initial of the person is known.			
NOT USED	NM106	1038	Name Prefix	O	AN	1/10
SITUATIONAL	NM107	1039	Name Suffix Suffix to individual name <i>INDUSTRY: Patient Name Suffix</i>	O	AN	1/10
			Examples I, II, III, IV, JR, SR. Required if known.			
REQUIRED	NM108	66	Identification Code Qualifier Code designating the system/method of code structure used for Identification Code (67) SYNTAX: P0809	X	ID	1/2
			CODE	DEFINITION		
			MI	Member Identification Number The code "MI" is intended to be the subscriber's identification number as assigned by the payer. Payers use different terminology to convey the same number. Therefore the 275 Workgroup recommends using MI - Member Identification Number to convey the following terms: Insured's ID, Subscriber's ID, Health Insurance Claim Number (HIC), etc.		
			ZZ	Mutually Defined The value "ZZ", when used in this data element shall be defined as "HIPAA Individual Identifier" once this identifier has been adopted. Under the Health Insurance Portability and Accountability Act of 1996, the Secretary of the Department of Health and Human Services must adopt a standard individual identifier for use in this transaction.		

REQUIRED	NM109	67	Identification Code Code identifying a party or other code <i>INDUSTRY: Patient Identifier</i> SYNTAX: P0809	X	AN	2/80
NOT USED	NM110	706	Entity Relationship Code	X	ID	2/2
NOT USED	NM111	98	Entity Identifier Code	O	ID	2/3

IMPLEMENTATION

PATIENT ACCOUNT NUMBER

Loop: 1000D — PATIENT NAME

Usage: REQUIRED

Repeat: 1

Example: REF*EJ*ME1234~

STANDARD

REF Reference Identification

Level: Header

Position: 1000

Loop: NM1

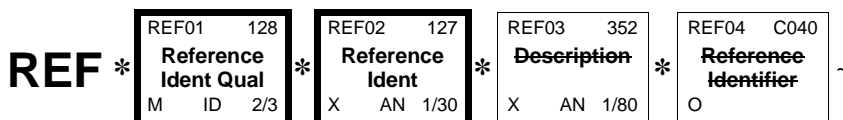
Requirement: Optional

Max Use: 5

Purpose: To specify identifying information

Syntax: 1. R0203
 At least one of REF02 or REF03 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES				
REQUIRED	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3				
			<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>EJ</td> <td> Patient Account Number Must be the Patient Account Number given in CLM01 in the 837 claim or the number given in the REF segment of the 277 Request for Additional Information. </td> </tr> </tbody> </table>	CODE	DEFINITION	EJ	Patient Account Number Must be the Patient Account Number given in CLM01 in the 837 claim or the number given in the REF segment of the 277 Request for Additional Information.	
CODE	DEFINITION							
EJ	Patient Account Number Must be the Patient Account Number given in CLM01 in the 837 claim or the number given in the REF segment of the 277 Request for Additional Information.							
REQUIRED	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X AN 1/30				
			INDUSTRY: <i>Patient Account Number</i> SYNTAX: R0203 REF02 is limited to 20 positions.					
NOT USED	REF03	352	Description	X AN 1/80				
NOT USED	REF04	C040	REFERENCE IDENTIFIER	O				

IMPLEMENTATION

INSTITUTIONAL TYPE OF BILL

- Loop:** 1000D — PATIENT NAME
Usage: SITUATIONAL
Repeat: 1
Notes: 1. This is required for institutional claims and is the Type of Bill on the original claim.
 2. Not used for Professional Claims.

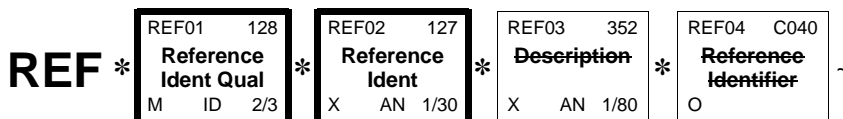
Example: REF*BLT*111~

STANDARD

REF Reference Identification

- Level:** Header
Position: 1000
Loop: NM1
Requirement: Optional
Max Use: 5
Purpose: To specify identifying information
Syntax: 1. **R0203**
 At least one of REF02 or REF03 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3
			BLT Billing Type	
REQUIRED	REF02	127	Reference Identification Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier <i>INDUSTRY: Bill Type Identifier</i> SYNTAX: R0203	X AN 1/30
			This is the Type of Bill on the original claim (CLM05) or is the Type of Bill on the 277 Request for Additional Information.	

NOT USED	REF03	352	Description	X	AN	1/80
NOT USED	REF04	C040	REFERENCE IDENTIFIER	O		

IMPLEMENTATION

INSTITUTIONAL CLAIM SERVICE DATE

- Loop: 1000D — PATIENT NAME
- Usage: SITUATIONAL
- Repeat: 1
- Notes:
 1. This is required for Institutional Claims and is the Statement from and through dates.
 2. Not used for Professional Claims.

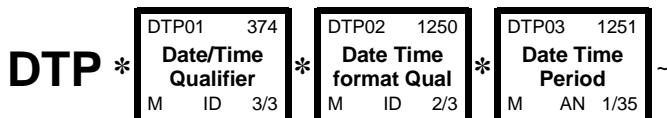
Example: DTP*232*RD8*19970501-19970515~

STANDARD

DTP Date or Time or Period

- Level: Header
- Position: 1050
- Loop: NM1
- Requirement: Optional
- Max Use: 1
- Purpose: To specify any or all of a date, a time, or a time period

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES				
REQUIRED	DTP01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time <i>INDUSTRY: Date Time Qualifier</i> This includes statement from and through dates.	M ID 3/3				
			<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>232</td> <td>Claim Statement Period Start This includes statement from and through dates.</td> </tr> </tbody> </table>	CODE	DEFINITION	232	Claim Statement Period Start This includes statement from and through dates.	
CODE	DEFINITION							
232	Claim Statement Period Start This includes statement from and through dates.							
REQUIRED	DTP02	1250	Date Time Period Format Qualifier Code indicating the date format, time format, or date and time format <i>SEMANTIC: DTP02 is the date or time or period format that will appear in DTP03.</i>	M ID 2/3				
			<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>RD8</td> <td>Range of Dates Expressed in Format CCYYMMDD-CCYYMMDD</td> </tr> </tbody> </table>	CODE	DEFINITION	RD8	Range of Dates Expressed in Format CCYYMMDD-CCYYMMDD	
CODE	DEFINITION							
RD8	Range of Dates Expressed in Format CCYYMMDD-CCYYMMDD							

REQUIRED	DTP03	1251	Date Time Period	M AN 1/35
-----------------	--------------	-------------	-------------------------	------------------

Expression of a date, a time, or range of dates, times or dates and times

INDUSTRY: Claim Date

This is the statement from & through dates.

IMPLEMENTATION

ASSIGNED NUMBER

Loop: 2000A — ASSIGNED NUMBER Repeat: >1

Usage: REQUIRED

Repeat: 1

Notes: 1. This begins the claim level looping structure to give information on a patient. This includes either the information to be stapled to an 837 claim/encounter or responses to a 277 Health Care Claim Request for Additional Information.

2. Within the LX, LX01 is the sequence number of the segments that follow. It is recommended that the LX01 sequence number start at 1 and incremented by 1.

Example: LX*1~

STANDARD

LX Assigned Number

Level: Detail

Position: 0100

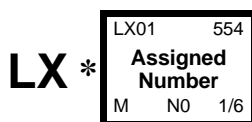
Loop: LX Repeat: >1

Requirement: Optional

Max Use: 1

Purpose: To reference a line number in a transaction set

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	LX01	554	Assigned Number Number assigned for differentiation within a transaction set	M NO 1/6
<p>Within the LX, LX01 is the sequence number of the segments that follow. It is recommended that the LX01 sequence number start at 1 and incremented by 1.</p>				

IMPLEMENTATION

PAYER'S CONTROL NUMBER/PROVIDER'S CONTROL NUMBER

- Loop:** 2000A — ASSIGNED NUMBER
Usage: REQUIRED
Repeat: 1
- Notes:**
1. Payer's control number that was given in the TRN segment of the 277 Request for Additional Information.
 2. Provider's control number that was given in the 2300 loop (PWK06) of the 837 claim/encounter submitted within the same transmission.

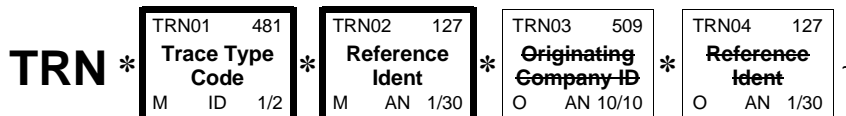
Example: TRN*2*1234567~

STANDARD

TRN Trace

- Level:** Detail
Position: 0150
Loop: LX
Requirement: Optional
Max Use: 1
- Purpose:** To uniquely identify a transaction to an application
- Set Notes:**
1. The TRN segment in Loop LX identifies a previously sent transaction set. The LX loop provides supporting or additional information for that item when TRN is used.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	TRN01	481	Trace Type Code Code identifying which transaction is being referenced	M ID 1/2
			CODE DEFINITION	
			1 Current Transaction Trace Numbers Used when sending a 275 to support an 837 within the same transmission.	
			2 Referenced Transaction Trace Numbers REQUIRED	

REQUIRED	TRN02	127	Reference Identification	M AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	
			<i>INDUSTRY: Attachment Control Number</i>	
			<i>ALIAS: Payer Control Identifier</i>	
			SEMANTIC: TRN02 provides unique identification for the transaction.	
			When BGN02 = 11, this number will be the payer's control number that had been given in the TRN segment of the 277 Request for Additional Information.	
			When BGN02 = 02, this number will be the unique control number that the provider assigned. It will match the number that was given in the 2300 Loop, (PWK06) of the 837 Claim within the same transmission.	
NOT USED	TRN03	509	Originating Company Identifier	O AN 10/10
NOT USED	TRN04	127	Reference Identification	O AN 1/30

IMPLEMENTATION

STATUS INFORMATION

Loop: 2000A — ASSIGNED NUMBER

Usage: SITUATIONAL

Repeat: 1

Notes: 1. This segment is required when the transaction is used as a response to a 277 Request for Additional Information.

2. This segment must be used to return the question that originally was sent on the 277 Request for Additional Information.

3. Not used when additional information is tied to an 837.

Example: STC*R3:A0001-0::LOI~

STANDARD

STC Status Information

Level: Detail

Position: 0170

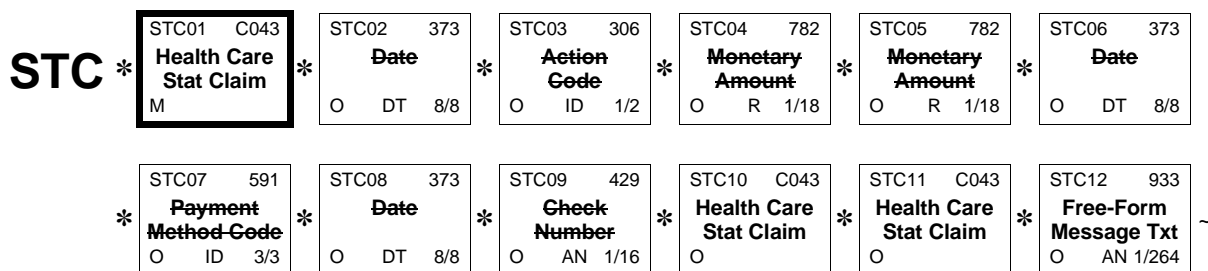
Loop: LX

Requirement: Optional

Max Use: 1

Purpose: To report the status, required action, and paid information of a claim or service line

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	STC01	C043	HEALTH CARE CLAIM STATUS	M
Used to convey status of the entire claim or a specific service line				

This data element contains the values found in the STC in the 277 Request for Additional Information.

REQUIRED **STC01 - 1** **1271** **Industry Code** **M AN 1/30**
Code indicating a code from a specific industry code list

INDUSTRY: Health Care Claim Status Category Code

This is the Category Code.

REQUIRED **STC01 - 2** **1271** **Industry Code** **M AN 1/30**
Code indicating a code from a specific industry code list

INDUSTRY: Additional Information Request Code

This will be the LOINC Code that defines the additional information.

CODE SOURCE 663: Logical Observation Identifier Names and Codes (LOINC)

NOT USED **STC01 - 3** **98** **Entity Identifier Code** **O ID 2/3**
Code identifying an organizational entity, a physical location, property or an individual

REQUIRED **STC01 - 4** **1270** **Code List Qualifier Code** **O ID 1/3**
Code identifying a specific industry code list

CODE DEFINITION

LOI **Logical Observation Identifier Names and Codes (LOINC) Codes**

CODE SOURCE 663: Logical Observation Identifier Names and Codes (LOINC)

NOT USED **STC02** **373** **Date** **O DT 8/8**

NOT USED **STC03** **306** **Action Code** **O ID 1/2**

NOT USED **STC04** **782** **Monetary Amount** **O R 1/18**

NOT USED **STC05** **782** **Monetary Amount** **O R 1/18**

NOT USED **STC06** **373** **Date** **O DT 8/8**

NOT USED **STC07** **591** **Payment Method Code** **O ID 3/3**

NOT USED **STC08** **373** **Date** **O DT 8/8**

NOT USED **STC09** **429** **Check Number** **O AN 1/16**

SITUATIONAL **STC10** **C043** **HEALTH CARE CLAIM STATUS** **O**
Used to convey status of the entire claim or a specific service line

Return if it was used to complete a question and was given on the Health Care Claim 277 Request for Additional Information.

This data element contains the values found in the STC in the 277 Request for Additional Information.

REQUIRED **STC10 - 1** **1271** **Industry Code** **M AN 1/30**
Code indicating a code from a specific industry code list

INDUSTRY: Health Care Claim Status Category Code

This is the Category Code.

REQUIRED **STC10 - 2** **1271** **Industry Code** **M AN 1/30**
Code indicating a code from a specific industry code list

INDUSTRY: Additional Information Request Code

ALIAS: Additional Information Request Modifier

This will be the LOINC Code that defines the additional information.

NOT USED **STC10 - 3** **98** **Entity Identifier Code** **O ID 2/3**
Code identifying an organizational entity, a physical location, property or an individual

REQUIRED **STC10 - 4** **1270** **Code List Qualifier Code** **O ID 1/3**
Code identifying a specific industry code list

CODE	DEFINITION
------	------------

LOI	Logical Observation Identifier Names and Codes (LOINC) Codes
------------	---

CODE SOURCE 663: Logical Observation Identifier Names and Codes (LOINC)

SITUATIONAL **STC11** **C043** **HEALTH CARE CLAIM STATUS** **O**
Used to convey status of the entire claim or a specific service line

Return if it was used to complete a question and was given on the Health Care Claim 277 Request for Additional Information.

REQUIRED **STC11 - 1** **1271** **Industry Code** **M AN 1/30**
Code indicating a code from a specific industry code list

INDUSTRY: Health Care Claim Status Category Code

This is the Category Code.

REQUIRED **STC11 - 2** **1271** **Industry Code** **M AN 1/30**
Code indicating a code from a specific industry code list

INDUSTRY: Additional Information Request Code

This will be the LOINC Code that defines the additional information.

Additional Information Request Modifier

NOT USED **STC11 - 3** **98** **Entity Identifier Code** **O ID 2/3**
Code identifying an organizational entity, a physical location, property or an individual

REQUIRED **STC11 - 4** **1270** **Code List Qualifier Code** **O ID 1/3**
Code identifying a specific industry code list

CODE	DEFINITION
------	------------

LOI	Logical Observation Identifier Names and Codes (LOINC) Codes
------------	---

CODE SOURCE 663: Logical Observation Identifier Names and Codes (LOINC)

SITUATIONAL **STC12** **933** **Free-Form Message Text** **O AN 1/264**
Free-form message text

INDUSTRY: Free Form Message Text

SEMANTIC: STC12 allows additional free-form status information.

Return if it was used to complete a question and was given on the Health Care Claim 277 Request for Additional Information.

IMPLEMENTATION

PROCEDURE OR REVENUE CODE

Loop: 2000A — ASSIGNED NUMBER
Usage: SITUATIONAL
Repeat: 1
Notes: 1. This segment will convey service line or revenue line information that the additional information is associated with. This matches the value in the 837 SV101-2, SV201-2, or SV301-2. or the 277 SVC01-2.

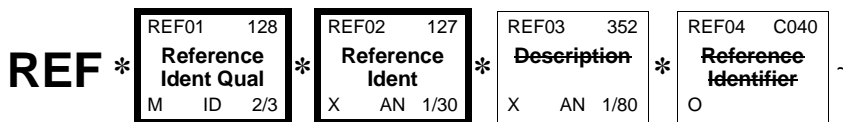
Example: REF*CPT*44499~

STANDARD

REF Reference Identification

Level: Detail
Position: 0500
Loop: LX
Requirement: Optional
Max Use: 5
Purpose: To specify identifying information
Syntax: 1. **R0203**
 At least one of REF02 or REF03 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3

If the code is not a revenue code or an NDC code, use value "CPT".

CODE	DEFINITION
CPT	Current Procedural Terminology Code Used to convey the Procedure Code (HCPCS or CPT) that was reported on the institutional and professional 837 claim or encounter or the 277 Request for Additional Information.

CODE SOURCE 133: Current Procedural Terminology (CPT) Codes

FO **Drug Formulary Number**
Used to convey the National Drug Code (NDC) that was reported on the Institutional and Professional 837 Claim or Encounter or the 277 Request for Additional Information.

YJ **Revenue Source**
Used to convey the Revenue Code that was reported on the institutional and professional 837 claim or encounter or 277 Request for Additional Information.

REQUIRED	REF02	127	Reference Identification	X AN 1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	

INDUSTRY: Procedure or Revenue Code

SYNTAX: R0203

This is the information is for a specific service line of an 837 claim. This value will be the reported service identification code.

NOT USED	REF03	352	Description	X AN 1/80
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NOT USED	REF04	C040	REFERENCE IDENTIFIER	O
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IMPLEMENTATION

SERVICE LINE ITEM IDENTIFICATION

Loop: 2000A — ASSIGNED NUMBER

Usage: SITUATIONAL

Repeat: 1

Notes: 1. This is used to convey the service line Provider Control number or sequence number of the service line that the additional information is associated with. This information will match what was given in the REF segment in the 2220 D and E loops of the 277.

2. If this segment is used, then there will be REF segment that contains the Procedure Code or Revenue Code.

Example: REF*FJ*1234~

STANDARD

REF Reference Identification

Level: Detail

Position: 0500

Loop: LX

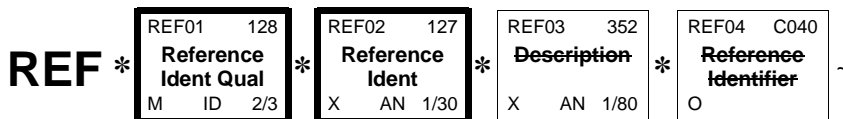
Requirement: Optional

Max Use: 5

Purpose: To specify identifying information

Syntax: 1. **R0203**
At least one of REF02 or REF03 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	REF01	128	Reference Identification Qualifier Code qualifying the Reference Identification	M ID 2/3
			CODE	DEFINITION
			6R	Provider Control Number Used when BGN01 equals 02. This will be the same information that was reported in an 837 claim or encounter that reports service line identification.

			FJ	Line Item Control Number Used when BGN01 equals 11. This will be what was originally given in the 277 Request for Additional Information.			
REQUIRED	REF02	127	Reference Identification		X	AN	1/30
			Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier				
			<i>INDUSTRY: Line Item Control Number</i>				
			SYNTAX: R0203				
			This is the service line or revenue line information that the additional information is associated with.				
NOT USED	REF03	352	Description		X	AN	1/80
NOT USED	REF04	C040	REFERENCE IDENTIFIER		O		

IMPLEMENTATION

PROFESSIONAL DATE OF SERVICE

Loop: 2100A — PROFESSIONAL DATE OF SERVICE Repeat: 1

Usage: SITUATIONAL

Repeat: 1

Notes: 1. This is required for Professional Claims and is the Line Level Date of Service.

2. This is not used for Institutional Claims.

Example: DTP*097*D8*19971024~

STANDARD

DTP Date or Time or Period

Level: Detail

Position: 0600

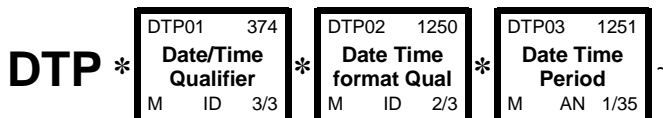
Loop: LX/DTP Repeat: >1

Requirement: Optional

Max Use: 1

Purpose: To specify any or all of a date, a time, or a time period

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	DTP01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time <i>INDUSTRY: Date Time Qualifier</i>	M ID 3/3
			472 Service	
REQUIRED	DTP02	1250	Date Time Period Format Qualifier Code indicating the date format, time format, or date and time format SEMANTIC: DTP02 is the date or time or period format that will appear in DTP03.	M ID 2/3
			D8 Date Expressed in Format CCYYMMDD	
			RD8 Range of Dates Expressed in Format CCYYMMDD-CCYYMMDD	

REQUIRED	DTP03	1251	Date Time Period	M AN	1/35
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Expression of a date, a time, or range of dates, times or dates and times

INDUSTRY: Professional Service Date

IMPLEMENTATION

DATE ADDITIONAL INFORMATION WAS SUBMITTED

Loop: 2100B — DATE ADDITIONAL INFORMATION WAS SUBMITTED **Repeat:** 1

Usage: REQUIRED

Repeat: 1

Notes: 1. This segment is required in order to use the BIN segment to send additional information.

Example: DTP*368*D8*19971024~

STANDARD

DTP Date or Time or Period

Level: Detail

Position: 0600

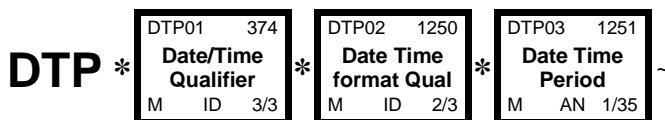
Loop: LX/DTP **Repeat:** >1

Requirement: Optional

Max Use: 1

Purpose: To specify any or all of a date, a time, or a time period

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	DTP01	374	Date/Time Qualifier Code specifying type of date or time, or both date and time <i>INDUSTRY: Date Time Qualifier</i>	M ID 3/3
			368 Submittal Date Information was Submitted	
REQUIRED	DTP02	1250	Date Time Period Format Qualifier Code indicating the date format, time format, or date and time format <i>SEMANTIC: DTP02 is the date or time or period format that will appear in DTP03.</i>	M ID 2/3
			D8 Date Expressed in Format CCYYMMDD	

REQUIRED	DTP03	1251	Date Time Period	M AN	1/35
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Expression of a date, a time, or range of dates, times or dates and times

INDUSTRY: Additional Information Gathered Date

IMPLEMENTATION

CATEGORY OF PATIENT INFORMATION SERVICE

Loop: 2100B — DATE ADDITIONAL INFORMATION WAS SUBMITTED
Usage: REQUIRED
Repeat: 1
Example: CAT*AE*HL~

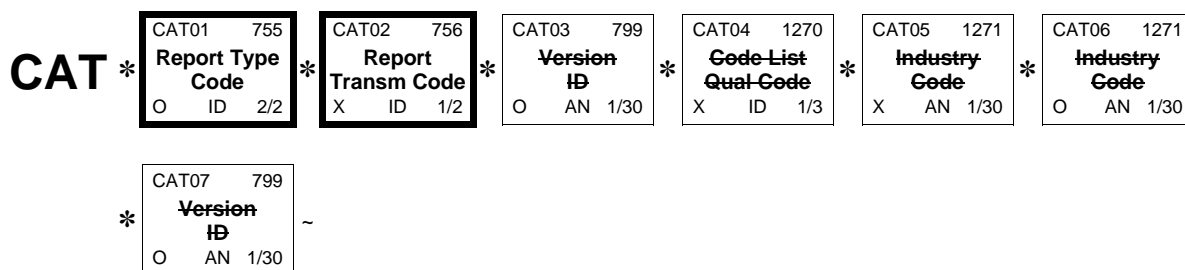
STANDARD

CAT Category of Patient Information Service

Level: Detail
Position: 0700
Loop: LX/DTP
Requirement: Optional
Max Use: 1
Purpose: To specify categories of patient information service
Syntax:

1. **C0302**
If CAT03 is present, then CAT02 is required.
2. **P0405**
If either CAT04 or CAT05 is present, then the other is required.
3. **C0605**
If CAT06 is present, then CAT05 is required.
4. **C0704**
If CAT07 is present, then CAT04 is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES				
REQUIRED	CAT01	755	Report Type Code Code indicating the title or contents of a document, report or supporting item <i>INDUSTRY: Attachment Report Type Code</i>	O ID 2/2				
Description of information that will be coming in the BIN segment.								
<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>AE</td> <td>Attachment</td> </tr> </tbody> </table>					CODE	DEFINITION	AE	Attachment
CODE	DEFINITION							
AE	Attachment							
REQUIRED	CAT02	756	Report Transmission Code Code defining timing, transmission method or format by which reports are to be sent <i>ALIAS: Industry Report Transmission Code</i> SYNTAX: C0302	X ID 1/2				
Format of the attachment information that will be in the BIN segment.								
<table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>HL</td> <td>Health Industry Level 7 Interface Standards (HL/7) Format</td> </tr> </tbody> </table> <p>CODE SOURCE 464: Health Industry Level 7 (HL7)</p>					CODE	DEFINITION	HL	Health Industry Level 7 Interface Standards (HL/7) Format
CODE	DEFINITION							
HL	Health Industry Level 7 Interface Standards (HL/7) Format							
NOT USED	CAT03	799	Version Identifier	O AN 1/30				
NOT USED	CAT04	1270	Code List Qualifier Code	X ID 1/3				
NOT USED	CAT05	1271	Industry Code	X AN 1/30				
NOT USED	CAT06	1271	Industry Code	O AN 1/30				
NOT USED	CAT07	799	Version Identifier	O AN 1/30				

IMPLEMENTATION

ELECTRONIC FORMAT IDENTIFICATION

Loop: 2110B — ELECTRONIC FORMAT IDENTIFICATION Repeat: 1

Usage: REQUIRED

Repeat: 1

Notes: 1. Required in order to use the BIN segment.

Example: EFI*05~

STANDARD

EFI Electronic Format Identification

Level: Detail

Position: 0900

Loop: LX/DTP/EFI Repeat: 1

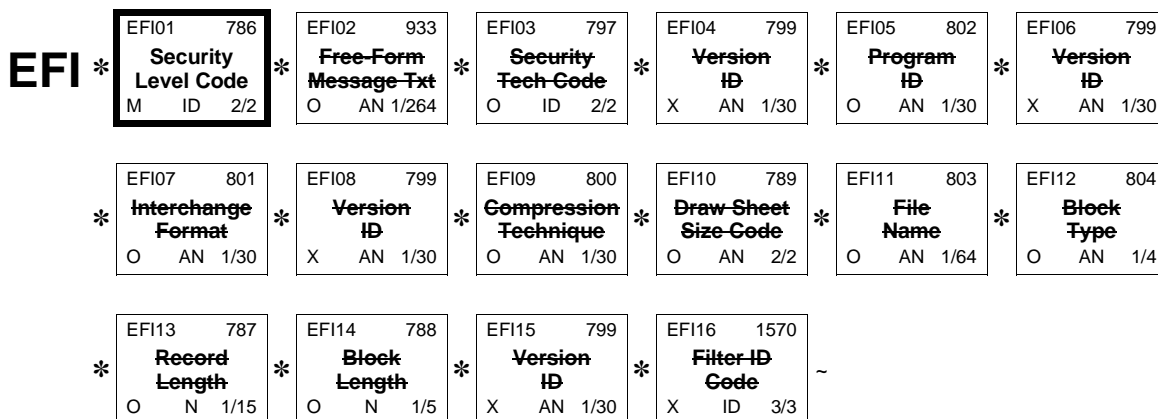
Requirement: Optional

Max Use: 1

Purpose: To provide basic information about the electronic format of the interchange data

- Syntax:**
1. **C0504**
If EFI05 is present, then EFI04 is required.
 2. **C0706**
If EFI07 is present, then EFI06 is required.
 3. **C0908**
If EFI09 is present, then EFI08 is required.
 4. **P1516**
If either EFI15 or EFI16 is present, then the other is required.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES		
REQUIRED	EFI01	786	Security Level Code Code indicating the level of confidentiality assigned by the sender to the information following	M	ID	2/2
			CODE	DEFINITION		
			05	Personal Per public law publication 104-191 August 21, 1996 Section 1177 [HIPAA] - This information is confidential and wrongful use is subject to penalties.		
NOT USED	EFI02	933	Free-Form Message Text	O	AN	1/264
NOT USED	EFI03	797	Security Technique Code	O	ID	2/2
NOT USED	EFI04	799	Version Identifier	X	AN	1/30
NOT USED	EFI05	802	Program Identifier	O	AN	1/30
NOT USED	EFI06	799	Version Identifier	X	AN	1/30
NOT USED	EFI07	801	Interchange Format	O	AN	1/30
NOT USED	EFI08	799	Version Identifier	X	AN	1/30
NOT USED	EFI09	800	Compression Technique	O	AN	1/30
NOT USED	EFI10	789	Drawing Sheet Size Code	O	AN	2/2
NOT USED	EFI11	803	File Name	O	AN	1/64
NOT USED	EFI12	804	Block Type	O	AN	1/4
NOT USED	EFI13	787	Record Length	O	N	1/15
NOT USED	EFI14	788	Block Length	O	N	1/5
NOT USED	EFI15	799	Version Identifier	X	AN	1/30
NOT USED	EFI16	1570	Filter ID Code	X	ID	3/3

IMPLEMENTATION

BINARY DATA

Loop: 2110B — ELECTRONIC FORMAT IDENTIFICATION

Usage: REQUIRED

Repeat: 1

- Notes: 1. This is used to send additional information in an HL7 message format.
2. It is recommended that BIN02 not be larger than 64 megabytes.

Example: BIN*277*XXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXX~

STANDARD

BIN Binary Data

Level: Detail

Position: 1000

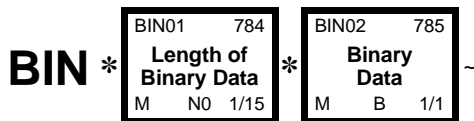
Loop: LX/DTP/EFI

Requirement: Mandatory

Max Use: 1

Purpose: To transfer binary data in a single data segment and allow identification of the end of the data segment through a count; there is no identification of the internal structure of the binary data in this segment

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	BIN01	784	Length of Binary Data The length in integral octets of the binary data <i>INDUSTRY: Binary Data Length Number</i>	M NO 1/15
REQUIRED	BIN02	785	Binary Data A string of octets which can assume any binary pattern from hexadecimal 00 to FF	M B 1/1

IMPLEMENTATION

275 TRANSACTION SET TRAILER

Usage: REQUIRED

Repeat: 1

Example: SE*17*1001~

STANDARD

SE Transaction Set Trailer

Level: Detail

Position: 1100

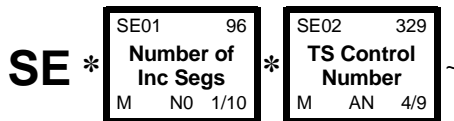
Loop: _____

Requirement: Mandatory

Max Use: 1

Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	SE01	96	Number of Included Segments Total number of segments included in a transaction set including ST and SE segments <i>INDUSTRY: Transaction Segment Count</i> Do not include segments that are contained within the HL7 Message, but include in the count as one segment the entire BIN segment.	M NO 1/10
REQUIRED	SE02	329	Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set The transaction Control Number in ST02 and SE02 must be identical. This unique number also aids in error resolution research. Submitters could begin sending transactions using the number 0001 in this element and increment from there. The number must be unique within a specific functional group (GS-GE) and interchange (ISA-IEA), but can repeat in other groups and interchanges.	M AN 4/9

4 EDI Transmission Examples for Business Usages

Overview

The 275 Additional Information to support a Health Care Claim or Encounter has been written to be able to send answers to standard attachments electronically. The following scenarios have used the Ambulance and Clinical Notes Attachment booklets as well as the HL7 documentation that accompanies this Implementation Guide. These two attachment examples are being used to show how to code the 275.

The following table contains the list of questions and associated LOINC codes used in the following scenarios.

Electronic Form	Attach. Element LOINC Code	Attachment Element Name	Response Codes	Code Description	Response Code Source
Operative Report	11504-8	Entire Operative Report	Narrative		
Service Line Level	19016-5	Request or Response is at the Service Line level			
Ambulance	A0001-0	ENTIRE AMBULANCE ATTACHMENT			
Question 1	18584-3	BODY WEIGHT AT EMS TRANSPORT (COMPOSITE)			
Question 2	15517-6	EMS TRANSPORT, TRANSPORT DIRECTION	Codes	Type of EMS transport. Code List is in HL7 Ambulance Attachment Documentation	HL79007
Question 3	15509-3	EMS TRANSPORT, RATIONALE FOR CHOICE OF DESTINATION	Numerous	Code indicates if patient was transported to the nearest facility or for other considerations. Code List is in HL7 Ambulance Attachment Documentation	HL79008
Question 4	15510-1	EMS TRANSPORT, DISTANCE TRANSPORTED	Mileage		
Question 5	15511-9	EMS TRANSPORT, ORIGINATION SITE INFORMATION (COMPOSITE)	Name & Address		
Question 6	15512-7	EMS TRANSPORT, DESTINATION SITE INFORMATION (COMPOSITE)	Name & Address		
Question 7	15513-5	EMS TRANSPORT, REASON FOR SCHEDULED TRIP (COMPOSITE)	Numerous Codes or Narrative	Can be a code from Code List or a Narrative explanation. Code List is in HL7 Ambulance Attachment Documentation	HL79000
Question 8	18588-4	EMS TRANSPORT, PURPOSE OF STRETCHER (NARRATIVE)	Narrative		
Question 9	18589-2	EMS TRANSPORT, ADMITTED AT DESTINATION FACILITY	Y or N	Yes or No	HL70136
Question 10	15514-3	EMS TRANSPORT, ORDERING PRACTITIONER (COMPOSITE)	Name		
Question 11	18591-8	CONFINED TO BED BEFORE EMS TRANSPORT	Y or N	Yes or No	HL70136
Question 12	18592-6	CONFINED TO BED AFTER EMS TRANSPORT	Y or N	Yes or No	HL70136
Question 13	18593-4	EMS TRANSPORT, DISCHARGED FROM ORIGIN INSTITUTION	Y or N	Yes or No	HL70136

Electronic Form	Attach. Element LOINC Code	Attachment Element Name	Response Codes	Code Description	Response Code Source
Question 14	15515-0	EMS TRANSPORT, MEDICAL REASON FOR UNSCHEDULED TRIP	Codes	Medical Reason for Unscheduled Trip. Code List is in HL7 Ambulance Attachment Documentation	HL79010
Question 15	15516-8	EMS TRANSPORT, JUSTIFICATION FOR EXTRA ATTENDANTS	Codes	Justification for Extra Attendants. Code List is in HL7 Ambulance Attachment Documentation	HL79001

Scenario One Description

Scenario One depicts the utilization of the ANSI ASC X12 275 in a Medicare Part A, governmental institutional claim environment. Two claims have been electronically transmitted to the Medicare Part A fiscal intermediary through the use of a third party billing service (clearinghouse). In this scenario, both claims have been accepted for submission to the claims adjudication system but have not been paid yet. Both claims are needing additional information in order finish processing the claims and a request for additional information is being sent to the provider. The provider is responding to a request that was received electronically giving the necessary information in order to be processed into the adjudication system for payment. The electronic request in this example was a 277 Request for Additional Information The 275 will be returned to the clearinghouse to be returned to the payer in this scenario.

Assumptions

ABC Insurance Company is located at PO Box 4321-9111, Miami, FL, 33131-9111 and has a payer ID of 05440. ABC Insurance Company, which is both a commercial insurance and a Medicare Intermediary, has received two electronic ASC X12 837 claim transmissions from XYZ Services on behalf of St. Holy Hill Hospital with Provider Number of 3999000B.

St. Holy Hill Hospital utilizes XYZ Services (Electronic Transmitter Identification Number of A222222221), an electronic clearinghouse, to help the hospital prepare and submit its electronic claims to payers.

The first transmission contains a claim submitted on behalf of Peter M. Jones. Mr. Jones is a commercial insurance enrollee with a health insurance claim number of 123456789A. The hospital's patient control number is JONES123.

St. Holy Hill Hospital has submitted a claim for an unlisted surgical procedure code rendered on October 3, 1997.

ABC Insurance Company would need to operative report to determine what surgical procedure was performed and the amount paid. Therefore St. Holy Hill Hospital sent the operative report in the ASC X12 275 within the same transmission as the ASC X12 837 claim.

The second transmission contains two claims. The first claim submitted is on behalf of Jack J. Jackson Mr. Jackson is a Medicare enrollee with a health insurance claim number of 649111111A. The hospital's patient control number is JACKSON123.

St. Holy Hill Hospital has submitted a claim for outpatient ambulance services (bill type 131) rendered on September 11, 1997.

ABC Insurance Company always wants an Ambulance certification on any ambulance runs so rather than wait for a request St. Holy Hills Hospital has sent the

ambulance certification in the ASC X12 275 within the same transmission as the ASC X12 837 claim.

The second claim submitted is on behalf of Joe Smith. Mr. Smith is a Medicare enrollee with a health insurance claim number of 123405074A. The hospital's patient control number is SMITH123.

St. Holy Hill Hospital has submitted a claim for outpatient services (bill type 131) rendered to Mr. Smith rendered on June 14, 1997.

Below is the 837 Health Care Claim transmissions and the 275 Additional Information to Support a Health Care Claim or Encounter transmissions that have been sent to ABC Insurance Company.

277 Request for Additional Information Transmission

```

ISA*00**00**ZZ*A222222221*ZZ*05440*971015*0908*
U*00401*000001273*0*P*:*~
GS*HC*A222222221*05440*971015*0908*1273*X*
004010X096~
ST*837*3456~
BHT*0019*00*0123*19971015*1023*CH~
REF*87*004010X096~
NM1*41*2*XYZ SERVICE*****46*A222222221~
PER*IC*Jane Doe*TE*8005551212~
NM1*40*2*ABC INSURANCE COMPANY*****46*05440~
HL*1**20*1~
NM1*85*2*XYZ SERVICE*****FI*222222221~
N3*234 MAIN ST~
N4*MIAMI*FL*331323111~
NM1*87*2*ST HOLY HILLS HOSPITAL*****XX*581234567~
N3*2345 WINTER BLVD~
N4*MIAMI*FL*331323111~
HL*2*1*22*1~
SBR*P*18*2222-SJ*****CI~
NM1*IL*1*JONES*PETER*M***HN*123456789A~
N3*623 N MAIN ST~
N4*MIAMI*FL*331323111~
DMG*D8*19430501*M~
NM1*PR*2*ABC INSURANCE COMPANY~
N3*PO BOX 4321-9111~
N4*MIAMI*FL*331319111~
REF*FY*000221111~
CLM*JONES123*5903.20***11:A:1*Y*A*Y*Y*****Y~
DTP*434*D8*19991010~
DTP*435*DT*199910020800~
CL1*3*1*01~
PWK*OB*EL***AC*987654~
    
```

HI*BK:0340*BJ:340~
HI*BF:V7389~
HI*BR:784:D8:19991003~
QTY*CA*8*DA~
NM1*71*1*FITCH*ROBERT*D***XX*KA6663~
PRV*AT*22*203BF0100Y~
NM1*72*1*FITCH*ROBERT*D***XX*KA6663~
LX*1~
SV2*0120*HC:44499*3328*DA*8*416~
LX*2~
SV2*0250**700*UN*20~
LX*3~
SV2*0361**1875.20*UN*17~
LX*4~
SV2*0001**5903.20~
DTP*472*D8*19971003~
SE*45*3456~
GE*1*1273~

275 Additional Information to Support a Health Care Claim or Encounter

GS*PI*A222222221*05440*971015*0908*1274*X*
004020X107~
ST*275*1002*004020X107~
BGN*11*0001*19971015~
NM1*PR*2*ABC INSURANCE COMPANY*****PI*05440~
NM1*41*2*XYZ SERVICE*****46*A222222221~
NM1*1P*1*FITCH*ROBERT*D***XX*KA6663~
NM1*QC*1*JONES*PETER*M***HN*123456789A~
REF*EJ*26463774~
LX*1~
TRN*2*987654~
REF*CPT*44499~
DTP*472*D8*19971003~
DTP*368*D8*19971015~
CAT*AE*HL~
EFI*05~
BIN*3231*MSH|^~\&|||19980919131523||ORU^R01|
A12349282|P|2.3||NE|NE<cr>
PID|||100928782^9^M11||JONES^PETER<cr>
OBR|||11504-8^OPERATIVE NOTE^LN<cr>
OBX|TX|11504-8||JONES, PETER~
St Holy Hill Hospital~
MRN: ABC123~Operative Report~ ATT: ROBERT DOUGLAS
FITCH, M.D.~~Procedure: 08/13/96 DICT: SAMUEL

DAVID STANLEY, M.D.~PREOPERATIVE DIAGNOSIS: Left leg length discrepancy.~~POSTOPERATIVE DIAGNOSIS: Left leg length discrepancy.~~OPERATION: Right distal femoral epiphysiodesis.~~SURGEON: Robert Douglas Fitch, M.D.~~ASSISTANTS: Samuel David Stanley, M.D.; James D. Davidson, M.D.~~ANESTHESIA: General endotracheal.~~ESTIMATED BLOOD LOSS: Minimal.~~TOURNIQUET TIME: 28 minutes.~~FLUIDS: 500 cc of lactated Ringer's.~~PATHOLOGY: None.~~DRAINS: None.~~COMPLICATIONS: None.~~DESCRIPTION OF PROCEDURE: The patient was brought to the operating room and placed supine on the operating table. Following

Scenario Two Description

Scenario Two depicts the utilization of the ANSI ASC X12 275 with both a professional and institutional 837 claim environment. The first example is a professional 837 claim with a 275 Additional Information being transmitted electronically to ABC Insurance Company through the use of a third party billing service (clearinghouse). The second example is two claims with one of the claims having a 275 Additional Information being transmitted electronically to the Medicare Part A fiscal intermediary through the use of a third party billing service (clearinghouse).

Assumptions

ABC Insurance Company is located at PO Box 4321-9111, Miami, FL, 33131-9111 and has a payer ID of 05440. ABC Insurance Company, which is both a commercial insurance and a Medicare Intermediary, has received two electronic ASC X12 837 claim transmissions from XYZ Services on behalf of St. Holy Hill Hospital with Provider Number of 3999000B.

St. Holy Hill Hospital utilizes XYZ Services (Electronic Transmitter Identification Number of A22222221), an electronic clearinghouse, to help the hospital prepare and submit its electronic claims to payers.

The first transmission contains a claim submitted on behalf of Peter M. Jones.

Mr. Jones is a commercial insurance enrollee with a health insurance claim number of 123456789A. The hospital's patient control number is JONES123.

St. Holy Hill Hospital has submitted a claim for an unlisted surgical procedure code rendered on October 3, 1997.

ABC Insurance Company would need to operative report to determine what surgical procedure was performed and the amount paid. Therefore St. Holy Hill Hospital sent the operative report in the ASC X12 275 within the same transmission as the ASC X12 837 claim.

The second transmission contains two claims. The first claim submitted is on behalf of Jack J. Jackson Mr. Jackson is a Medicare enrollee with a health insurance claim number of 649111111A. The hospital's patient control number is JACKSON123.

St. Holy Hill Hospital has submitted a claim for outpatient ambulance services

ISA*00* *00* *ZZ*A22222221

*ZZ*05440 *971015*
0908*U*04010*000001273*0*P*:~
GS*HC*A222222221*05440*971015*0908*1273*
X*004010X096~
ST*837*3456~
BHT*0019*00*0123*19971015*1023*CH~
REF*87*004010X096~
NM1*41*2*XYZ SERVICE*****46*A222222221~
NM1*40*2*ABC INSURANCE COMPANY*****46*05440~
HL*1**20*1~
NM1*85*2*XYZ SERVICE*****FI*222222221~
N3*234 MAIN ST~
N4*MIAMI*FL*331323111~
NM1*87*2*ST HOLY HILLS HOSPITAL*****XX*581234567~
N3*2345 WINTER BLVD~
N4*MIAMI*FL*331323111~
HL*2*1*22*1~
SBR*P*18*2222-SJ*****CI~
NM1*IL*1*JONES*PETER*M***HN*123456789A~
N3*623 N MAIN ST~
N4*MIAMI*FL*331323111~
DMG*D8*19430501*M~
NM1*PR*2*ABC INSURANCE COMPANY~
N3*PO BOX 4321-9111~
N4*MIAMI*FL*331319111~
REF*FY*000221111~
CLM*JONES123*1000***11::1*Y*A*Y*Y*S~
PWK*OB*EL***AC*987654~
HI*BK:0340*BF:V7389~
NM1*82*1*FITCH*ROBERT*D**XX*KA6663~
PRV*PE*S3*203BF0100Y~
N3*2345 WINTER BLVD~
N4*MIAMI*FL*331323111~
LX*1~
SV1*HC:44499*1000*UN*1*11*1*1**N~
DTP*472*D8*19971003~
SE*33*3456~
GE*1*1273~
GS*PI*A222222221*05440*971015*0908*1274*
X*004020X107~
ST*275*1002*004020X107~
BGN*11*0001*19971015~
NM1*PR*2*ABC INSURANCE COMPANY*****PI*05440~

NM1*41*2*XYZ SERVICE*****46*A22222221~
 NM1*1P*1*FITCH*ROBERT*D**XX*KA6663~
 NM1*QC*1*JONES*PETER*M***HN*123456789A~
 REF*EJ*26463774~
 LX*1~
 TRN*2*987654~
 REF*CPT*44499~
 DTP*472*D8*19971003~
 DTP*368*D8*19971015~
 CAT*AE*HL~
 EFI*05~
 BIN*3231*MSH|^~\&|||19980919131523||ORU^R01|A1234
 9282|P|2.3||NE|NE<cr>
 PID||100928782^9^M11||JONES^PETER<cr>
 OBR||11504-8^OPERATIVE NOTE^LN<cr>
 OBX|TX|11504-8||JONES, PETER~St Holy Hill Hospi-
 tal~
 MRN: ABC123~Operative Report~ ATT: ROBERT DOUGLAS
 FITCH, M.D.~~Procedure: 08/13/96 DICT: SAMUEL
 DAVID STANLEY, M.D.~~PREOPERATIVE DIAGNOSIS: Left
 leg length discrepancy.~~POSTOPERATIVE DIAGNOSIS:
 Left leg length discrepancy.~~OPERATION: Right
 distal femoral epiphysiodesis.~~SURGEON: Robert
 Douglas Fitch, M.D.~~ASSISTANTS: Samuel David
 Stanley, M.D.; James D. Davidson, M.D.~~ANESTHE-
 SIA: General endotracheal.~~ESTIMATED BLOOD LOSS:
 Minimal.~~TOURNIQUET TIME: 28 minutes.~~FLUIDS:
 500 cc of lactated Ringer's.~~PATHOLOGY:
 None.~~DRAINS: None.~~COMPLICATIONS: None.~~DE-
 SCRIPTON OF PROCEDURE: The patient was brought
 to the operating room and placed supine on the op-
 erating table. Following the administration of
 general endotracheal anesthetic, a nonsterile
 tourniquet was placed on the patient's right up-
 per thigh. The patient's right lower extremity
 was then prepped and draped in the normal sterile
 fashion. Attention was then turned to the right
 distal femoral physis. Fluoroscopy was used to
 isolate the level of the physis. An approximately
 1 cm incision was then made on the lateral aspect
 of the distal thigh. Subcutaneous tissues were in-
 cised in line with the skin incision. The dissec-
 tion was carried bluntly down to the lateral as-
 pect of the femur. A Steinmann pin was then
 placed to cross the distal femoral site, this us-
 ing fluoroscopy as a guide. The pin was then over-
 drilled with a 9 mm and then an 11 mm drill bit.
 Dr. Urbaniak revascularized the fibular graft
 set. The Steinmann pin was then removed. The re-

maining portion of the physeal plate was removed using an angled curet. Incision was made medially when the Steinmann pin was placed across the physeal plate, which also measured approximately 1 cm. This was used to insert the curet to assist with destruction of the medial physeal plate. OncPhyseal plate had been thoroughly destroyed, destruction was confirmed using fluoroscopy. The wounds were then thoroughly irrigated with normal saline containing bacitracin. Deep fascial layer was closed using figure-of-eight sutures of #0 Vicryl. Subcutaneous tissues were reapproximated using interrupted inverted sutures of 20 Vicryl. The skin was closed with a 4-0 subcuticular stitch. The wounds were cleaned and dried and dressed with Steri-Strips, Xeroform, sterile gauze, and a bulky Jones wrap. The tourniquet was deflated prior to application of the bulky Jones wrap. The patient was then placed in a knee immobilizer. There were no intraoperative complications. Dr. Fitch was present for the critical portion of the case. DISPOSITION: The patient was successfully extubated and transported to the recovery room in stable condition. dictating for SAMUEL DAVID STANLEY, M.D. ROBERT DOUGLAS FITCH, M.D.&&SDS:618/0732 DD: 10/03/97 DT: 10/04/97 RD:10/23/97|||||F<CR>~
SE*15*1001~
GE*1*1274~
IEA*2*000001273~

Institutional Transmission

ISA*00* *00* *ZZ*A222222221
*ZZ*05440 *970918*
0908*U*04010*000001173*0*P*:~
GS*HC*A222222221*05440*970918*0908*1173*X*004010X096~
ST*837*987654~
BHT*0019*00*0123*19970918*0932CH~
REF*87*X096~
NM1*40*2*ABC INSURANCE COMPANY*****46*05440~
NM1*41*2*XYZ SERVICE*****46*A222222221~
HL*1**20*1~
NM1*85*2*ST HOLY HILL HOSPITAL*****MP*3999000B~
N3*225 MAIN STREET BARRLEY BUILDING~
N4*MIAMI*FL*331323111~
PER*IC**TE*8007775555~
HL*2*1*22*1~
SBR*P*18*****MA~

NM1*IL*1*JACKSON*JACK*J***MI*64911111A~
N3*125 CITY AVENUE~
N4*MIAMI*FL*331323111~
DMG*D8*19261111*M~
NM1*PR*2*ABC INSURANCE COMPANY*****PI*05440~
CLM*JACKSON123*89.93***13:A:1***Y*Y~
DTP*232*D8*19970911~
DTP*233*D8*19970911~
DTP*435*DT*199709111400~
CL1*3*1~
PWK*OB*EL***AC*986543~
HI*BH:A1:D8:19261111*BG:09*BE:A2:::15.31*BK:3669*
BF:4019*BF:79431~
QTY*CA*1*DA~
NM1*71*1*JONES*JOHN*J***OP*B99937~
SBR*S*01*351630*STATE TEACHERS*****CI~
OI***Y***Y~
NM1*IL*1*JACKSON*JACK*J***MI*649111111~
N3*125 CITY AVENUE~
N4*MIAMI*FL*331323111~
NM1*PR*2*STATE TEACHERS*****PI*1135~
LX*1~
SV2*540*HC:A0030:RH:QN*150*UN*1~
DTP*472*D8*19970911~
LX*2~
SV2*540*HC:A0380:RH:QN*100*UN*10~
DTP*472*D8*19970911~
LX*3~
SV2*540*HC:A0030:HR:QN*150*UN*1~
DTP*472*D8*19970911~
LX*4~
SV2*540*HC:A0380:HR:QN*100*UN*10~
DTP*472*D8*19970911~
HL*3*1*22*1~
SBR*P*18*****MA~
NM1*IL*1*SMITH*JOE***MI*123405074A~
N3*5 MAIN STREET~
N4*MIAMI*FL*331323111~
DMG*D8*19120512*M~
NM1*PR*2*ABC INSURANCE COMPANY*****PI*05440~
CLM*SMITH123*50***13:A:1***Y*Y~
DTP*232*D8*19970614~
DTP*233*D8*19970614~

CL1*3*1~
HI*BK:30000~
NM1*71*1*JONES*JOHN*J***UP*B99937~
LX*1~
SV2*300*HC:85087*50*ON*1~
DTP*472*D8*19970614~
SE*61*987654~
GE*1*1173~
GS*PI*A222222221*05440*970918*0908*1174*
X*004020X107~
ST*275*1001*004020X107~
BGN*11*0001*19970918~
NM1*PR*2*ABC INSURANCE COMPANY*****PI*05440~
PER*IC*MEDICAL REVIEW DEPARTMENT~
NM1*41*2*XYZ SERVICE*****46*A222222221~
NM1*1P*2*ST HOLY HILL HOSPITAL*****SV*3999000B~
NM1*QC*1*JACKSON*JACK*J***HN*649111111A~
REF*EJ*JACKSON123~
REF*BLT*131~
DTP*232*RD8*19970911-19970911~
LX*1~
TRN*986543~
DTP*368*D8*19970918~
CAT*AE*HL~
EFI*05~
BIN*873*MSH|^-\&|||
19981105131523|0RU^R01|A12349282|P|2.3||NE
|NE<Cr>
PID|||100928782^9^MOD11||Jackson^Jack^J<cr>
OBR|||18584-3<cr>
OBX|NM|8335-2||143|lb^^ans+|||F<cr>
OBR|||15517-6<cr>
OBX|CE|15517-6||I^^HL79007|||F<cr>
OBR|||15509-3<cr>
OBX|CE|15509-3||A^^HL79008|||F<cr>
OBR|||15510-1<cr>
OBX|NM|15510-1||17|mi^^ANS+|||F<cr>
OBR|||15511-9<cr>
OBX|ST|15511-9||HOME|||F<cr>
OBX|XAD|30085-0||11073 S. Mission
St^^MIAMI^FL^543219111^USA^P|||F<cr>
OBR|||15512-7<cr>
OBX|ST|15512-7||HOSPITAL|||F<cr>

```
OBX||XAD|30094-0||933 Fortner  
St^^MIAMI^FL^543219111^USA^P|||||F<cr>  
OBR||||18588-4<cr>  
OBX||ST|18588-4||Patient unconcscious|||||F<cr>  
OBR||||18589-2<cr>  
OBX||CE|18589-2||Y^^HL70136|||||F<cr>  
OBR||||15514-3<cr>  
OBX||XCN|15514-  
3||06720932^Alioto^Joshua^J^^DR^MD^NPI^^^5^  
M10|||||F<cr>  
OBR||||18591-8<cr>  
OBX||CE|18591-8||N^^HL70136|||||F<cr>  
OBR||||18592-8<cr>  
OBX||CE|18592-8||Y^^ATTCH04|||||F<cr>  
OBR||||15515-0<cr>  
OBX||CE|15515-0||29^^HL79010|||||F<cr>~  
SE*17*1001~  
GE*1*1174~  
IEA*2*000001173~
```


A ASC X12 Nomenclature

A.1 Interchange and Application Control Structures

A.1.1 Interchange Control Structure

The transmission of data proceeds according to very strict format rules to ensure the integrity and maintain the efficiency of the interchange. Each business grouping of data is called a transaction set. For instance, a group of benefit enrollments sent from a sponsor to a payer is considered a transaction set.

Each transaction set contains groups of logically related data in units called segments. For instance, the N4 segment used in the transaction set conveys the city, state, ZIP Code, and other geographic information. A transaction set contains multiple segments, so the addresses of the different parties, for example, can be conveyed from one computer to the other. An analogy would be that the transaction set is like a freight train; the segments are like the train's cars; and each segment can contain several data elements the same as a train car can hold multiple crates.

The sequence of the elements within one segment is specified by the ASC X12 standard as well as the sequence of segments in the transaction set. In a more conventional computing environment, the segments would be equivalent to records, and the elements equivalent to fields.

Similar transaction sets, called "functional groups," can be sent together within a transmission. Each functional group is prefaced by a group start segment; and a functional group is terminated by a group end segment. One or more functional groups are prefaced by an interchange header and followed by an interchange trailer. Figure A1, Transmission Control Schematic, illustrates this interchange control.

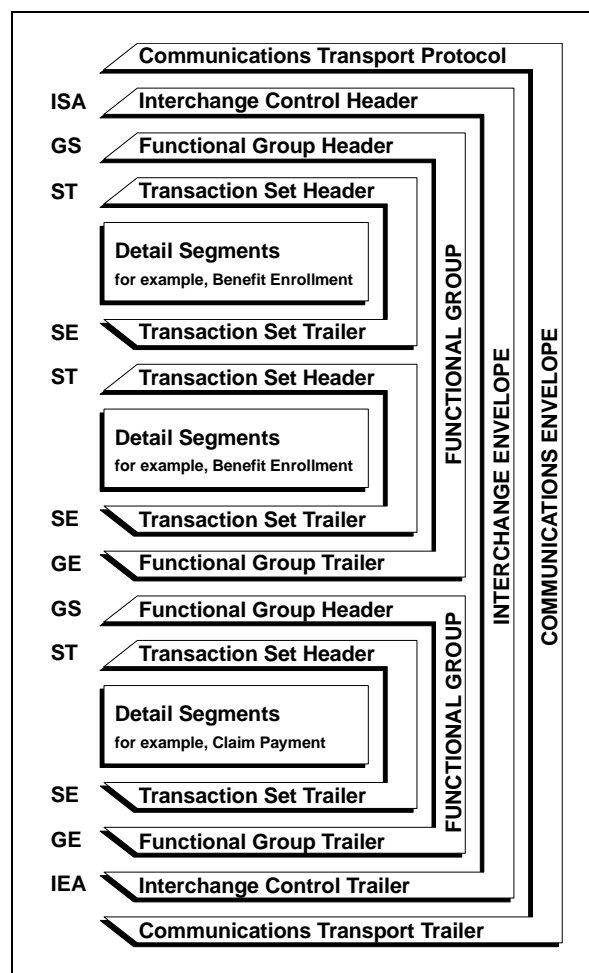


Figure A1. Transmission Control Schematic

The interchange header and trailer segments envelop one or more functional groups or interchange-related control segments and perform the following functions:

1. Define the data element separators and the data segment terminator.
2. Identify the sender and receiver.
3. Provide control information for the interchange.
4. Allow for authorization and security information.

A.1.2 Application Control Structure Definitions and Concepts

A.1.2.1 Basic Structure

A data element corresponds to a data field in data processing terminology. The data element is the smallest named item in the ASC X12 standard. A data segment corresponds to a record in data processing terminology. The data segment begins with a segment ID and contains related data elements. A control segment has the same structure as a data segment; the distinction is in the use. The data segment is used primarily to convey user information, but the control segment is used primarily to convey control information and to group data segments.

A.1.2.2 Basic Character Set

The section that follows is designed to have representation in the common character code schemes of EBCDIC, ASCII, and CCITT International Alphabet 5. The ASC X12 standards are graphic-character-oriented; therefore, common character encoding schemes other than those specified herein may be used as long as a common mapping is available. Because the graphic characters have an implied mapping across character code schemes, those bit patterns are not provided here.

The basic character set of this standard, shown in figure A2, Basic Character Set, includes those selected from the uppercase letters, digits, space, and special characters as specified below.

A...Z	0...9	!	"	&	'	()	*	+
,	-	.	/	:	;	?	=	" " (space)	

Figure A2. Basic Character Set

A.1.2.3 Extended Character Set

An extended character set may be used by negotiation between the two parties and includes the lowercase letters and other special characters as specified in figure A3, Extended Character Set.

a..z	%	~	@	[]	_	{
}	\		<	>	#	\$	

Figure A3. Extended Character Set

Note that the extended characters include several character codes that have multiple graphical representations for a specific bit pattern. The complete list appears

in other standards such as CCITT S.5. Use of the USA graphics for these codes presents no problem unless data is exchanged with an international partner. Other problems, such as the translation of item descriptions from English to French, arise when exchanging data with an international partner, but minimizing the use of codes with multiple graphics eliminates one of the more obvious problems.

A.1.2.4 Control Characters

Two control character groups are specified; they have only restricted usage. The common notation for these groups is also provided, together with the character coding in three common alphabets. In the matrix A1, Base Control Set, the column IA5 represents CCITT V.3 International Alphabet 5.

A.1.2.5 Base Control Set

The base control set includes those characters that will not have a disruptive effect on most communication protocols. These are represented by:

NOTATION	NAME	EBCDIC	ASCII	IA5
BEL	bell	2F	07	07
HT	horizontal tab	05	09	09
LF	line feed	25	0A	0A
VT	vertical tab	0B	0B	0B
FF	form feed	0C	0C	0C
CR	carriage return	0D	0D	0D
FS	file separator	1C	1C	1C
GS	group separator	1D	1D	1D
RS	record separator	1E	1E	1E
US	unit separator	1F	1F	1F
NL	new line	15		

Matrix A1. Base Control Set

The Group Separator (GS) may be an exception in this set because it is used in the 3780 communications protocol to indicate blank space compression.

A.1.2.6 Extended Control Set

The extended control set includes those that may have an effect on a transmission system. These are shown in matrix A2, Extended Control Set.

NOTATION	NAME	EBCDIC	ASCII	IA5
SOH	start of header	01	01	01
STX	start of text	02	02	02
ETX	end of text	03	03	03
EOT	end of transmission	37	04	04
ENQ	enquiry	2D	05	05
ACK	acknowledge	2E	06	06
DC1	device control 1	11	11	11
DC2	device control 2	12	12	12
DC3	device control 3	13	13	13
DC4	device control 4	3C	14	14
NAK	negative acknowledge	3D	15	15
SYN	synchronous idle	32	16	16
ETB	end of block	26	17	17

Matrix A2. Extended Control Set

A.1.2.7 Delimiters

A delimiter is a character used to separate two data elements (or subelements) or to terminate a segment. The delimiters are an integral part of the data.

Delimiters are specified in the interchange header segment, ISA. The ISA segment is a 105 byte fixed length record. The data element separator is byte number 4; the component element separator is byte number 105; and the segment terminator is the byte that immediately follows the component element separator.

Once specified in the interchange header, the delimiters are not to be used in a data element value elsewhere in the interchange. For consistency, this implementation guide uses the delimiters shown in matrix A3, Delimiters, in all examples of EDI transmissions.

CHARACTER	NAME	DELIMITER
*	Asterisk	Data Element Separator
:	Colon	Subelement Separator
~	Tilde	Segment Terminator

Matrix A3. Delimiters

The delimiters above are for illustration purposes only and are not specific recommendations or requirements. Users of this implementation guide should be aware that an application system may use some valid delimiter characters within the application data. Occurrences of delimiter characters in transmitted data within a data element can result in errors in translation programs. The existence of asterisks (*) within transmitted application data is a known issue that can affect translation software.

A.1.3 Business Transaction Structure Definitions and Concepts

The ASC X12 standards define commonly used business transactions (such as a health care claim) in a formal structure called “transaction sets.” A transaction set is composed of a transaction set header control segment, one or more data segments, and a transaction set trailer control segment. Each segment is composed of the following:

- A unique segment ID
- One or more logically related data elements each preceded by a data element separator
- A segment terminator

A.1.3.1 Data Element

The data element is the smallest named unit of information in the ASC X12 standard. Data elements are identified as either simple or component. A data element that occurs as an ordinal member of a composite data structure is identified as a component data element. A data element that occurs in a segment outside the defined boundaries of a composite data structure is identified as a simple data element. The distinction between simple and component data elements is strictly a matter of context because a data element can be used in either capacity.

Data elements are assigned a unique reference number. Each data element has a name, description, type, minimum length, and maximum length. For ID type data elements, this guide provides the applicable ASC X12 code values and their descriptions or references where the valid code list can be obtained.

Each data element is assigned a minimum and maximum length. The length of the data element value is the number of character positions used except as noted for numeric, decimal, and binary elements.

The data element types shown in matrix A4, Data Element Types, appear in this implementation guide.

SYMBOL	TYPE
Nn	Numeric
R	Decimal
ID	Identifier
AN	String
DT	Date
TM	Time
B	Binary

Matrix A4. Data Element Types

A.1.3.1.1

Numeric

A numeric data element is represented by one or more digits with an optional leading sign representing a value in the normal base of 10. The value of a numeric data element includes an implied decimal point. It is used when the position of the decimal point within the data is permanently fixed and is not to be transmitted with the data.

This set of guides denotes the number of implied decimal positions. The representation for this data element type is “Nn” where N indicates that it is numeric and n indicates the number of decimal positions to the right of the implied decimal point.

If n is 0, it need not appear in the specification; N is equivalent to N0. For negative values, the leading minus sign (-) is used. Absence of a sign indicates a positive value. The plus sign (+) should not be transmitted.

EXAMPLE

A transmitted value of 1234, when specified as numeric type N2, represents a value of 12.34.

Leading zeros should be suppressed unless necessary to satisfy a minimum length requirement. The length of a numeric type data element does not include the optional sign.

A.1.3.1.2

Decimal

A decimal data element may contain an explicit decimal point and is used for numeric values that have a varying number of decimal positions. This data element type is represented as “R.”

The decimal point always appears in the character stream if the decimal point is at any place other than the right end. If the value is an integer (decimal point at the right end) the decimal point should be omitted. For negative values, the leading minus sign (-) is used. Absence of a sign indicates a positive value. The plus sign (+) should not be transmitted.

Leading zeros should be suppressed unless necessary to satisfy a minimum length requirement. Trailing zeros following the decimal point should be suppressed unless necessary to indicate precision. The use of triad separators (for example, the commas in 1,000,000) is expressly prohibited. The length of a decimal type data element does not include the optional leading sign or decimal point.

EXAMPLE

A transmitted value of 12.34 represents a decimal value of 12.34.

A.1.3.1.3

Identifier

An identifier data element always contains a value from a predefined list of codes that is maintained by the ASC X12 Committee or some other body recognized by the Committee. Trailing spaces should be suppressed unless they are necessary to satisfy a minimum length. An identifier is always left justified. The representation for this data element type is "ID."

A.1.3.1.4

String

A string data element is a sequence of any characters from the basic or extended character sets. The significant characters shall be left justified. Leading spaces, when they occur, are presumed to be significant characters. Trailing spaces should be suppressed unless they are necessary to satisfy a minimum length. The representation for this data element type is "AN."

A.1.3.1.5

Date

A date data element is used to express the standard date in either YYMMDD or CCYYMMDD format in which CC is the first two digits of the calendar year, YY is the last two digits of the calendar year, MM is the month (01 to 12), and DD is the day in the month (01 to 31). The representation for this data element type is "DT." Users of this guide should note that all dates within transactions are 8-character dates (millennium compliant) in the format CCYYMMDD. The only date data element that is in format YYMMDD is the Interchange Date data element in the ISA segment, and also used in the TA1 Interchange Acknowledgment, where the century can be readily interpolated because of the nature of an interchange header.

A.1.3.1.6

Time

A time data element is used to express the ISO standard time HHMMSSd.d format in which HH is the hour for a 24 hour clock (00 to 23), MM is the minute (00 to 59), SS is the second (00 to 59) and d.d is decimal seconds. The representation for this data element type is "TM." The length of the data element determines the format of the transmitted time.

EXAMPLE

Transmitted data elements of four characters denote HHMM. Transmitted data elements of six characters denote HHMMSS.

A.1.3.2

Composite Data Structure

The composite data structure is an intermediate unit of information in a segment. Composite data structures are composed of one or more logically related simple data elements, each, except the last, followed by a sub-element separator. The final data element is followed by the next data element separator or the segment terminator. Each simple data element within a composite is called a component.

Each composite data structure has a unique four-character identifier, a name, and a purpose. The identifier serves as a label for the composite. A composite data structure can be further defined through the use of syntax notes, semantic notes, and comments. Each component within the composite is further characterized by a reference designator and a condition designator. The reference designators and the condition designators are described below.

A.1.3.3 Data Segment

The data segment is an intermediate unit of information in a transaction set. In the data stream, a data segment consists of a segment identifier, one or more composite data structures or simple data elements each preceded by a data element separator and succeeded by a segment terminator.

Each data segment has a unique two- or three-character identifier, a name, and a purpose. The identifier serves as a label for the data segment. A segment can be further defined through the use of syntax notes, semantic notes, and comments. Each simple data element or composite data structure within the segment is further characterized by a reference designator and a condition designator.

A.1.3.4 Syntax Notes

Syntax notes describe relational conditions among two or more data segment units within the same segment, or among two or more component data elements within the same composite data structure. For a complete description of the relational conditions, See A.1.3.8, Condition Designator.

A.1.3.5 Semantic Notes

Simple data elements or composite data structures may be referenced by a semantic note within a particular segment. A semantic note provides important additional information regarding the intended meaning of a designated data element, particularly a generic type, in the context of its use within a specific data segment. Semantic notes may also define a relational condition among data elements in a segment based on the presence of a specific value (or one of a set of values) in one of the data elements.

A.1.3.6 Comments

A segment comment provides additional information regarding the intended use of the segment.

A.1.3.7 Reference Designator

Each simple data element or composite data structure in a segment is provided a structured code that indicates the segment in which it is used and the sequential position within the segment. The code is composed of the segment identifier followed by a two-digit number that defines the position of the simple data element or composite data structure in that segment.

For purposes of creating reference designators, the composite data structure is viewed as the hierarchical equal of the simple data element. Each component data element in a composite data structure is identified by a suffix appended to the reference designator for the composite data structure of which it is a member.

This suffix is a two-digit number, prefixed with a hyphen, that defines the position of the component data element in the composite data structure.

EXAMPLE

- The first simple element of the CLP segment would be identified as CLP01.
- The first position in the SVC segment is occupied by a composite data structure that contains seven component data elements, the reference designator for the second component data element would be SVC01-02.

A.1.3.8 Condition Designator

This section provides information about X12 standard conditions designators. It is provided so that users will have information about the general standard. Implementation guides may impose other conditions designators. See implementation guide section 3.1 Presentation Examples for detailed information about the implementation guide Industry Usage requirements for compliant implementation.

Data element conditions are of three types: mandatory, optional, and relational. They define the circumstances under which a data element may be required to be present or not present in a particular segment.

DESIGNATOR	DESCRIPTION
M- Mandatory	The designation of mandatory is absolute in the sense that there is no dependency on other data elements. This designation may apply to either simple data elements or composite data structures. If the designation applies to a composite data structure, then at least one value of a component data element in that composite data structure shall be included in the data segment.
O- Optional	The designation of optional means that there is no requirement for a simple data element or composite data structure to be present in the segment. The presence of a value for a simple data element or the presence of value for any of the component data elements of a composite data structure is at the option of the sender.
X- Relational	Relational conditions may exist among two or more simple data elements within the same data segment based on the presence or absence of one of those data elements (presence means a data element must not be empty). Relational conditions are specified by a condition code (see table below) and the reference designators of the affected data elements. A data element may be subject to more than one relational condition. The definitions for each of the condition codes used within syntax notes are detailed below:

CONDITION CODE	DEFINITION
P- Paired or Multiple	If any element specified in the relational condition is present, then all of the elements specified must be present.
R- Required	At least one of the elements specified in the condition must be present.
E- Exclusion	Not more than one of the elements specified in the condition may be present.
C- Conditional	If the first element specified in the condition is present, then all other elements must be present. However, any or all of the elements not specified as the first element in the condition may appear without requiring that the first element be present. The order of the elements in the condition does not have to be the same as the order of the data elements in the data segment.
L- List	

Conditional	If the first element specified in the condition is present, then at least one of the remaining elements must be present. However, any or all of the elements not specified as the first element in the condition may appear without requiring that the first element be present. The order of the elements in the condition does not have to be the same as the order of the data elements in the data segment.
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Table A5. Condition Designator

A.1.3.9 Absence of Data

Any simple data element that is indicated as mandatory must not be empty if the segment is used. At least one component data element of a composite data structure that is indicated as mandatory must not be empty if the segment is used. Optional simple data elements and/or composite data structures and their preceding data element separators that are not needed should be omitted if they occur at the end of a segment. If they do not occur at the end of the segment, the simple data element values and/or composite data structure values may be omitted. Their absence is indicated by the occurrence of their preceding data element separators, in order to maintain the element's or structure's position as defined in the data segment.

Likewise, when additional information is not necessary within a composite, the composite may be terminated by providing the appropriate data element separator or segment terminator.

A.1.3.10 Control Segments

A control segment has the same structure as a data segment, but it is used for transferring control information rather than application information.

A.1.3.10.1 Loop Control Segments

Loop control segments are used only to delineate bounded loops. Delineation of the loop shall consist of the loop header (LS segment) and the loop trailer (LE segment). The loop header defines the start of a structure that must contain one or more iterations of a loop of data segments and provides the loop identifier for this loop. The loop trailer defines the end of the structure. The LS segment appears only before the first occurrence of the loop, and the LE segment appears only after the last occurrence of the loop. Unbounded looping structures do not use loop control segments.

A.1.3.10.2 Transaction Set Control Segments

The transaction set is delineated by the transaction set header (ST segment) and the transaction set trailer (SE segment). The transaction set header identifies the start and identifier of the transaction set. The transaction set trailer identifies the end of the transaction set and provides a count of the data segments, which includes the ST and SE segments.

A.1.3.10.3 Functional Group Control Segments

The functional group is delineated by the functional group header (GS segment) and the functional group trailer (GE segment). The functional group header starts and identifies one or more related transaction sets and provides a control number

and application identification information. The functional group trailer defines the end of the functional group of related transaction sets and provides a count of contained transaction sets.

A.1.3.10.4 Relations among Control Segments

The control segment of this standard must have a nested relationship as is shown and annotated in this subsection. The letters preceding the control segment name are the segment identifier for that control segment. The indentation of segment identifiers shown below indicates the subordination among control segments.

GS Functional Group Header, starts a group of related transaction sets.

ST Transaction Set Header, starts a transaction set.

LS Loop Header, starts a bounded loop of data segments but is not part of the loop.

LS Loop Header, starts an inner, nested, bounded loop.

LE Loop Trailer, ends an inner, nested bounded loop.

LE Loop Trailer, ends a bounded loop of data segments but is not part of the loop.

SE Transaction Set Trailer, ends a transaction set.

GE Functional Group Trailer, ends a group of related transaction sets.

More than one ST/SE pair, each representing a transaction set, may be used within one functional group. Also more than one LS/LE pair, each representing a bounded loop, may be used within one transaction set.

A.1.3.11 Transaction Set

The transaction set is the smallest meaningful set of information exchanged between trading partners. The transaction set consists of a transaction set header segment, one or more data segments in a specified order, and a transaction set trailer segment. See figure A1, Transmission Control Schematic.

A.1.3.11.1 Transaction Set Header and Trailer

A transaction set identifier uniquely identifies a transaction set. This identifier is the first data element of the Transaction Set Header Segment (ST). A user assigned transaction set control number in the header must match the control number in the Trailer Segment (SE) for any given transaction set. The value for the number of included segments in the SE segment is the total number of segments in the transaction set, including the ST and SE segments.

A.1.3.11.2 Data Segment Groups

The data segments in a transaction set may be repeated as individual data segments or as unbounded or bounded loops.

A.1.3.11.3 Repeated Occurrences of Single Data Segments

When a single data segment is allowed to be repeated, it may have a specified maximum number of occurrences defined at each specified position within a given transaction set standard. Alternatively, a segment may be allowed to repeat

an unlimited number of times. The notation for an unlimited number of repetitions is ">1."

A.1.3.11.4 Loops of Data Segments

Loops are groups of semantically related segments. Data segment loops may be unbounded or bounded.

A.1.3.11.4.1 Unbounded Loops

To establish the iteration of a loop, the first data segment in the loop must appear once and only once in each iteration. Loops may have a specified maximum number of repetitions. Alternatively, the loop may be specified as having an unlimited number of iterations. The notation for an unlimited number of repetitions is ">1."

A specified sequence of segments is in the loop. Loops themselves are optional or mandatory. The requirement designator of the beginning segment of a loop indicates whether at least one occurrence of the loop is required. Each appearance of the beginning segment defines an occurrence of the loop.

The requirement designator of any segment within the loop after the beginning segment applies to that segment for each occurrence of the loop. If there is a mandatory requirement designator for any data segment within the loop after the beginning segment, that data segment is mandatory for each occurrence of the loop. If the loop is optional, the mandatory segment only occurs if the loop occurs.

A.1.3.11.4.2 Bounded Loops

The characteristics of unbounded loops described previously also apply to bounded loops. In addition, bounded loops require a Loop Start Segment (LS) to appear before the first occurrence and a Loop End Segment (LE) to appear after the last occurrence of the loop. If the loop does not occur, the LS and LE segments are suppressed.

A.1.3.11.5 Data Segments in a Transaction Set

When data segments are combined to form a transaction set, three characteristics are applied to each data segment: a requirement designator, a position in the transaction set, and a maximum occurrence.

A.1.3.11.6 Data Segment Requirement Designators

A data segment, or loop, has one of the following requirement designators for health care and insurance transaction sets, indicating its appearance in the data stream of a transmission. These requirement designators are represented by a single character code.

<u>DESIGNATOR</u>	<u>DESCRIPTION</u>
M- Mandatory	This data segment must be included in the transaction set. (Note that a data segment may be mandatory in a loop of data segments, but the loop itself is optional if the beginning segment of the loop is designated as optional.)
O- Optional	The presence of this data segment is the option of the sending party.

A.1.3.11.7 Data Segment Position

The ordinal positions of the segments in a transaction set are explicitly specified for that transaction. Subject to the flexibility provided by the optional requirement designators of the segments, this positioning must be maintained.

A.1.3.11.8 Data Segment Occurrence

A data segment may have a maximum occurrence of one, a finite number greater than one, or an unlimited number indicated by ">1."

A.1.3.12 Functional Group

A functional group is a group of similar transaction sets that is bounded by a functional group header segment and a functional group trailer segment. The functional identifier defines the group of transactions that may be included within the functional group. The value for the functional group control number in the header and trailer control segments must be identical for any given group. The value for the number of included transaction sets is the total number of transaction sets in the group. See figure A1, Transmission Control Schematic.

A.1.4 Envelopes and Control Structures

A.1.4.1 Interchange Control Structures

Typically, the term "interchange" connotes the ISA/IEA envelope that is transmitted between trading/business partners. Interchange control is achieved through several "control" components. The interchange control number is contained in data element ISA13 of the ISA segment. The identical control number must also occur in data element 02 of the IEA segment. Most commercial translation software products will verify that these two fields are identical. In most translation software products, if these fields are different the interchange will be "suspended" in error.

There are many other features of the ISA segment that are used for control measures. For instance, the ISA segment contains data elements such as authorization information, security information, sender identification, and receiver identification that can be used for control purposes. These data elements are agreed upon by the trading partners prior to transmission and are contained in the written trading partner agreement. The interchange date and time data elements as well as the interchange control number within the ISA segment are used for debugging purposes when there is a problem with the transmission or the interchange.

Data Element ISA12, Interchange Control Version Number, indicates the version of the ISA/IEA envelope. The ISA12 does not indicate the version of the transaction set that is being transmitted but rather the envelope that encapsulates the transaction. An Interchange Acknowledgment can be denoted through data element ISA14. The acknowledgment that would be sent in reply to a "yes" condition in data element ISA14 would be the TA1 segment. Data element ISA15, Test Indicator, is used between trading partners to indicate that the transmission is in a "test" or "production" mode. This becomes significant when the production phase of the project is to commence. Data element ISA16, Subelement Separator, is used by the translator for interpretation of composite data elements.

The ending component of the interchange or ISA/IEA envelope is the IEA segment. Data element IEA01 indicates the number of functional groups that are included within the interchange. In most commercial translation software products, an aggregate count of functional groups is kept while interpreting the interchange. This count is then verified with data element IEA01. If there is a discrepancy

ancy, in most commercial products, the interchange is suspended. The other data element in the IEA segment is IEA02 which is referenced above.

See the Appendix B, EDI Control Directory, for a complete detailing of the interchange control header and trailer.

A.1.4.2 Functional Groups

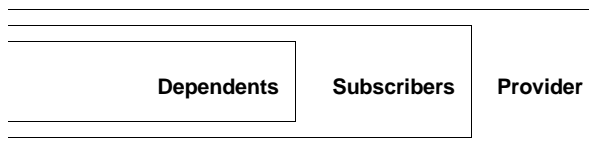
Control structures within the functional group envelope include the functional identifier code in GS01. The Functional Identifier Code is used by the commercial translation software during interpretation of the interchange to determine the different transaction sets that may be included within the functional group. If an inappropriate transaction set is contained within the functional group, most commercial translation software will suspend the functional group within the interchange. The Application Sender's Code in GS02 can be used to identify the sending unit of the transmission. The Application Receiver's Code in GS03 can be used to identify the receiving unit of the transmission. For health care, this unit identification can be used to differentiate between managed care, indemnity, and Medicare. The functional group contains a creation date (GS04) and creation time (GS05) for the functional group. The Group Control Number is contained in GS06. These data elements (GS04, GS05, AND GS06) can be used for debugging purposes during problem resolution. GS08, Version/Release/Industry Identifier Code is the version/release/sub-release of the transaction sets being transmitted in this functional group. Appendix B provides guidance for the value for this data element. The GS08 does not represent the version of the interchange (ISA/IEA) envelope but rather the version/release/sub-release of the transaction sets that are encompassed within the GS/GE envelope.

The Functional Group Control Number in GS06 must be identical to data element 02 of the GE segment. Data element GE01 indicates the number of transaction sets within the functional group. In most commercial translation software products, an aggregate count of the transaction sets is kept while interpreting the functional group. This count is then verified with data element GE01.

See the Appendix B, EDI Control Directory, for a complete detailing of the functional group header and trailer.

A.1.4.3 HL Structures

The HL segment is used in several X12 transaction sets to identify levels of detail information using a hierarchical structure, such as relating dependents to a subscriber. Hierarchical levels may differ from guide to guide. The following diagram, from transaction set 837, illustrates a typical hierarchy.



Each provider can bill for one or more subscribers, each subscriber can have one or more dependents and the subscriber and the dependents can make one or more claims. Each guide states what levels are available, the level's requirement, a repeat value, and whether that level has subordinate levels within a transmission.

A.1.5 Acknowledgments

A.1.5.1 Interchange Acknowledgment, TA1

The Interchange or TA1 Acknowledgment is a means of replying to an interchange or transmission that has been sent. The TA1 verifies the envelopes only. Transaction set-specific verification is accomplished through use of the Functional Acknowledgment Transaction Set, 997. See A.1.5.2, Functional Acknowledgment, 997, for more details. The TA1 is a single segment and is unique in the sense that this single segment is transmitted without the GS/GE envelope structures. A TA1 can be included in an interchange with other functional groups and transactions.

Encompassed in the TA1 are the interchange control number, interchange date and time, interchange acknowledgment code, and the interchange note code. The interchange control number, interchange date and time are identical to those that were present in the transmitted interchange from the sending trading partner. This provides the capability to associate the TA1 with the transmitted interchange. TA104, Interchange Acknowledgment Code, indicates the status of the interchange control structure. This data element stipulates whether the transmitted interchange was accepted with no errors, accepted with errors, or rejected because of errors. TA105, Interchange Note Code, is a numerical code that indicates the error found while processing the interchange control structure. Values for this data element indicate whether the error occurred at the interchange or functional group envelope.

The TA1 segment provides the capability for the receiving trading partner to notify the sending trading partner of problems that were encountered in the interchange control structure.

Due to the uniqueness of the TA1, implementation should be predicated upon the ability for the sending and receiving trading partners commercial translators to accommodate the uniqueness of the TA1. Unless named as mandatory in the Federal Rules implementing HIPAA, use of the TA1, although urged by the authors, is not mandated.

See the Appendix B, EDI Control Directory, for a complete detailing of the TA1 segment.

A.1.5.2 Functional Acknowledgment, 997

The Functional Acknowledgment Transaction Set, 997, has been designed to allow trading partners to establish a comprehensive control function as a part of their business exchange process. This acknowledgment process facilitates control of EDI. There is a one-to-one correspondence between a 997 and a functional group. Segments within the 997 can identify the acceptance or rejection of the functional group, transaction sets or segments. Data elements in error can also be identified. There are many EDI implementations that have incorporated the acknowledgment process in all of their electronic communications. Typically, the 997 is used as a functional acknowledgment to a previously transmitted functional group. Many commercially available translators can automatically generate this transaction set through internal parameter settings. Additionally translators will automatically reconcile received acknowledgments to functional groups that have been sent. The benefit to this process is that the sending trading partner

can determine if the receiving trading partner has received ASC X12 transaction sets through reports that can be generated by the translation software to identify transmissions that have not been acknowledged.

As stated previously the 997 is a transaction set and thus is encapsulated within the interchange control structure (envelopes) for transmission.

As with any information flow, an acknowledgment process is essential. If an “automatic” acknowledgment process is desired between trading partners then it is recommended that the 997 be used. Unless named as mandatory in the Federal Rules implementing HIPAA, use of the 997, although recommended by the authors, is not mandated.

See Appendix B, EDI Control Directory, for a complete detailing of transaction set 997.

B EDI Control Directory

B.1 Control Segments

- **ISA**
Interchange Control Header Segment
- **IEA**
Interchange Control Trailer Segment
- **GS**
Functional Group Header Segment
- **GE**
Functional Group Trailer Segment
- **TA1**
Interchange Acknowledgment Segment

B.2 Functional Acknowledgment Transaction Set, 997

IMPLEMENTATION

INTERCHANGE CONTROL HEADER

Notes: 1. The ISA is a fixed record length segment and all positions within each of the data elements must be filled. The first element separator defines the element separator to be used through the entire interchange. The segment terminator used after the ISA defines the segment terminator to be used throughout the entire interchange. Spaces in the example are represented by "." for clarity.

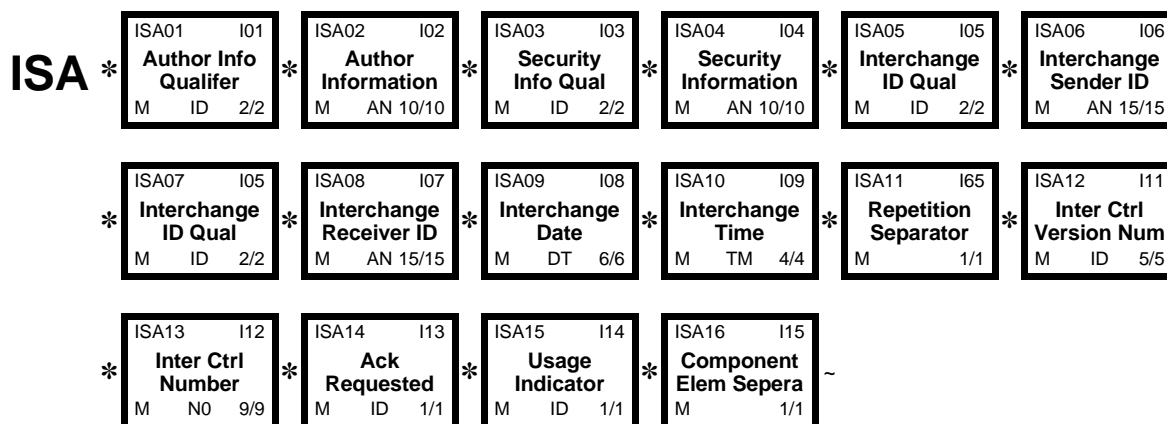
Example: ISA* 00** 01* SECRET...* ZZ* SUBMITTERS.ID...* ZZ* RECEIVERS.ID...* 930602* 1253* U* 00402* 000000905* 1* T* :~

STANDARD

ISA Interchange Control Header

Purpose: To start and identify an interchange of zero or more functional groups and interchange-related control segments

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	ISA01	I01	Authorization Information Qualifier Code identifying the type of information in the Authorization Information	M ID 2/2
			CODE	DEFINITION
			00	No Authorization Information Present (No Meaningful Information in I02) ADVISED UNLESS SECURITY REQUIREMENTS MANDATE USE OF ADDITIONAL IDENTIFICATION INFORMATION.
			03	Additional Data Identification
REQUIRED	ISA02	I02	Authorization Information Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01)	M AN 10/10

REQUIRED	ISA	ID	Segment Name	M	ID	2/2
REQUIRED	ISA03	I03	Security Information Qualifier Code identifying the type of information in the Security Information			
			00			No Security Information Present (No Meaningful Information in I04) ADVISED UNLESS SECURITY REQUIREMENTS MANDATE USE OF PASSWORD DATA.
			01			Password
REQUIRED	ISA04	I04	Security Information This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (I03)	M	AN	10/10
REQUIRED	ISA05	I05	Interchange ID Qualifier Code indicating the system/method of code structure used to designate the sender or receiver ID element being qualified	M	ID	2/2
			This ID qualifies the Sender in ISA06.			
			01			Duns (Dun & Bradstreet)
			14			Duns Plus Suffix
			20			Health Industry Number (HIN) CODE SOURCE 121: Health Industry Number
			27			Carrier Identification Number as assigned by Health Care Financing Administration (HCFA)
			28			Fiscal Intermediary Identification Number as assigned by Health Care Financing Administration (HCFA)
			29			Medicare Provider and Supplier Identification Number as assigned by Health Care Financing Administration (HCFA)
			30			U.S. Federal Tax Identification Number
			33			National Association of Insurance Commissioners Company Code (NAIC)
			ZZ			Mutually Defined
REQUIRED	ISA06	I06	Interchange Sender ID Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element	M	AN	15/15
REQUIRED	ISA07	I05	Interchange ID Qualifier Code indicating the system/method of code structure used to designate the sender or receiver ID element being qualified	M	ID	2/2
			This ID qualifies the Receiver in ISA08.			
			01			Duns (Dun & Bradstreet)

			14	Duns Plus Suffix			
			20	Health Industry Number (HIN)			
				CODE SOURCE 121: Health Industry Number			
			27	Carrier Identification Number as assigned by Health Care Financing Administration (HCFA)			
			28	Fiscal Intermediary Identification Number as assigned by Health Care Financing Administration (HCFA)			
			29	Medicare Provider and Supplier Identification Number as assigned by Health Care Financing Administration (HCFA)			
			30	U.S. Federal Tax Identification Number			
			33	National Association of Insurance Commissioners Company Code (NAIC)			
			ZZ	Mutually Defined			
REQUIRED	ISA08	I07		Interchange Receiver ID	M	AN	15/15
				Identification code published by the receiver of the data; When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them			
REQUIRED	ISA09	I08		Interchange Date	M	DT	6/6
				Date of the interchange			
				The date format is YYMMDD.			
REQUIRED	ISA10	I09		Interchange Time	M	TM	4/4
				Time of the interchange			
				The time format is HHMM.			
REQUIRED	ISA11	I65		Repetition Separator	M		1/1
				Type is not applicable; the repetition separator is a delimiter and not a data element; this field provides the delimiter used to separate repeated occurrences of a simple data element or a composite data structure; this value must be different than the data element separator, component element separator, and the segment terminator			
REQUIRED	ISA12	I11		Interchange Control Version Number	M	ID	5/5
				Code specifying the version number of the interchange control segments			
				CODE	DEFINITION		
			00402	Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1998, Version 4, Release 2			
REQUIRED	ISA13	I12		Interchange Control Number	M	NO	9/9
				A control number assigned by the interchange sender			
				The Interchange Control Number, ISA13, must be identical to the associated Interchange Trailer IEA02.			

CONTROL SEGMENTS

REQUIRED **ISA14** **I13** **Acknowledgment Requested** **M** **ID** **1/1**
Code indicating sender's request for an interchange acknowledgment

See Section A.1.5.1 for interchange acknowledgment information.

CODE	DEFINITION
0	No Acknowledgment Requested
1	Interchange Acknowledgment Requested

REQUIRED **ISA15** **I14** **Usage Indicator** **M** **ID** **1/1**
Code indicating whether data enclosed by this interchange envelope is test, production or information

CODE	DEFINITION
P	Production Data
T	Test Data

REQUIRED **ISA16** **I15** **Component Element Separator** **M** **1/1**
Type is not applicable; the component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure; this value must be different than the data element separator and the segment terminator

IMPLEMENTATION

INTERCHANGE CONTROL TRAILER

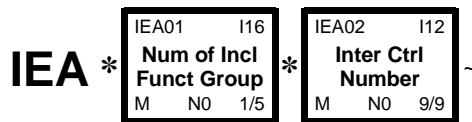
Example: IEA*1*000000905~

STANDARD

IEA Interchange Control Trailer

Purpose: To define the end of an interchange of zero or more functional groups and interchange-related control segments

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	IEA01	I16	Number of Included Functional Groups A count of the number of functional groups included in an interchange	M NO 1/5
REQUIRED	IEA02	I12	Interchange Control Number A control number assigned by the interchange sender	M NO 9/9

IMPLEMENTATION

FUNCTIONAL GROUP HEADER

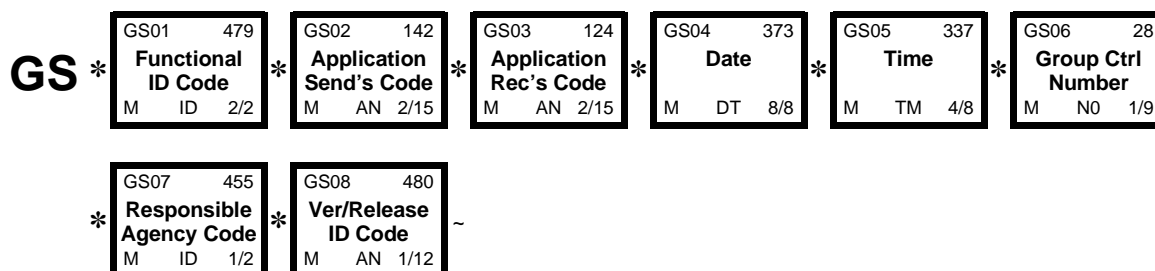
Example: GS*PI*SENDER CODE*RECEIVER
CODE*19940331*0802*1*X*004020X107~

STANDARD

GS Functional Group Header

Purpose: To indicate the beginning of a functional group and to provide control information

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	GS01	479	Functional Identifier Code Code identifying a group of application related transaction sets	M ID 2/2
			CODE	DEFINITION
			PI	Patient Information (275)
			SP	Specifications/Technical Information (841)
REQUIRED	GS02	142	Application Sender's Code Code identifying party sending transmission; codes agreed to by trading partners	M AN 2/15
			Use this code to identify the unit sending the information.	
REQUIRED	GS03	124	Application Receiver's Code Code identifying party receiving transmission; codes agreed to by trading partners	M AN 2/15
			Use this code to identify the unit receiving the information.	
REQUIRED	GS04	373	Date Date expressed as CCYYMMDD	M DT 8/8
			SEMANTIC: GS04 is the group date.	
			Use this date for the functional group creation date.	

REQUIRED	GS05	337	Time	M TM 4/8
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Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where H = hours (00-23), M = minutes (00-59), S = integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)

SEMANTIC: GS05 is the group time.

Use this time for the creation time. The recommended format is HHMM.

REQUIRED	GS06	28	Group Control Number	M NO 1/9
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Assigned number originated and maintained by the sender

SEMANTIC: The data interchange control number GS06 in this header must be identical to the same data element in the associated functional group trailer, GE02.

REQUIRED	GS07	455	Responsible Agency Code	M ID 1/2
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Code identifying the issuer of the standard; this code is used in conjunction with Data Element 480

<u>CODE</u>	<u>DEFINITION</u>
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X	Accredited Standards Committee X12
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REQUIRED	GS08	480	Version / Release / Industry Identifier Code	M AN 1/12
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Code indicating the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments; if code in DE455 in GS segment is X, then in DE 480 positions 1-3 are the version number; positions 4-6 are the release and subrelease, level of the version; and positions 7-12 are the industry or trade association identifiers (optionally assigned by user); if code in DE455 in GS segment is T, then other formats are allowed

<u>CODE</u>	<u>DEFINITION</u>
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004020X107	Draft Standards Approved for Publication by ASC X12 Procedures Review Board through October 1998, Version 4, Release 2.
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IMPLEMENTATION

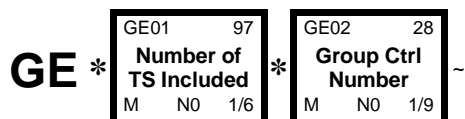
FUNCTIONAL GROUP TRAILER

Example: GE*1*1~

STANDARD

GE Functional Group Trailer**Purpose:** To indicate the end of a functional group and to provide control information

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	GE01	97	Number of Transaction Sets Included Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element	M NO 1/6
REQUIRED	GE02	28	Group Control Number Assigned number originated and maintained by the sender	M NO 1/9

SEMANTIC: The data interchange control number GE02 in this trailer must be identical to the same data element in the associated functional group header, GS06.

IMPLEMENTATION

INTERCHANGE ACKNOWLEDGMENT

- Notes:
1. All fields must contain data.
 2. This segment acknowledges the reception of an X12 interchange header and trailer from a previous interchange. If the header/trailer pair was received correctly, the TA1 reflects a valid interchange, regardless of the validity of the contents of the data included inside the header/trailer envelope.
 3. See A.1.5.1, Interchange Acknowledgment, TAI, for interchange acknowledgment.
 4. Use of TA1 is subject to trading partner agreement and is neither mandated or prohibited in the Appendix.

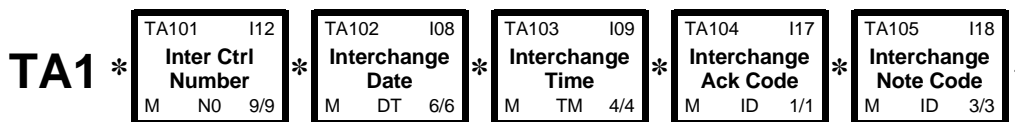
Example: TA1*000000905*940101*0100*A*001~

STANDARD

TA1 Interchange Acknowledgment

Purpose: To report the status of processing a received interchange header and trailer or the non-delivery by a network provider

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	TA101	I12	Interchange Control Number A control number assigned by the interchange sender	M NO 9/9
<p>This number uniquely identifies the interchange data to the sender. It is assigned by the sender. Together with the sender ID it uniquely identifies the interchange data to the receiver. It is suggested that the sender, receiver, and all third parties be able to maintain an audit trail of interchanges using this number.</p> <p>In the TA1, this should be the interchange control number of the original interchange that this TA1 is acknowledging.</p>				
REQUIRED	TA102	I08	Interchange Date Date of the interchange	M DT 6/6
<p>This is the date of the original interchange being acknowledged. (YYMMDD)</p>				

CONTROL SEGMENTS

REQUIRED TA103 I09 **Interchange Time** M TM 4/4
Time of the interchange

This is the time of the original interchange being acknowledged. (HHMM)

REQUIRED TA104 I17 **Interchange Acknowledgment Code** M ID 1/1
Code indicating the status of the receipt of the interchange control structure

CODE	DEFINITION
A	The Transmitted Interchange Control Structure Header and Trailer Have Been Received and Have No Errors.
E	The Transmitted Interchange Control Structure Header and Trailer Have Been Received and Are Accepted But Errors Are Noted. This Means the Sender Must Not Resend This Data.
R	The Transmitted Interchange Control Structure Header and Trailer are Rejected Because of Errors.

REQUIRED TA105 I18 **Interchange Note Code** M ID 3/3
Code specifying the error found processing the interchange control structure

CODE	DEFINITION
000	No error
001	The Interchange Control Number in the Header and Trailer Do Not Match. The Value From the Header is Used in the Acknowledgment.
002	This Standard as Noted in the Control Standards Identifier is Not Supported.
003	This Version of the Controls is Not Supported
004	The Segment Terminator is Invalid
005	Invalid Interchange ID Qualifier for Sender
006	Invalid Interchange Sender ID
007	Invalid Interchange ID Qualifier for Receiver
008	Invalid Interchange Receiver ID
009	Unknown Interchange Receiver ID
010	Invalid Authorization Information Qualifier Value
011	Invalid Authorization Information Value
012	Invalid Security Information Qualifier Value
013	Invalid Security Information Value
014	Invalid Interchange Date Value
015	Invalid Interchange Time Value
016	Invalid Interchange Standards Identifier Value

017	Invalid Interchange Version ID Value
018	Invalid Interchange Control Number Value
019	Invalid Acknowledgment Requested Value
020	Invalid Test Indicator Value
021	Invalid Number of Included Groups Value
022	Invalid Control Structure
023	Improper (Premature) End-of-File (Transmission)
024	Invalid Interchange Content (e.g., Invalid GS Segment)
025	Duplicate Interchange Control Number
026	Invalid Data Element Separator
027	Invalid Component Element Separator
028	Invalid Delivery Date in Deferred Delivery Request
029	Invalid Delivery Time in Deferred Delivery Request
030	Invalid Delivery Time Code in Deferred Delivery Request
031	Invalid Grade of Service Code

STANDARD

997 Functional Acknowledgment

Functional Group ID: **FA**

This Draft Standard for Trial Use contains the format and establishes the data contents of the Functional Acknowledgment Transaction Set (997) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to define the control structures for a set of acknowledgments to indicate the results of the syntactical analysis of the electronically encoded documents. The encoded documents are the transaction sets, which are grouped in functional groups, used in defining transactions for business data interchange. This standard does not cover the semantic meaning of the information encoded in the transaction sets.

Table 1 - Header

POS. #	SEG. ID	NAME	REQ. DES.	MAX USE	LOOP REPEAT
0100	ST	Transaction Set Header	M	1	
0200	AK1	Functional Group Response Header	M	1	
LOOP ID - AK2					999999
0300	AK2	Transaction Set Response Header	O	1	
LOOP ID - AK2/AK3					999999
0400	AK3	Data Segment Note	O	1	
0500	AK4	Data Element Note	O	99	
0600	AK5	Transaction Set Response Trailer	M	1	
0700	AK9	Functional Group Response Trailer	M	1	
0800	SE	Transaction Set Trailer	M	1	

NOTES:

- 1/0100** These acknowledgments shall not be acknowledged, thereby preventing an endless cycle of acknowledgments of acknowledgments. Nor shall a Functional Acknowledgment be sent to report errors in a previous Functional Acknowledgment.
- 1/0100** The Functional Group Header Segment (GS) is used to start the envelope for the Functional Acknowledgment Transaction Sets. In preparing the functional group of acknowledgments, the application sender's code and the application receiver's code, taken from the functional group being acknowledged, are exchanged; therefore, one acknowledgment functional group responds to only those functional groups from one application receiver's code to one application sender's code.
- 1/0100** There is only one Functional Acknowledgment Transaction Set per acknowledged functional group.
- 1/0200** AK1 is used to respond to the functional group header and to start the acknowledgment for a functional group. There shall be one AK1 segment for the functional group that is being acknowledged.
- 1/0300** AK2 is used to start the acknowledgment of a transaction set within the received functional group. The AK2 segments shall appear in the same order as the transaction sets in the functional group that has been received and is being acknowledged.
- 1/0400** The data segments of this standard are used to report the results of the syntactical analysis of the functional groups of transaction sets; they report the extent to which the syntax complies with the standards for transaction sets and functional groups. They do not report on the semantic meaning of the transaction sets (for example, on the ability of the receiver to comply with the request of the sender).

IMPLEMENTATION

TRANSACTION SET HEADER

Usage: REQUIRED

Repeat: 1

Notes: 1. Use of the 997 transaction is subject to trading partner agreement or accepted usage and is neither mandated nor prohibited in this Appendix.

Example: ST*997*1234~

STANDARD

ST Transaction Set Header

Level: Header

Position: 0100

Loop: _____

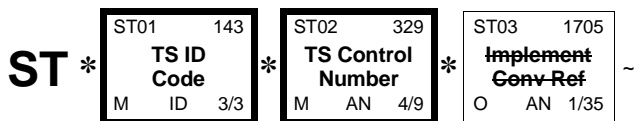
Requirement: Mandatory

Max Use: 1

Purpose: To indicate the start of a transaction set and to assign a control number

- Set Notes:
1. These acknowledgments shall not be acknowledged, thereby preventing an endless cycle of acknowledgments of acknowledgments. Nor shall a Functional Acknowledgment be sent to report errors in a previous Functional Acknowledgment.
 2. The Functional Group Header Segment (GS) is used to start the envelope for the Functional Acknowledgment Transaction Sets. In preparing the functional group of acknowledgments, the application sender's code and the application receiver's code, taken from the functional group being acknowledged, are exchanged; therefore, one acknowledgment functional group responds to only those functional groups from one application receiver's code to one application sender's code.
 3. There is only one Functional Acknowledgment Transaction Set per acknowledged functional group.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES				
REQUIRED	ST01	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set	M ID 3/3				
<p>SEMANTIC: The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).</p> <table border="1"> <thead> <tr> <th>CODE</th> <th>DEFINITION</th> </tr> </thead> <tbody> <tr> <td>997</td> <td>Functional Acknowledgment</td> </tr> </tbody> </table>					CODE	DEFINITION	997	Functional Acknowledgment
CODE	DEFINITION							
997	Functional Acknowledgment							
REQUIRED	ST02	329	Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M AN 4/9				
<p>The Transaction Set Control Numbers in ST02 and SE02 must be identical. The number is assigned by the originator and must be unique within a functional group (GS-GE). The number also aids in error resolution research. For example, start with the number 0001 and increment from there.</p>								
<p>Use the corresponding value in ST02 for this transaction set.</p>								
NOT USED	ST03	1705	Implementation Convention Reference	O AN 1/35				

IMPLEMENTATION

FUNCTIONAL GROUP RESPONSE HEADER

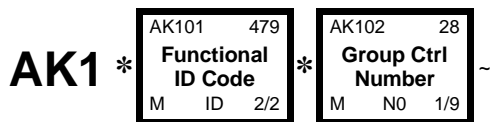
Usage: REQUIRED
Repeat: 1
Example: AK1*PI*1~

STANDARD

AK1 Functional Group Response Header

Level: Header
Position: 0200
Loop: _____
Requirement: Mandatory
Max Use: 1
Purpose: To start acknowledgment of a functional group
Set Notes: 1. AK1 is used to respond to the functional group header and to start the acknowledgment for a functional group. There shall be one AK1 segment for the functional group that is being acknowledged.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	AK101	479	Functional Identifier Code Code identifying a group of application related transaction sets SEMANTIC: AK101 is the functional ID found in the GS segment (GS01) in the functional group being acknowledged.	M ID 2/2
			CODE DEFINITION	
			PI Patient Information (275)	
REQUIRED	AK102	28	Group Control Number Assigned number originated and maintained by the sender SEMANTIC: AK102 is the functional group control number found in the GS segment in the functional group being acknowledged.	M NO 1/9

IMPLEMENTATION

TRANSACTION SET RESPONSE HEADER

Loop: AK2 — TRANSACTION SET RESPONSE HEADER Repeat: 999999

Usage: SITUATIONAL

Repeat: 1

Notes: 1. Required when communicating information about a transaction set within a functional group identified in AK1.

Example: AK2*275*00000905~

STANDARD

AK2 Transaction Set Response Header

Level: Header

Position: 0300

Loop: AK2 Repeat: 999999

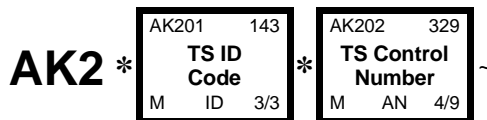
Requirement: Optional

Max Use: 1

Purpose: To start acknowledgment of a single transaction set

Set Notes: 1. AK2 is used to start the acknowledgment of a transaction set within the received functional group. The AK2 segments shall appear in the same order as the transaction sets in the functional group that has been received and is being acknowledged.

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	AK201	143	Transaction Set Identifier Code Code uniquely identifying a Transaction Set SEMANTIC: AK201 is the transaction set ID found in the ST segment (ST01) in the transaction set being acknowledged.	M ID 3/3
			CODE	DEFINITION
			275	Patient Information
REQUIRED	AK202	329	Transaction Set Control Number Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set SEMANTIC: AK202 is the transaction set control number found in the ST segment in the transaction set being acknowledged.	M AN 4/9

IMPLEMENTATION

DATA SEGMENT NOTE

Loop: AK2/AK3 — DATA SEGMENT NOTE Repeat: 999999

Usage: SITUATIONAL

Repeat: 1

Notes: 1. Used when there are errors to report in a transaction.

Example: AK3*NM1*37*CLP*7~

STANDARD

AK3 Data Segment Note

Level: Header

Position: 0400

Loop: AK2/AK3 Repeat: 999999

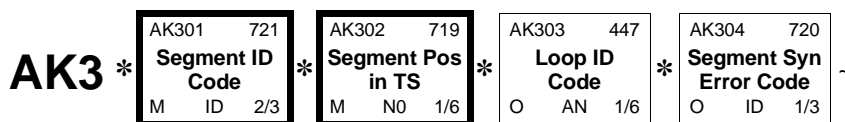
Requirement: Optional

Max Use: 1

Purpose: To report errors in a data segment and identify the location of the data segment

Set Notes: 1. The data segments of this standard are used to report the results of the syntactical analysis of the functional groups of transaction sets; they report the extent to which the syntax complies with the standards for transaction sets and functional groups. They do not report on the semantic meaning of the transaction sets (for example, on the ability of the receiver to comply with the request of the sender).

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	AK301	721	Segment ID Code Code defining the segment ID of the data segment in error (See Appendix A - Number 77) CODE SOURCE 77: X12 Directories This is the 2 or 3 characters which occur at the beginning of a segment.	M ID 2/3
REQUIRED	AK302	719	Segment Position in Transaction Set The numerical count position of this data segment from the start of the transaction set: the transaction set header is count position 1 This is a data count, not a segment position in the standard description.	M NO 1/6

SITUATIONAL **AK303** **447** **Loop Identifier Code** **O AN 1/6**
 The loop ID number given on the transaction set diagram is the value for this data element in segments LS and LE

Code identifying a loop within the transaction set which is bounded by the related LS and LE segments (corresponding LS and LE segments must have the same value for loop identifier). (Note: The loop ID number given on the transaction set diagram is recommended as the value for this data element in the segments LS and LE.)

SITUATIONAL **AK304** **720** **Segment Syntax Error Code** **O ID 1/3**
 Code indicating error found based on the syntax editing of a segment

Required if error exists

CODE	DEFINITION
1	Unrecognized segment ID
2	Unexpected segment
3	Mandatory segment missing
4	Loop Occurs Over Maximum Times
5	Segment Exceeds Maximum Use
6	Segment Not in Defined Transaction Set
7	Segment Not in Proper Sequence
8	Segment Has Data Element Errors

IMPLEMENTATION

DATA ELEMENT NOTE

Loop: AK2/AK3 — DATA SEGMENT NOTE

Usage: SITUATIONAL

Repeat: 99

Notes: 1. Used when there are errors to report in a data element or composite data structure.

Example: AK4*1*98*7~

STANDARD

AK4 Data Element Note

Level: Header

Position: 0500

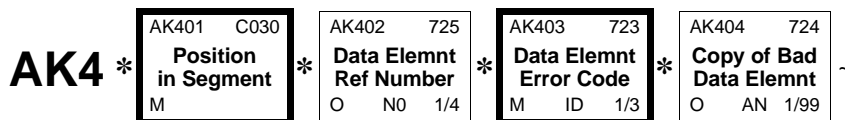
Loop: AK2/AK3

Requirement: Optional

Max Use: 99

Purpose: To report errors in a data element or composite data structure and identify the location of the data element

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	AK401	C030	POSITION IN SEGMENT	M Code indicating the relative position of a simple data element, or the relative position of a composite data structure combined with the relative position of the component data element within the composite data structure, in error; the count starts with 1 for the simple data element or composite data structure immediately following the segment ID
REQUIRED	AK401 - 1	722	Element Position in Segment	M NO 1/2 This is used to indicate the relative position of a simple data element, or the relative position of a composite data structure with the relative position of the component within the composite data structure, in error; in the data segment the count starts with 1 for the simple data element or composite data structure immediately following the segment ID
SITUATIONAL	AK401 - 2	1528	Component Data Element Position in Composite	O NO 1/2 To identify the component data element position within the composite that is in error

Used when an error occurs in a composite data element and the composite data element position can be determined.

SITUATIONAL	AK401 - 3	1686	Repeating Data Element Position	O NO 1/4
			To identify the specific repetition of a data element that is in error	
SITUATIONAL	AK402 725		Data Element Reference Number	O NO 1/4
			Reference number used to locate the data element in the Data Element Dictionary	
			ADVISORY: Under most circumstances, this element is expected to be sent.	
			CODE SOURCE 77: X12 Directories	
			The Data Element Reference Number for this data element is 725. All reference numbers are found with the segment descriptions in this guide.	
REQUIRED	AK403 723		Data Element Syntax Error Code	M ID 1/3
			Code indicating the error found after syntax edits of a data element	
			CODE	DEFINITION
			1	Mandatory data element missing
			2	Conditional required data element missing.
			3	Too many data elements.
			4	Data element too short.
			5	Data element too long.
			6	Invalid character in data element.
			7	Invalid code value.
			8	Invalid Date
			9	Invalid Time
			10	Exclusion Condition Violated
SITUATIONAL	AK404 724		Copy of Bad Data Element	O AN 1/99
			This is a copy of the data element in error	
			SEMANTIC: In no case shall a value be used for AK404 that would generate a syntax error, e.g., an invalid character.	
			Used to provide copy of erroneous data to the original submitter, but this is not used if the error reported in an invalid character.	

IMPLEMENTATION

TRANSACTION SET RESPONSE TRAILER

Loop: AK2/AK3 — DATA SEGMENT NOTE

Usage: REQUIRED

Repeat: 1

Example: AK5*E*5~

STANDARD

AK5 Transaction Set Response Trailer

Level: Header

Position: 0600

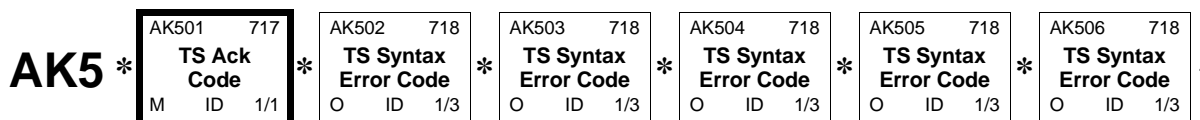
Loop: AK2

Requirement: Mandatory

Max Use: 1

Purpose: To acknowledge acceptance or rejection and report errors in a transaction set

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	AK501	717	Transaction Set Acknowledgment Code Code indicating accept or reject condition based on the syntax editing of the transaction set	M ID 1/1
			CODE	DEFINITION
			A	Accepted ADVISED
			E	Accepted But Errors Were Noted
			M	Rejected, Message Authentication Code (MAC) Failed
			R	Rejected ADVISED
			W	Rejected, Assurance Failed Validity Tests
			X	Rejected, Content After Decryption Could Not Be Analyzed

SITUATIONAL AK502 718

Transaction Set Syntax Error Code

O ID 1/3

Code indicating error found based on the syntax editing of a transaction set

Required if error exists

CODE	DEFINITION
1	Transaction Set Not Supported
2	Transaction Set Trailer Missing
3	Transaction Set Control Number in Header and Trailer Do Not Match
4	Number of Included Segments Does Not Match Actual Count
5	One or More Segments in Error
6	Missing or Invalid Transaction Set Identifier
7	Missing or Invalid Transaction Set Control Number
8	Authentication Key Name Unknown
9	Encryption Key Name Unknown
10	Requested Service (Authentication or Encrypted) Not Available
11	Unknown Security Recipient
12	Incorrect Message Length (Encryption Only)
13	Message Authentication Code Failed
15	Unknown Security Originator
16	Syntax Error in Decrypted Text
17	Security Not Supported
19	S1E Security End Segment Missing for S1S Security Start Segment
20	S1S Security Start Segment Missing for S1E Security End Segment
21	S2E Security End Segment Missing for S2S Security Start Segment
22	S2S Security Start Segment Missing for S2E Security End Segment
23	Transaction Set Control Number Not Unique within the Functional Group
24	S3E Security End Segment Missing for S3S Security Start Segment
25	S3S Security Start Segment Missing for S3E Security End Segment

			26	S4E Security End Segment Missing for S4S Security Start Segment			
			27	S4S Security Start Segment Missing for S4E Security End Segment			
SITUATIONAL	AK503	718	Transaction Set Syntax Error Code	O ID 1/3	Code indicating error found based on the syntax editing of a transaction set		
			Use the same codes indicated in AK502.				
SITUATIONAL	AK504	718	Transaction Set Syntax Error Code	O ID 1/3	Code indicating error found based on the syntax editing of a transaction set		
			Use the same codes indicated in AK502.				
SITUATIONAL	AK505	718	Transaction Set Syntax Error Code	O ID 1/3	Code indicating error found based on the syntax editing of a transaction set		
			Use the same codes indicated in AK502.				
SITUATIONAL	AK506	718	Transaction Set Syntax Error Code	O ID 1/3	Code indicating error found based on the syntax editing of a transaction set		
			Use the same codes indicated in AK502.				

IMPLEMENTATION

FUNCTIONAL GROUP RESPONSE TRAILER

Usage: REQUIRED

Repeat: 1

Example: AK9*A*1*1*1~

STANDARD

AK9 Functional Group Response Trailer

Level: Header

Position: 0700

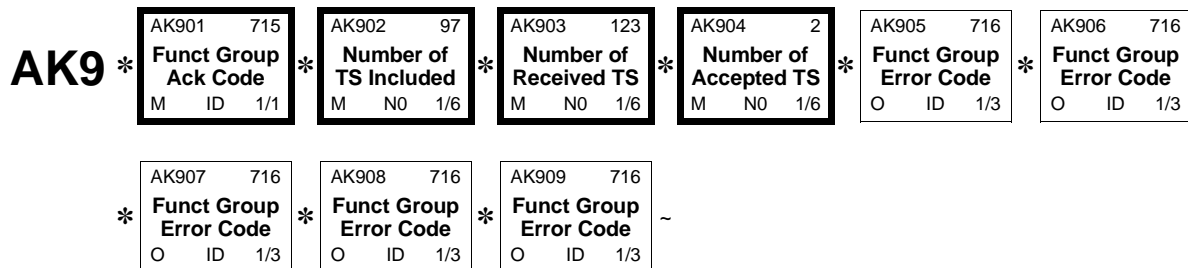
Loop: _____

Requirement: Mandatory

Max Use: 1

Purpose: To acknowledge acceptance or rejection of a functional group and report the number of included transaction sets from the original trailer, the accepted sets, and the received sets in this functional group

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	AK901	715	Functional Group Acknowledge Code Code indicating accept or reject condition based on the syntax editing of the functional group COMMENT: If AK901 contains the value "A" or "E", then the transmitted functional group is accepted.	M ID 1/1
			CODE	DEFINITION
			A	Accepted ADVISED
			E	Accepted, But Errors Were Noted.
			M	Rejected, Message Authentication Code (MAC) Failed

			P	Partially Accepted, At Least One Transaction Set Was Rejected ADVISED
			R	Rejected ADVISED
			W	Rejected, Assurance Failed Validity Tests
			X	Rejected, Content After Decryption Could Not Be Analyzed
REQUIRED	AK902	97	Number of Transaction Sets Included	M NO 1/6 Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element
			This is the value in the original GE01.	
REQUIRED	AK903	123	Number of Received Transaction Sets	M NO 1/6 Number of Transaction Sets received
REQUIRED	AK904	2	Number of Accepted Transaction Sets	M NO 1/6 Number of accepted Transaction Sets in a Functional Group
SITUATIONAL	AK905	716	Functional Group Syntax Error Code	O ID 1/3 Code indicating error found based on the syntax editing of the functional group header and/or trailer
			Required if error exists	
			CODE	DEFINITION
			1	Functional Group Not Supported
			2	Functional Group Version Not Supported
			3	Functional Group Trailer Missing
			4	Group Control Number in the Functional Group Header and Trailer Do Not Agree
			5	Number of Included Transaction Sets Does Not Match Actual Count
			6	Group Control Number Violates Syntax
			10	Authentication Key Name Unknown
			11	Encryption Key Name Unknown
			12	Requested Service (Authentication or Encryption) Not Available
			13	Unknown Security Recipient
			14	Unknown Security Originator
			15	Syntax Error in Decrypted Text
			16	Security Not Supported
			17	Incorrect Message Length (Encryption Only)
			18	Message Authentication Code Failed

19	S1E Security End Segment Missing for S1S Security Start Segment
20	S1S Security Start Segment Missing for S1E End Segment
21	S2E Security End Segment Missing for S2S Security Start Segment
22	S2S Security Start Segment Missing for S2E Security End Segment
23	S3E Security End Segment Missing for S3S Security Start Segment
24	S3S Security Start Segment Missing for S3E End Segment
25	S4E Security End Segment Missing for S4S Security Start Segment
26	S4S Security Start Segment Missing for S4E Security End Segment

SITUATIONAL AK906 716 **Functional Group Syntax Error Code** O ID 1/3
Code indicating error found based on the syntax editing of the functional group header and/or trailer

Use the same codes indicated in AK905.

SITUATIONAL AK907 716 **Functional Group Syntax Error Code** O ID 1/3
Code indicating error found based on the syntax editing of the functional group header and/or trailer

Use the same codes indicated in AK905.

SITUATIONAL AK908 716 **Functional Group Syntax Error Code** O ID 1/3
Code indicating error found based on the syntax editing of the functional group header and/or trailer

Use the same codes indicated in AK905.

SITUATIONAL AK909 716 **Functional Group Syntax Error Code** O ID 1/3
Code indicating error found based on the syntax editing of the functional group header and/or trailer

Use the same codes indicated in AK905.

IMPLEMENTATION

TRANSACTION SET TRAILER

Usage: MANDATORY

Repeat: 1

Example: SE*27*1234~

STANDARD

SE Transaction Set Trailer

Level: Header

Position: 0800

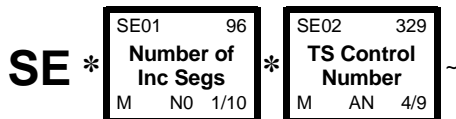
Loop: _____

Requirement: Mandatory

Max Use: 1

Purpose: To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

DIAGRAM



ELEMENT SUMMARY

USAGE	REF. DES.	DATA ELEMENT	NAME	ATTRIBUTES
REQUIRED	SE01	96	Number of Included Segments	M NO 1/10
			Total number of segments included in a transaction set including ST and SE segments	
REQUIRED	SE02	329	Transaction Set Control Number	M AN 4/9
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

The Transaction Set Control Numbers in ST02 and SE02 must be identical. The number is assigned by the originator and must be unique within a functional group (GS-GE). The number also aids in error resolution research. For example, start with the number 0001 and increment from there.

C External Code Sources

77 X12 Directories

SIMPLE DATA ELEMENT/CODE REFERENCES721, 725

SOURCE

X12.3 Data Element Dictionary
X12.22 Segment Directory

AVAILABLE FROM

Data Interchange Standards Association, Inc. (DISA)
Suite 200
1800 Diagonal Road
Alexandria, VA 22314-2852

ABSTRACT

The data element dictionary contains the format and descriptions of data elements used to construct X12 segments. It also contains code lists associated with these data elements. The segment directory contains the format and definitions of the data segments used to construct X12 transaction sets.

94 International Organization for Standardization (Date and Time)

SIMPLE DATA ELEMENT/CODE REFERENCES623

SOURCE

ISO 8601

AVAILABLE FROM

American National Standards Institute
11 West 42nd Street, 13th Floor
New York, NY 10036

ABSTRACT

ISO Standards code list for representation of date and time.

121 Health Industry Number

SIMPLE DATA ELEMENT/CODE REFERENCES66/21, 128/HI, 1270/HI, I05/20

SOURCE

Health Industry Number Database

AVAILABLE FROM

Health Industry Business Communications Council
5110 North 40th Street
Phoenix, AZ 85018

ABSTRACT

The HIN is a coding system, developed and administered by the Health Industry Business Communications Council, that assigns a unique code number to hospitals other provider organizations, and manufacturers and distributors.

- 133** **URL**
<http://www.HIBCC.ORG>
- 133** **Current Procedural Terminology (CPT) Codes**
- SIMPLE DATA ELEMENT/CODE REFERENCES**128/CPT, 235/CJ, 1270/BS, 1270/AAW
- SOURCE**
Physicians' Current Procedural Terminology (CPT) Manual
- AVAILABLE FROM**
Order Department
American Medical Association
515 North State Street
Chicago, IL 60610
- ABSTRACT**
A listing of descriptive terms and identifying codes for reporting medical services and procedures performed by physicians.
- 214** **Coverage Code List**
- SIMPLE DATA ELEMENT/CODE REFERENCES**128/D7, 1270/CV, 1271
- SOURCE**
Coverage Code List
- AVAILABLE FROM**
Standards Department
Agency Company Organization for Research and Development (ACORD)
One Blue Hill Plaza - 15th Floor
P.O. Box 1529
Pearl River, NY 10965-8529
- ABSTRACT**
Codes identifying the insurance coverage.
- URL**
<http://www.acord.org>
- 464** **Health Industry Level 7 (HL7)**
- SIMPLE DATA ELEMENT/CODE REFERENCES**756/HL
- SOURCE**
Health Level Standard Version 2.3
- AVAILABLE FROM**
Health Level 7 (HL7)
Suite 227
3300 Washtenaw Avenue
Ann Arbor, MI 48104-4250
- ABSTRACT**
Health Level Seven Interface Standards describe standards for interfacing health care industry institutional computer applications. Tables designated as HL7 tables are part of the standard because they affect the interpretation of the mes-

sages that contain them. These tables are available in an Access database that can be obtained from HL7 Headquarters or ordered via our web site.

URL

<http://www.h17.org>

540 Health Care Financing Administration National PAYERID

SIMPLE DATA ELEMENT/CODE REFERENCES66/XV

SOURCE

PAYERID Database

AVAILABLE FROM

Health Care Financing Administration
Bureau of Program Operations
Chief, Benefit Coordination
S1-03-08
7500 Security Boulevard
Baltimore, MD 21244-1850

ABSTRACT

The Health Care Financing Administration has joined with other payers to develop a unique national payer identification number. The Health Care Financing Administration is the authorizing agent for enumerating payers through the services of a PAYERID Registrar. It may also be used by other payers on a voluntary basis.

663 Logical Observation Identifier Names and Codes (LOINC)

SIMPLE DATA ELEMENT/CODE REFERENCES128/LOI, 235/LB, 1270/LOI

SOURCE

Logical Observation Identifier Names and Codes (LOINC)

AVAILABLE FROM

Reginstriff Institute
Indiana University School of Medicine
1001 West 10th Street
5th Floor RHC
Indianapolis, IN 46202

ABSTRACT

List of descriptive terms and identifying codes for reporting precise test methods in medicine.

URL

<http://www.mcis.duke.edu/standards/termcode/loinc.htm>

D Change Summary

D.1 Change Summary

This is the first Implementation Guide (IG) for the 275. In future guides, this section will contain a summary of all changes since the previous guide.

E Data Element Name Index

This appendix contains an alphabetic listing of data elements used in this implementation guide. Consult the Data Element Dictionary for the complete list. Data element names in normal type are generic ASC X12 names. *Italic* type indicates a health care industry defined name.

Name	—	<i>Payment Date</i>	
Definition	—	Date of payment.	
Transaction Set ID	—	277	
Locator Key	—	D 2200D SPA12 C001-2 373	156
H=Header, D=Detail, S=Summary	—		
Loop ID	—		
Segment ID/Reference Designator	—		
Composite ID-Sequence	—		
Data Element Number	—		
Page Number	—		

Additional Information Gathered Date

Date additional information provided in transaction was gathered.
D | 2100B | DTP03 | - | 125170

Additional Information Request Code

Code identifying the additional information requested.
D | 2000A | STC01 | C043-2 | 127161
D | 2000A | STC10 | C043-2 | 127161
D | 2000A | STC11 | C043-2 | 127162

Assigned Number

Number assigned for differentiation within a transaction set.
D | 2000A | LX01 | - | 55457

Attachment Control Number

Identification number of attachment related to the claim.
D | 2000A | TRN02 | - | 12759

Attachment Report Type Code

Code to specify the type of attachment that is related to the claim.
D | 2100B | CAT01 | - | 75572

Bill Type Identifier

A code indicating the specific type of bill or claim.
H | 1000D | REF02 | - | 12754

Binary Data

A string of octets which can assume any binary pattern from hexadecimal 00 to FF.
D | 2110B | BIN02 | - | 78575

Binary Data Length Number

Expression of the length of following binary data in the number of integral octets of the binary data.
D | 2110B | BIN01 | - | 78475

Claim Date

Date associated with the claim.
H | 1000D | DTP03 | - | 125156

Code List Qualifier Code

Code identifying a specific industry code list.
D | 2000A | STC01 | C043-4 | 127061
D | 2000A | STC10 | C043-4 | 127062
D | 2000A | STC11 | C043-4 | 127062

Communication Number

Complete communications number including country or area code when applicable
H | 1000A | PER04 | - | 36442
H | 1000A | PER06 | - | 36443
H | 1000A | PER08 | - | 36443

Communication Number Qualifier

Code identifying the type of communication number
H | 1000A | PER03 | - | 36542
H | 1000A | PER05 | - | 36542

H | 1000A | PER07 | - | 365 43

Contact Function Code

Code identifying the major duty or responsibility of the person or group named.

H | 1000A | PER01 | - | 366 42

Date Time Period Format

Qualifier

Code indicating the date format, time format, or date and time format

H | 1000D | DTP02 | - | 1250 56

D | 2100A | DTP02 | - | 1250 67

D | 2100B | DTP02 | - | 1250 69

Date Time Qualifier

Code specifying the type of date or time or both date and time.

H | 1000D | DTP01 | - | 374 55

D | 2100A | DTP01 | - | 374 67

D | 2100B | DTP01 | - | 374 69

Entity Identifier Code

Code identifying an organizational entity, a physical location, property or an individual

H | 1000A | NM101 | - | 98 38

H | 1000B | NM101 | - | 98 44

H | 1000C | NM101 | - | 98 46

H | 1000D | NM101 | - | 98 49

Entity Type Qualifier

Code qualifying the type of entity

H | 1000A | NM102 | - | 1065 39

H | 1000B | NM102 | - | 1065 45

H | 1000C | NM102 | - | 1065 47

H | 1000D | NM102 | - | 1065 50

Free Form Message Text

Text used to convey information related to the transaction.

D | 2000A | STC12 | - | 933 62

Health Care Claim Status

Category Code

Code indicating the category of the associated claim status code.

D | 2000A | STC01 | C043-1 | 1271 61

D | 2000A | STC10 | C043-1 | 1271 61

D | 2000A | STC11 | C043-1 | 1271 62

Identification Code Qualifier

Code designating the system/method of code structure used for Identification Code (67)

H | 1000A | NM108 | - | 66 39

H | 1000B | NM108 | - | 66 45

H | 1000C | NM108 | - | 66 47

H | 1000D | NM108 | - | 66 50

Information Receiver Contact Name

Individual at information receiver to whom inquiries about this transaction should be directed.

H | 1000A | PER02 | - | 93 42

Line Item Control Number

Identifier assigned by the submitter/provider to this line item.

D | 2000A | REF02 | - | 127 66

Patient Account Number

Unique identification number assigned by the provider to the patient to facilitate posting of payment information and identification of the billed claim.

H | 1000D | REF02 | - | 127 52

Patient First Name

The first name of the individual to whom the services were provided.

H | 1000D | NM104 | - | 1036 50

Patient Identifier

Patient identification code

H | 1000D | NM109 | - | 67 51

Patient Last Name

The last name of the individual to whom the services were provided.

H | 1000D | NM103 | - | 1035 50

Patient Middle Name

The middle name of the individual to whom the services were provided.

H | 1000D | NM105 | - | 1037 50

Patient Name Suffix

Suffix to the name of the individual to whom the services were provided.

H | 1000D | NM107 | - | 1039 50

Procedure or Revenue Code

The procedure code or revenue code, as specified in preceding qualifier, applying to the identified service or claim.

D | 2000A | REF02 | - | 127 64

Professional Service Date

Date of service for a service billed on a professional service claim.

D | 2100A | DTP03 | - | 1251 68

<p>Provider First Name The first name of the provider of care submitting a transaction or related to the information provided in or request by the transaction. H 1000C NM104 - 1036 47</p>	<p>Security Level Code Code indicating the level of confidentiality assigned by the sender to the information following. D 2110B EF101 - 786 74</p>
<p>Provider Identifier Number assigned by the payer, regulatory authority, or other authorized body or agency to identify the provider. H 1000C NM109 - 67 48</p>	<p>Submitter First Name The first name of the person submitting the transaction or receiving the transaction, as identified by the preceding identification code. H 1000B NM104 - 1036 45</p>
<p>Provider Last or Organization Name The last name of the provider of care or name of the provider organization submitting a transaction or related to the information provided in or request by the transaction. H 1000C NM103 - 1035 47</p>	<p>Submitter Identifier Code or number identifying the entity submitting the claim. H 1000B NM109 - 67 45</p>
<p>Provider Middle Name The middle name of the provider of care submitting a transaction or related to the information provided in or request by the transaction. H 1000C NM105 - 1037 47</p>	<p>Submitter Last or Organization Name The last name or the organizational name of the entity submitting the transaction H 1000B NM103 - 1035 45</p>
<p>Provider Name Suffix The name suffix of the provider of care submitting a transaction or related to the information provided in or request by the transaction. H 1000C NM107 - 1039 47</p>	<p>Submitter Middle Name The middle name of the person submitting the transaction H 1000B NM105 - 1037 45</p>
<p>Receiver Identifier Number identifying the organization receiving the payment. H 1000A NM109 - 67 39</p>	<p>Trace Type Code Code identifying the type of reassociation which needs to be performed. D 2000A TRN01 - 481 58</p>
<p>Receiver Name Name of organization receiving the transaction. H 1000A NM103 - 1035 39</p>	<p>Transaction Segment Count A tally of all segments between the ST and the SE segments including the ST and SE segments. D SE01 - 96 76</p>
<p>Reference Identification Qualifier Code qualifying the reference identification H 1000D REF01 - 128 52 H 1000D REF01 - 128 53 D 2000A REF01 - 128 64 D 2000A REF01 - 128 65</p>	<p>Transaction Set Control Number The unique identification number within a transaction set. H ST02 - 329 34 D SE02 - 329 76</p>
<p>Report Transmission Code Code defining timing, transmission method or format by which reports are to be sent. D 2100B CAT02 - 756 72</p>	<p>Transaction Set Creation Date Identifies the date the submitter created the transaction H BGN03 - 373 37</p>
	<p>Transaction Set Identifier Code Code uniquely identifying a Transaction Set. H ST01 - 143 34 H BGN02 - 127 37</p>

Transaction Set Purpose Code

Code identifying purpose of transaction set.

H | | BGN01 | - | 353 36



**Health Level Seven (HL7)
HL7 Implementation Guide for
Additional Information to
Support a Healthcare Claim or Encounter
(Version 1.0)
Feb 6, 1999**

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Health Level Seven, Inc.
Ann Arbor, MI

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Health Level Seven (HL7) Implementation Guide for Additional Information to Support a Healthcare Claim or Encounter Version 1.0

1 Introduction

This document specifies construction rules for HL7 messages that are imbedded in X12 transactions. This document, along with the documents listed below, constitute a proposed solution for the requirement for electronic transmission of claims attachments included in the Health Insurance Portability and Accountability Act (HIPAA).

- ASC X12N Implementation Guide for Use of the 275 Transaction (004020) Additional Information to Support a Health Care Claim or Encounter, which is a product of subcommittee X12N of Accredited Standards Committee X12^{1,2}
- ASC X12N Implementation Guide for Use of the 277 Transaction (004020) Health Care Claim, Request for Additional Information³
- booklets containing codes published by the Consortium for Logical Observation Identifiers, Names, and Codes (LOINC[®]) as described in section 1.5.2.⁴

At the same time, this HL7 document will be published as an officially balloted recommendation of the Health Level Seven Standards Development Organization (SDO), which is accredited by the American National Standards Institute (ANSI).

For a comprehensive understanding of the solution proposed in these documents, the following reading sequence is suggested:

- *ASC X12N Implementation Guide for Use of the 277 Transaction (004020) Health Care Claim, Request for Additional Information*
- *ASC X12N Implementation Guide for Use of the 275 Transaction (004020) Additional Information to Support a Health Care Claim or Encounter*
- *Health Level Seven (HL7) Implementation Guide for Additional Information to Support a Healthcare Claim or Encounter Version 1.0*
- *Logical Observation Identifier Names and Codes (LOINC[™]) Consortium Modifier Codes in the ASC X12N Implementation Guide for the 277 Requests for Additional Information Transaction*
- The Logical Observation Identifier Names and Codes (LOINC[®]) Consortium booklets containing the code tables for the Ambulance, Clinical Reports, Emergency Department, Laboratory Results, Medications and Rehabilitation Services messages. These booklets may be read in any order.

¹Information on this and other X12/HIPAA-related implementation guides is available from the Washington Publishing Company, Gaithersburg, MD. <http://www.wpc-edi.com/>

² Within the HL7 Implementation Guide, references to the transaction defined by this document will be abbreviated by calling it 275. The implied citation is to this particular X12 document.

³ Within the HL7 Implementation Guide, references to the transaction defined by this document will be abbreviated by calling it 277.

⁴These booklets, and information on this and other HIPAA-related EDI matters will be available from the Washington Publishing Company, Gaithersburg, MD. <http://www.wpc-edi.com/>

- One additional document serves as a reference: *Logical Observation Identifier Names and Codes (LOINC®) Consortium Codes for the HL7 and X12 Additional Information to Support a Health Care Claim or Encounter Transactions: Summary Listing*

1.1 Conceptual Approach

A claim attachment is a set of supporting documentation that is associated with a healthcare claim or encounter. **Electronic** supporting documentation in this context is a collection of **data elements** that has been given a name and a LOINC identification code. Each data element has its own name and identification code.

Some of these items of electronic supporting documentation are based on paper forms that have been used by payers in the past. Each such item, however, has been reviewed for appropriateness in an electronic format.

In some cases, electronic supporting documentation may be defined for situations where there was not a specific paper precursor. For example, items have been defined to send various kinds of clinical reports, laboratory results, and patient medication information.

1.1.1 Relationship to the X12 Transaction

As described in the X12 Implementation Guide, the LX loop in the 275 transaction will include a Binary (BIN) segment that will include an HL7 message. That HL7 message may contain the information for an entire electronic attachment or it may contain the information for a single attachment data element.

Figure 1 shows an example of an HL7 *Unsolicited Transmission of an Observation* message embedded in an X12 275. This HL7 message, which is in boldface, is identified by the code **ORU** and will be referred to as the ORU message throughout this and related documents. Although X12 segments do not end with carriage return characters, each X12 segment is shown on a separate line for readability.

Figure 1. Sample HL7 Message (in boldface) embedded in X12 BIN segment.

```

ST*275*1001~
BGN*11*0001*19980429~
NM1*PR*2*HEALTH CARE SERVICE CORPORATION*****PI*00121~
PER*IC*MEDICAL REVIEW DEPARTMENT~
NM1*85*2*LOYOLA UNIVERSITY MEDICAL CENTER*****FI*364015560~
NM1*41*2*LOYOLA UNIVERSITY MEDICAL CENTER*****SV*00000000500~
NM1*QC*1*SMITH JOHN***HN*111223333A~
REF*IK*1722634842~
DTP*472*RD8*19980401-19980411~
LX*01~
STC*R3:30005-0~
DTP*097*D8*19980429~
CAT*UL*HL~
EFI*09~
BIN*143*MSH|^~\&|||19981105131523||ORU^R01|A12349282|P|2.3|||NE|NE<cr>
PID|||100928782^9^M11|Smith^John^J<cr>
OBR|||30005-0^^LN<cr>
OBX||CE|3141-9||147|LB^^ANS+<cr>
se*15*1001~

```

1.1.2 No Trading Partner or Site-Specific Variations in Content

The economic benefits of the HIPAA are obtained, in part, by creating a universal specification. Providers will not have to maintain large libraries of variations on transaction formats to meet the differing requirements of payers. It is intended that the formats in this Implementation Guide meet the requirement for universality. Where options exist in HL7, the Implementation Guide should definitively specify which will be used. Occasionally, however, the senders need options to cover alternative use cases. Where such options exist in the Implementation Guide, the receivers will accept all of the options that exist. For example, the electronic attachment for ambulance has a data element called patient weight. There are three different LOINC codes for patient weight according to whether the weight was measured, estimated, or stated by the patient or an agent of the patient. The attachment specifies the option to use any of the three LOINC codes. Receivers must accept all three.

1.2 Electronic Supporting Documentation Authority

HL7 does not specify *what* information is to be sent electronically. Federal regulations will assign that authority to **data content committees**. DHHS will publish information separately regarding the role and formation of Data Content Committee. HL7 only specifies *how to format* the HL7 messages that are embedded within X12 transactions and contain the prescribed information. That is specified in this Implementation Guide.

When a data content committee establishes the requirement for specific electronic attachments or attachment data elements, HL7 does not specify the codes that are used to identify them. Those codes are established and maintained by the LOINC Consortium.

When a data content committee establishes a specific set of concepts that are the valid answers for a data element, the LOINC committee provides codes to identify those concepts.

Figure 2. Relationship of organizations, publications, and transactions.

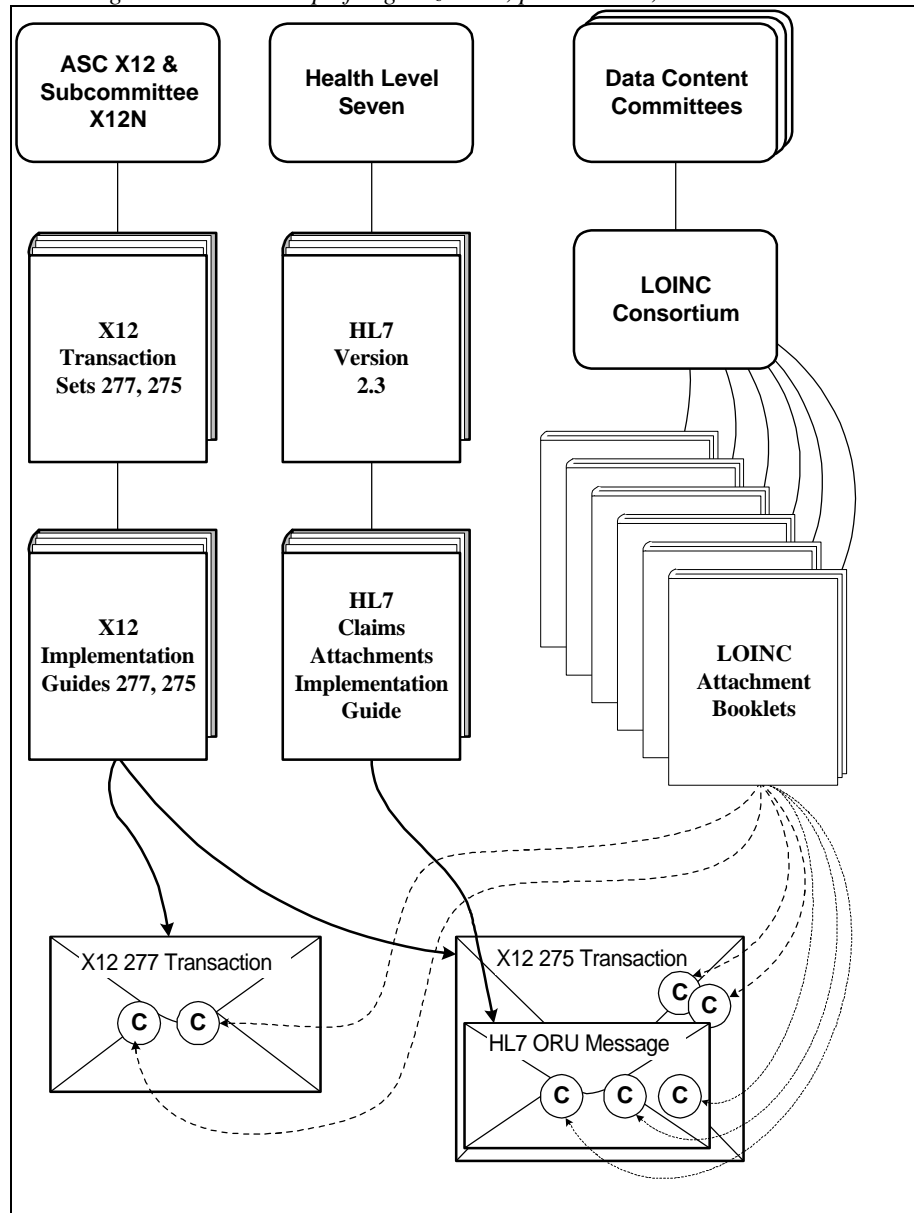


Figure 2 illustrates the relationship of the organizations, documents, transaction messages, and codes. The X12N implementation guides determine the contents of the X12N transactions up to the BIN segment. It also specifies the use of externally defined LOINC codes in certain data fields. The format of the ORU message in the BIN segment are determined by the HL7 Implementation Guide, except for certain LOINC and answer codes. The external LOINC codes for the X12N transactions and HL7 messages are published by LOINC in booklets that are specific to the kind of electronic supporting documentation being sent.

At the time of publication of this implementation guide, six LOINC attachment booklets were available to describe electronic supporting documentation:

- ambulance

- rehabilitation, addressing eight disciplines: alcohol/substance abuse, cardiac, medical social services, occupational therapy, physical therapy, psychiatric, respiratory therapy, and skilled nursing
- Emergency Department
- narrative clinical reports, including, but not limited to, those shown in Table 1, below
- laboratory results
- medications.

In addition, a LOINC booklet is available to enumerate the use of LOINC codes in modifying the scopes of requests in the X12N 277 transaction. Another booklet lists all the LOINC codes relevant to claims attachments transactions.

Table 1. Clinical report topics.

anesthesia	diagnostic imaging	flexible sigmoidoscopy	procedure note
arthroscopy	discharge note	history and physical	progress note
bronchoscope	echo heart	notes	radiology
cardiac catheterization	EEG brain	initial assessment	spirometry
colonoscopy	EKG	nursing	surgical pathology
consultation note	Electromyogram	OB echo	temperature chart total
consultation request	endoscopy	operative note	visit note
cytology	exercise stress test		

1.3 Authority, Organization and Scope of this Document

The Implementation Guide is based on the *Health Level Seven Standard, Version 2.3*, which was approved as an ANSI-accredited American National Standard in May 1997. The Implementation Guide will be approved by the HL7 Membership in a letter ballot using the procedure for publishing HL7 Recommendations.

HL7 Version 2.3 is based on rules for forming messages from segments and data fields that are very similar to, but different than, those of X12.

The organization of this specification is described below:

- Section 1 is this introduction
- Section 2 describes how HL7 message formats are constructed to convey claims attachment information within X12 275 transactions. It also gives examples of attachment-specific booklets published by the LOINC consortium to establish the codes and answers for specific attachment elements. Readers who are unfamiliar with HL7 may find it beneficial to read Section 3 before reading this section.
- Section 3 provides summary information about *Health Level Seven Standard, Version 2.3*. It restates selected information, eliminating optional features that are not required for creating claims attachment inserts and giving guidance on the use of other features.

1.4 Health Level Seven Organization

The mission of HL7 is to provide standards for the exchange, management, and integration of data that support clinical patient care and the management, delivery, and evaluation of healthcare services. Founded in 1987, HL7 is a not-for-profit Standards Developing Organization (SDO) that specializes in developing standards for the exchange of clinical data among disparate health care

computer applications. Like X12, HL7 is accredited by the American National Standards Institute.

The HL7 membership represents more than 1,600 people drawn from more than 1000 of the nation's leading organizations with an interest in this topic. These include the industry's leading healthcare provider organizations, 90% of the top vendors selling information systems to healthcare providers, as well as consulting firms, payers, pharmaceutical vendors, other healthcare organizations and healthcare professional associations. HL7 Standards are also used internationally in Australia, Austria, Belgium, Canada, Germany, Israel, Japan, New Zealand, The Netherlands, and the United Kingdom.

HL7 complements X12N in that its interests have been to support the clinical processes, whereas Task Group 2, X12N (the Healthcare Task Group of the Insurance Subcommittee of X12) focuses on administrative and financial processes within healthcare.

For information on membership and obtaining the standard, contact:

Health Level Seven
3300 Washtenaw Ave., Suite 227
Ann Arbor, MI 48104-4261
(734) 677-7777
hq@hl7.org
<http://www.hl7.org>

Substantial additional information about the HL7 group and its standards (and about all standards for health information) can be obtained from the medical informatics web site at Duke University:

<http://www.mcis.duke.edu/standards/guide.htm/hl7>

1.5 Logical Observation Identifier Names and Codes (LOINC®)

The HL7 encoding of claims attachments makes extensive use of the code set, *Logical Observation Identifier Names and Codes (LOINC)*. LOINC codes are available for commercial use without charge, subject to the terms of a license that assures the integrity and ownership of the codes.

1.5.1 LOINC Names and Identifiers

The LOINC database provides sets of universal names and ID codes for identifying laboratory and clinical test results and other units of information meaningful in claims attachments.

Each LOINC record corresponds to a single observation. The record includes attributes to specify:

- the numeric **code** that identifies the observation
- **observed component** — e.g., potassium, hepatitis C antigen, distance the patient was transported (by an ambulance)
- **property** measured — e.g., a mass concentration, length (distance)
- whether the measurement is a momentary observation at a point in time, or an observation made over a span of time
- the type of sample or other **source of observation** — e.g., urine, blood, EMS transport

- the type of **scale** — e.g., whether the measurement is quantitative (a true measurement) or nominal (red, blue, green)
- where relevant, the **method** used to produce the result or other observation
- a **class** code that associates the observation with others in a group, such as the observations associated with an obstetric ultrasound procedure.

Many medical concepts have multiple LOINC codes. The codes distinguish different methods of making the observation. For example, there are different LOINC codes for manual and automated leukocyte counts. Indeed, there are three codes for the patient's body weight according to whether it was measured, estimated, or the datum is the weight that the patient reported.

Different LOINC codes will also be used to distinguish different ways to report the observation. For example, 10221-0 identifies the specimens taken during surgery when reported using narrative text, whereas 8721-3 would identify coded descriptions of the same specimens.

LOINC codes may also identify **sets** of observations. For example, the LOINC code 18617-1 (discharge medications) identifies a set of other observations, identified by other LOINC codes, including 18618-9 (discharge medication identification), 18619-7 (discharge medication dose), 18620-5 (discharge medication timing), etc.

The LOINC codes are not intended to transmit all possible information about a test or observation. They are only intended to *identify* the observation. The LOINC code for a name is unique and permanent. The LOINC code has no intrinsic structure except that the last character in the code is a mod-10 check digit.

LOINC codes must always be transmitted with a hyphen before the check digit (e.g., "10154-3").

The LOINC committee assigns LOINC codes upon request from various agencies. Requests go through a review process to ensure the concept has not been previously added and the meaning is clear.

1.5.2 LOINC Codes for Electronic Supporting Documentation

LOINC codes identify:

- an electronic attachment that is being requested (e.g., a request for the Ambulance electronic attachment in support of a claim for ambulance services)
- a single element from an electronic attachment that is being asked (e.g., a request for the number of miles that the ambulance drove in support of a claim for ambulance services)
- one of a set of observations that compose a single attachment element (e.g., one code identifies the name portion of the data element that is the ambulance destination; a distinct code identifies the address portion)
- a category of clinical report that is requested (e.g., send any reports of CAT scans of the head that are related to the claim or a specific service)
- a part of a clinical report that is requested (e.g., send the impression section of a radiology report in support of a claim or a specific service)
- a category of laboratory results that is requested (e.g., send any hematology results that are related to the claim or a specific service)

- a category of medication information that is requested (e.g., send the discharge medications that are related to the claim or a specific service)
- a modification of the implicit scope of a request in an X12N 277 transaction (e.g., to modify a request for serology lab values to specify only the abnormal results).

1.5.3 The LOINC Consortium

LOINC is a consortium of laboratories, system vendors, hospitals and academic institutions organized by the Regenstrief Institute and supported by grants from The John A. Hartford Foundation, Inc., the Agency for Health Policy Research and Development and The National Library of Medicine to create formal names and codes for laboratory results and clinical variables with numeric, coded, or narrative text values. The LOINC codes were designed specifically to provide a universal identifier for OBX-3 of the HL7/ASTM observation reporting messages and the corresponding field in CEN messages. It has since been adopted by DICOM as well. For identifying observations in these "messages", the LOINC committee distributes the 10,000+ record database and the Regenstrief LOINC Mapping Assistant (RELMA™) software for perpetual free use on the Internet (<http://www.mcis.duke.edu/standards/loinc.htm>). Widespread use of LOINC will enable better and more efficient use of computer-stored clinical data.

1.5.4 Obtaining LOINC Codes

LOINC codes are copyrighted by Regenstrief Institute and the Logical Observation Identifier Names and Codes (LOINC®) Consortium.

The LOINC code booklets, and information on this and other HIPAA-related EDI matters will be available from the Washington Publishing Company, Gaithersburg, MD. <http://www.wpc-edi.com/>

The LOINC database can be obtained from Regenstrief Institute, c/o Kathy Hutchins, 1001 West 10th Street RG-5, Indianapolis, IN 46202, 317/630-7433. It is also available via the Duke University Web site:

<http://www.mcis.duke.edu/standards/termcode/loinclab>, and
<http://www.mcis.duke.edu/standards/termcode/loinclab/loinc.html>.

1.6 Revision History

<i>Date</i>	<i>Purpose</i>
Feb 6, 1999	Version 1.0

2 Claims Attachment Messages

This section documents how HL7 messages are constructed to convey claims attachment information within X12 275 transaction. It further describes the format of LOINC booklets that document the specifications for specific electronic supporting documentation.

2.1 Rules for Constructing Claims Attachment Messages

All Claims Attachment messages are derived from the HL7 ORU message and consist exclusively of MSH, PID, OBR and OBX segments. Each message variant uses the pattern of segments shown in Figure 3.

Figure 3. Usage of ORU message for claims attachments.

ORU	Observational Results (Unsolicited)
MSH	Message Header
PID	Patient Identification
{OBR	Observations Report ID
{OBX}	Observation/Result
}	

This message format requires that there be at least one OBR segment, although it allows many. In each OBR segment, the Universal service ID (OBR-4) always contains a LOINC code that identifies an attachment data element. After each OBR segment there must be at least one OBX segment; in some cases there may be several. When there is more than one OBX segment following an OBR, each OBX segment contains a part of the attachment element identified in OBR-4.

For some parts, the information in OBR-4 may be supplemented by the contents of other data fields in the OBR segment. A particular set of requirements for using the data fields of the segments is called a **message variant**. These are described in 2.4.1.

In each OBX segment, Observation Identifier (OBX-3) always contains a LOINC code that identifies the part of the attachment element contained in the segment. Observation Value (OBX-5) contains the information that is being transmitted. Value Type (OBX-2) gives the data type of the information in OBX-5.

For some parts, the information in OBX-5 may be supplemented by the contents of other data fields in the OBX segment. Such requirements are documented as part of the message variant, also described in section 2.4.1.

Figure 4 provides an example of an additional information message for the scenario, “the payer requested the date of onset or aggravation of the primary diagnosis for the rehabilitation treatment plan, the associated clinical discipline, and the primary diagnosis.” The boldface portions show three OBR segments containing the LOINC codes for each of the three attachment elements. Each has one or more OBX segments to contain the information. The LOINC code 18627-0 identifies the rationale for the chosen destination; the specified date is March 26, 1997. The LOINC code 18629-6 identifies the discipline; the coded value is PS (psychology) and the code is drawn from the HL79004 code set. The LOINC code 19007-4 identifies the primary diagnosis. This element is transmitted in two parts: 18630-4 identifies the coded diagnosis, 296.4. “I9” in that element indicates that the code is from the ICD-9-CM code set. The second part of the element is identified by the LOINC code 18777-3. This is the narrative description of the problem, in this case bipolar affective disorder.

For clarity, Figure 4 shows each segment starting on a new line.

Figure 4. Sample claims attachment medications message.

```

BGN*11*0001*19980429~
NM1*PR*2*HEALTH CARE SERVICE CORPORATION*****PI*00121~
PER*IC*MEDICAL REVIEW DEPARTMENT~
NM1*85*2*DUKE UNIVERSITY MEDICAL CENTER*****FI*364015560~
NM1*41*2* DUKE UNIVERSITY MEDICAL CENTER*****SV*00000000500~
NM1*QC*1*STONE^ERIKA****HN*111223333A~
REF*IK*1722634842~
DTP*472*RD8*19980401-19980411~
LX*01~
STC*R3:Z0001-0~
DTP*097*D8*19980429~
CAT*UL*HL~
EFI*09~
BIN*1120*MSH|^~\&|||19981105131523||ORU^R01|A12349282|P|2.3|||NE|NE<cr>
PID|||100928782^9^M11|STONE^ERIKA<cr>
OBR|||18627-0^^LN<cr>
OBX|DT|18627-0^^LN|19970326|||F<cr>
OBR|||18629-6^^LN<cr>
OBX|CE|18629-6^^LN|PS^HL79004|||F<cr>
OBR|||19007-4^^LN<cr>
OBX|CE|18630-4^^LN|296.4^^I9|||F<cr>
OBX|TX|18777-3^^LN|BIPOLAR AFFECTIVE D/O|||F<cr>~
SE*16*1001~

```

2.2 Use of LOINC Codes

LOINC codes are used for several different purposes both in the two X12 transactions and in the HL7 message format used to request and provide electronic supporting documentation. Furthermore, the information pattern of the messages can follow one of two paradigms:

- electronic attachments, such as ambulance or rehabilitation services
- clinical reports, such as discharge notes, radiology reports, lab results, or medication information.

Table 2, below, identifies the distinct uses of LOINC codes for electronic supporting documentation based on forms. Table 3 does the same for clinical reports. **Note:** these tables provide a general orientation to how LOINC codes are used. The specific usage of LOINC codes in X12 277 and X12 275 transactions is described in the X12 implementation guides cited in section 1. Each transaction has separate positions for the Scope Modifier and Attachment Identifier, so LOINC codes can be used for both purposes in a single transaction. The specific usage of LOINC codes in the HL7 ORU message is defined in the LOINC booklets.

Table 2. Uses of LOINC codes for Attachments.

Transaction	X12 277	X12 275	HL7 ORU
Purpose of Transaction LOINC Scope Modifier	<i>request further information in support of a claim</i> modify the scope of a request for information <ul style="list-style-type: none"> ▪ <i>send only abnormal results</i> ▪ <i>send results for up to 90 days before the encounter described in the claim</i> 	<i>supply further information in support of a claim</i> when sent in response to a request, echo the scope codes from the 277.	<i>transmit the information within the X12 275</i> (not used)
LOINC Attachment Identifier	identify an attachment that is requested <ul style="list-style-type: none"> ▪ <i>send the ambulance attachment</i> ▪ <i>send the occupational therapy rehabilitation plan</i> 	identify the attachment that is sent <ul style="list-style-type: none"> ▪ <i>this is the ambulance attachment</i> ▪ <i>this is the occupational therapy rehabilitation plan</i> 	(not used)
LOINC Attachment Element	identify a specific attachment element or part of a clinical report that is requested <ul style="list-style-type: none"> ▪ <i>send the ambulance transport destination</i> 	identify the specific attachment element or part of a clinical report that is sent <ul style="list-style-type: none"> ▪ <i>this is the ambulance transport destination</i> 	identify the attachment element that is provided <ul style="list-style-type: none"> ▪ <i>this is the ambulance transport destination</i> (Used in OBR-4, sometimes used in OBX-3)
LOINC Attachment Element Part or Report Part Identifier	(not used)	(not used)	identify a part of an attachment element clinical report that is provided <ul style="list-style-type: none"> ▪ <i>this is the name of the ambulance transport destination</i> (used in OBX-3)

Table 3. Uses of LOINC codes in Clinical Reports, Lab Results and Medications.

Transaction	X12 277	X12 275	HL7 ORU
Purpose of Transaction LOINC Scope Modifier	<i>request further information in support of a claim</i> modify the scope of a request for information <ul style="list-style-type: none"> ▪ <i>send only abnormal results</i> ▪ <i>send results for up to 90 days before the encounter described in the claim</i> 	<i>supply further information in support of a claim</i> when responding to a 277, send the codes from the 277; otherwise not used.	<i>transmit the information within the 275</i> (not used)
LOINC Clinical Report Request Category Identifier	identify a kind of clinical information that is requested <ul style="list-style-type: none"> ▪ <i>send the progress note</i> ▪ <i>send the discharge medications</i> ▪ <i>send microbiology results</i> 	identify a category of clinical information that is included <ul style="list-style-type: none"> ▪ <i>send the progress note</i> ▪ <i>send the discharge medications</i> ▪ <i>send microbiology results</i> 	identify the category of the clinical report that is provided <ul style="list-style-type: none"> ▪ <i>this is a progress note</i> ▪ <i>these are microbiology results</i> (used in OBR-4)
LOINC Report Part Identifier	(not used)	(not used)	identify a part of a clinical report or a specific lab result that is provided <ul style="list-style-type: none"> ▪ <i>this is the history of present illness from the discharge note</i> ▪ <i>this is the discharge medications number of refills</i> ▪ <i>this is the automated leukocyte count</i> (used in OBX-3)

2.3 Related LOINC Publications

The following booklets published by the LOINC Consortium provide information that supplements this implementation guide.

Table 4. Related LOINC Publications.

Title
<i>LOINC Code Tables for the HL7 “Additional Information to Support a HealthcareHealth Care Claim or Encounter” Message: Ambulance</i>
<i>LOINC Code Tables for the HL7 “Additional Information to Support a HealthcareHealth Care Claim or Encounter” Message: Rehabilitation Services</i>
<i>LOINC Code Tables for the HL7 “Additional Information to Support a HealthcareHealth Care Claim or Encounter” Message: Medications</i>
<i>LOINC Code Tables for the HL7 “Additional Information to Support a HealthcareHealth Care Claim or Encounter” Message: Laboratory Results</i>
<i>LOINC Code Tables for the HL7 “Additional Information to Support a HealthcareHealth Care Claim or Encounter” Message: Clinical Reports</i>
<i>LOINC Code Tables for the HL7 “Additional Information to Support a HealthcareHealth Care Claim or Encounter” Message: Emergency Department</i>
<i>Modifier Codes in the ASC X12N Implementation Guide for the 277 Requests for Additional Information Transaction</i>
<i>LOINC Codes for the HL7 and X12 Additional Information to Support a HealthcareHealth Care Claim or Encounter Transactions: Summary Listing</i>

2.4 Contents of a LOINC Attachment Booklet

The codes and message variants for each type of electronic supporting documentation are defined in a LOINC code booklet. Each booklet contains the following:

- the applicable **message variant**
- the LOINC code or codes that are used to identify the form-based documentation or the clinical report category in 277 and 275 transactions and the ORU message
- the LOINC codes that are used to identify individual elements or parts of clinical results in 275 and 277 transactions
- a **value table**, which repeats the LOINC codes for each data element and gives the associated LOINC codes, data type, and answer code information for each of its attachment data element parts; for clinical reports the value table provides the same information for each part of a report
- coding examples
- **code sets**, which are lists of the codes used for specific attachment data element parts.

These are described below.

2.4.1 HL7 Message Variants

An HL7 message variant is a specific subset of all the segments and data fields that might be included in a message. The description of each message variant includes:

- a general description of the applicability of the message variant
- an HL7 message format diagram that describes the segments that will actually be used
- a table of data fields that will be used in the message with guidance on how to populate the fields.

Figure 5 is an example of the table that describes how each mandatory data field in the segments of a message variant will be populated. Fields that are not described in the table must be null.

Figure 5. Sample Data Field Usage table for Discrete Element message variant.

Example From LOINC Publication		
SEQ	Element Name	Required Value
MSH-1	Field Separator	(recommended)
MSH-2	Encoding Characters	^~\& (recommended)
MSH-7	Date/Time Of Message	
MSH-9	Message Type	ORU^R01
MSH-10	Message Control ID	An identifier that uniquely identifies this message.
MSH-11	Processing ID	P
MSH-12	Version ID	2.3
MSH-15	Accept Acknowledgment Type	NE
MSH-16	Application Acknowledgment Type	NE
PID-3	Patient ID (Internal ID)	Provider identification number for patient.
PID-5	Patient Name	last^first^mi^prefix^suffix^title
OBR-4	Universal Service ID	Code to identify attachment data element in value table, below
OBX-2	Value Type	Code to identify data type of OBX-5, see value table, in the section for a specific electronic attachment.
OBX-3	Observation Identifier	See value table, in the section for a specific electronic attachment.
OBX-5	Observation Value	See value table in the section for a specific electronic attachment.
OBX-6	Units	See value table in the section for a specific electronic attachment.
OBX-11	Observ Result Status	See HL7 table 0085. This application of HL7 does not include the protocol for amending results. Where the status of the source data is known it must be represented with one of these values: C - This report was received as a correction to a prior result; F - Final results; P - Preliminary results; S - Partial results; X - Results cannot be obtained for this observation. Where the source does not track revisions to its data, send F.

2.4.2 Value Table

Figure 6 is an example of the value table.

Figure 7 shows sample HL7 coding that corresponds to the value table.

The columns of the value table are:

- **LOINC code** — this column contains the LOINC code that identifies an element or clinical report category in OBR-4, or a part of an element or clinical report an OBX-3.
- **Value** — this column names the element identified by the LOINC codes. It can also contain instructions on how to populate OBX-5, the field that carries the data.
- **OBX-2** — this column contains the HL7 data type of the data in the OBX-5 field; this value will be sent in OBX-2.

- **Rep**— this column gives the minimum and maximum number of repetitions. In a row associated with an OBR segment, it describes whether the element is optional or can repeat. In a row associated with an OBX segment, it describes whether the element part is optional or can repeat. (See 2.4.2.1.)

2.4.2.1 Repetitions

Repetitions are described as a pair of numbers, the first is the least number of repetitions that are permitted, and the second the greatest. The second number can also be “n” which means an unspecified number, more than one. The common patterns are

- {1,1} The element or element part is required; only a single occurrence is permitted
- {0,1} The element or element part is optional; at most a single occurrence is permitted
- {1,n} The element or element part is required; multiple occurrences are permitted
- {0,n} The element or element part is optional; multiple occurrences are permitted

The Rep column describes repetition in the pattern of OBR and OBX segments. If such a value appears in a row containing LOINC code for an OBR-4, it describes whether the entire element (including and OBR and one or more OBX segments) can repeat. If a Rep value appears in a row containing LOINC code for an OBX-3, it indicates that the OBX segment for that part can repeat within a single occurrence of the complete attachment element.

In some cases, a data element may be shown as required even though it is not always collected as part of the episode that is the subject of the claim. In this case, the detailed specifications offer the ability to document affirmatively that the data was not collected.

Figure 6. Sample Value Table.

LOINC code	Value	OBX-2	Rep	OBX 5/6
OBR-4: 18627-0	PRIMARY DX FOR TREATMENT PLAN, DATE ONSET OR EXACERBATION			
OBX-3: 18627-0	Date of Onset/Exacerbation of Primary Diagnosis	DT	1..1	
OBR-4: 18629-6	REHABILITATION TREATMENT PLN, CLINICAL DISCIPLINE			
OBX-3: 18629-6	Discipline/Therapy Type	CE	1..1	OBX-5^3: HL79004
	AS Alcohol/Substance Abuse			
	CR Cardiac Rehabilitation			
	MS Medical Social Services			
	OT Occupational Therapy			
	PS Psychiatric			
	PT Physical Therapy			
	RT Respiratory Therapy			
	SN Skilled Nursing			
OBR-4: 19007-4	PRIMARY DIAGNOSIS (COMPOSITE)			
	Diagnosis code and narrative description of the problem addressed in the rehabilitation plan.			
OBX-3: 18820-1	PRIMARY DIAGNOSIS IDENTIFIER	CE	1..1	OBX-5^3: I9C
	ICD-9 code.			
OBX-3: 18777-3	PRIMARY DIAGNOSIS (NARRATIVE)	TX		
	Narrative that describes the primary diagnosis from the rehabilitation plan.			

The same LOINC code, 18627-0, appears in OBR-4 and OBX-3

The data type is Date, so DT appears in OBX-2

When the OBR segment appears, the OBX segment must appear exactly once.

The data type is Coded Element, so CE appears in OBX-2

The same LOINC code, 18629-6, appears in OBR-4 and OBX-3

Because there are only a few answer codes, they are shown in-line, as well as in a subsequent section.

Because the data type is coded this column specifies the value that identifies the code system in OBX-5 component 3

When 19007-4 appears in OBR-4, two OBX-s will follow with 18820-1 and 18777-3

The data type is Text, so TX appears in OBX-2

Figure 7. Partial Coding Example

```

OBR || | 18627-0^^LN<cr>
OBX | DT | 18627-0^^LN | 19970326 | | | | F<cr>
OBR || | 18629-6^^LN<cr>
OBX | CE | 18629-6^^LN | PS^^HL79004 | | | | F<cr>
OBR || | 19007-4^^LN<cr>
OBX | CE | 18630-4^^LN | 296.4^^I9 | | | | F<cr>
OBX | TX | 18777-3^^LN | BIPOLAR AFFECTIVE D/O | | | | F<cr>

```

2.4.3 Coding Examples

The Coding Examples portion of the description of an electronic attachment includes sample messages. Each sample includes the X12 275 transaction envelope and the HL7 message or messages that are contained in the X12 BIN segment. A description of the scenario that would generate the sample message precedes each example.

2.4.4 Code Sets

This section describes all the code sets that are identified in the Units or Code Source column of the Value Table. Some code sets are simply named and described. For others the code values are listed here. The example below shows the code set named DEEDS4.31.

5.3 DEEDS4.31: DEEDS Tetanus Special Circumstances

(From DEEDS⁵) Codes that describe why the date of tetanus vaccination was not included in the record. Original source, the DEEDS document.

Code	DEEDS Tetanus Special Circumstances
1	date was requested, but it is unknown
2	the year is known, but the remainder of the date was not requested or was not recorded
3	only the year is known
4	year and month are known, but the remainder of the date was not requested or was not recorded
5	only the year and month are known

2.5 Character Sets

HL7 version 2.3 uses the Basic G0 Set of the International Reference Version of ISO 646:1990 (ISO IR-6) as the default character repertoire for character strings. This is a single-byte character set, identical to ASCII. It supports trading partner agreements to use numerous extensions to the character set including ISO 8859 (1-9) for various European alphabets and JIS X 0201, JIS X 0208, JIS X 0212 for Japanese applications.

The HL7 standard theoretically permits trading partner agreements to use EBCDIC instead of ASCII. However, the anticipated regulations associated with HIPAA do not permit these variations. For HIPAA implementations, senders must use ASCII when exchanging information among trading partners.

Numerous HL7 implementations have been built on mainframes and other operating environments that natively do not support ASCII. These applications have successfully interoperated with other applications using ASCII as the data exchange format. Such implementations typically work with data in EBCDIC in the programming environment and rely on one of two approaches to convert the data to and from ASCII before transmission and after reception:

- Many operating system versions provide features for automatic conversion of data between EBCDIC and ASCII during input-output operations.
- Many "message mapping" or "interface engine" products provide this translation.

⁵ This example is drawn from a separate booklet. In that booklet the acronym DEEDS is identified as the document *Data Elements for Emergency Department Systems*.

3 The HL7 Standard

3.1 Introduction to HL7

This section provides information excerpted and adapted from the *Health Level Seven Standard, Version 2.3*.

Certain HL7 options are required or prohibited for HL7 Claims Attachments messages. These are indicated in this document in the following ways:

- HL7 features and message formats that are not described in this document shall not be used
- Optional segments and data fields should not be used unless they are explicitly described in sections 3.2 or 3.2.2
- Further required interpretations of HL7 are described in the highlighted attachment exception note, an example of which is in Figure 8.

Figure 8. Sample guidance on interpreting HL7 for attachment exceptions.

(Sample) The optional second component of the TS data type shall not be used for claims attachments.

3.1.1 HL7 Messages

A **message** is the unit of data transferred between information systems. It is composed of a group of segments in a defined sequence. Each message has a **message type** that defines its purpose. For example, the *Observational Result Unsolicited* message type is used to transmit clinical data about a patient from one system to another. A three-character code contained within each message identifies its type. The three-character code for the *Observational Result Unsolicited* message is ORU.

The real-world event that initiates an exchange of messages is called a **trigger event**. Examples of trigger events include “a patient is admitted to a healthcare facility”, “an order for a medication is discontinued” or “a laboratory measurement has been completed and has met the criteria for release to users.” The trigger event that stimulates a message is identified in a message by a code. There is a one-to-many relationship between message types and trigger event codes. The same trigger event code may not be associated with more than one message type; however, a message type may be associated with more than one trigger event. Figure 9 shows a sample HL7 *Observational Result Unsolicited* message (ORU) sent for the trigger event “unsolicited transmission of an observation message” (R01). The message ID and trigger event code are highlighted. The characters “|”, “^”, “\”, “&” and the carriage return character (shown as “<cr>”) are reserved for special functions as described in 3.1.4.

Figure 9. Sample HL7 message with message ID and trigger event code highlighted.

```
MSH|^~\&|||19981105131523|ORU^R01|A12349282|P|2.3|||NE|NE<cr>  
PID|||100928782^9^M11||Smith^John^J<cr>  
OBR|||38755-0<cr>  
OBX||CE|3141-9||147|LB^^ANS+|||F<cr>
```

3.1.2 Segments

Messages are composed of segments.

A **segment** is a logical grouping of **data fields**. Segments of a message may be required or optional. They may occur only once in a message or they may be allowed to repeat. Each segment is identified by a name and a unique three-character code known as the Segment ID.

Segments are sent within messages as the Segment ID followed by a sequence of data fields. The last field ends with the end-of-segment character, a carriage return. For example, the ORU message in Figure 9 contains the following segments: Message Header (MSH), Patient ID (PID), observation request (OBR) and observation/result (OBX).

3.1.3 Fields

Data fields are transmitted as character strings separated by characters that are data field separators.

This recommendation includes segment attribute tables. These tables list and describe the data fields in the segment and characteristics of their usage. Figure 10 is an example of the attribute table that describes the MSH segment. The columns are described below.

Figure 10. Sample Segment Attribute Table.

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	Element Name
1	1	ST	R			00001	Field Separator
2	4	ST	R			00002	Encoding Characters
3	180	HD	O			00003	Sending Application
4	180	HD	O			00004	Sending Facility
5	180	HD	O			00005	Receiving Application
6	180	HD	O			00006	Receiving Facility
7	26	TS	O			00007	Date/Time Of Message
8	40	ST	O			00008	Security
9	7	CM	R			00009	Message Type
10	20	ST	R			00010	Message Control ID
11	3	PT	R			00011	Processing ID
12	8	ID	R		0104	00012	Version ID
13	15	NM	O			00013	Sequence Number
14	180	ST	O			00014	Continuation Pointer
15	2	ID	O		0155	00015	Accept Acknowledgment Type
16	2	ID	O		0155	00016	Application Acknowledgment Type
17	2	ID	O			00017	Country Code
18	6	ID	O	Y/3	0211	00692	Character Set
19	60	CE	O			00693	Principal Language Of Message

3.1.3.1 SEQ—Position (sequence within the segment)

Ordinal position of the data field within the segment. This number is used to refer to the data field in the text comments that follow the segment definition table.

3.1.3.2 LEN—Maximum length

Maximum number of characters that one occurrence of the data field may occupy. The maximum length is not of conceptual importance in the abstract message or the HL7 coding rules. The length of a field is normative. However, in general practice it is often negotiated on a site-specific basis. It is calculated to include the component and subcomponent separators that are defined

below. Because the maximum length is that of a single occurrence, the repetition separator is not included in calculating the maximum length.

3.1.3.3 DT—Data type

Restrictions on the contents and specification of the format of the data field. There are a number of data types defined by HL7. These are explained in Section 3.1.5.

Many data types break a data field into multiple components. For example, the HL7 Person Name (PN) data type has six components: Family name, Given name, Middle initial or name, Suffix, Prefix, Degree.

3.1.3.4 OPT—Optionality

Whether the field is required, optional, or conditional in a segment. The designations are:

- R - required
- O - optional
- C - conditional on the trigger event or on some other field(s). The field definitions following the segment attribute table should specify the algorithm that defines the conditionality for this field.
- X - not used with this trigger event
- B - left in for backward compatibility with previous versions of HL7. The field definitions following the segment attribute table should denote the optionality of the field for prior versions.

In the segment attribute tables this information is in a column labeled **OPT**.

3.1.3.5 RP#—Repetition

Whether the field may repeat. The designations are:

- N - no repetition
- Y - the field may repeat an indefinite or site-determined number of times
- (integer) - the field may repeat up to the number of times specified in the integer

Each occurrence may contain the number of characters specified by the field's maximum length. (See Section 3.1.3.2, "LEN—Maximum length.")

3.1.3.6 TBL#—Table

HL7 defines a table of values for this field. An entry in the table number column means that the table name and the element name are equivalent.

The manner in which HL7 defines the valid values for tables will vary. Certain fields, like Patient Location, will have values that vary from institution to institution. Such tables are designated user- or site-defined. Even though these tables are not defined in the Standard, they are given a user-defined table number to facilitate implementations. The IS data type is often used to encode values for these tables. Note that some of these tables (e.g., location) may reference common master files.

Others, like Event Type (*HL7 table 0003*), are a part of the HL7 Standard because they affect the interpretation of the messages that contain them. They are limited to the values established by the HL7 Standard.

Still other tables contain values that are encoded by reference to other standards documents. The CE data type is used to encode values for these tables.

3.1.3.7 Item Number

Small integer that uniquely identifies the data field throughout the Standard.

3.1.3.8 Element Name

Descriptive name for the field.

3.1.4 Message Delimiters

In constructing a message, certain special characters are used. They are the segment terminator, the field separator, the component separator, subcomponent separator, repetition separator, and escape character. The segment terminator is always a carriage return (in ASCII, a hex 0D). The other delimiters are defined in the MSH segment, with the field delimiter in the 4th character position, and the other delimiters occurring as in the field called Encoding Characters, which is the first field after the segment ID. The delimiter values used in the MSH segment are the delimiter values used throughout the entire message. In the absence of other considerations, HL7 strongly recommends the suggested values found in Figure 11.

Figure 11. HL7 Delimiters.

Delimiter	Suggested Value	Encoding Character Position	Usage
Segment Terminator	<cr> hex 0D (this value required)	-	Terminates a segment record. This value cannot be changed by implementors.
Field Separator		-	Separates two adjacent data fields within a segment. It also separates the segment ID from the first data field in each segment.
Component Separator	^	1	Separates adjacent components of data fields, where allowed.
Subcomponent Separator	&	4	Separates adjacent subcomponents of data fields, where allowed. If there are no subcomponents, this character may be omitted.
Repetition Separator	~	2	Separates multiple occurrences of a field, where allowed.
Escape Character	\	3	Escape character for use with any field represented by an ST, TX or FT data type, or for use with the data (fourth) component of the ED data type. If no escape characters are used in a message, this character may be omitted. However, it must be present if subcomponents are used in the message.

3.1.5 Data Types

As described in 3.1.3.3, when a field is described in a segment attribute table, one of the characteristics that is given is the data type. The data type declaration describes the format of the data. Many data types are compound. That means that a single occurrence of a data field that conforms to the data type may have multiple components. Components may be declared to have subcomponents.

Figure 12. HL7 Data Types.

Data Type Category/ Data type	Data Type Name	Comment
<i>Alphanumeric</i>		
ST	String	
TX	Text data	
FT	Formatted text	Not used for Claims Attachments
<i>Numerical</i>		
CQ	Composite quantity with units	Not used for Claims Attachments
MO	Money	Not used for Claims Attachments
NM	Numeric	
SI	Sequence ID	
SN	Structured numeric	
<i>Identifier</i>		
ID	Coded values for HL7 tables	
IS	Coded value for user-defined tables	
HD	Hierarchic designator	
EI	Entity identifier	
RP	Reference pointer	
PL	Person location	
PT	Processing type	
<i>Date/Time</i>		
DT	Date	
TM	Time	
TS	Time stamp	
<i>Code Values</i>		
CE	Coded element	
CF	Coded element with formatted values	
CK	Composite ID with check digit	
CN	Composite ID number and name	Not used for Claims Attachments
CX	Extended composite ID with check digit	
XCN	Extended composite ID number and name	
<i>Generic</i>		
CM	Composite	
<i>Demographics</i>		
AD	Address	Not used for Claims Attachments
PN	Person name	Not used for Claims Attachments
TN	Telephone number	
XAD	Extended address	
XPN	Extended person name	
XON	Extended composite name and ID number for organizations	Not used for Claims Attachments
XTN	Extended telecommunications number	Not used for Claims Attachments

Data Type Category/ Data type	Data Type Name	Comment
<i>Specialty/Chapter Specific</i>		
<i>Waveform</i>		
CD	Channel definition	Not used for Claims Attachments
MA	Multiplexed array	Not used for Claims Attachments
NA	Numeric array	Not used for Claims Attachments
ED	Encapsulated data	
<i>Price data</i>		
CP	Composite price	
<i>Patient Administration/Financial Information</i>		
FC	Financial Class	Not used for Claims Attachments
<i>Extended Queries</i>		
QSC	Query selection criteria	Not used for Claims Attachments
QIP	Query input parameter list:	Not used for Claims Attachments
RCD	Row column definition:	Not used for Claims Attachments
<i>Master Files</i>		
DLN	Driver's license number	
JCC	Job code/class	
VH	Visiting hours	Not used for Claims Attachments
<i>Medical Records/Information Management</i>		
PPN	Performing person time stamp	
<i>Time Series</i>		
DR	Date/time range	
RI	Repeat interval	Not used for Claims Attachments
SCV	Scheduling class value pair	Not used for Claims Attachments
TQ	Timing/quantity	

The following HL7 Data Types are used for claims attachments:

3.1.5.1 CE - coded element

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

Example:

|F-11380^CREATININE^I9^2148-5^CREATININE^LN|

This data type transmits codes and the text associated with the code. To allow all six components of a CE data type to be valued, the maximum length of this data type must be at least 60 (see Section 3.1.3.2, "LEN—Maximum length").

3.1.5.1.1 Identifier (ST)

Sequence of characters (the code) that uniquely identifies the item being referenced by the <text>. Different coding schemes will have different elements here.

3.1.5.1.2 Text (ST)

Name or description of the item in question. For example, myocardial infarction or X-ray impression. Its data type is string (ST).

3.1.5.1.3 Name of coding system (ST)

Each coding system is assigned a unique identifier. This component will serve to identify the coding scheme being used in the identifier component. The combination of the **identifier** and **name of coding system** components will be a unique code for a data item. Each system has a unique identifier. ASTM E1238-94, Diagnostic, procedure, observation, drug ID, and health outcomes coding systems are identified in the tables in Section 7.1.4, "Coding schemes." Others may be added as needed. When an HL7 table is used for a CE data type, the **name of coding system** component is defined as **HL7nnnn** where **nnnn** is the HL7 table number.

3.1.5.1.4 Alternate components

These three components are defined analogously to the above for the alternate or local coding system.

<i>Alternate components are not used in claims attachments messages.</i>
--

3.1.5.2 CK - composite ID with check digit

Components: <ID number (NM)> ^ <check digit (NM)> ^ <code identifying the check digit scheme employed (ID)> ^ < assigning authority (HD)>

Example:

|128952^6^M11^ADT01|

This data type is used for certain fields that commonly contain check digits, e.g., *PID-3-patient ID (internal)*. If a site is not using check digits for a particular CK field, the second and third components are not valued.

3.1.5.2.1 ID number (NM)

The identification number being transmitted in a data field of this data type.

3.1.5.2.2 Check digit (NM)

The check digit in this data type is not an add-on produced by the message processor. It is the check digit that is part of the identifying number used in the sending application. If the sending application does not include a self-generated check digit in the identifying number, this component should be valued null.

3.1.5.2.3 Code identifying the check digit scheme employed (ID)

The check digit scheme codes are defined in *HL7 table 0061 - Check digit scheme*.

Table 0061 - Check digit scheme

Value	Description
M10	Mod 10 algorithm
M11	Mod 11 algorithm

The algorithm for calculating a Mod10 check digit is as follows:

Assume you have an identifier = 12345. Take the odd digit positions, counting from the right, i.e., 531, multiply this number by 2 to get 1062. Take the even digit positions, starting from the right (i.e., 42), prepend these to the 1062 to get 421062. Add all of these six digits together to get 15. Subtract this number from the next highest multiple of 10, i.e., 20 - 15 to get 5. The Mod10 check digit is 5. The Mod10 check digit for 401 is 0; for 9999, it's 4; for 99999999, it's 8.

The algorithm for calculating a Mod11 check digit is as follows:

Terms

- d = digit of number starting from units digit, followed by 10's position, followed by 100's position, etc.
- w = weight of digit position starting with the units position, followed by 10's position, followed by 100's position etc. Values for w = 2, 3, 4, 5, 6, 7, 2, 3, 4, 5, 6, 7, etc. (repeats for each group of 6 digits)
- c = check digit

Calculation

- (Step 1) m = sum of (d * w) for positions 1, 2, etc. starting with units digit
for d = digit value starting with units position to highest order
for w = weight value from 2 to 7 for every six positions starting with units digit
- (Step 2) c1 = m mod 11
- (Step 3) if c1 = 0 then reset c1 = 1
- (Step 4) = (11 - c1) mod 10

Example:

if the number is 1234567, then the mod 11 check digit = 4

The calculations are:

$$\begin{aligned}
 M &= (7*2)+(6*3)+(5*4)+(4*5)+(3*6)+(2*7)+(1*2) \\
 &= 14 + 18 + 20 + 20 + 18 + 14 + 2 \\
 &= 106 \\
 c1 &= 106 \text{ mod } 11 \\
 &= 7
 \end{aligned}$$

$$\begin{aligned}
c &= (11-c1) \bmod 10 \\
&= 4 \bmod 10 \\
&= 4
\end{aligned}$$

Other variants of these check digit algorithms exist and may be used by local bilateral site agreement.

3.1.5.2.4 Assigning authority (HD)

The assigning authority is a unique name of the system that creates the data. It is an HD data type. It is equivalent to the application ID of the placer or filler order number (see the HL7 Standard, Chapter 4). Assigning authorities are unique across a given HL7 implementation.

3.1.5.3 CM - composite

A field that is a combination of other meaningful data fields. Each portion is called a **component**. The specific components of CM fields are defined within the field descriptions. Certain other composites have been separately identified and are described below. *The CM data type is maintained strictly for backward compatibility and may not be used for the definition of new fields.* Wherever a component of an HL7 field is itself an HL7 data type which contains components, its delimiters are demoted by one. Thus, a component designated as a CE data type should be encoded as <identifier & text & name of coding system> (see Section 3.1.5.1, “CE - coded element”). Note that since HL7 delimiters are not recursive, an HL7 data type containing components cannot be a subcomponent. When this level of detail is needed, each component of the HL7 data type can be encoded as a separate subcomponent. For an example of this, see the encoding of the filler order number in the order sequencing component of the Timing/Quantity data type.

3.1.5.4 CP - composite price

Components: <price (MO)> ^ <price type (ID)> ^ <from value (NM)> ^ <to value (NM)> ^ <range units (CE)> ^ <range type (ID)>

Note: This data type is often used to permit the information group defined by its components to repeat within a given data field.

Example:

```
|100.00&USD^UP^0^9^min^P~50.00&USD^UP^10^59^min^P~10.00&USD^UP^60^999^P~50.00&USD^AP~200.00&USD^PF~80.00&USD^DC|
```

3.1.5.4.1 Price (MO)

The only required component; usually containing a decimal point. Note that each component of the MO data type is a subcomponent here.

Subcomponents of price: <quantity> & <denomination>

3.1.5.4.2 Price type (ID)

A coded value, data type ID. Refer to *HL7 table 0205 - Price type* for valid values.

Table 0205 - Price type

Value	Description
AP	Administrative price or handling fee
PF	Professional fee for performing provider
UP	Unit price, may be based on length of procedure or service
TF	Technology fee for use of equipment
DC	Direct unit cost
IC	Indirect unit cost
TP	Total price

3.1.5.4.3 From value (NM)

Each is an NM data type; together they specify the “range.” The range can be defined as either time or quantity. For example, the range can indicate that the first 10 minutes of the procedure has one price. Another repetition of the data type can use the range to specify that the following 10 to 60 minutes of the procedure is charged at another price per; a final repetition can specify that the final 60 to N minutes of the procedure at a third price.

Note that, if the <price type> component is TP, both <from value> and <to value> may be null.

3.1.5.4.4 To value (NM)

See *From value* above.

3.1.5.4.5 Range units (CE)

A coded value, data type CE, defined by the standard table of units for either time or quantity (see for example, the tables in Section 7.1.4, “Coding schemes”). This describes the units associated with the range, e.g., seconds, minutes, hours, days, quantity (e.g., count); it is required if <from value> and <to value> are present.

Subcomponents of range units: <identifier (ID)> & <text (ST)> & <name of coding system (ST)> & <alternate identifier (ID)> & <alternate text (ST)> & <name of alternate coding system (ST)>

3.1.5.4.6 Range type (ID)

Refer to *HL7 table 0298 - CP range type* for valid values.

Table 0298 - CP range type

Value	Description
P	Pro-rate. Apply this price to this interval, pro-rated by whatever portion of the interval has occurred/been consumed
F	Flat-rate. Apply the entire price to this interval, do not pro-rate the price if the full interval has not occurred/been consumed

3.1.5.5 CX - extended composite ID with check digit

Components: <ID (ST)> ^ <check digit (ST)> ^ <code identifying the check digit scheme employed (ID)> ^ < assigning authority (HD))> ^ <identifier type code (IS)> ^ < assigning facility (HD)

Example:

```
|1234567^4^M11^ADT01^MR^University Hospital|
```

3.1.5.5.1 ID (ST)

Defined as in the CK data type except that an ST data type is allowed instead of an NM data type.

3.1.5.5.2 Check digit (ST)

Defined as in the CK data type except that an ST data type is allowed instead of an NM data type. The check digit in this data type is not an add-on produced by the message processor. It is the check digit that is part of the identifying number used in the sending application. If the sending application does not include a self-generated check digit in the identifying number, this component should be valued null.

3.1.5.5.3 Code identifying the check digit scheme employed (ID)

Defined as in the CK data type. Refer to *HL7 table 0061- Check digit scheme* for valid values.

Note: The check digit and code identifying check digit scheme are null if ID is alphanumeric.
--

3.1.5.5.4 Assigning authority (HD)

The assigning authority is a unique name of the system that creates the data. It is an HD data type. It is equivalent to the application ID of the placer or filler order number. Assigning authorities are unique across a given HL7 implementation.

3.1.5.5.5 Identifier type code (IS)

A code corresponding to the type of identifier. In some cases, this code may be used as a qualifier to the “Assigning authority” component. Refer to *user-defined table 0203 - Identifier type* for suggested values.

User-defined table 0203 - Identifier type

Value	Definition
AM	American Express
AN	Account Number
BR	Birth Registry Number
DI	Diner's Club Card
DL	Driver's License Number
DN	Doctor Number
DS	Discover Card
EI	Employee Number
EN	Employer Number
GI	Guarantor Internal Identifier
GN	Guarantor External Identifier
MS	MasterCard
MA	Medicaid Number
MC	Medicare Number
MR	Medical Record Number
PI	Patient Internal Identifier
PN	Person Number
PT	Patient External Identifier
RR	Railroad Retirement Number
SS	Social Security Number
UPIN	Medicare/HCFA's Universal Physician Identification Numbers
VS	VISA
VN	Visit Number
XX	Organization Identifier

3.1.5.5.6 Assigning facility (HD)

Subcomponents: <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (ID)>

Definition: The place or location identifier where the identifier was first assigned to the patient. This component is not an inherent part of the identifier but rather part of the history of the identifier: as part of this data type, its existence is a convenience for certain intercommunicating systems.

3.1.5.6 DLN - driver's license number

Components: <license number (ST)> ^ <issuing state, province, country (IS)> ^ <expiration date (DT)>

Definition: This field contains the driver's license information. For state or province refer to official postal codes for that country; for country refer to ISO 3166 for codes.

3.1.5.6.1 Driver's license number (as ST data type)

This field contains the driver's license number.

3.1.5.6.2 Issuing state, province, country (IS)

Issuing authority for driver's license. For state or province refer to official postal codes for that country; for country refer to ISO 3166 for codes. Refer to *user-defined table 0333 - Driver's license issuing authority*.

3.1.5.6.3 Expiration date (DT)

Expiration date for driver's license.

3.1.5.7 DR - date/time range

Components: <range start date/time (TS)> ^ <range end date/time (TS)>

3.1.5.7.1 Range start date/time (TS)

Definition: The first component contains the earliest date/time (time stamp) in the specified range.

3.1.5.7.2 Range end date/time (TS)

The second component contains the latest date/time in the specified range. Note that the TS (time stamp) data type allows the specification of precision.

3.1.5.8 DT - date

Format: YYYY[MM[DD]]

The precision of a date may be expressed by limiting the number of digits used with the format specification YYYY[MM[DD]]. Thus, YYYY is used to specify a precision of "year," YYYYMM specifies a precision of "month," and YYYYMMDD specifies a precision of "day."

For HL7 Claims Attachments, the dates shall be always be sent with the maximum precision known by the sending system. Furthermore, the format YYYYMMDD shall always be used unless the notes for a specific data element specify a different requirement.

Examples:

```
|19880704|  
|199503|
```

3.1.5.9 ED - encapsulated data

Components: <source application (HD) > ^ <type of data (ID)> ^ <data subtype (ID)> ^ <encoding (ID)> ^ <data (ST)>

This data type transmits encapsulated data from a source system to a destination system. It contains the identity of the source system, the type of data, the encoding method of the data, and the data itself. This data type is similar to the RP (reference pointer) data type of Section 3.1.5.22, "RP - reference pointer," except that instead of pointing to the data on another system, it contains the data which is to be sent to that system.

3.1.5.9.1 Source application (HD)

A unique name that identifies the system which was the source of the data. Identical format and restrictions as in reference pointer (see Section 3.1.5.22.2, “Application ID (HD)”).

Subcomponents: <namespace ID (IS)> & < universal ID (ST)> & <universal ID type (ID)>

3.1.5.9.2 Type of data

Identical to “type of data” component in the reference pointer (RP) data type. (See Section 2.8.34.3, “Type of data (CM)”).

Refer to *HL7 table 0191 - Type of referenced data* for valid values.

3.1.5.9.3 Subtype

Refer to *HL7 table 0291 - Subtype of referenced data* for valid values.

3.1.5.9.4 Encoding (ID)

The type of encoding, if present, used to represent successive octets of binary data as displayable text characters. Refer to *HL7 table 0299 - Encoding* for valid values.

Table 0299 - Encoding

Value	Description
A	No encoding - data are displayable text characters.
Hex	Hexadecimal encoding - consecutive pairs of hexadecimal digits represent consecutive single octets.
Base64	Encoding as defined by MIME (Multipurpose Internet Mail Extensions) standard RFC 1521. Four consecutive text characters represent three consecutive octets of binary data. Base64 utilizes a 65-character subset of US-ASCII, consisting of both the upper and lower case alphabetic characters, digits "0" through "9," "+," "/", and "=".

Base64 is defined as follows (adapted from MIME Internet standard RFC 1521, which has precedence over this description). Proceeding from left to right across a 24-bit input group (three octets), each 6-bit group is used as an index into an array of 64 printable characters. The character referenced by the index is placed in the encoded string. These characters are shown in *HL7 table 0290 - MIME Base64 encoding characters*, and are selected to be universally representable.

Special processing is performed if fewer than 24 bits are available in an input group at the end of data. A full encoding quantum is always completed at the end of data. When fewer than 24 input bits are available in an input group, zero bits are added (on the right) to form an integral number of 6-bit groups.

Output character positions which are not required to represent actual input data are set to the character “=”. Since all canonically encoded output is an integral number of octets, only the following cases can arise: (1) the final quantum of input is an integral multiple of 24 bits; here, the final unit of encoded output will be an integral multiple of 4 characters with no “=” padding, (2) the final quantum of input is exactly 8 bits; here, the final unit of encoded output will be two characters followed by two “=”padding characters, or (3) the final quantum of input is exactly 16 bits; here, the final unit of encoded output will be three characters followed by one “=” padding character.

Table 0290 - MIME Base64 encoding characters

Value/Code	Value/Code	Value/Code	Value/Code
0 A	17 R	34 I	51 z
1 B	18 S	35 j	52 0
2 C	19 T	36 k	53 1
3 D	20 U	37 l	54 2
4 E	21 V	38 m	55 3
5 F	22 W	39 n	56 4
6 G	23 X	40 o	57 5
7 H	24 Y	41 p	58 6
8 I	25 Z	42 q	59 7
9 J	26 a	43 r	60 8
10 K	27 b	44 s	61 9
11 L	28 c	45 t	62 +
12 M	29 d	46 u	63 /
13 N	30 e	47 v	
14 O	31 f	48 w	(pad) =
15 P	32 g	49 x	
16 Q	33 h	50 y	

The interpretation of the encoded octets by any of the encoding methods, beyond what is either implicit or specified in the represented data type (such as their ordering within 16-bit or 32-bit binary words on the destination application), is determined by the destination application and is beyond the scope of this Standard.

3.1.5.9.5 Data (ST)

Displayable text characters which constitute the data to be sent from source application to destination application. The characters are limited to the legal characters of the ST data type, as defined in Section 3.1.5.25, “ST - string data,” and, if encoded binary, are encoded according to the method of Section 3.1.5.9.2, “Type of data.”

If the encoding component (see Section 3.1.5.9.4, “Encoding (ID)”) = ‘A’ (none), then the data component must be scanned before transmission for HL7 delimiter characters, and any found must be escaped by using the HL7 escape sequences. On the receiving application, the data field must be de-escaped after being parsed.

If the encoding component (see Section 3.1.5.9.4, “Encoding (ID)”) does not equal ‘A,’ then, after encoding, the (encoded) data must be scanned for HL7 delimiter characters, and any found must be escaped by using the HL7 escape sequences. Only then can the component be added to the HL7 segment/message. On the receiving application, the data field must be de-escaped after being parsed out of the message before being decoded. This can be expressed as ‘encode’, ‘escape’, parse, ‘de-escape’, ‘decode’.

3.1.5.10 EI - entity identifier

Components: <entity identifier (ST)> ^ <namespace ID (IS)> ^ <universal ID (ST)> ^ <universal ID type (ID)>

The entity identifier defines a given entity within a specified series of identifiers.

The specified series, the *assigning authority*, is defined by components 2 through 4. The assigning authority is of the hierarchic designator data type, but it is defined as three separate components in the EI data type, rather than as a single component as would normally be the case. This is in order to maintain backward compatibility with the EI's use as a component in several existing data fields. Otherwise, the components 2 through 4 are as defined in Section 3.1.5.11, "HD - hierarchic designator." Hierarchic designators are unique across a given HL7 implementation.

3.1.5.10.1 Entity identifier (ST)

The first component, *entity identifier*, is usually defined to be unique within the series of identifiers created by the *assigning authority*, defined by a hierarchic designator, represented by components 2 through 4. (See Section 3.1.5.11, "HD - hierarchic designator".)

3.1.5.10.2 Namespace ID (IS)

Refer to *user-defined table 0300 - Namespace ID* for suggested values.

3.1.5.10.3 Universal ID (ST)

The HD's second component, universal ID (UID), is a string formatted according to the scheme defined by the third component, universal ID type (UID type). The UID is intended to be unique over time within the UID type. It is rigorously defined. Each UID must belong to one of the specifically enumerated schemes for constructing UID's (defined by the UID type). The UID (second component) must follow the syntactic rules of the particular universal identifier scheme (defined by the third component).

3.1.5.10.4 Universal ID type (ID)

Refer to *HL7 table 0301 - Universal ID type* for valid values. See Section 3.1.5.11, "HD - hierarchic designator," for definition.

3.1.5.11 HD - hierarchic designator

Components: <namespace ID (IS)> ^ <universal ID (ST)> ^ <universal ID type (ID)>

The HD is designed to be a more powerful application identifier than a simple code. It is also designed to be used either as a local version of a site-defined application identifier or a publicly-assigned UID. Syntactically, the HD is a group of two application identifiers: one defined by the first component, and one defined by the second and third components.

The HD allows any site to act as an assigning authority (on a local or user-defined basis), even if it technically does not have the right to issue new IDs within an identification scheme. HDs which have defined third components (defined UID types) must be unique within the series of ID's defined by that component.

Note: The HD is used in fields that in earlier versions of HL7 used the IS data type. Thus, a single component HD (only the first component valued) will look like a simple IS data type for older systems expecting a single component in the place of the HD data type.

If the first component for the HD data type is present, the second and third components are optional. If the third component is present, then the second must also be present.

(although in this case the first is optional). The second and third components must either both be valued (both non-null), or both be not valued (both null).

3.1.5.11.1 Namespace ID (IS)

Refer to *user-defined table 0300 - Namespace ID* for suggested values.

3.1.5.11.2 Universal ID (ST)

The HD's second component, Universal ID (UID), is a string formatted according to the scheme defined by the third component, Universal ID type (UID type). The UID is intended to be unique over time within the UID type. It is rigorously defined. Each UID must belong to one of the specifically enumerated schemes for constructing UID's (defined by the UID type). The UID (second component) must follow the syntactic rules of the particular universal identifier scheme (defined by the third component).

3.1.5.11.3 Universal ID type (ID)

The third component governs the interpretation of the second component of the HD. If the third component is a known UID refer to *HL7 table 0301 - Universal ID type* for valid values, then the second component is a universal ID of that type.

Table 0301 - Universal ID type

Value	Description
DNS	An Internet dotted name. Either in ASCII or as integers
GUID	Same as UUID.
HCD	The CEN Healthcare Coding Scheme Designator. (Identifiers used in DICOM follow this assignment scheme.)
HL7	Reserved for future HL7 registration schemes
ISO	An International Standards Organization Object Identifier
L,M,N	These are reserved for locally defined coding schemes.
Random	Usually a base64 encoded string of random bits. The uniqueness depends on the length of the bits. Mail systems often generate text string "unique names," from a combination of random bits and system names. Obviously, such identifiers will not be constrained to the base64 character set.
UUID	The DCE Universal Unique Identifier
x400	An X.400 MHS format identifier
x500	An X.500 directory name

Note: X400, X500, and DNS are not technically universally valid for all time. Names can be de-registered from an existing user and registered to a new user.

Examples:

```
1.2.34.4.1.5.1.5.1,1.13143143.131.3131.1^ISO
14344.14144321.4122344.14434.654^GUID
falcon.iupui.edu^DNS
40C983F09183B0295822009258A3290582^RANDOM
LAB1
```

Local use only: an HD that looks like an IS data type.

```
PathLab^UCF.UC^L
```

A locally defined HD in which the middle component is itself structured. This can be considered the combination of 'PathLab' with the locally defined UID system "L".

LAB1^1.2.3.3.4.6.7^ISO

An HD with an ISO "Object Identifier" as a suffix, and a locally defined system name.

^1.2.344.24.1.1.3^ISO

An HD consisting only of an ISO UID.

3.1.5.12 ID - coded value for HL7 defined tables

The value of such a field follows the formatting rules for an ST field except that it is drawn from a table of legal values. There shall be an HL7 table number associated with ID data types. Examples of ID fields include religion and sex. This data type should be used only for HL7 tables (see Section 3.1.3.7). The reverse is not true, since in some circumstances it is more appropriate to use the CE data type for HL7 tables.

3.1.5.13 IS - coded value for user-defined tables

The value of such a field follows the formatting rules for an ST field except that it is drawn from a site-defined (or user-defined) table of legal values. There shall be an HL7 table number associated with IS data types. An example of an IS field is the *Event reason code* defined in Section 3.3.1.4, "Event reason code." This data type should be used only for user-defined tables (see Section 3.1.3.7). The reverse is not true, since in some circumstances, it is more appropriate to use the CE data type for user-defined tables.

3.1.5.14 JCC - job code/class

Components: <job code (IS)> ^ <job class (IS)>

3.1.5.15 Job code (IS)

This component contains the person's job code. Refer to *user-defined table 0327 - job code*.

3.1.5.16 Job class (IS)

This component contains the person's employee classification. Refer to *user-defined table 0329 - job class*.

3.1.5.17 NM - numeric

A number represented as a series of numeric characters consisting of an optional leading sign (+ or -), the digits, and an optional decimal point. In the absence of a sign, the number is assumed to be positive. If there is no decimal point, the number is assumed to be an integer. Examples:

| 999 |
| -123.792 |

Leading zeros, or trailing zeros after a decimal point, are not significant. For example, the following two values with different representations, "01.20" and "1.2", are identical. Except for the optional leading sign (+ or -) and the optional decimal point (.), no non-numeric text characters are allowed. Thus, the value <12 should be encoded as a structured numeric (SN) (preferred) or as a string (ST) (allowed, but not preferred) data type.

3.1.5.18 PL - person location

Components: <point of care (IS)> ^ <room (IS)> ^ <bed (IS)> ^ <facility (HD)> ^ < location status (IS)> ^ <person location type (IS)> ^ <building (IS)> ^ <floor (IS)> ^ <location description (ST)>

This data type is used to specify a patient location within a healthcare institution. Which components are valued depends on the needs of the site. It is most commonly used for specifying patient locations, but may refer to other types of persons within a healthcare setting.

3.1.5.18.1 Point of care (IS)

Conditional on person location type (e.g., nursing unit or department or clinic). After floor, most general patient location designation. Refer to *user-defined table 0302 - Point of care* for suggested values.

3.1.5.18.2 Room (IS)

Patient room. After nursing unit, most general person location designation. Refer to *user-defined table 0303 - Room* for suggested values.

3.1.5.18.3 Bed (IS)

Patient bed. After room, most general person location designation. Refer to *user-defined table 0304 - Bed* for suggested values.

3.1.5.18.4 Facility (HD)

Most general person location designation. (See Section 3.1.5.11, “HD - hierarchic designator”).

3.1.5.18.5 Location status (IS)

Location (e.g., Bed) status. Refer to *user-defined table 0306 - Location status* for suggested values.

3.1.5.18.6 Person location type (IS)

Usually includes values such as nursing unit, department, clinic, SNF, physician’s office. Refer to *user-defined table 0305 - Person location type* for suggested values.

3.1.5.18.7 Building (IS)

After facility, most general person location designation. Refer to *user-defined table 0307 - Building* for suggested values.

3.1.5.18.8 Floor (IS)

After building, most general person location designation. Refer to *user-defined table 0308 - Floor* for suggested values.

3.1.5.18.9 Location description (ST)

A free text description of the location.

Note: The actual order of components allows compatibility with previous versions of HL7. Without backward compatibility constraints, the hierarchical, structural order of components would be: <person location type (IS)> ^ <facility (HD)> ^ < building (IS)> ^ <floor (IS)> ^ <point of care (IS)> ^ <room (IS)> ^ <bed (IS)> ^ <location description (ST)> ^ < location status (IS)>.

3.1.5.19 PN - person name

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

Example:

|SMITH^JOHN^J^III^DR^PHD|

This data type includes multiple free text components. Each component is specified to be an HL7 ST data type. **The maximum length of a PN field is 48 characters including component separators.** The sending system may send upper- and lowercase or all uppercase. The receiving system may convert to all uppercase if required.

3.1.5.19.1 Family name (ST)

3.1.5.19.2 Given name (ST)

3.1.5.19.3 Middle initial or name (ST)

3.1.5.19.4 Suffix (ST)

Used to specify a name suffix (e.g., Jr. or III).

3.1.5.19.5 Prefix (ST)

Used specify a name prefix (e.g., Dr.).

3.1.5.19.6 Degree (ST)

Used to specify an educational degree (e.g., MD).

3.1.5.20 PPN - performing person time stamp

Components: <ID number (ST)> ^ <family name (ST)> ^ <given name (ST)> ^ <middle initial or name (ST)> ^ <suffix (e.g., JR or III) (ST)> ^ <prefix (e.g., DR) (ST)> ^ <degree (e.g., MD) (ST)> ^ <source table (IS)> ^ <assigning authority (HD)> ^ <name type code(ID)> ^ <identifier check digit (ST)> ^ <code identifying the check digit scheme employed (ID)> ^ <identifier type code (IS)> ^ <assigning facility (HD)> ^ < date/time action performed (TS)>

This data type is the equivalent of an XCN data type joined with a TS data type. However, since HL7 does not support subcomponents in Version 2.3, the XCD data type has been flattened.

3.1.5.20.1 ID number (ST)

Coded ID according to a user-defined table, defined by the 8th component. If the first component is present, either the source table or the assigning authority must be valued.

3.1.5.20.2 Family name (ST)

3.1.5.20.3 Given name (ST)

3.1.5.20.4 Middle initial or name (ST)

3.1.5.20.5 Suffix (ST)

Used to specify a name suffix (e.g., Jr. Or III).

3.1.5.20.6 Prefix (ST)

Used to specify a name prefix (e.g., Dr.).

3.1.5.20.7 Degree (ST)

Used to specify an educational degree (e.g., MD).

3.1.5.20.8 Source table (ID)

Refer to *user-defined table 0207 - CN ID* for suggested values. Used to delineate the first component.

3.1.5.20.9 Assigning authority (HD)

In this version, an optional 9th component, the assigning authority (HD), has been added. It is an HD data type (see Section 3.1.5.11, “HD - hierarchic designator”).

3.1.5.20.10 Name type code (ID)

A code that represents the type of name. Refer to *HL7 table 0200 - Name type* for valid values

3.1.5.20.11 Identifier check digit (ST)

The check digit in this data type is not an add-on produced by the message processor. It is the check digit that is part of the identifying number used in the sending application. If the sending application does not include a self-generated check digit in the identifying number, this component should be valued null.

3.1.5.20.12 Code identifying the check digit scheme employed (ID)

Refer to *HL7 table 0060 - Check digit scheme* for valid values.

3.1.5.20.13 Identifier type code (ID)

A code corresponding to the type of identifier. In some cases, this code may be used as a qualifier to the “Assigning authority” component. Refer to *user-defined table 0203 - Identifier type* for suggested values.

3.1.5.20.14 Assigning facility (HD)

The place or location identifier where the identifier was first assigned to the patient. This component is not an inherent part of the identifier but rather part of the history of the identifier: as part of this data type, its existence is a convenience for certain intercommunicating systems.

3.1.5.20.15 Date/time action performed (TS)

This component describes when the activity was performed.

Note: If this field is not null, both the performing person and the time stamp must be valued
--

3.1.5.21 PT - processing type

Components: <processing ID (ID)> ^ <processing mode (ID)>

This data type indicates whether to process a message as defined in HL7 Application Processing rules.

3.1.5.21.1 Processing ID (ID)

A value that defines whether the message is part of a production, training, or debugging system. Refer to *HL7 table 0103 - Processing ID* for valid values.

3.1.5.21.2 Processing mode (ID)

A value that defines whether the message is part of an archival process or an initial load. Refer to *HL7 table 0207 - Processing mode* for valid values.

<i>Processing Mode must never be present for HL7 transactions carried in X12 BIN segments.</i>

3.1.5.22 RP - reference pointer

Components: <pointer (ST) > ^ < application ID (HD)> ^ <type of data (ID)> ^ <subtype (ID)>

This data type transmits information about data stored on another system. It contains a reference pointer that uniquely identifies the data on the other system, the identity of the other system, and the type of data.

3.1.5.22.1 Pointer (ST)

A unique key assigned by the system that stores the data. The key, which is an ST data type, is used to identify and access the data.

3.1.5.22.2 Application ID (HD)

Subcomponents: <namespace ID (IS)> & < universal ID (ST)> & <universal ID type (ID)>

A unique designator of the system that stores the data. It is an HD data type (See Section 3.1.5.11, “HD - hierarchic designator”). It is equivalent to the application ID of the placer or filler order number. Application ID’s must be unique across a given HL7 implementation.

3.1.5.22.3 Type of data (ID)

An ID data type that declares the general type of data. Refer to *HL7 table 0191- Type of referenced data* for valid values.

Table 0191 - Type of referenced data

Value	Description
SI	Scanned image (HL7 v 2.2 only)
NS	Non-scanned image (HL7 v 2.2 only)
SD	Scanned document (HL7 v 2.2 only)
TX	Machine readable text document (HL7 v 2.2 only)
FT	Formatted text (HL7 v 2.2 only)
Image	Image data (HL7 v 2.3)
Audio	Audio data (HL7 v 2.3)
Application	Other application data, typically uninterpreted binary data (HL7 v 2.3)

3.1.5.22.4 Subtype (ID)

An ID data type declaring the format for the data of subcomponent <main type>. Refer to *HL7 table 0291 - Subtype of referenced data* for valid values.

Table 0291 - Subtype of referenced data

Value	Description
TIFF	TIFF image data
PICT	PICT format image data
DICOM	Digital Imaging and Communications in Medicine
FAX	Facsimile data
JOT	Electronic ink data (Jot 1.0 standard)
BASIC	ISDN PCM audio data
Octet-stream	Uninterpreted binary data
PostScript	PostScript program
JPEG	Joint Photographic Experts Group
GIF	Graphics Interchange Format
HTML	Hypertext Markup Language
RTF	Rich Text Format

3.1.5.22.5 Type-subtype combinations

Possible subtypes are specific to main types (though in principle the same subtype could be used for more than one main type), and so are defined under their main types.

Additional subtypes may be added to this Standard. In addition, private, non-standard subtypes may be defined by agreement between cooperating parties. All private, non-standard subtypes should begin with the letter **Z** to distinguish them from the standard subtypes.

3.1.5.22.5.1 *Image subtypes*

TIFF = TIFF image data

TIFF (Tagged Image File Format) is one of the common formats for scanned images. Its first version was developed in 1986 by Aldus Corporation as a standard for encoding scanned images. The official version of the TIFF standard is now maintained by Adobe Corporation. TIFF format is specified in the document "TIFF, Revision 6.0." Adobe Systems Incorporated, 1585 Charleston Road, P.O. Box 7900, Mountain View, CA 94039-7900.

415-961-4400

The subtype "TIFF" implies recognition of that trademark and all the rights it entails.

PICT = PICT format image data

PICT is one of the common formats for scanned images. PICT is a graphics format developed by Apple Computer, Inc., Cupertino, California. PICT format is officially defined in the book set "Inside Macintosh," published by Addison-Wesley Publishing Company, Reading, Massachusetts.

DICOM = the Digital Imaging and Communications in Medicine (DICOM) standard

DICOM is the format developed jointly by the American College of Radiology (ACR) and the National Electrical Manufacturers Association (NEMA) as the standard for interchange of radiological images and ancillary data. It is standardized as NEMA PS3, and is available from:

NEMA
2101 L Street NW
Washington, DC 20037

DICOM specifies a complete communications standard, including a generic messaging service for two-way exchange of imaging-related information between applications, as well as transfer of the actual images. In HL7, the use of DICOM data is limited to images only.

Images in this subtype shall be encoded according to the Generic DICOM File Format defined in DICOM Part 10, Media Storage and File Format (NEMA PS3.10). This shall be in accordance with the Image Information Object Definitions of DICOM Part 3 (NEMA PS3.3), Data Structure and Semantics of DICOM Part 5 (NEMA PS3.5), and the Data Dictionary of DICOM Part 6 (NEMA PS3.6).

The Generic DICOM File Format consists of two parts: a DICOM File Meta Information Header, immediately followed by a DICOM Data Set. The DICOM Data Set contains the image or images specified according to DICOM Part 10. The DICOM File Meta Information Header contains, among other information, a Transfer Syntax UID (Unique Identifier) which completely specifies the encoding of the Data Set according to DICOM Part 5. This encoding defines big endian vs. little endian byte ordering, as well as image compression via the JPEG (Joint Photographics Experts Group) standard (ISO/IS 10918-1 and 10918-2). The transfer syntax of the File Meta Information Header itself is little endian byte ordered, as required by DICOM Part 10.

FAX = facsimile data

Facsimile data as specified by CCITT standards F1.60, F1.80, F1.82, and F1.84.

Jot = electronic ink data, as specified by the Jot 1.0 standard

The JOT standard, proposed jointly by Slate Corporation, Microsoft, Apple, Lotus, GO, and General Magic, allows handwritten notes, sketches, signatures and other free-form written data to be transmitted. It is the standard by which portable pen computers or workstations equipped with stylus-input tablets can represent and exchange information.

It represents electronic ink as a series of stylus strokes, and therefore contains necessary information for potential automatic handwriting recognition, which would be lost if converted to other image representations. It may, however, be readily converted to another image representation for purposes of printing or display.

The JOT 1.0 standard is available from:

Software Publishers Association
1730 M Street Northwest, Suite 700
Washington, DC 20036-4510
202-452-1600

3.1.5.22.5.2 *Audio subtypes*

`basic` = ISDN PCM audio data

Telephone quality audio data, encoded as 8-bit ISDN mu-law Pulse Code Modulation sampled at 8 kHz, according to CCITT Fascicle III.4, Recommendation G.711. This subtype may be used for voice mail messages as well as voice dictation.

3.1.5.22.5.3 *Application subtypes*

`octet-stream` = uninterpreted binary data

This subtype is for binary data that has none of the other standard formats as given by Section 3.1.5.22.3, "Type of data (ID)." Its interpretation by the system utilizing the data must be mutually agreed upon by sending and receiving parties.

`PostScript` = PostScript program

A PostScript language program typically representing a formatted document for printing on a PostScript printer, or for display on a computer screen via a PostScript interpreter.

PostScript consists of the original specification, PostScript level 1, described in "PostScript Language Reference Manual," Addison-Wesley, 1985, and a more advanced variant, PostScript level 2, described in "PostScript Language Reference Manual," Addison-Wesley, Second Edition, 1990. PostScript is a registered trademark of Adobe Systems, Inc. Use of the subtype "PostScript" implies recognition of that trademark and all the rights it entails.

Other types may be added as needed.

Example:

```
|1234A321634BC^EFC^SD|
```

3.1.5.23 **SI - sequence ID**

A non-negative integer in the form of an NM field. The uses of this data type are defined in the chapters defining the segments and messages in which it appears.

3.1.5.24 SN - structured numeric

Components: $\langle \text{comparator (ST)} \rangle \wedge \langle \text{num1 (NM)} \rangle \wedge \langle \text{separator/suffix (ST)} \rangle$
 $\wedge \langle \text{num2 (NM)} \rangle$

The structured numeric data type is used to unambiguously express numeric clinical results along with qualifications. This enables receiving systems to store the components separately, and facilitates the use of numeric database queries. The corresponding sets of values indicated with the $\langle \text{comparator} \rangle$ and $\langle \text{separator/suffix} \rangle$ components are intended to be the authoritative and complete set of values. If additional values are needed for the $\langle \text{comparator} \rangle$ and $\langle \text{separator/suffix} \rangle$ components, they should be submitted to HL7 for inclusion in the Standard.

If $\langle \text{num1} \rangle$ and $\langle \text{num2} \rangle$ are both non-null, then the separator/suffix must be non-null. If the separator is “-”, the data range is inclusive; e.g., $\langle \text{num1} \rangle - \langle \text{num2} \rangle$ defines a range of numbers x , such that: $\langle \text{num1} \rangle \leq x \leq \langle \text{num2} \rangle$.

3.1.5.24.1 $\langle \text{comparator} \rangle = >$ or $<$ or \geq or \leq or $=$ or $\langle \rangle$

Defined as greater than, less than, greater than or equal, less than or equal, equal, and not equal, respectively. If this component is not valued, it defaults to equal (“=”).

3.1.5.24.2 $\langle \text{num1} \rangle$ (NM)

A number.

3.1.5.24.3 $\langle \text{num2} \rangle$ (NM)

A number or null depending on the measurement.

3.1.5.24.4 $\langle \text{separator/suffix} \rangle$ (ST)

“-” or “+” or “/” or “.” or “:”

Examples:

$\mid >^{\wedge}100 \mid$	(greater than 100)
$\mid ^{\wedge}100^{\wedge}-^{\wedge}200 \mid$	(equal to range of 100 through 200)
$\mid ^{\wedge}1^{\wedge}:\ ^{\wedge}228 \mid$	(ratio of 1 to 128, e.g., the results of a serological test)
$\mid ^{\wedge}2^{\wedge}+ \mid$	(categorical response, e.g., occult blood positivity)

3.1.5.25 ST - string data

String data is left justified with trailing blanks optional. Any displayable (printable) text characters (ASCII hexadecimal values between 20 and 7E, inclusive, or ASCII decimal values between 32 and 126), except the defined delimiter characters. Example:

$\mid \text{almost any data at all} \mid$

To include any HL7 delimiter character (except the segment terminator) within a string data field, use the appropriate HL7 escape sequence (see Section 3.1.6).

Usage note: the ST data type is intended for short strings (e.g., less than 200 characters). For longer strings the TX or FT data types should be used.

3.1.5.26 TM - time

Format: HH[MM[SS[.S[S[S[S]]]]]]][+/-ZZZZ]

The precision of a time may be expressed by limiting the number of digits used with the format specification as shown above. Thus, HH is used to specify a precision of “hour,” HHMM is used to specify a precision of “minute,” HHMMSS is used to specify a precision of seconds, and HHMMSS.SSSS is used to specify a precision of ten-thousandths of a second. The fractional seconds could be sent by a transmitter who requires greater precision than whole seconds. Fractional representations of minutes, hours or other higher orders units of time are not permitted.

In each of these cases, the time zone is an optional component.

The time zone of the sender may be sent optionally as an offset from the coordinated universal time (previously known as Greenwich Mean Time). Where the time zone is not present in a particular TM field but is included as part of the date/time field in the MSH segment, the MSH value will be used as the default time zone. Otherwise, the time is understood to refer to the local time of the sender. Midnight is represented as 0000. Examples:

235959+1100	1 second before midnight in a time zone eleven hours ahead of Universal Coordinated Time (i.e., east of Greenwich). Eight AM, local time of the sender.
093544.2312	44.2312 seconds after Nine thirty-five AM, local time of sender.
13	1pm (with a precision of hours), local time of sender.

3.1.5.27 TN - telephone number

For use in the United States and conforming countries, the telephone number is always in the form:

Format: [NN] [(999)]999-9999[X99999][B99999][C any text]

The optional first two digits are the country code. The optional **X** portion gives an extension. The optional **B** portion gives a beeper code. The optional **C** portion may be used for comments like, “After 6:00”. While no explicit limit is placed on the text field, receiving systems may be expected to truncate values that are more than 10 characters long. To accommodate the variability of institutional phone systems, the length of the extension and beeper numbers may be extended by local agreement. Examples:

(415)925-0121X305
234-4532CWEEKENDS

3.1.5.28 TQ - timing quantity

Describes when a service should be performed and how frequently. See section 3.1.6 for a complete description of this data type.

3.1.5.29 TS - time stamp

Format: YYYY[MM[DD[HHMM[SS[.S[S[S[S]]]]]]]]][+/-ZZZZ]^<degree of precision>

Contains the exact time of an event, including the date and time. The date portion of a time stamp follows the rules of a date field and the time portion follows the rules of a time field. The specific data representations used in the HL7 encoding rules are compatible with ISO 8824-1987(E).

In prior versions of HL7, an optional second component indicates the degree of precision of the time stamp (Y = year, L = month, D = day, H = hour, M = minute, S = second). This optional second component is retained only for purposes of backward compatibility.

The optional second component shall not be used for HL7 Claims Attachments.

By site-specific agreement, YYYYMMDD[HHMM[SS[.S[S[S[S]]]]]][+/-ZZZZ]^<degree of precision> may be used where backward compatibility must be maintained.

In the current and future versions of HL7, the precision is indicated by limiting the number of digits used, unless the optional second component is present. Thus, YYYY is used to specify a precision of “year,” YYYYMM specifies a precision of “month,” YYYYMMDD specifies a precision of “day,” YYYYMMDDHH is used to specify a precision of “hour,” YYYYMMDDHHMM is used to specify a precision of “minute,” YYYYMMDDHHMMSS is used to specify a precision of seconds, and YYYYMMDDHHMMSS.SSSS is used to specify a precision of ten thousandths of a second. In each of these cases, the time zone is an optional component. Maximum length of the time stamp is 26. Examples:

19760704010159-0600	1:01:59 AM on July 4, 1976 in the Eastern Standard Time zone.
19760704010159-0500	1:01:59 AM on July 4, 1976 in the Eastern Daylight Saving Time zone.
198807050000	Midnight of the night extending from July 4 to July 5, 1988 in the local time zone of the sender.
19880705	Any time on the day of July 5, 1988. Precision extends only to the day. Could be used for a birthdate, if the time of birth is unknown.

The HL7 Standard strongly recommends that all systems routinely send the time zone offset, but does not require it. All HL7 systems are required to accept the time zone offset, but its implementation is application specific. For many applications the time of interest is the local time of the sender. For example, an application in the Eastern Standard Time zone receiving notification of an admission that takes place at 11:00 PM in San Francisco on December 11 would prefer to treat the admission as having occurred on December 11, rather than advancing the date to December 12.

One exception to this rule would be a clinical system that processed patient data collected in a clinic and a nearby hospital that happens to be in a different time zone. Such applications may choose to convert the data to a common representation. Similar concerns apply to the transitions to and from daylight saving time. HL7 supports such requirements by requiring that the time zone information be present when the information is sent. It does not, however, specify which of the treatments discussed here will be applied by the receiving system.

3.1.5.30 TX - text data

String data meant for user display (on a terminal or printer). Such data would not necessarily be left justified since leading spaces may contribute greatly to the clarity of the presentation to the user. Because this type of data is intended for display, it may contain certain escape character sequences designed to control the display. Escape sequence formatting is defined later in section 3.1.7. Leading spaces should be included. Trailing spaces should be removed. Example:

| leading spaces are allowed. |

Since TX data is intended for display purposes, the repeat delimiter, when used with a TX data field, implies a series of repeating lines to be displayed on a printer or terminal. Therefore, the repeat delimiters are regarded as paragraph terminators or hard carriage returns (e.g., they would display as though a CR/LF were inserted in the text (DOS type system) or as though a LF were inserted into the text (UNIX style system)).

A receiving system must word-wrap the text between repeat delimiters in order to fit it into an arbitrarily sized display window but start any line beginning with a repeat delimiter on a new line.

Usage note: *the maximum length of a TX data field is 64K.*

3.1.5.31 XAD - extended address

Components: <street address (ST)> ^ <other designation (ST)> ^ <city (ST)> ^ <state or province (ST)> ^ <zip or postal code (ST)> ^ <country (ID)> ^ < address type (ID)> ^ <other geographic designation (ST)> ^ <county/parish code (IS)> ^ <census tract (IS)>

Example:

```
|1234 Easy St.^Ste. 123^San Francisco^CA^95123^USA^B^^SF^|
```

3.1.5.31.1 Street address (ST)

The street or mailing address of a person or institution.

3.1.5.31.2 Other designation (ST)

Second line of address. In general, it qualifies address. Examples: Suite 555 or Fourth Floor.

3.1.5.31.3 City (ST)

3.1.5.31.4 State or province (ST)

State or province should be represented by the official postal service codes for that country.

3.1.5.31.5 Zip or postal code (ST)

Zip or postal codes should be represented by the official codes for that country. In the US, the zip code takes the form 99999[-9999], while the Canadian postal code takes the form A9A-9A9.

3.1.5.31.6 Country (ID)

Defines the country of the address. ISO 3166 provides a list of country codes that may be used.

3.1.5.31.7 Address type (ID)

Address type is optional and defined by *HL7 table 0190 - Address type*.

<p><i>Unless otherwise specified for a specific data element, the sending system should send the legal address of the organization or person being described.</i></p>
--

3.1.5.31.8 Other geographic designation (ST)

Other geographic designation includes country, bioregion, SMSA, etc.

Unless otherwise specified for a specific data element, the sending system shall not send this component.

3.1.5.31.9 County/parish code (IS)

A code that represents the county in which the specified address resides. Refer to *user-defined table 0289 - County/parish*. When this component is used to represent the county (or parish), component 8 “other geographic designation” should not duplicate it (i.e., the use of “other geographic designation” to represent the county is allowed only for the purpose of backward compatibility, and should be discouraged in this and future versions of HL7).

Allowable values: codes defined by government.

Unless otherwise specified for a specific data element, the sending system shall not send this component.

3.1.5.31.10 Census tract (IS)

A code that represents the census track in which the specified address resides. Refer to *user-defined table 0288 - Census tract*.

Allowable Values: codes defined by government.

Unless otherwise specified for a specific data element, the sending system shall not send this component.

3.1.5.32 XCN - extended composite ID number and name for persons

Components: <ID number (ST)> ^ <family name (ST)> ^ <given name (ST)> ^ <middle initial or name (ST)> ^ <suffix (e.g., JR or III) (ST)> ^ <prefix (e.g., DR) (ST)> ^ <degree (e.g., MD) (ST)> ^ <source table (IS)> ^ <assigning authority (HD)> ^ <name type code (ID)> ^ <identifier check digit (ST)> ^ <code identifying the check digit scheme employed (ID)> ^ <identifier type code (IS)> ^ <assigning facility (HD)>

Subcomponents of assigning authority: <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (ID)>

Subcomponents of assigning facility: <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (ID)>

Example:

|1234567^Smith^John^J^III^DR^PHD^ADT01^^L^4^M11^MR|

This data type can be used to send various types of names (legal, maiden, alias, etc.) Unless otherwise specified for a specific data element, the sending system must send the legal name if it has it. Otherwise, it should send the name that best helps to identify the person being described.

Unless otherwise specified for a specific data element, when identifying a person as a provider the sending system shall use the HCFA National Provider ID in component 1.

This data type allows for the use of multibyte character sets in international usage. Multibyte character sets shall not be used in HL7/X12 Claims Attachments Messages within the United States.

3.1.5.32.1 ID number (ST)

Coded ID according to a user-defined table, defined by the 8th component. If the first component is present, either the source table or the assigning authority must be valued.

Unless otherwise specified for a specific data element, the sending system must send this component.

3.1.5.32.2 Family name (ST)

3.1.5.32.3 Given name (ST)

3.1.5.32.4 Middle initial or name (ST)

3.1.5.32.5 Suffix (ST)

Used to specify a name suffix (e.g., Jr. or III).

3.1.5.32.6 Prefix (ST)

Used to specify a name prefix (e.g., Dr.).

3.1.5.32.7 Degree (ST)

Used to specify an educational degree (e.g., MD).

3.1.5.32.8 Source table (IS)

Refer to *user-defined table 0297 - Composite Number ID source* for suggested values. Used to delineate the first component.

3.1.5.32.9 Assigning authority (HD)

Unless otherwise specified for a specific data element, the sending system shall not send this component.

3.1.5.32.10 Name type code (ID)

A code that represents the type of name. Refer to *HL7 table 0200 - Name type* for valid values (see Section, “XPN - extended person name”).

Unless otherwise specified for a specific data element, the sending system shall send this component.

3.1.5.32.11 Identifier check digit (ST)

The check digit in this data type is not an add-on produced by the message processor. It is the check digit that is part of the identifying number used in the sending application. If the sending application does not include a self-generated check digit in the identifying number, this component should be valued null.

3.1.5.32.12 Code identifying the check digit scheme employed (ID)

Refer to HL7 table 0061- Check digit scheme for valid values.

3.1.5.32.13 Identifier type code (IS)

A code corresponding to the type of identifier. In some cases, this code may be used as a qualifier to the “Assigning authority” component. Refer to *user-defined table 0203 - Identifier type* for suggested values.

3.1.5.32.14 Assigning facility (HD)

The place or location identifier where the identifier was first assigned to the person. This component is not an inherent part of the identifier but rather part of the history of the identifier: as part of this data type, its existence is a convenience for certain intercommunicating systems.

Unless otherwise specified for a specific data element, the sending system shall not send this component.

3.1.6 Timing/Quantity (TQ) Definition

The timing/quantity data type provides a means of specifying when the service described by the order segment is to be performed and how frequently. It is a complex multicomponent field that can have repeats; i.e., more than one quantity/timing specification, separated by repeat delimiters, may appear. The components of a single quantity/timing specification are:

Components: <quantity (CQ)> ^ <interval (CM)> ^ <duration (ST)> ^
<start date/time (TS)> ^ <end date/time (TS)> ^ <priority
(ST)> ^ <condition (ST)> ^ <text (TX)> ^ <conjunction (ST)>
^ <order sequencing (CM)>

These components are described in the following sections.

Claims Attachments messages may not use conjunction and order sequencing components. Any other information that might have been encoded in these elements must be excluded or sent as text in the 'text' component.

Unless stated otherwise in the description of an element, the timing/quantity information must be encoded; it is not sufficient to send it solely as free text in the 'text' component.

Unless otherwise stated herein, data fields of the TQ data type may not repeat.

3.1.6.1 Quantity component (CQ)

Subcomponents: <quantity (NM) & units (CE)>

Definition: This field is the quantity of the service that should be provided at each service interval. For example, if two blood cultures are to be obtained every 4 hours, the quantity would be 2. If three units of blood are to be typed and cross-matched, the quantity would be 3. The default value is 1. When units are required, they can be added, specified by a subcomponent delimiter.

Note: The component delimiter in this CQ is demoted to a subcomponent delimiter. The component delimiters of the CE subcomponent are themselves shown as subcomponents. For example, a data field of data type CQ would convey the concept "25 grams" as ^25&g&grams^ISO+. ("g", "gram", and "ISO+" are components of the CE data type representation of "gram".)

3.1.6.2 Interval component (CM)

Subcomponents: <repeat pattern (IS)> ^ <explicit time interval (ST)>

Definition: This field determines the interval between repeated services.

The default is one time only, the first subcomponent is the repeat pattern, and the second subcomponent is the explicit time at which pattern is to be executed.

3.1.6.2.1 Repeat pattern

Definition: The repeating frequency with which the treatment is to be administered. It is similar to the frequency and SIG code tables used in order entry systems. The following is preferred syntax for repeat patterns:

Figure 13. User-defined table 4001 - Repeat pattern

Pattern	Meaning
Q<integer>S	every <integer> seconds
Q<integer>M	every <integer> minutes
Q<integer>H	every <integer> hours
Q<integer>D	every <integer> days
Q<integer>W	every <integer> weeks
Q<integer>L	every <integer> months (Lunar cycle)
Q<integer>J<day#>	repeats on a particular day of the week, from the French <i>jour</i> (day). If <integer> is missing, the repeat rate is assumed to be 1. Day numbers are counted from 1=Monday to 7=Sunday. So Q2J2 means every second Tuesday; Q1J6 means every Saturday.
BID	twice a day at institution-specified times (e.g., 9 AM - 4 PM)
TID	three times a day at institution-specified times (e.g., 9 AM - 4 PM - 9 PM)
QID	four times a day at institution-specified times (e.g., 9 AM- 11 AM - 4 PM - 9 PM)
xID	"X" times per day at institution-specified times, where X is a numeral 5 or greater. For example, 5ID = five times per day; 8ID = 8 times per day
Note:	None of the above three specifications are equivalent to their Q<integer>H counterpart. QID is not Q6H. The former is unequally spaced; the latter is equally spaced.
QAM	in the morning at institution-specified time

QSHIFT	during each of three eight-hour shifts at institution-specified times
QOD	every other day (same as Q2D)
QHS	every day before the hour of sleep
QPM	in the evening at institution-specified time
C	service is provided continuously between start time and stop time
U <spec>	for future use, where <spec> is an interval specification as defined by the UNIX cron specification.
<i>U shall not be used for claims attachments</i>	
PRN	given as needed
PRNxxx	where xxx is some frequency code (e.g., PRNQ6H); given as needed over the frequency period
Once	one time only; this is the default when this component is null

The first subcomponent may repeat, with repeat values separated by a space. The repeats are interpreted as connected by logical ANDs. For example,

Twice per day, every other day: BID QOD

Three times per day, Monday Wednesday and Friday: TID QJ135

Because of this syntax, repeat values should never contain blanks. If a free text frequency, such as “Twice a day, every other day” is to be sent, use the text component (component 8).

3.1.6.2.2 Explicit time interval subcomponent

Definition: This field explicitly lists the actual times referenced by the code in the first subcomponent, in the following format: HHMM,HHMM,HHMM,... This second subcomponent is used to clarify the first subcomponent in cases where the actual administration times vary within an institution. If the time of the order spans more than a single day, this new subcomponent is only practical if the same times of administration occur for each day of the order. If the actual start time of the order (as given by the fourth subcomponent of the quantity/timing field) is after the first explicit time, the first administration is taken to be the first explicit time after the start time. In the case where the patient moves to a location having a different set of explicit times, the existing order may be updated with a new quantity/timing field showing the changed explicit times.

Ex: 2nd component of quantity/timing field:

...^QID&0230,0830,1430,2030^...

3.1.6.3 Duration component (ST)

Definition: This field indicates how long the service should continue after it is started. The default is INDEF (do indefinitely). This component is coded as follows:

S<integer>	=	<integer> seconds
M<integer>	=	<integer> minutes
H<integer>	=	<integer> hours
D<integer>	=	<integer> days
W<integer>	=	<integer> weeks
L<integer>	=	<integer> months

X<integer>	=	<integer> times at interval specified in the order. A request for 2 blood cultures Q2H X3 would imply obtaining 2 blood cultures 3 different times at 2-hour intervals for a total of 6 blood cultures.
T<integer>	=	at the interval and amount stated until a total of <integer> "DOSAGE" is accumulated. Units would be assumed to be the same as in the QUANTITY field.
INDEF	=	do indefinitely - also the default

3.1.6.4 Start date/time component (TS)

The appropriate start date is determined by the context of the attachment data element. If it is reporting the administration of a medication or execution of a service, it is the time the first dose was administered or the first procedure performed. If it is reporting an order, it is the time for which the first medication or service was ordered.

3.1.6.5 End date/time component (TS)

The appropriate end date is determined by the context of the attachment data element. If it is reporting the administration of a medication or execution of a service, it is the time the last dose was administered or the last time the procedure was performed. If it is reporting an order, it is the time for which the last medication or service was ordered.

3.1.6.6 Priority component (ST)

Definition: This field describes the urgency of the request. The following values are suggested (the default for Priority is R):

S	=	Stat	With highest priority
A	=	ASAP	Fill after S orders
R	=	Routine	Default
P	=	Preop	
C	=	Callback	
T	=	Timing critical	A request implying that it is critical to come as close as possible to the requested time, e.g., for a trough antimicrobial level.
PRN	=	As needed	

If using the value "T" (timing critical), the degree of criticality can be specified thus:

Format:

TS<integer>	=	timing critical within <integer> seconds
TM<integer>	=	timing critical within <integer> minutes
TH<integer>	=	timing critical within <integer> hours
TD<integer>	=	timing critical within <integer> days
TW<integer>	=	timing critical within <integer> weeks
TL<integer>	=	timing critical within <integer> months

For the sequential orders specification, these values specify the time criticality with which the predecessor order must be followed by the given order.

The priority component may repeat; separate repeating values with the repeat delimiter separated by a space.

3.1.6.7 Condition component (ST)

Definition: This is a free text field that describes the conditions under which the drug is to be given. For example, “PRN pain”, or “to keep blood pressure below 110”. The presence of text in this field should be taken to mean that human review is needed to determine the how and/or when this drug should be given.

3.1.6.8 Text component (TX)

Definition: This field is a full text version of the instruction (optional).

3.1.6.9 Conjunction component (ST)

This component shall not be used.

3.1.6.10 Order sequencing component (CM)

This component shall not be used.

3.1.6.11 Examples of quantity/timing usage

3^once

Perform the service at one point in time, e.g., order 3 units of blood to be given once.

1^QHS^X2

Perform the service twice at bedtime, e.g., give a unit of blood at bedtime on two sequential nights.

1^C^3D

Do a service continuously for 3 days.

1^Q1H^X4^^^^PVCs>10/min

Perform an EKG every hour up to a maximum of 4 EKGs, if patient is having more than 10 PVCs per minute.

1^Q2J^^1432

Perform a service every Tuesday at 2:32 p.m.

1^^^^198911210800

Perform a test before 11/21/89 0800, e.g., some preop laboratory tests.

1^Q3600S^X5^198911051030

Perform a service every hour for 5 hours starting at 10:30 a.m. 11/5/89, e.g., draw a blood glucose.

1^QAM^X3^^^^^S^1^QOD^4D^^^if K+>5.5.

Perform a service every morning for 3 days and then do it every other morning for 4 days (i.e., max twice) if the serum potassium is greater than 5.5.

```
^^^198812120800^^T^^Trough specimen for MIC^C~^^^R
```

The first repeat instructs to draw a blood specimen exactly at 8:00 a.m. on 12/12/1988. The second repeat specifies to report results routinely.

3.1.7 Use of Escape Sequences in Text Fields

3.1.7.1 Formatting codes

When a field of type TX, FT, or CF is being encoded, the escape character may be used to signal certain special characteristics of portions of the text field. The escape character is whatever display text character is specified in the Escape Character component of MSH-2-encoding characters. For purposes of this section, the character \ will be used to represent the character so designated in a message. An escape sequence consists of the escape character followed by an escape code ID of one character, zero (0) or more data characters, and another occurrence of the escape character. The following escape sequences are defined:

\H\	start highlighting
\N\	normal text (end highlighting)
\F\	field separator
\S\	component separator
\T\	subcomponent separator
\R\	repetition separator
\E\	escape character
\Xdddd...\	hexadecimal data
\Zdddd...\	locally defined escape sequence

The escape sequences for field separator, component separator, subcomponent separator, repetition separator, and escape character are also valid within an ST data field.

No escape sequence may contain a nested escape sequence.

3.1.7.2 Escape sequences supporting multiple character sets for PN and XPN data types

The following HL7 escape sequences are defined to support multiple character sets for fields of the PN and XPN data types. They allow HL7 parsers to use escape codes (defined in the standards used below), without breaking, and without being non-conformant, to the HL7 escape paradigm defined in this section.

Multiple character sets are not permitted in HL7 messages embedded within X12 messages in the United States.

3.1.7.3 Highlighting

In designating highlighting, the sending application is indicating that the characters that follow somehow should be made to stand out, but leaving the method of doing so to the receiving application. Depending on device characteristics and application style considerations, the receiving application may choose reverse video, boldface, underlining, blink, an alternate color, or another means of highlighting the displayed data. For example, the message fragment:

```
DSP | TOTAL CHOLESTEROL \H\240*\N\ [90 - 200]
```

might cause the following data to appear on a screen or report:

```
TOTAL CHOLESTEROL 240* [90 - 200]
```

whereas another system may choose to show the 240* in red.

3.1.7.4 Special character

The special character escape sequences (\F, \S, \R, \T, and \E) allow the corresponding characters to be included in the data in a text field, though the actual characters are reserved. For example, the message fragment:

```
DSP | TOTAL CHOLESTEROL 180 \F\90 - 200\F\  
DSP | \S\-----\S\
```

would cause the following information to be displayed, given suitable assignment of separators:

```
TOTAL CHOLESTEROL 180 |90 - 200|  
^-----^
```

3.1.7.5 Hexadecimal

When the hexadecimal escape sequence (\Xddd...) is used, the X should be followed by 1 or more pairs of hexadecimal digits (0, 1, . . . , 9, A, . . . , F). Consecutive pairs of the hexadecimal digits represent 8-bit binary values. The interpretation of the data is entirely left to an agreement between the sending and receiving applications that is beyond the scope of this Standard.

Unless otherwise specified for a specific data element, the sending system shall not send data using the hexadecimal escape sequence.

3.1.7.6 Formatted text

If the field is of the formatted text (FT) data type, formatting commands also may be surrounded by the escape character. Each command begins with the . (period) character. The following formatting commands are available:

- .sp <number> End current output line and skip <number> vertical spaces. <number> is a positive integer or absent. If <number> is absent, skip one space. The horizontal character position remains unchanged. Note that for purposes of compatibility with previous versions of HL7, “\sp” is equivalent to “\br.”
- .br Begin new output line. Set the horizontal position to the current left margin and increment the vertical position by 1.
- .fi Begin word wrap or fill mode. This is the default state. It can be changed to a no-wrap mode using the .nf command.
- .nf Begin no-wrap mode.
- .in <number> Indent <number> of spaces, where <number> is a positive or negative integer. This command cannot appear after the first printable character of a line.
- .ti <number> Temporarily indent <number> of spaces where number is a positive or negative integer. This command cannot appear after the first printable character of a line.
- .sk < number> Skip <number> spaces to the right.

.ce End current output line and center the next line.

The component separator that marks each line defines the extent of the temporary indent command (.ti), and the beginning of each line in the no-wrap mode (.nf). Examples of formatting instructions that are NOT included in this data type include: width of display, position on page or screen, and type of output devices.

Figure 14 is an example of the FT data type from a radiology impression section of a radiology report:

```
|\.in+4\\.ti-4\ 1. The cardiomediastinal silhouette is now within  
normal limits.^\.sp\\.ti-4\ 2. Lung fields show minimal ground  
glass appearance.^\.sp\\.ti-4\ 3. A loop of colon visible in the  
left upper quadrant is distinctly abnormal with the appearance of  
mucosal effacement suggesting colitis.\.in-4\|
```

Figure 14. Formatted text as transmitted

Figure 15 shows one way of presenting the data in Figure 14. The receiving system can create many other interpretations by varying the right margin.

```
1. The cardiomediastinal silhouette is now within normal  
  limits.  
2. Lung fields show minimal ground glass appearance.  
3. A loop of colon visible in the left upper quadrant is  
  distinctly abnormal with the appearance of mucosal  
  effacement suggesting colitis.
```

Figure 15. Formatted text in one possible presentation.

3.1.7.7 Local

When the local escape sequence (\Zdddd...\) is used, the Z should be followed by characters that are valid in a TX field. The interpretation of the data is entirely left to an agreement between the sending and receiving applications that is beyond the scope of this Standard.

Unless otherwise specified for a specific data element, the sending system shall not send data using the hexadecimal escape sequence.

3.1.8 Message Construction Rules

3.1.8.1 Creating Messages

Step 1 Construct the segments in the order defined for the message. Each segment is constructed as follows:

- a) the first three characters are the segment ID code
- b) each data field in sequence is inserted in the segment in the following manner:
 - 1) a field separator is placed in the segment
 - 2) if the value is not present, no further characters are required

- 3) if the value is present, but null, the characters "" (two consecutive double quotation marks) are placed in the field
- 4) otherwise, place the characters of the value in the segment. As many characters can be included as the maximum defined for the data field. It is not necessary, and is undesirable, to pad fields to fixed lengths. Encode the individual data fields as shown in Section 3.1.5.
- 5) if the field definition calls for a field to be broken into components, the following rules are used:
 - i) if more than one component is included they are separated by the component separator
 - ii) components that are present but null are represented by the characters ""
 - iii) components that are not present are sent by including no characters in the component
 - iv) components that are not present at the end of a field need not be represented by component separators. For example, the two data fields are equivalent:
 |ABC^DEF^^| and |ABC^DEF|.
- 6) if the component definition calls for a component to be broken into subcomponents, the following rules are used:
 - i) if more than one subcomponent is included, they are separated by the subcomponent separator
 - ii) subcomponents that are present but null are represented by the characters ""
 - iii) subcomponents that are not present are sent by including no characters in the subcomponent
 - iv) subcomponents that are not present at the end of a component need not be represented by subcomponent separators. For example, the two data components are equivalent:
 ^XXX&YYY&&^ and ^XXX&YYY^.
- 7) if the field definition permits repetition, and if more than one occurrence is actually sent, place the repetition separator between the occurrences. (If three occurrences are transmitted, two repetition separators are used.) In the example below, two occurrences of telephone number are being sent:
 |234-7120~599-1288B1234|
- c) repeat Step 1b while there are any fields present to be sent. If all the data fields remaining in the segment definition will be sent as "not present" there is no requirement to include any more delimiters.
- d) end each segment with an ASCII carriage return character

Step 2 Repeat Step 1 until all segments have been generated.

3.1.8.2 Decoding Messages

The following rules apply to receiving HL7 messages and converting their contents to data values:

- a) ignore segments, fields, components, subcomponents, and extra repetitions of a field that are present but were not expected
- b) treat segments that were expected but are not present as consisting entirely of fields that are not present
- c) treat fields and components that are expected but were not included in a segment as not present.

The standard explicitly requires receivers not to treat the conditions above as errors.

3.2 HL7 Message Specifications

This section describes the HL7 messages that are used to send claims attachments. It contains the full general descriptions. Section 3 describes how options are selected to deal with specific attachments.

3.2.1 HL7 Specification Format

HL7 uses a tabular format to specify the pattern of segments that may appear in a message. The first row, which is underlined, includes the Message ID and the Message name. Each subsequent row identifies a segment and the chapter of the HL7 specification in which it is defined.

Segments may be grouped between curly braces ({}), and square brackets ([]). Curly braces indicate that the group may repeat. Square brackets indicate that the group may be omitted.

Figure 16 is and the following figures are examples of the different formats of a hypothetical widget message.

<u>WRP</u>	<u>Widget Report</u>	<u>Chapter</u>
MSH	Message Header	2
{ WDN	Widget Description	XX
WPN	Widget Portion	XX
{ [WPD] }	Widget Portion Detail	XX
}		

Figure 16. Hypothetical HL7 Widget message.

In this format the first segment is always the MSH segment. There is also group that may repeat. Each repetition contains one WDN segment, one WPN and zero to many WPD segments.

In the format in Figure 17, WPN and WPD segments appear in pairs, but the pairs are optional and can repeat.

<u>WRP</u>	<u>Widget Report</u>	<u>Chapter</u>
MSH	Message Header	2
MSA	Message acknowledgment	XX
{ WDN	Widget Description	XX
[{ WPN	Widget Portion	XX
WPD	Widget Portion Detail	XX
}]		
}		

Figure 17. WPN and WPD segments in pairs.

In the format in Figure 18, at least one pair of WPN and WPD segments must follow a WDN.

WRP	Widget Report	Chapter
MSH	Message Header	2
MSA	Message acknowledgment	XX
{ WDN	Widget Description	XX
{ { WPN	Widget Portion	XX
{ { WPD	Widget Portion Detail	XX
{ }		
}		

Figure 18. At least one pair of WPN and WPD.

3.2.2 ORU - Unsolicited Transmission of an Observation Message (Event R01)

Note: The segments in ORU messages are used in other messages to implement a dialogue between two applications, one of which is known as the *placer* of the order, and the other as the *filler*. Many of the field definitions for this segment are defined in terms of those system roles. The ORU message, as applied to claims attachments, is used to send information that is created as a consequence of such a dialogue. For this reason, the distinction between placer and sender does not impact the likelihood that information will be present in data fields. It is still valuable, however, in understanding the meaning of these fields.

The underlying structure of this message is a three-level hierarchy: patient, report, report-part. The patient is described in the PID and related segments. The report is described in the OBR and related segments. The report-parts are described in OBX and related segments. A report-part may be a single observation, such as an electrolyte, or a section of a text report. The entire report (the battery or complete text report) is identified in a single OBR.

ORU	Observational Results (Unsolicited)	Chapter
MSH	Message Header	2
{		
[
PID	Patient Identification	3
[PD1]	Additional Demographics	3
[{{NTE}}]	Notes and Comments	2
[PV1]	Patient Visit	3
[PV2]]	Patient Visit - Additional Info	3
]		
{		
[ORC]	Order common	4
OBR	Observations Report ID	7
[{{NTE}}]	Notes and comments	2
{		
[OBX]	Observation/Result	7
[{{NTE}}]	Notes and comments	2
}		
[{{CTI}}]	Clinical Trial Identification	7
}		
}		
[DSC]	Continuation Pointer	2

Note: In HL7 version 2.3, the ORC is permitted but not required in this message, however it will not be used in claims attachment messages. Any information that could be placed in either the ORC or the OBR must be included in the OBR. Notice also that the ORU (and the QRY) messages accommodate reports about many patients.

Many report headers (OBR) may be sent beneath each patient segment, with many separate observation segments (OBX) beneath each OBR. Note segments

(NTE) may be inserted after any of the above segments. The note segment applies to the entity that immediately precedes it, i.e., the patient if it follows the PID segment, the observation if it follows the OBR segment, and the individual result if it follows the OBX segment

3.3 HL7 Segment Specifications

This section describes the HL7 segments that will actually be used to send claims attachments. It contains their full general descriptions. Section 3 describes how options are selected to deal with specific attachments.

3.3.1 MSH - Message Header Segment

The MSH segment defines the intent, source, destination, and some specifics of the syntax of a message.

Table 5. MSH Segment.

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME
1	1	ST	R			00001	Field Separator
2	4	ST	R			00002	Encoding Characters
3	180	HD	O			00003	Sending Application
4	180	HD	O			00004	Sending Facility
5	180	HD	O			00005	Receiving Application
6	180	HD	O			00006	Receiving Facility
7	26	TS	O			00007	Date/Time Of Message
8	40	ST	O			00008	Security
9	7	CM	R			00009	Message Type
10	20	ST	R			00010	Message Control ID
11	3	PT	R			00011	Processing ID
12	8	ID	R		0104	00012	Version ID
13	15	NM	O			00013	Sequence Number
14	180	ST	O			00014	Continuation Pointer
15	2	ID	O		0155	00015	Accept Acknowledgment Type
16	2	ID	O		0155	00016	Application Acknowledgment Type
17	2	ID	O			00017	Country Code
18	6	ID	O	Y/3	0211	00692	Character Set
19	60	CE	O			00693	Principal Language Of Message

3.3.1.1 Field separator (ST) 00001

Definition: This field contains the separator between the segment ID and the first real field, *MSH-2-encoding characters*. As such it serves as the separator and defines the character to be used as a separator for the rest of the message. The recommended value is |, (ASCII 124).

3.3.1.2 Encoding characters (ST) 00002

Definition: This field contains the four characters in the following order: the component separator, repetition separator, escape character, and subcomponent separator. Recommended values are ^~\&, (ASCII 94, 126, 92, and 38, respectively). See Section 3.1.4.

3.3.1.3 Sending application (HD) 00003

This field is not used for HL7 messages that are embedded in X12 messages.

3.3.1.4 Sending facility (HD) 00004

This field is not used for HL7 messages that are embedded in X12 messages.

3.3.1.5 Receiving application (HD) 00005

This field is not used for HL7 messages that are embedded in X12 messages.

3.3.1.6 Receiving facility (HD) 00006

This field is not used for HL7 messages that are embedded in X12 messages.

3.3.1.7 Date/time of message (TS) 00007

Definition: This field contains the date/time that the sending system created the message. If the time zone is specified, it will be used throughout the message as the default time zone.

3.3.1.8 Security (ST) 00008

This field is not used for HL7 messages that are embedded in X12 messages.

3.3.1.9 Message type (CM) 00009

Components: <message type (ID)> ^ <trigger event (ID)>

Definition: This field contains the message type and trigger event for the message. The first component is the message type edited by *HL7 table 0076 - Message type*; second is the trigger event code edited by *HL7 table 0003 - Event type*.

The receiving system uses this field to know the data segments to recognize, and possibly, the application to which to route this message.

3.3.1.10 Processing ID (PT) 00011

Components: <processing ID (ID)> ^ <processing mode (ID)>

Definition: This field is used to decide whether to process the message as defined in HL7 Application Processing rules, above. The first component defines whether the message is part of a production, training, or debugging system (refer to *HL7 table 0103 - Processing ID* for valid values). The second component defines whether the message is part of an archival process or an initial load (refer to *HL7 table 0207 - Processing mode* for valid values). This allows different priorities to be given to different processing modes.

Table 0103 - Processing ID

Value	Description
D	Debugging
P	Production
T	Training

Table 0207 - Processing mode

Value	Description
A	Archive
R	Restore from archive
I	Initial load
not present	Not present (the default, meaning <i>current</i> processing)

3.3.1.11 Version ID (ID) 00012

Definition: This field is matched by the receiving system to its own version to be sure the message will be interpreted correctly.

Table 0104 - Version ID

Value	Description
2.0	Release 2.0 September 1988
2.0D	Demo 2.0 October 1988
2.1	Release 2.1 March 1990
2.2	Release 2.2 December 1994
2.3	Release 2.3 March 1997

3.3.1.12 Sequence number (NM) 00013

This field is not used for HL7 messages that are embedded in X12 messages.

3.3.1.13 Continuation pointer (ST) 00014

This field is not used for HL7 messages that are embedded in X12 messages.

3.3.1.14 Accept acknowledgment type (ID) 00015

Definition: This field identifies the conditions under which accept acknowledgments are required to be returned in response to this message. Required for enhanced acknowledgment mode. Refer to HL7 table 0155 - Accept/application acknowledgment conditions for valid values.

This field always has the value "NE" for HL7 messages that are embedded in X12 messages.

3.3.1.15 Application acknowledgment type (ID) 00016

Definition: This field contains the conditions under which application acknowledgments are required to be returned in response to this message. Required for enhanced acknowledgment mode.

This field always has the value "NE" for HL7 messages that are embedded in X12 messages.

3.3.1.16 Country code (ID) 00017

This field is not used for HL7 messages that are embedded in X12 messages.

3.3.1.17 Character set (ID) 00692

This field is not used for HL7 messages that are embedded in X12 messages.

3.3.1.18 Principal language of message (CE) 00693

This field is not used for HL7 messages that are embedded in X12 messages.

3.3.2 OBR - Observation Request Segment

In the reporting of clinical data, the OBR serves as the report header. It identifies the observation set represented by the atomic observations described in the following table. It includes the relevant ordering information when that applies. It contains many of the attributes that usually apply to all of the included observations.

Table 6. OBR Segment.

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME
1	4	SI	C			00237	Set ID - OBR
2	22	EI	C			00216	Placer Order Number
3	22	EI	C			00217	Filler Order Number +
4	200	CE	R			00238	Universal Service ID
5	2	ID	O			00239	Priority
6	26	TS	O			00240	Requested Date/time
7	26	TS	C			00241	Observation Date/Time #
8	26	TS	O			00242	Observation End Date/Time #
9	20	CQ	O			00243	Collection Volume *
10	60	XCN	O	Y		00244	Collector Identifier *
11	1	ID	O		0065	00245	Specimen Action Code *
12	60	CE	O			00246	Danger Code
13	300	ST	O			00247	Relevant Clinical Info.
14	26	TS	C			00248	Specimen Received Date/Time *
15	300	CM	O		0070	00249	Specimen Source *
16	80	XCN	O	Y		00226	Ordering Provider
17	40	XTN	O	Y/2		00250	Order Callback Phone Number
18	60	ST	O			00251	Placer field 1
19	60	ST	O			00252	Placer field 2
20	60	ST	O			00253	Filler Field 1 +
21	60	ST	O			00254	Filler Field 2 +
22	26	TS	C			00255	Results Rpt/Status Chng - Date/Time +
23	40	CM	O			00256	Charge to Practice +
24	10	ID	O		0074	00257	Diagnostic Serv Sect ID
25	1	ID	C		0123	00258	Result Status +
26	400	CM	O			00259	Parent Result +
27	200	TQ	O	Y		00221	Quantity/Timing
28	150	XCN	O	Y/5		00260	Result Copies To
29	150	CM	O			00261	Parent *
30	20	ID	O		0124	00262	Transportation Mode

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME
31	300	CE	O	Y		00263	Reason for Study
32	200	CM	O			00264	Principal Result Interpreter +
33	200	CM	O	Y		00265	Assistant Result Interpreter +
34	200	CM	O	Y		00266	Technician +
35	200	CM	O	Y		00267	Transcriptionist +
36	26	TS	O			00268	Scheduled Date/Time +
37	4	NM	O			01028	Number of Sample Containers *
38	60	CE	O	Y		01029	Transport Logistics of Collected Sample *
39	200	CE	O	Y		01030	Collector's Comment *
40	60	CE	O			01031	Transport Arrangement Responsibility
41	30	ID	O		0224	01032	Transport Arranged
42	1	ID	O		0225	01033	Escort Required
43	200	CE	O	Y		01034	Planned Patient Transport Comment

The daggered (+) items in this segment are known to the filler, not the placer. They are not created by the placer in an initial order. Instead, they are created by the filler and valued as needed when the OBR segment is returned as part of a report. Hence, on a new order sent to the filler, they are not valued. There is an exception when the filler initiates the order. In that case, the filler order number is valued and the placer order number may be blank. They are valued by the filler as needed when the OBR segment is returned as part of a report.

The starred (*) fields are only relevant when an observation is associated with a specimen. These fields are completed by the placer when the placer obtains the specimen. They are completed by the filler when the filler obtains the specimen.

OBR-7-observation date/time and *OBR-8-observation end date/time* (flagged with #) are the physiologically relevant times. In the case of an observation on a specimen, they represent the start and end of the specimen collection. In the case of an observation obtained directly from a subject (e.g., BP, Chest X-ray), they represent the start and end time of the observation.

3.3.2.1 Set ID - OBR (SI) 00237

This field is not used for HL7 messages that are embedded in X12 messages.

3.3.2.2 Placer order number (EI) 00216

Components: <entity identifier (ST)> ^ <namespace ID (IS)> ^ <universal ID (ST)> ^ <universal ID type (ID)>

Definition: The first component is a string that identifies an individual order (e.g., OBR). A limit of fifteen (15) characters is suggested but not required. It is assigned by the placer (ordering application). It identifies an order uniquely among all orders from a particular ordering application. The second through fourth components contain the application ID of the placing application in the same form as the HD data type. The second component, namespace ID, is a user-defined coded value that will be uniquely associated with an application. A limit of six (6) characters is suggested but not required. A given institution or group of intercommunicating institutions should establish a unique list of applications that may be potential placers and fillers and assign unique application IDs. The components are separated by component delimiters.

3.3.2.3 Filler order number (EI) 00217

Components: <entity identifier (ST)> ^ <namespace ID (IS)> ^
<universal ID (ST)> ^ <universal ID type (ID)>

Definition: This field is the order number associated with the filling application. Its first component is a string that identifies an order detail segment (e.g., OBR). A limit of fifteen (15) characters is suggested but not required. It is assigned by the order filler (receiving) application. This string must uniquely identify the order (as specified in the order detail segment) from other orders in a particular filling application (e.g., clinical laboratory). This uniqueness must persist over time.

The second through fourth components contain the filler application ID, in the form of the HD data type. The second component is a user-defined coded value that uniquely defines the application from other applications on the network. A limit of six (6) characters is suggested but not required. The second component of the filler order number always identifies the actual filler of an order.

3.3.2.4 Universal service ID (CE) 00238

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

Definition: This field is the identifier code for the requested observation/test/battery.

This field will always be populated with LOINC codes in HL7 claims attachment messages.

3.3.2.5 Priority (ID) 00239

Definition: ***This field has been retained for backward compatibility only.*** It is not used. Previously contained a priority code (e.g., STAT, ASAP), but that information is now carried as the sixth component of *OBR-27-quantity/timing*.

3.3.2.6 Requested date/time (TS) 00240

Definition: ***This field has been retained for backward compatibility only.*** This is not used. Previously requested date/time. That information is now carried in the fourth component of the *OBR-27-quantity/timing*.

3.3.2.7 Observation date/time (TS) 00241

Definition: This field is the clinically relevant date/time of the observation. In the case of observations taken directly from a subject, it is the actual date and time the observation was obtained. In the case of a specimen-associated study, this field represents the date and time the specimen was collected or obtained. (This is a results-only field except when the placer or a third-party has already drawn the specimen.) This field is conditionally required. When the OBR is transmitted as part of a report message, the field **must** be filled in. If it is transmitted as part of a request **and** a sample has been sent along as part of the request, this field must be filled in because this specimen time is the physiologically relevant date-time of the observation.

3.3.2.8 Observation end date/time (TS) 00242

Definition: This field is the end date and time of a study or timed specimen collection. If an observation takes place over a substantial period of time, it indicates when the observation period

ended. For observations made at a point in time, it is null. This is a results field except when the placer or a party other than the filler has already drawn the specimen.

3.3.2.9 Collection volume (CQ) 00243

Components: <quantity (NM)> ^ <units (CE)>

Subcomponents of units: <identifier (ST)> & <test (ST)> & <name of coding system (ST)> & <alternate identifier (ST)> & <alternate text (ST)> & <name of alternate coding system (ST)>

Definition: For laboratory tests, the collection volume is the volume of a specimen. The default unit is ML. Specifically, units should be expressed in the ISO Standard unit abbreviations (ISO-2955, 1977). This is a results-only field except when the placer or a party has already drawn the specimen. (See Chapter 7 of the HL7 standard for full details about units.)

3.3.2.10 Collector identifier (XCN) 00244

Components: <ID number (ST)> ^ <family name (ST)> ^ <given name (ST)> ^ <middle initial or name (ST)> ^ <suffix (e.g., JR or III) (ST)> ^ <prefix (e.g., DR) (ST)> ^ <degree (e.g., MD) (ST)> ^ <source table (IS)> ^ <assigning authority (HD)> ^ <name type code (ID)> ^ <identifier check digit (ST)> ^ <code identifying the check digit scheme employed (ID)> ^ <identifier type code (IS)> ^ <assigning facility (HD)>

Subcomponents of assigning authority: <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (ID)>

Subcomponents of assigning facility ID: <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (ID)>

Definition: When a specimen is required for the study, this field identifies the person, department, or facility that collected the specimen. Either name or ID code, or both, may be present.

3.3.2.11 Specimen action code (ID) 00245

Definition: This field is the action to be taken with respect to the specimens that accompany or precede this order. The purpose of this field is to further qualify (when appropriate) the general action indicated by the order control code contained in the accompanying ORC segment. For example, when a new order (ORC - "NW") is sent to the lab, this field would be used to tell the lab whether or not to collect the specimen ("L" or "O"). Refer to *HL7 table 0065 - Specimen action code* for valid values.

Table 0065 - Specimen action code

Value	Description
A	Add ordered tests to the existing specimen
G	Generated order; reflex order
L	Lab to obtain specimen from patient
O	Specimen obtained by service other than Lab
P	Pending specimen; Order sent prior to delivery
R	Revised order
S	Schedule the tests specified below

3.3.2.12 Danger code (CE) 00535

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

Definition: This field is the code and/or text indicating any known or suspected patient or specimen hazards, e.g., patient with active tuberculosis or blood from a hepatitis patient. Either code and/or text may be absent. However, the code is always placed in the first component position and any free text in the second component. Thus, free text without a code must be preceded by a component delimiter.

3.3.2.13 Relevant clinical information (ST) 00247

Definition: This field contains any additional clinical information about the patient or specimen. It is used to report the suspected diagnosis and clinical findings on requests for interpreted diagnostic studies. Examples include reporting the amount of inspired carbon dioxide for blood gasses, the point in the menstrual cycle for cervical pap tests, and other conditions that influence test interpretations.

3.3.2.14 Specimen received date/time (TS) 00248

Definition: For observations requiring a specimen, the specimen received date/time is the actual login time at the diagnostic service. This field must contain a value when the order is accompanied by a specimen, or when the observation required a specimen **and** the message is a report.

3.3.2.15 Specimen source (CM) 00249

Components: <specimen source name or code (CE)> ^ <additives (TX)> ^ <freetext (TX)> ^ <body site (CE)> ^ <site modifier (CE)> ^ <collection method modifier code (CE)>

Subcomponents of specimen source name or doe: <identifier (ST)> & <test (ST)> & <name of coding system (ST)> & <alternate identifier (ST)> & <alternate text (ST)> & <name of alternate coding system (ST)>

Subcomponents of body site: <identifier (ST)> & <test (ST)> & <name of coding system (ST)> & <alternate identifier (ST)> & <alternate text (ST)> & <name of alternate coding system (ST)>

Subcomponents of site modifier: <identifier (ST)> & <test (ST)> & <name of coding system (ST)> & <alternate identifier (ST)> & <alternate text (ST)> & <name of alternate coding system (ST)>

Subcomponents of collection method modifier code: <identifier (ST)> & <test (ST)> & <name of coding system (ST)> & <alternate

identifier (ST) & <alternate text (ST) & <name of alternate coding system (ST)>

See the HL7 standard for a detailed description of this field.

3.3.2.16 Ordering provider (XCN) 00226

Components: <ID number (ST)> ^ <family name (ST)> ^ <given name (ST)> ^ <middle initial or name (ST)> ^ <suffix (e.g., JR or III) (ST)> ^ <prefix (e.g., DR) (ST)> ^ <degree (e.g., MD) (ST)> ^ <source table (IS)> ^ <assigning authority (HD)> ^ <name type code (ID)> ^ <identifier check digit (ST)> ^ <code identifying the check digit scheme employed (ID)> ^ <identifier type code (IS)> ^ <assigning facility (HD)>

Subcomponents of assigning authority: <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (ID)>

Subcomponents of assigning facility ID: <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (ID)>

Definition: This field identifies the provider who ordered the test. Either the ID code or the name, or both, may be present. This is the same as *ORC-12-ordering provider*.

3.3.2.17 Order callback phone number (XTN) 00250

Components: [NNN] [(999)]999-9999 [X99999] [B99999] [C any text] ^ <telecommunication use code (ID)> ^ <telecommunication equipment type (ID)> ^ <email address (ST)> ^ <country code (NM)> ^ <area/city code (NM)> ^ <phone number (NM)> ^ <extension (NM)> ^ <any text (ST)>

Definition: This field is the telephone number for reporting a status or a result using the standard format with extension and/or beeper number when applicable.

3.3.2.18 Placer field #1 (ST) 00251

Definition: This field is user field #1. Text sent by the placer will be returned with the results.

3.3.2.19 Placer field #2 (ST) 00252

Definition: This field is similar to placer field #1.

3.3.2.20 Filler field #1 (ST) 00253

Definition: This field is definable for any use by the filler (diagnostic service).

3.3.2.21 Filler field #2 (ST) 00254

Definition: This field is similar to filler field #1.

3.3.2.22 Results rpt/status chng - date/time (TS) 00255

Definition: This field specifies the date/time results reported or status changed. This field is used to indicate the date and time that the results are composed into a report and released, or that a status, as defined in *ORC-5-order status*, is entered or changed. (This is a results field only.) When other applications (such as office or clinical database applications) query the laboratory application for untransmitted results, the information in this field may be used to control processing on the communications link. Usually, the ordering service would want only those

results for which the reporting date/time is greater than the date/time the inquiring application last received results.

3.3.2.23 Charge to practice (CM) 00256

This field is not used for HL7 claims attachment messages.

3.3.2.24 Diagnostic service sect ID (ID) 00257

Definition: This field is the section of the diagnostic service where the observation was performed. If the study was performed by an outside service, the identification of that service should be recorded here. Refer to *HL7 table 0074 - Diagnostic service section ID* for valid entries.

Table 0074 - Diagnostic service section ID

Value	Description	Value	Description
AU	Audiology	OUS	OB Ultrasound
BG	Blood gases	OT	Occupational Therapy
BLB	Blood bank	OTH	Other
CUS	Cardiac Ultrasound	OSL	Outside Lab
CTH	Cardiac catheterization	PHR	Pharmacy
CT	CAT scan	PT	Physical Therapy
CH	Chemistry	PHY	Physician (Hx, Dx, admission note, etc.)
CP	Cytopathology	PF	Pulmonary function
EC	Electrocardiac (e.g., EKG, EEC, Holter)	RAD	Radiology
EN	Electroneuro (EEG, EMG, EP, PSG)	RX	Radiograph
HM	Hematology	RUS	Radiology ultrasound
ICU	Bedside ICU Monitoring	RC	Respiratory Care (therapy)
IMM	Immunology	RT	Radiation therapy
LAB	Laboratory	SR	Serology
MB	Microbiology	SP	Surgical Pathology
MCB	Mycobacteriology	TX	Toxicology
MYC	Mycology	VUS	Vascular Ultrasound
NMS	Nuclear medicine scan	VR	Virology
NMR	Nuclear magnetic resonance	XRC	Cineradiograph
NRS	Nursing service measures		

3.3.2.25 Result status (ID) 00258

Definition: This field is the status of results for this order. This conditional field is required whenever the OBR is contained in a report message. It is not required as part of an initial order.

There are two methods of sending status information. If the status is that of the entire order, use *ORC-15-order effective date/time* and *ORC-5-order status*. If the status pertains to the order detail segment, use *OBR-25-result status* and *OBR-22-results report/status change - date/time*. If both are present, the OBR values override the ORC values.

This field would typically be used in a response to an order status query where the level of detail requested does not include the OBX segments. When the individual status of each result is

necessary, *OBX-11-observ result status* may be used. Refer to *HL7 table 0123 - Result status* for valid entries.

Table 0123 - Result status

Value	Description	Value	Description
O	Order received; specimen not yet received	R	Results stored; not yet verified
I	No results available; specimen received, procedure incomplete	F	Final results; results stored and verified. Can only be changed with a corrected result.
S	No results available; procedure scheduled, but not done	X	No results available; Order canceled.
A	Some, but not all, results available	Y	No order on record for this test. (Used only on queries)
P	Preliminary: A verified early result is available, final results not yet obtained	Z	No record of this patient. (Used only on queries)
C	Correction to results		

3.3.2.26 Parent result (CM) 00259

Components: <OBX-3-observation identifier of parent result (CE)> ^ <OBX-4-sub-ID of parent result (ST)> ^ <part of OBX-5 observation result from parent (TX) see discussion>

Subcomponents of OBX-3-observation identifier or parent result:
<identifier (ST)> & <test (ST)> & <name of coding system (ST)> & <alternate identifier (ST)> & <alternate text (ST)> & <name of alternate coding system (ST)>

Definition: This field is defined to make it available for other types of linkages (e.g., toxicology). This important information, together with the information in *OBR-29-parent number*, uniquely identifies the parent result's OBX segment related to this order. The value of this OBX segment in the parent result is the organism or chemical species about which this battery reports. For example, if the current battery is an antimicrobial susceptibility, the parent result's identified OBX contains a result that identifies the organism on which the susceptibility test was run. This indirect linkage is preferred because the name of the organism in the parent result may undergo several preliminary values prior to finalization.

See the HL7 specification for a detailed description of this field.

3.3.2.27 Quantity/timing (TQ) 00221

Components: <quantity (CQ)> ^ <interval (CM)> ^ <duration> ^ <start date/time (TS)> ^ <end date/time (TS)> ^ <priority (ID)> ^ <condition (ST)> ^ <text (TX)> ^ <conjunction (ID)> ^ <order sequencing>

Definition: This field contains information about how many services to perform at one service time and how often the service times are repeated, and to fix duration of the request.

3.3.2.28 Result copies to (XCN) 00260

This field is not used for HL7 claims attachment messages.

3.3.2.29 Parent (CM) 00261

Components: <parent's placer order number (EI)> ^ <parent's filler order number (EI)>

Subcomponents of parent's placer order number: <entity identifier (ST)> & <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (IS)>

Subcomponents of parent's filler order number: <entity identifier (ST)> & <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (IS)>

This field relates a child to its parent when a parent/child relationship exists. For example, observations that are spawned by previous observations, e.g., antimicrobial susceptibilities spawned by blood cultures, need to record the parent (blood culture) filler order number here. The parent/child mechanism is described under the order control field notes (see Segment ORC field notes in Section 4.3.1.1.1, "Table notes for order control codes of ORC." It is required when the order is a child.

Parent is a two-component field. The first component contains the parent's placer order number. The second component is optional and contains the parent's filler order number. The components of the placer order number and the filler order number are transmitted in subcomponents of the two components of this field.

3.3.2.30 Transportation mode (ID) 00262

Definition: This field identifies how (or whether) to transport a patient, when applicable. Refer to *HL7 table 0124 - Transportation mode* for valid codes.

Table 0124 - Transportation mode

Value	Description
CART	Cart - patient travels on cart or gurney
PORT	The examining device goes to patient's location
WALK	Patient walks to diagnostic service
WHLC	Wheelchair

3.3.2.31 Reason for study (CE) 00263

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

Definition: This field is the code or text using the conventions for coded fields given in Chapter 2, Control/Query of the HL7 standard. This is required for some studies to obtain proper reimbursement.

3.3.2.32 Principal result interpreter (CM) 00264

Components: <name (CN)> ^ <start date/time (TS)> ^ <end date/time (TS)> ^ <point of care (IS)> ^ <room (IS)> ^ <bed (IS)> ^ <facility (HD)> ^ <location status (IS)> ^ <patient location type (IS)> ^ <building (IS)> ^ <floor (IS)>

Subcomponents of name : <ID number (ST)> & <family name (ST)> & <given name (ST)> & <middle initial or name (ST)> & <suffix (e.g., JR, III) (ST)> & <prefix (e.g., DR)> & <degree (e.g., MD) (ST)> & <source table (IS)> & <assigning authority (HD)>

Subcomponents of facility: <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (ID)>

Definition: This field identifies the physician or other clinician who interpreted the observation and is responsible for the report content.

3.3.2.33 Assistant result interpreter (CM) 00265

Components: <name (CN)> ^ <start date/time (TS)> ^ <end date/time (TS)> ^ <point of care (IS)> ^ <room (IS)> ^ <bed (IS)> ^ <facility (HD)> ^ <location status (IS)> ^ <patient location type (IS)> ^ <building (IS)> ^ <floor (IS)>

Subcomponents of name : <ID number (ST)> & <family name (ST)> & <given name (ST)> & <middle initial or name (ST)> & <suffix (e.g., JR. III) (ST)> & <prefix (e.g., DR)> & <degree (e.g., MD) (ST)> & <source table (IS)> & <assigning authority (HD)>

Subcomponents of facility: <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (ID)>

Definition: This field identifies the clinical observer who assisted with the interpretation of this study.

3.3.2.34 Technician (CM) 00266

Components: <name (CN)> ^ <start date/time (TS)> ^ <end date/time (TS)> ^ <point of care (IS)> ^ <room (IS)> ^ <bed (IS)> ^ <facility (HD)> ^ <location status (IS)> ^ <patient location type (IS)> ^ <building (IS)> ^ <floor (IS)>

Subcomponents of name : <ID number (ST)> & <family name (ST)> & <given name (ST)> & <middle initial or name (ST)> & <suffix (e.g., JR. III) (ST)> & <prefix (e.g., DR)> & <degree (e.g., MD) (ST)> & <source table (IS)> & <assigning authority (HD)>

Subcomponents of facility: <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (ID)>

Definition: This field identifies the performing technician.

3.3.2.35 Transcriptionist (CM) 00267

Components: <name (CN)> ^ <start date/time (TS)> ^ <end date/time (TS)> ^ <point of care (IS)> ^ <room (IS)> ^ <bed (IS)> ^ <facility (HD)> ^ <location status (IS)> ^ <patient location type (IS)> ^ <building (IS)> ^ <floor (IS)>

Subcomponents of name : <ID number (ST)> & <family name (ST)> & <given name (ST)> & <middle initial or name (ST)> & <suffix (e.g., JR. III) (ST)> & <prefix (e.g., DR)> & <degree (e.g., MD) (ST)> & <source table (IS)> & <assigning authority (HD)>

Subcomponents of facility: <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (ID)>

Definition: This field identifies the report transcriber.

3.3.2.36 Scheduled - date/time (TS) 00268

Definition: This field is the date/time the filler scheduled an observation, when applicable (e.g., action code in *OBR-11-specimen action code* = "S"). This is a result of a request to schedule a particular test and provides a way to inform the Placer of the date/time a study is scheduled (result only).

3.3.2.37 Number of sample containers (NM) 01028

Definition: This field identifies the number of containers for a given sample. For sample receipt verification purposes; may be different from the total number of samples which accompany the order.

3.3.2.38 Transport logistics of collected sample (CE) 01029

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

Definition: This field is the means by which a sample reaches the diagnostic service provider. This information is to aid the lab in scheduling or interpretation of results. Possible answers: routine transport van, public postal service, etc. If coded, requires a user-defined table.

3.3.2.39 Collector's comment (CE) 01030

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

Definition: This field is for reporting additional comments related to the sample. If coded, requires a user-defined table. If only free text is reported, it is placed in the second component with a null in the first component, e.g., ^difficult clotting after venepuncture and echymosis..

3.3.2.40 Transport arrangement responsibility (CE) 01031

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

Definition: This field is an indicator of who is responsible for arranging transport to the planned diagnostic service. Examples: Requester, Provider, Patient. If coded, requires a user-defined table.

3.3.2.41 Transport arranged (ID) 01032

Definition: This field is an indicator of whether transport arrangements are known to have been made. Refer to HL7 table 0224 - Transport arranged for valid codes.

Table 0224 - Transport arranged

Value	Description
A	Arranged
N	Not Arranged
U	Unknown

3.3.2.42 Escort required (ID) 01033

Definition: This field is an indicator that the patient needs to be escorted to the diagnostic service department.

Note: The nature of the escort requirements should be stated in the *OBR-43-planned patient transport comment* field. See *HL7 table 0225 - Escort required* for valid values.

Table 0225 - Escort required

Value	Description
R	Required
N	Not Required
U	Unknown

3.3.2.43 Planned patient transport comment (CE) 01034

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

Definition: This field is the code or free text comments on special requirements for the transport of the patient to the diagnostic service department. If coded, requires a user-defined table.

3.3.3 OBX - Observation/Result Segment

The OBX segment is used to transmit a single observation or observation fragment. It represents the smallest indivisible unit of a report. Its principal mission is to carry information about observations in report messages. But the OBX can also be part of an observation order (see Section 4.2, "Order Message Definitions"). In this case, the OBX carries clinical information needed by the filler to interpret the observation the filler makes. For example, an OBX is needed to report the inspired oxygen on an order for a blood oxygen to a blood gas lab, or to report the menstrual phase information which should be included on an order for a pap smear to a cytology lab. Appendix 7A of the HL7 standard includes codes for identifying many of pieces of information needed by observation producing services to properly interpret a test result. OBX is also found in other HL7 messages that need to include patient clinical information.

Table 7. OBX Segment.

SEQ	LEN	DT	OPT	RP/#	TBL #	ITEM #	ELEMENT NAME
1	10	SI	O			00569	Set ID - OBX
2	2	ID	C		0125	00570	Value Type
3	590	CE	R			00571	Observation Identifier
4	20	ST	C			00572	Observation Sub-ID
5	65536 ⁶	*	C	Y ⁷		00573	Observation Value
6	60	CE	O			00574	Units
7	10	ST	O			00575	References Range
8	5	ID	O	Y/5	0078	00576	Abnormal Flags
9	5	NM	O			00577	Probability
10	2	ID	O	Y	0080	00578	Nature of Abnormal Test
11	1	ID	R		0085	00579	Observ Result Status
12	26	TS	O			00580	Date Last Obs Normal Values
13	20	ST	O			00581	User Defined Access Checks
14	26	TS	O			00582	Date/Time of the Observation
15	60	CE	O			00583	Producer's ID
16	80	XC N	O			00584	Responsible Observer
17	60	CE	O	Y		00936	Observation Method

3.3.3.1 Set ID - observation simple (SI) 00569

This field is not used for HL7 claims attachment messages.

3.3.3.2 Value type (ID) 00570

Definition: This field contains the format of the observation value in OBX. It must be valued if *OBX-11-Observation result status* is not valued with an 'X'. If the value is CE then the result must be a coded entry. When the value type is TX or FT then the results are bulk text. The valid values for the value type of an observation are listed in *HL7 table 0125 - Value type*.

The observation value must be represented according to the format for the data type defined in 3.1.5. For example, a PN consists of 6 components, separated by component delimiters.

Although NM is a valid type, observations which are usually reported as numbers will sometimes have the string (ST) data type because non-numeric characters are often reported as part of the result, e.g., >300 to indicate the result was off-scale for the instrument. In the example, ">300", ">" is a symbol and the digits are considered a numeric value. However, this usage of the ST type should be discouraged since the SN (structured numeric) data type now accommodates such reporting and, in addition, permits the receiving system to interpret the magnitude.

All HL7 data types are valid, and are included in Table 0125 except CM, CQ, SI, and ID. For a CM definition to have meaning, the specifics about the CM must be included in the field definition. *OBX-5-observation value* is a general field definition that is influenced by the data

6 The length of the observation value field is variable, depending upon value type. See *OBX-2-value type*.
7 May repeat for multipart, single answer results with appropriate data types, e.g., CE, TX, and FT data types.

type *OBX-3*, so CMs are undefined in this context. CQ is invalid because units for *OBX-5-observation value* are always specified explicitly in an OBX segment with *OBX-6 units*. SI is invalid because it only applied to HL7 message segments, and ID because it requires a constant field definition.

The RP value (reference pointer) must be used if the actual observation value is not sent in OBX, but exists somewhere else. For example, if the observation consists of an image (document or medical), the image itself cannot be sent in OBX. The sending system may in that case opt to send a reference pointer. The receiving system can use this reference pointer whenever it needs access to the actual image through other interface standards, e.g., DICOM, or through appropriate data base servers.

Table 0125 - Value type

Value	Description
AD	Address
CE	Coded Entry
CF	Coded Element With Formatted Values
CK	Composite ID With Check Digit
CN	Composite ID And Name
CP	Composite Price
CX	Extended Composite ID With Check Digit
DT	Date
ED	Encapsulated Data
FT	Formatted Text (Display)
MO	Money
NM	Numeric
PN	Person Name
RP	Reference Pointer
SN	Structured Numeric
ST	String Data.
TM	Time
TN	Telephone Number
TS	Time Stamp (Date & Time)
TX	Text Data (Display)
XAD	Extended Address
XCN	Extended Composite Name And Number For Persons
XON	Extended Composite Name And Number For Organizations
XPN	Extended Person Number
XTN	Extended Telecommunications Number

The full definition of these data types is given in Chapter 2 of the HL7 standard, Section 2.8, “Data Types.” The structured numeric (SN) data type, new to version 2.3, provides for reporting ranges (e.g., 3-5 or 10-20), titres (e.g., 1:10), and out-of-range indicators (e.g., >50) in a structured and computer interpretable way.

We allow the FT data type in the OBX segment, but its use is discouraged. Formatted text usually implies a meaningful structure e.g., a list of three independent diagnoses reported on different lines. But ideally, the structure in three independent diagnostic statements would be reported as three separate OBX segments.

TX should **not** be used except to send large amounts of text. In the TX data type, the repeat delimiter can only be used to identify paragraph breaks. Use ST to send short, and possibly encodable, text strings.

3.3.3.3 Observation identifier (CE) 00571

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

Definition: This field contains a unique identifier for the observation. The format is that of the Coded Element (CE). Example: 93000.3^P-R interval^A34.

In most systems the identifier will **point** to a master observation table that will provide other attributes of the observation that may be used by the receiving system to process the observations it receives. A set of message segments for transmitting such master observation tables is described in the HL7 specification..

<i>LOINC codes are required in this field for claims attachment messages.</i>

3.3.3.4 Observation sub-ID (ST) 00572

Definition: This field is used to distinguish between multiple OBX segments with the same observation ID organized under one OBR. For example, a chest X-ray report might include three separate diagnostic impressions. The standard requires three OBX segments, one for each impression. By putting a 1 in the Sub-ID of the first of these OBX segments, 2 in the second, and 3 in the third, we can uniquely identify each OBX segment for editing or replacement.

See the HL7 Specification for a detailed description of the use of this segment.

3.3.3.5 Observation value (*) 00573

Definition: This field contains the value observed by the observation producer. *OBX-2-value type* contains the data type for this field according to which observation value is formatted. It is not a required field because some systems will report only the normalcy/abnormalcy (*OBX-8*), especially in product experience reporting.

3.3.3.5.1 Representation

This field contains the value of *OBX-3-observation identifier* of the same segment. Depending upon the observation, the data type may be a number (e.g., a respiratory rate), a coded answer (e.g., a pathology impression recorded as SNOMED), or a date/time (the date/time that a unit of blood is sent to the ward). An observation value is always represented as the data type specified in *OBX-2-value type* of the same segment. Whether numeric or short text, the answer shall be recorded in text.

3.3.3.5.2 Reporting logically independent observations

The main sections of dictated reports, such as radiologic studies or history and physicals, are reported as separate OBX segments. In addition, each logically independent observation should be reported in a separate OBX segment, i.e., one OBX segment should not contain the **result** of more than one logically independent observation. This requirement is included to assure that the contents of *OBX-6-units*, *OBX-8-abnormal flags*, and *OBX-9-probability* can be interpreted unambiguously. The electrolytes and vital signs batteries, for example, would each be reported as

four separate OBX segments. Two diagnostic impressions, e.g., congestive heart failure and pneumonia, would also be reported as two separate OBX segments whether reported as part of a discharge summary or chest X-ray report. Similarly, two bacterial organisms isolated in a single bacterial culture would be reported as two separate OBX segments.

Though two independent diagnostic **statements** cannot be reported in one OBX segment, multiple categorical responses are allowed (usually as CE data types separated by repeat delimiters), as long as they are fragments (modifiers) that together construct one diagnostic statement. Right upper lobe (recorded as one code) and pneumonia (recorded as another code), for example, could be both reported in one OBX segment. Such multiple “values” would be separated by repeat delimiters.

3.3.3.5.3 Multiple OBX segments with the same observation ID and Sub ID

In some systems, a single observation may include **fragments** of more than one data type. The most common example is a numeric result followed by coded comments (CE). In this case, the logical observation can be sent in more than one OBX segment. For example, one segment of numeric or string data type for the numeric result and another segment of CE data type for coded comments. If the producer was reporting multiple coded comments, they would all be sent in one OBX segment, separated by repeat delimiters, because they all modified a single logical observation. Multiple OBX segments with the same observation ID and sub ID should always be sent in sequence, with the most significant OBX segment (the one that has the normal flag/units and or reference range and status flag) first. The value of *OBX-6 through 12* should be null in any following OBX segments with the same *OBX-3-observation identifier* and *OBX-4-observation sub-ID*. For the purpose of replacement or deletion, multiple OBX segments with the same observation ID and sub ID are treated as a unit. If any are replaced or deleted, they all are replaced.

3.3.3.5.4 Coded values

When an OBX segment contains values of CE data types, the observations are stored as a combination of codes and/or text. The observation may be an observation battery ID (for recommended studies), a diagnostic code or finding (for a diagnostic impression), or an anatomic site for a pathology report, or any of the other kinds of coded results.

It is not necessary to always encode the information stored within a coded observation. For example, a chest X-ray impression could be transmitted as pure text even though it has a CE data type. In this case, the test must be recorded as the second component of the **result code**, e.g.,

```
OBX|1|CE|71020&IMP|1|^CONGESTIVE HEART FAILURE.
```

However, separate impressions, recommendations, etc., even if recorded as pure text, should be recorded in separate result segments. That is, congestive heart failure and pneumonia should not be sent as:

```
OBX|1|CE|71020&IMP|1|^CONGESTIVE HEART FAILURE AND PNEUMONIA|
```

but as:

```
OBX|1|CE|71020&IMP|1|^CONGESTIVE HEART FAILURE|
OBX|2|CE|71020&IMP|2|^PNEUMONIA|.
```

Even better would be fully-coded results that include computer understandable codes (component 1) instead of, or in addition to, the text description (component 2). One may include multiple values in a CE value and these can be mixtures of code and text, but only when they are needed to

construct one diagnosis, impression, or concept. When text follows codes as an independent value it would be taken as a modifier or addenda to the codes, e.g.,

```
OBX|1|CE|710120&IMP^CXR|1|428.0^CONGESTIVE HEART FAILURE^I9C~^MASSIVE HEART
```

The text in component 2 should be an accurate description of the code in component 1. Likewise, if used, the text in component 5 should be an accurate description of the code in component 4.

3.3.3.6 Units (CE) 00574

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

Definition: This field contains the units that have a data type of CE.

See the HL7 Standard for a full description of the coding systems that may be used for units.

3.3.3.7 References range (ST) 00575

Components: for numeric values in the format:

- a) lower limit-upper limit (when both lower and upper limits are defined, e.g., for potassium 3.5 - 4.5)
- b) > lower limit (if no upper limit, e.g., >10)
- c) < upper limit (if no lower limit, e.g., <15)

alphabetical values: the normal value may be reported in this location

Definition: When the observation quantifies the amount of a toxic substance, then the upper limit of the range identifies the toxic limit. If the observation quantifies a drug, the lower limits identify the lower therapeutic bounds and the upper limits represent the upper therapeutic bounds above which toxic side effects are common.

3.3.3.8 Abnormal flags (ID) 00576

Definition: This field contains a table lookup indicating the normalcy status of the result. We strongly recommend sending this value when applicable. If the observation is an antimicrobial susceptibility, the interpretation codes are: S=susceptible; R=resistant; I=intermediate; MS=moderately susceptible; VS=very susceptible. (See ASTM 1238 - review for more details). Refer to *HL7 table 0078 - Abnormal flags* for valid entries.

When the laboratory can discern the normal status of a textual report, such as chest X-ray reports or microbiologic cultures, these should be reported as N when normal and A when abnormal. Multiple codes, e.g., abnormal and worse, should be separated by a repeat delimiter, e.g., A~W.

Table 0078 Abnormal flags

Value	Description
L	Below low normal
H	Above high normal
LL	Below lower panic limits
HH	Above upper panic limits
<	Below absolute low-off instrument scale
>	Above absolute high-off instrument scale
N	Normal (applies to non-numeric results)
A	Abnormal (applies to non-numeric results)
AA	Very abnormal (applies to non-numeric units, analogous to panic limits for numeric units)
null	No range defined, or normal ranges don't apply
U	Significant change up
D	Significant change down
B	Better--use when direction not relevant
W	Worse--use when direction not relevant
<i>For microbiology susceptibilities only:</i>	
S	Susceptible
R	Resistant
I	Intermediate
MS	Moderately susceptible
VS	Very susceptible

Results may also be reported in **shorthand** by reporting the normalcy status without specifying the exact numeric value of the result. Such shorthand is quite common in clinical notes, where physicians will simply say that **the glucose result was normal**. Such shorthand reporting is also seen in drug experience reporting. In such cases, the result can be reported in the OBX by reporting the normalcy code in *OBX-8-abnormal flags* without specifying any value in *OBX-5-observation value*.

3.3.3.9 Probability (NM) 00577

Definition: This field contains the probability of a result being true for results with categorical values. It mainly applies to discrete coded results. It is a decimal number represented as a text string that must be between 0 and 1, inclusive.

3.3.3.10 Nature of abnormal test (ID) 00578

Definition: This field contains the nature of the abnormal test. Refer to *HL7 table 0080 - Nature of abnormal testing* for valid values. As many of the codes as apply may be included, separated by repeat delimiters. For example, normal values based on age, sex, and race would be coded as A~S~R.

Table 0080 Nature of abnormal testing

Value	Description
A	An age-based population
N	None - generic normal range
R	A race-based population
S	A sex-based population

3.3.3.11 Observ result status (ID) 00579

Definition: This field contains the observation result status. Refer to *HL7 table 0085 - Observation result status* for valid values.

This field reflects the current completion status of the results for one Observation Identifier. Previous versions of HL7 stated this implicitly by defining a default value of "F." Code **F** indicates that the result has been verified to be correct and final. Code **W** indicates that the result has been verified to be wrong (incorrect); a replacement (corrected) result may be transmitted later. Code **C** indicates that data contained in the *OBX-5-observation value* field are to replace previously transmitted (verified and) final result data with the same observation ID (including suffix, if applicable) and observation sub-ID usually because the previous results were wrong. Code **D** indicates that data previously transmitted in a result segment with the same observation ID (including suffix) and observation sub-ID should be deleted. When changing or deleting a result, multiple OBX segments with the same observation ID and observation sub-ID are replaced or deleted as a unit. Normal progression of results through intermediate (e.g., 'gram positive cocci') to final (e.g., 'staphylococcus aureus') should not be transmitted as **C** (correction); they should be transmitted as **P** or **S** (depending upon the specific case) until they are final.

Table 0085 - Observation result status codes interpretation

Value	Description
C	Record coming over is a correction and thus replaces a final result
D	Deletes the OBX record
F	Final results; Can only be changed with a corrected result.
I	Specimen in lab; results pending
P	Preliminary results
R	Results entered -- not verified
S	Partial results
X	Results cannot be obtained for this observation
U	Results status change to Final. without retransmitting results already sent as 'preliminary.' E.g., radiology changes status from preliminary to final
W	Post original as wrong, e.g., transmitted for wrong patient

3.3.3.12 Effective date last obs normal value (TS) 00580

Definition: This field contains the changes in the observation methods that would make values obtained from the old method not comparable with those obtained from the new method.

Null if there are no normals or units. If present, a change in this date compared to date-time recorded, the receiving system's test dictionary should trigger a manual review of the results to determine whether the new observation ID should be assigned a new ID in the local system to distinguish the new results from the old.

3.3.3.13 User defined access checks (ST) 00581

Definition: This field permits the producer to record results-dependent codes for classifying the observation at the receiving system. This field should be needed only rarely, because most classifications are fixed attributes of the observation ID and can be defined in the associated observation master file.

However, there are a few cases when such controls vary with the value of the observation in a complex way that the receiving system would not want to re-calculate. An example is an antimicrobial susceptibility result. Some systems prefer to display only the susceptibility results of inexpensive antimicrobials depending upon the organism, the source of the specimen and the patient's allergy status. The sending service wants to send all of the susceptibilities so that certain privileged users (e.g., Infectious Disease specialists) can review all of the results but nonprivileged users would see only the "preferred" antimicrobials to which the organism was susceptible. We expect that other cases also occur.

3.3.3.14 Date-time of the observation (TS) 00582

Definition: This field is required in two circumstances. The first is when the observations reported beneath one report header (OBR) have different dates. This could occur in the case of queries, timed test sequences, or clearance studies where one measurement within a battery may have a different time than another measurement.

It is also needed in the case of OBX segments that are being sent by the placer to the filler, in which case the date of the observation being transmitted is likely to have no relation to the date of the requested observation. In France, requesting services routinely send a set of the last observations along with the request for a new set of observations. The date of these observations is important to the filler laboratories.

In all cases, the observation date-time is the physiologically relevant date-time or the closest approximation to that date-time. In the case of tests performed on specimens, the relevant date-time is the specimen's collection date-time. In the case of observations taken directly on the patient (e.g., X-ray images, history and physical), the observation date-time is the date-time that the observation was performed.

3.3.3.15 Producer's ID (CE) 00583

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

Definition: This field contains a unique identifier of the responsible producing service. It should be reported explicitly when the test results are produced at outside laboratories, for example. When this field is null, the receiving system assumes that the observations were produced by the sending organization. This information supports CLIA regulations in the US. The code for producer ID is recorded as a CE data type. In the US, the Medicare number of the producing service is suggested as the identifier.

3.3.3.16 Responsible observer (XCN) 00584

Components: <ID number (ST)> ^ <family name (ST)> ^ <given name (ST)> ^ <middle initial or name (ST)> ^ <suffix (e.g., JR or III) (ST)> ^ <prefix (e.g., DR) (ST)> ^ <degree (e.g., MD) (ST)> ^ <source table (IS)> ^ <assigning authority (HD)> ^ <name type (ID)> ^ <identifier check digit (ST)> ^ <code identifying the check digit scheme employed (ID)> ^ <identifier type code (IS)> ^ <assigning facility ID (HD)>

Subcomponents of assigning authority: <namespace ID (IS)> &
<universal ID (ST)> & <universal ID type (ID)>

Subcomponents of assigning facility ID: <namespace ID (IS)> &
<universal ID (ST)> & <universal ID type (ID)>

Definition: When required, this field contains the identifier of the individual directly responsible for the observation (i.e., the person who either performed or verified it). In a nursing service, the observer is usually the professional who performed the observation (e.g., took the blood pressure). In a laboratory, the observer is the technician who performed or verified the analysis. The code for the observer is recorded as a CE data type. If the code is sent as a local code, it should be unique and unambiguous when combined with *OBX-15-producer ID*.

3.3.3.17 Observation method (CE) 00936

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

This optional field can be used to transmit the method or procedure by which an observation was obtained when the sending system wishes to distinguish among one measurement obtained by different methods and the distinction is not implicit in the test ID. Chemistry laboratories do not usually distinguish between two different methods used to measure a given serum constituent (e.g., serum potassium) as part of the test name. See the LOINC Users Manual⁸ for a more complete discussion of these distinctions. If an observation producing service wanted to report the method used to obtain a particular observation, and the method was NOT embedded in the test name, they can use this field.

The Centers for Disease Control and Prevention (CDC) Method Code (CDCM) is one candidate code system for reporting methods/instruments. EUCLIDES method codes are another. User-defined tables are an alternative.

3.3.4 PID - Patient Identification Segment

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

⁸ LOINC Committee. Logical Observation Identifier Names and Codes. Indianapolis: Regenstrief Institute and LOINC Committee, 1995. c/o Kathy Hutchins, 1001 West 10th Street RG-5, Indianapolis, IN 46202. 317/630-7433. Available via FTP/Gopher (dumccss.mc.duke.edu/standards/HL7/termcode/loinclub) and World Wide Web (<http://dumccss.mc.duke.edu/standards/HL7/termcode/loinclub/>). The LOINC Code System is described in Forrey AW, McDonald CJ, DeMoor G, Huff SM, Leavelle D, Leland D, et.al. "Logical Observation Identifier Names and Codes (LOINC) database: a public use set of codes and names for electronic reporting of clinical laboratory test results." *Clinical Chemistry* 1996;42:81-90

Table 8. PID Segment

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	4	SI	O			00104	Set ID - Patient ID
2	20	CX	O			00105	Patient ID (External ID)
3	20	CX	R	Y		00106	Patient ID (Internal ID)
4	20	CX	O	Y		00107	Alternate Patient ID - PID
5	48	XPN	R	Y		00108	Patient Name
6	48	XPN	O			00109	Mother's Maiden Name
7	26	TS	O			00110	Date/Time of Birth
8	1	IS	O		0001	00111	Sex
9	48	XPN	O	Y		00112	Patient Alias
10	1	IS	O		0005	00113	Race
11	106	XAD	O	Y		00114	Patient Address
12	4	IS	B			00115	County Code
13	40	XTN	O	Y		00116	Phone Number - Home
14	40	XTN	O	Y		00117	Phone Number - Business
15	60	CE	O		0296	00118	Primary Language
16	1	IS	O		0002	00119	Marital Status
17	3	IS	O		0006	00120	Religion
18	20	CX	O			00121	Patient Account Number
19	16	ST	O			00122	SSN Number - Patient
20	25	DLN	O			00123	Driver's License Number - Patient
21	20	CX	O	Y		00124	Mother's Identifier
22	3	IS	O		0189	00125	Ethnic Group
23	60	ST	O			00126	Birth Place
24	2	ID	O		0136	00127	Multiple Birth Indicator
25	2	NM	O			00128	Birth Order
26	4	IS	O	Y	0171	00129	Citizenship
27	60	CE	O		0172	00130	Veterans Military Status
28	80	CE	O			00739	Nationality
29	26	TS	O			00740	Patient Death Date and Time
30	1	ID	O		0136	00741	Patient Death Indicator

3.3.4.1 Set ID - patient ID (SI) 00104

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.

3.3.4.2 Patient ID (external ID) (CX) 00105

Components: <ID (ST)> ^ <check digit (ST)> ^ <code identifying the check digit scheme employed (ID)> ^ <assigning authority (HD)> ^ <identifier type code (IS)> ^ <assigning facility (HD)>

Subcomponents of assigning authority: <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (ID)>

Subcomponents of assigning facility: <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (ID)>

Definition: When the patient is from another institution, outside office, etc., the identifier used by that institution can be shown in this field. This may be a number that multiple disparate corporations or facilities share. Refer to *HL7 table 0061 - Check digit scheme*.

3.3.4.3 Patient ID (internal ID) (CX) 00106

Components: <ID (ST)> ^ <check digit (ST)> ^ <code identifying the check digit scheme employed (ID)> ^ <assigning authority (HD)> ^ <identifier type code (IS)> ^ <assigning facility (HD)>

Subcomponents of assigning authority: <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (ID)>

Subcomponents of assigning facility: <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (ID)>

Definition: This field contains the primary identifier, or other identifiers used by the facility to identify a patient uniquely (e.g., medical record number, billing number, birth registry, etc.). Refer to *HL7 table 0061 - Check digit scheme* for valid values.

When merging patient IDs A34 (merge patient information-patient ID only) and A36 (merge patient information-patient ID & account number) events), the Patient ID contained in the PID segment cannot repeat.

3.3.4.4 Alternate patient ID - PID (CX) 00107

Components: <ID (ST)> ^ <check digit (ST)> ^ <code identifying the check digit scheme employed (ID)> ^ <assigning authority (HD)> ^ <identifier type code (IS)> ^ <assigning facility (HD)>

Subcomponents of assigning authority: <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (ID)>

Subcomponents of assigning facility: <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (ID)>

Definition: This field contains the alternate, temporary, or pending optional patient identifier to be used if needed, or additional numbers that may be required to identify a patient. This field may be used to convey multiple patient IDs when more than one exist for a patient. Possible contents might include a visit number, a visit date, or a Social Security Number.

3.3.4.5 Patient name (XPN) 00108

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

Definition: This field contains the legal name of the patient. All other names for the patient should be sent in *PID-9-patient alias*. Therefore, the name type code in this field should be "L - Legal." Refer to *HL7 table 0200 Name type code* for valid values. Repetition of this field is allowed for representing the same name in different character sets. Please refer to the PN data type.

3.3.4.6 Mother's maiden name (XPN) 00109

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

(e.g., DR) (ST) > ^ <degree (e.g., MD) (ST) > ^ <name type code (ID) >

Definition: This field contains the family name under which the mother was born (i.e., before marriage). It is used to distinguish between patients with the same last name.

3.3.4.7 Date/Time of birth (TS) 00110

Definition: This field contains the patient's date and time of birth.

3.3.4.8 Sex (IS) 00111

Definition: This field contains the patient's sex. Refer to *user-defined table 0001 - Sex* for suggested values.

User-defined Table 0001 - Sex

Value	Description
F	Female
M	Male
O	Other
U	Unknown

3.3.4.9 Patient alias (XPN) 00112

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

Definition: This field contains the name(s) by which the patient has been known at some time. Refer to *HL7 table 0200 - Name type* for valid values.

3.3.4.10 Race (IS) 00113

Definition: This field refers to the patient's race. Refer to *user-defined table 0005 - Race* for suggested values.

3.3.4.11 Patient address (XAD) 00114

Components: <street address (ST) > ^ <other designation (ST) > ^ <city (ST) > ^ <state or province (ST) > ^ <zip or postal code (ST) > ^ <country (ID) > ^ < address type (ID) > ^ <other geographic designation (ST) > ^ <county/parish code (IS) > ^ <census tract (IS) >

Definition: This field contains the mailing address of the patient. Address type codes are user defined. Multiple addresses for the same person may be sent in the following sequence: The primary mailing address must be sent first in the sequence (for backward compatibility); if the mailing address is not sent, then a repeat delimiter must be sent in the first sequence.

3.3.4.12 County code (IS) 00115

Definition: *This field has been retained for backward compatibility.* This field contains the patient's county code. The county can now be supported in the county/parish code component of the XAD data type (*PID-11-patient address*). Refer to *user-defined table 0289 - County/parish* for suggested values.

3.3.4.13 Phone number - home (XTN) 00116

Components: [NNN] [(999)]999-9999 [X99999] [B99999] [C any text] ^
<telecommunication use code (ID)> ^ <telecommunication
equipment type (ID)> ^ <email address (ST)> ^ <country code
(NM)> ^ <area/city code (NM)> ^ <phone number (NM)> ^
<extension (NM)> ^ <any text (ST)>

Definition: This field contains the patient's personal phone numbers. All personal phone numbers for the patient are sent in the defined sequence. The first sequence is considered the primary number (for backward compatibility). If the primary number is not sent, then a repeat delimiter is sent in the first sequence. Refer to *HL7 tables 0201 - Telecommunication use code and 0202 - Telecommunication equipment type* for valid values.

3.3.4.14 Phone number - business (XTN) 00117

Components: [NNN] [(999)]999-9999 [X99999] [B99999] [C any text] ^
<telecommunication use code (ID)> ^ <telecommunication
equipment type (ID)> ^ <email address (ST)> ^ <country code
(NM)> ^ <area/city code (NM)> ^ <phone number (NM)> ^
<extension (NM)> ^ <any text (ST)>

Definition: This field contains the patient's business telephone numbers. All business numbers for the patient are sent in the defined sequence. The first sequence is considered the patient's primary business phone number (for backward compatibility). If the primary business phone number is not sent, then a repeat delimiter must be sent in the first sequence. Refer to *HL7 tables 0201 - Telecommunication use code and 0202 - Telecommunication equipment type* for valid values.

3.3.4.15 Primary language (CE) 00118

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

Definition: This field contains the patient's primary language. HL7 recommends using ISO table 639 as the suggested values in *user-defined table 0296 - Language*.

3.3.4.16 Marital status (IS) 00119

Definition: This field contains the patient's marital status. Refer to *user-defined table 0002 - Marital status* for suggested values.

User-defined Table 0002 - Marital status

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

3.3.4.17 Religion (IS) 00120

Definition: This field contains the patient's religion. Refer to *user-defined table 0006 - Religion* for suggested values.

3.3.4.18 Patient account number (CX) 00121

Components: <ID (ST)> ^ <check digit (ST)> ^ <code identifying the check digit scheme employed (ID)> ^ <assigning authority (HD)> ^ <identifier type code (IS)> ^ <assigning facility (HD)>

Subcomponents of assigning authority: <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (ID)>

Subcomponents of assigning facility: <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (ID)>

Definition: This field contains the patient account number assigned by accounting to which all charges, payments, etc., are recorded. It is used to identify the patient's account. Refer to *HL7 table 0061 - Check digit scheme*.

3.3.4.19 SSN number - patient (ST) 00122

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

3.3.4.20 Driver's license number - patient (DLN) 00123

Components: <license number (ST)> ^ <issuing state, province, country (IS)> ^ <expiration date (DT)>

Definition: This field contains the patient's driver's license number. Some sites may use this number as a unique identifier of the patient. The default of the second component is the state in which the patient's license is registered.

3.3.4.21 Mother's identifier (CX) 00124

Components: <ID (ST)> ^ <check digit (ST)> ^ <code identifying the check digit scheme employed (ID)> ^ <assigning authority (HD)> ^ <identifier type code (IS)> ^ <assigning facility (HD)>

Subcomponents of assigning authority: <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (ID)>

Subcomponents of assigning facility: <namespace ID (IS)> & <universal ID (ST)> & <universal ID type (ID)>

Definition: This field is used, for example, as a link field for newborns. Typically a patient ID or account number may be used. This field can contain multiple identifiers for the same mother. Refer to *HL7 table 0061 - Check digit scheme*.

3.3.4.22 Ethnic group (IS) 00125

Definition: This field further defines the patient's ancestry. Refer to *user-defined table 0189 - Ethnic group* for suggested values. ERISA has a published list of ethnic classifications that may be used by local agreement at a site.

3.3.4.23 Birth place (ST) 00126

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

3.3.4.24 Multiple birth indicator (ID) 00127

Definition: This field indicates whether the patient was part of a multiple birth. Refer to *HL7 table 0136 - Yes/No indicator*.

3.3.4.25 Birth order (NM) 00128

Definition: When a patient was part of a multiple birth, a value (number) indicating the patient's birth order is entered in this field.

3.3.4.26 Citizenship (IS) 00129

Definition: This field contains the patient's country of citizenship. HL7 recommends using ISO table 3166 as the suggested values in *user-defined table 0171 - Citizenship*.

3.3.4.27 Veterans military status (CE) 00130

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

Definition: This field contains the military status assigned to a veteran. Refer to *user-defined table 0172 - Veterans military status* for suggested values.

3.3.4.28 Nationality (CE) 00739

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

Definition: This field contains a code that identifies the nation or national grouping to which the insured person belongs. This information may be different from a person's citizenship in countries in which multiple nationalities are recognized (for example, Spain: Basque, Catalan, etc.). HL7 recommends using ISO table 3166 as he suggested values in *user-defined table 0212 - Nationality*.

3.3.4.29 Patient death date and time (TS) 00740

Definition: This field contains the date and time at which the patient death occurred.

3.3.4.30 Patient death indicator (ID) 00741

Definition: This field indicates whether the patient is deceased. Refer to *HL7 Table 0136 - Yes/no Indicator* for valid values.

3.3.4.31 Usage notes: PID patient identification

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

HL7 implementations that have more than a single Patient Administration application assigning such numbers.

**Logical Observation Identifier
Names and Codes (LOINC[®]) Consortium**

**Code Tables for the HL7 “Additional Information to Support a
Healthcare Claim or Encounter” Message: Ambulance**

Feb 6, 1999

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Logical Observation Identifier Names and Codes (LOINC®) Consortium

Code Tables for the HL7 “Additional Information to Support a Healthcare Claim or Encounter” Message: Ambulance

1 Introduction

This LOINC publication provides the code values that are used in:

- ASC X12N Implementation Guide for Use of the 275 Transaction (004020) Additional Information to Support a Health Care Claim or Encounter, which is a product of subcommittee X12N of Accredited Standards Committee X12^{1,2}
- ASC X12N Implementation Guide for Use of the 277 Transaction (004020) Health Care Claim, Request for Additional Information
- Health Level Seven (HL7) Implementation Guide for Additional Information to Support a Healthcare Claim or Encounter.³

The format of this document and the methods used to arrive at its contents are prescribed in the HL7 Implementation Guide.

These documents together compose a proposed solution for the requirement for electronic transmission of claims attachments included in the Health Insurance Portability and Accountability Act (HIPAA). For a comprehensive understanding of the solution proposed in these documents, the following reading sequence is suggested:

- *ASC X12N Implementation Guide for Use of the 277 Transaction (004020) Health Care Claim, Request for Additional Information*
- *ASC X12N Implementation Guide for Use of the 275 Transaction (004020) Additional Information to Support a Health Care Claim or Encounter*
- *Health Level Seven (HL7) Implementation Guide for Additional Information to Support a Healthcare Claim or Encounter Version 1.0*
- *Logical Observation Identifier Names and Codes (LOINC™) Consortium Modifier Codes in the ASC X12N Implementation Guide for the 277 Requests for Additional Information Transaction*
- The Logical Observation Identifier Names and Codes (LOINC®) Consortium booklets containing the code tables for the Ambulance, Clinical Reports, Emergency Department, Laboratory Results, Medications and Rehabilitation Services messages. These booklets may be read in any order.

¹Information on this and other X12/HIPAA-related implementation guides is available from the Washington Publishing Company, Gaithersburg, MD. <http://www.wpc-edi.com/>

² Within this LOINC document, references to the transaction defined by these X12 implementation guides will be abbreviated by calling them 275 and 277.

³ Health Level Seven Inc., 3300 Washtenaw Ave., Suite 227, Ann Arbor, MI 48104-4261. (<http://www.hl7.org>)

- One additional document serves as a reference: *Logical Observation Identifier Names and Codes (LOINC®) Consortium Codes for the HL7 and X12 Additional Information to Support a Health Care Claim or Encounter Transactions: Summary Listing*

1.1 Revision History

<i>Date</i>	<i>Purpose</i>
Jan 12, 1999	Initial release to accompany HL7 Ballot.
Feb 6, 1999	Initial release to accompany HL7 Ballot.

2 HL7 Message Variants

All data elements for the Ambulance Electronic Attachment are sent using the Ambulance Message Variant, described below.

2.1 Ambulance Message Variant

The HL7 ORU message (trigger event R01) is the basis for the Ambulance Message Variant. Its segment pattern is:

ORU	Observational Results (Unsolicited)	Chapter
MSH	Message Header	2
PID	Patient Identification	3
{OBR	Observations Report ID	7
{OBX}	Observation/Result	7
}		

The following fields are used in each segment. Fields that are not included must be null. The column labeled Analysis Reference is used to correlate the information with the Data Elements for Ambulance Systems.

SEQ	ELEMENT NAME	REQUIRED VALUE
MSH-1	Field Separator	(recommended)
MSH-2	Encoding Characters	^~\& (recommended)
MSH-7	Date/Time Of Message	
MSH-9	Message Type	ORU^R01
MSH-10	Message Control ID	
MSH-11	Processing ID	P
MSH-12	Version ID	2.3
MSH-15	Accept Acknowledgment Type	NE
MSH-16	Application Acknowledgment Type	NE
<p>Coding Example, MSH Segment.</p> <p>Scenario. (An HL7 message was prepared for inclusion in a 275 at 2:35 PM on August 12, 1998. The system which prepared the message identified it as "Regenstrief0128765419")</p> <p>Example:</p> <pre>MSH ^~\& 199808121425 ORU^R01 Regenstrief0128765419 P 2.3 NE NE<CR></pre>		
PID-3	Patient ID (Internal ID)	Provider identification number for patient.
PID-5	Patient Name	
PID-9	Patient Alias	
PID-11	Patient Address	
PID-18	Patient Account	
<p>Coding Example, PID Segment.</p> <p>Scenario. The HL7 message is about transportation for patient Jon J Jay, who lives at 124 N. Elm St, Elmo, Utah, 85912. In the sending system the patient is identified by the number 184569. The claim that is the subject of the 275 is associated with billing account X48507924 in the sending system. In previous services, the patient has been identified as JJ Jay and John J. Jay.</p> <p>Example:</p> <pre>PID 184569 Jay^Jon^J Jay^JJ~Jay^John^J 124 Elm St^^Elmo^UT^85912 X48507924<CR></pre>		
OBR-4	Universal Service ID	Code to identify attachment data element in value table.
<p>Coding Example, OBR Segment.</p> <p>Scenario. The message was sent in response to a 277 that requested the referral source (LOINC code 18584-3).</p> <p>Example:</p> <pre>OBR 18584-3</pre>		
OBX-2	Value Type	Code to identify data type of OBX-5, see value table.
OBX-3	Observation Identifier	See value table.
OBX-4	Observation Sub-ID	Always empty.
OBX-5	Observation Value and code source	See value table.
OBX-6	Units	See value table.
OBX-11	Observ result status	Always send "F".
<p>Coding Example, OBX Segment.</p> <p>Scenario. The EMS attendants estimated the weight of the patient as 310 pounds.</p> <p>Example:</p> <pre>OBX NM 8335-2 310 lb^ans+ F<CR></pre>		

3 LOINC Codes

3.1 Ambulance Supporting Documentation

The following LOINC codes shall be used to designate ambulance supporting documentation in a 277 request for, or a 275 transmission of, supporting documentation for a healthcare claim.

3.2 Scope Modification Codes

Another booklet, *LOINC Modifier Codes in the ASC X12N Implementation Guide for the 277 Requests for Additional Information Transaction*⁴ provides code values for modifying the scope of requests for information in an X12 277 transaction. Those codes apply to all electronic attachments, including this one.

3.3 Data Elements

The LOINC code below is used to designate the entire set of data elements associated with Ambulance. When used in a 277, it requests all the data elements listed below. When used in a 275, it indicates that the entire set is being sent.

<i>LOINC code</i>	<i>Observation Name</i>
18682-5	AMBULANCE SUPPORTING DOCUMENTATION

The following Ambulance data elements are described in this document. The accompanying LOINC codes may be used in 275 and 277 transactions as defined in the associated ASC X12N Implementation Guides. In addition, the LOINC codes are used in the OBR-4 field in HL7 ORU message.

<i>LOINC code</i>	<i>Name</i>
18584-3	BODY WEIGHT AT EMS TRANSPORT (COMPOSITE)
15517-6	EMS TRANSPORT, TRANSPORT DIRECTION
15509-3	EMS TRANSPORT, RATIONALE FOR CHOICE OF DESTINATION
15510-1	EMS TRANSPORT, DISTANCE TRANSPORTED
15511-9	EMS TRANSPORT, ORIGINATION SITE INFORMATION (COMPOSITE)
15512-7	EMS TRANSPORT, DESTINATION SITE INFORMATION (COMPOSITE)
15513-5	EMS TRANSPORT, REASON FOR SCHEDULED TRIP (COMPOSITE)
18588-4	EMS TRANSPORT, PURPOSE OF STRETCHER (NARRATIVE)
18589-2	EMS TRANSPORT, ADMITTED AT DESTINATION FACILITY
15514-3	EMS TRANSPORT, ORDERING PRACTITIONER (COMPOSITE)
18591-8	CONFINED TO BED BEFORE EMS TRANSPORT
18592-6	CONFINED TO BED AFTER EMS TRANSPORT
18593-4	EMS TRANSPORT, DISCHARGED FROM ORIGIN INSTITUTION
15515-0	EMS TRANSPORT, MEDICAL REASON FOR UNSCHEDULED TRIP
15516-8	EMS TRANSPORT, JUSTIFICATION FOR EXTRA ATTENDANTS

⁴ The LOINC Consortium, c/o the Regenstrief Institute, 1001 West 10th Street RG-5, Indianapolis, IN 46202, 317/630-7433.

4 Value Table

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBR-4: 18584-3	BODY WEIGHT AT EMS TRANSPORT (COMPOSITE) Use different OBX-3 depending on how determined.		1..1	
OBX-3: 3141-9	BODY WEIGHT (MEASURED) lb Pounds kg Kilograms	NM	1..1	OBX-6^3: PtWtUnits
or OBX-3: 3142-7	BODY WEIGHT (STATED) lb Pounds kg Kilograms	NM	1..1	OBX-6^3: PtWtUnits
or OBX-3: 8335-2	BODY WEIGHT (ESTIMATED) lb Pounds kg Kilograms	NM	1..1	OBX-6^3: PtWtUnits
OBR-4: 15517-6	EMS TRANSPORT, TRANSPORT DIRECTION		1..1	
OBX-3: 15517-6	I initial trip R return trip T transfer trip X round trip	CE	1..1	OBX-5^3: HL79007
OBR-4: 15509-3	EMS TRANSPORT, RATIONALE FOR CHOICE OF DESTINATION Code indicates if patient was transported to the nearest facility or for other considerations.		1..1	
OBX-3: 15509-3		CE	1..1	OBX-5^3: HL79008
OBR-4: 15510-1	EMS TRANSPORT, DISTANCE TRANSPORTED Number of miles traveled during this ambulance service.		1..1	
OBX-3: 15510-1	mi Miles	NM	1..1	OBX-6: mi^^ans+
OBR-4: 15511-9	EMS TRANSPORT, ORIGINATION SITE INFORMATION (COMPOSITE)		1..1	
OBX-3: 18580-1	EMS TRANSPORT, ORIGINATION SITE The name of the place from which the patient was transported. (May be "home").	ST	1..1	
OBX-3: 18581-9	EMS TRANSPORT, ORIGINATION SITE ADDRESS The address of the place from which the patient was transported.	XAD	1..1	
OBR-4: 15512-7	EMS TRANSPORT, DESTINATION SITE INFORMATION (COMPOSITE)		1..1	
OBX-3: 18582-7	EMS TRANSPORT, DESTINATION SITE The name of the destination. (May be "home")	ST	1..1	
OBX-3: 18583-5	EMS TRANSPORT, DESTINATION SITE ADDRESS	XAD	1..1	
OBR-4: 15513-5	EMS TRANSPORT, REASON FOR SCHEDULED TRIP		1..1	
OBX-3: 18814-4		CE	1..1	OBX-5^3: HL79000
OBX-3: 18815-1	EMS TRANSPORT, REASON FOR SCHEDULED TRIP ADDITIONAL SERVICE INFORMATION (NARRATIVE) Send this field if the coded response includes the designation "specify service performed."	ST	0..1	
OBR-4: 18588-4	EMS TRANSPORT, PURPOSE OF STRETCHER (NARRATIVE)		1..1	
OBX-3: 18588-4		ST	1..1	
OBR-4: 18589-2	EMS TRANSPORT, ADMITTED AT DESTINATION FACILITY		1..1	
OBX-3: 18589-2	This applies only when the patient is transported from one facility to another. N No Y Yes	CE	1..1	OBX-5^3: HL70136
OBR-4: 15514-3	EMS TRANSPORT, ORDERING PRACTITIONER The name and identification number of the physician ordering the service.		1..1	
OBX-3: 18813-6	EMS TRANSPORT, ORDERING PRACTITIONER NAME	PN	0..1	

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBX-3: 18812-8	EMS TRANSPORT, ORDERING PRACTITIONER IDENTIFIER Unique Identifying Number of the Professional who established the Plan of Treatment Once the NPI is fully implemented the NPI number will be the only identifier allowed. Until complete implementation is achieved, other identifiers such as state license numbers or UPIN are allowed. Component 3 should indicate the authority assigning the identifier as follows: NPI (National Provider Identifier), UPIN, or XX, where XX is the two-letter US Postal Service abbreviation for the state of the licensing authority.	CE	1..1	OBX-5^3: NPI
OBR-4: 18591-8	CONFINED TO BED BEFORE EMS TRANSPORT		1..1	
OBX-3: 18591-8	N No Y Yes	CE	1..1	OBX-5^3: HL70136
OBR-4: 18592-6	CONFINED TO BED AFTER EMS TRANSPORT		1..1	
OBX-3: 18592-6	N No Y Yes	CE	1..1	OBX-5^3: HL70136
OBR-4: 18593-4	EMS TRANSPORT, DISCHARGED FROM ORIGIN INSTITUTION		1..1	
OBX-3: 18593-4	A code to indicate if the patient was discharged from the first facility. This applies only when the patient is being transported from one facility to another. N No Y Yes	CE	1..1	OBX-5^3: HL70136
OBR-4: 15515-0	EMS TRANSPORT, MEDICAL REASON FOR UNSCHEDULED TRIP		0..1	
OBX-3: 15515-0		CE	0..1	OBX-5^3: HL79010
OBR-4: 15516-8	EMS TRANSPORT, JUSTIFICATION FOR EXTRA ATTENDANTS		1..1	
OBX-3: 15516-8		ST	1..1	

4.1 Coding Example

Scenario. (An HL7 message was prepared for inclusion in a 275 at 2:35 PM on August 12, 1998. The system that prepared the message identified it as “Regenstrief0128765419”) The HL7 message is about patient Rev. Elmer Elmsley, who lives at 11. Elm, Apt 6, Elmo, Utah, 85912. In the sending system the patient is identified by the number 184569. The claim that is the subject of the 275 is associated with billing account X485024 in the sending system. The message was prepared in response to a 277 which requested the distance transported (LOINC code 15510-1), the place from which the trip originated (15511-9), the destination (15512-7) and whether the patient was admitted at the destination facility (18589-2).

Rev. Elmsley was transported 7 miles from his home to Alfred Newman Neurological Institute at 25 Centscheap Ave, Whatmeworry, UT, 85912, where he was admitted.

Example: all the segments in the right column of the table below constitute the single HL7 message that conveys this report. The left column provides help in relating the example to the scenario and to the Value Table.

Message Header	MSH ^~\& 199808121425 ORU^R01 Regenstrief0128765419 P 2.3 NE NE<CR>
Patient Identification	PID 184569 Elmsley^Elmer^^^Rev X485024<CR>
Transported 7 miles	OBR 15510-1^^LN<CR> OBX NM 15510-1^^LN 7 mi^^ans+ F<CR>
Transport from	OBR 15511-9^^LN<CR> OBX ST 18580-1^^LN HOME F<CR> OBX XAD 18581-9^^LN 124 Elm St^^Elmo^UT^85912 F<CR>
Transport to	OBR 15512-7^^LN<CR> OBX ST 18582-7^^LN Alfred Newman Neurological Institute F<CR> OBX XAD 18583-5^^LN 25 Centscheap Ave^^Whatmeworry^UT^85912 F<CR>
Admitted at destination facility: Yes	OBR 18589-2^^LN<CR> OBX CE 18589-2^^LN Y^HL70136 F<CR>

5 Response Code Sets

This section describes response codes that may be used in component 3 of OBX-5, when OBX-2 indicates a CE data type. These code sets may also be used in component 3 of OBX-6 when OBX-2 indicates a numeric data type. An entry in the value table refers to these code sets by a short abbreviation, such as “ans+”. These abbreviations are used in the headings of the subsections of this section.

The values for some code sets appear directly in this document. In other cases, the section cites another document as the source.

5.1 ans+: Extended ANSI Units Codes

ANSI X3.50-1986 and extensions as defined in HL7 Version 2.3, Figure 7-13.

5.2 HL70085: HL7 Observation Results Status

HL7 table describes the status for an observation contained in an OBX segment.

Code	HL7 Observation Results Status.
C	This item is a correction to a previous result at the provider site.
R	Results entered -- not verified
S	Partial results
F	Final
P	Preliminary
X	No result can be obtained for this request/specimen

5.3 HL70103: Processing ID

Description of whether HL7 messages represent production, testing, or training transactions.

5.4 HL70136: HL7 Yes-No Indicator

HL7 Yes and No Indicators

Code	HL7 Yes-No Indicator
N	No
Y	Yes

5.5 HL79000: Reason for Scheduled EMS Trip

Justification for a scheduled ambulance trip.

Answer list changes specified by Data Coordination Committee, maintained by LOINC.

Code	Reason for Scheduled EMS Trip
1	Evaluation and Management
2	Endoscopy
3	Trach Tube/GI Tube Insertion/Placement
4	No one at home to receive the patient
5	Pre-Surgical Testing
6	Nerve Blocks
7	Cast Application/Removal
8	Cardiac Catheterization
9	Cataract Surgery
11	Other Ambulatory Surgery: Debridement Decubitus Ulcer
12	Other Ambulatory Surgery: Shunt declotting
13	Other Ambulatory Surgery: Shunt Maintenance
14	Other Ambulatory Surgery: Lithotripsy
15	Other Ambulatory Surgery: Biopsy
16	Radiation Therapy (Cobalt Therapy)
17	CAT Scans
18	MRI Scans
19	PET Scans
20	Bone Scans
21	X-Rays
22	Ultrasounds
23	Diagnostic Mammography
24	Nuclear Medicine Tests
25	Chemotherapy
27	Other Intravenous Therapy: Antibiotic
28	Other Intravenous Therapy: Hydration
29	Arterial Blood Gases
30	Other Laboratory Testing (Specify Type of Lab Test)
31	Blood Transfusions
32	Respiratory Therapy
33	Whole Body Hyperbaric Therapy
34	Other Hyperbaric Therapy
35	Physical Therapy
36	Occupational Therapy
37	Speech-Language Pathology
38	Pulmonary Function Testing
39	Cardiac Stress Testing
40	EKG/ECG/EEG
41	Renal Dialysis
42	Electroconvulsive Therapy (ECT)
43	Other Psychiatric/Psychological Services (Specify Type of Service)

Code	Reason for Scheduled EMS Trip
44	Rehabilitation
45	Detoxification

5.6 HL79007: Ambulance Trip Type

Code set characterizing the destination of an ambulance trip.

Answer list changes specified by Data Coordination Committee, maintained by LOINC.

Code	Ambulance Trip Type
I	initial trip
R	return trip
T	transfer trip
X	round trip

5.7 HL79008: Rationale for Destination

Reason for selecting ambulance destination.

Answer list changes specified by Data Coordination Committee, maintained by LOINC.

Code	Rationale for Destination
A	Patient was transported to nearest facility for care of symptoms, complaints or both.
B	Patient was transported for the benefit of a preferred physician
C	Patient was transported for the nearness of family members
D	Patient was transported for the care of a specialist or for availability of specialized equipment
E	Patient was transported due to the lack of appropriate facilities/specialist
F	Patient was transported for the care of a trauma center
G	Patient was transported for the care of a burn center
H	Patient was transported for a special care unit NOS

5.8 HL79010: Medical Reason for Unscheduled Trip

Justification for an unscheduled ambulance run.

Answer list changes specified by Data Coordination Committee, maintained by LOINC.

Code	Medical Reason for Unscheduled Trip
1	abdominal pain / problems
2	airway obstruction
3	allergic reaction
4	altered level of consciousness
5	behavioral / psychiatric disorder
6	cardiac arrest
7	cardiac rhythm disturbance
8	chest pain / discomfort
9	diabetic symptoms (hypoglycemia)
10	electrocution
11	hyperthermia
12	hypothermia
13	hypovolemia / shock
14	inhalation injury (toxic gas)
15	obvious death

Code	Medical Reason for Unscheduled Trip
16	poisoning / drug ingestion
17	pregnancy / OB delivery
18	respiratory arrest
19	respiratory distress
20	seizure
21	sexual assault / rape
22	smoke inhalation
23	stings / venomous bites
24	stroke / CVA
25	syncope / fainting
26	traumatic injury
27	vaginal hemorrhage
29	unconsciousness or shock
30	severe hemorrhage
31	spinal injury
32	DOA
33	acute respiratory distress
34	restraining psychiatric patient
35	vehicle accident
36	cardiac incident
37	trauma other than vehicle
38	overdose/poisoning
39	bedbound
41	burns
42	acute metabolic or endocrine
43	acute surgical emergency non-trauma
44	hemodynamic instability
45	acute infectious process
46	neurological/neurovascular
47	organ procurement
48	accident, possible injury
98	not applicable
99	unknown

5.9 NPI: National Provider ID

Proposed HIPAA National Provider ID. Information available from Washington Publishing Company, Gaithersburg, MD. <http://www.wpc-edi.com/>

5.10 PtWtUnits: Units for Patient Weight

All units acceptable for a measurement of patient weight

Code	Units for Patient Weight
lb	Pounds
kg	Kilograms

5.10 PtWtUnits: Units for Patient Weight

All units acceptable for a measurement of patient weight

Code	Units for Patient Weight
lb	Pounds
kg	Kilograms

**Logical Observation Identifier
Names and Codes (LOINC[®]) Consortium**

**Code Tables for the HL7 “Additional Information
to Support a Healthcare Claim or Encounter” Message:
Clinical Reports**

Feb 6, 1999

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Logical Observation Identifier Names and Codes (LOINC[®]) Consortium

Code Tables for the HL7 “Additional Information to Support a Healthcare Claim or Encounter” Message: Clinical Reports

1 Introduction

This LOINC publication provides the code values that are used in:

- ASC X12N Implementation Guide for Use of the 275 Transaction (004020) Additional Information to Support a Health Care Claim or Encounter, which is a product of subcommittee X12N of Accredited Standards Committee X12^{1,2}
- ASC X12N Implementation Guide for Use of the 277 Transaction (004020) Health Care Claim, Request for Additional Information
- Health Level Seven (HL7) Implementation Guide for Additional Information to Support a Healthcare Claim or Encounter.³

The format of this document and the methods used to arrive at its contents are prescribed in the HL7 Implementation Guide.

These documents together compose a proposed solution for the requirement for electronic transmission of claims attachments included in the Health Insurance Portability and Accountability Act (HIPAA). For a comprehensive understanding of the solution proposed in these documents, the following reading sequence is suggested:

- *ASC X12N Implementation Guide for Use of the 277 Transaction (004020) Health Care Claim, Request for Additional Information*
- *ASC X12N Implementation Guide for Use of the 275 Transaction (004020) Additional Information to Support a Health Care Claim or Encounter*
- *Health Level Seven (HL7) Implementation Guide for Additional Information to Support a Healthcare Claim or Encounter Version 1.0*
- *Logical Observation Identifier Names and Codes (LOINC[™]) Consortium Modifier Codes in the ASC X12N Implementation Guide for the 277 Requests for Additional Information Transaction*
- The Logical Observation Identifier Names and Codes (LOINC[®]) Consortium booklets containing the code tables for the Ambulance, Clinical Reports, Emergency Department, Laboratory Results, Medications and Rehabilitation Services messages. These booklets may be read in any order.

¹Information on this and other X12/HIPAA-related implementation guides is available from the Washington Publishing Company, Gaithersburg, MD. <http://www.wpc-edi.com/>

² Within this LOINC document, references to the transaction defined by these X12 implementation guides will be abbreviated by calling them 275 and 277.

³ Health Level Seven, Inc., 3300 Washtenaw Ave., Suite 227, Ann Arbor, MI 48104-4261. (<http://www.hl7.org>)

- One additional document serves as a reference: *Logical Observation Identifier Names and Codes (LOINC®) Consortium Codes for the HL7 and X12 Additional Information to Support a Health Care Claim or Encounter Transactions: Summary Listing*

1.1 Structure in Clinical Reports

Clinical reports, by their nature, vary in the amount of structure represented in the human readable version of the report. Some reports, such as electrocardiograms, present almost as much structure as a laboratory test battery. For example, they will present the heart rate, the PR interval, and the QRS axis as discrete numerical results with units. Dictated reports include varying amounts of structure, usually defined by sub headers in the report. A printed radiology report, for example, will usually, but not always, contain headers for the description of the exam and the diagnostic impression. The description may include one or two paragraphs, the impression might include numbered bullets to identify each distinct diagnostic conclusion. At the least structured extreme, some narrative reports contain no structure except for paragraphing.

HL7 ORU messages that represent clinical reports also vary in the degree to which they represent the structure that exists in the clinical report. By the nature of the HL7 ORU message, at least the patient, the identification and date of the study, and (usually) the reporting provider are included as structured and computer understandable content. The patient is identified in the PID segment. The OBR identifies the kind of report and its date.

The contents of the report are included in one or more OBX segments. The entire body of the report can be transmitted in one OBX segment. In this case, all of the narrative text is sent in the OBX-5 field of one OBX. However, the human perceptible structure that is visible on the printed report can be retained for latter redisplay to humans by proper use of paragraph separators as described below.

Some source systems reflect some of the inherent structure of a report by using more than one OBX segment to represent its contents. Separate OBX segments may be used to identify the major sections of a report, as in hospital discharge notes that use separate OBX segments to identify the history or present illness, admission date, admission diagnosis, course of treatment, discharge date and diagnosis, etc. Systems that generate reports in this fashion may further enhance their structure by using coded data for specific parts of the report, such as dates, diagnoses, procedures, etc.

The trend among HL7 sources is to use more structure in HL7 ORU messages. It is likely that the single-OBX format will be very common initially as claims attachments. Over time, ORU messages with more structure will become more common. Receivers can always retrieve and display the reports. They will be able to provide more sophisticated processing of the information on an opportunistic basis according to the amount of structured information received on a case-by-base business.

This section defines how to use HL7 message to pass clinical reports as claims attachments. Because very little is assumed about the contents of the structured information, the approach used here can be used for reports about a wide variety of functional topics. These include, but are not limited to, discharge summaries, operative notes, history and physicals, clinic visits, other assessments, and all types of diagnostic procedures including laboratory studies

The only requirements for reports that are passed using this method are:

- the patient must be identified
- the subject of the report must be identified with a LOINC code

- if the report has any structured information, it must be able to recreate the contents for a human to read by assembling the blocks of text together with the text form of the codes that are used to describe the report itself, in the sequence in which they appear in the message.

1.2 Revision History

<i>Date</i>	<i>Purpose</i>
Nov 23, 1998	Initial release
Feb 6, 1999	Technical corrections after ballot of HL7 Implementation Guide

2 HL7 Clinical Report Message Variant

All data elements for Textual Report Electronic Attachments are sent using the Clinical Report Message Variant, described below. It is used to transmit textual and structured information.

2.1 LOINC Codes and Structure

LOINC codes are used for several different purposes in the two X12 transactions and HL7 message that are used to request and provide clinical reports. The table below identifies five specific uses of LOINC codes and describes their use within the messages.

Message	<i>X12 277</i>	<i>X12 275</i>	<i>HL7 ORU</i>
Purpose of Message	<i>request further information in support of a claim</i>	<i>supply further information in support of a claim</i>	<i>transmit the clinical report within the X12 275</i>
LOINC Scope Modifier	modify the scope of a request for information	--	--
LOINC Report Subject Identifier	identify a category of clinical report that is requested (e.g., send any reports that are related to hematology)	identify the subject of the clinical report that is provided (e.g., this is a CT scan of the head)	identify the subject of the clinical report that is provided (e.g., this is a CT scan of the head) (used in OBR-4)
LOINC Report Part Identifier	identify a part of a clinical report that is requested (e.g., send the impression section)	identify a part of a clinical report that is provided (e.g., this is the impression section)	identify a part of a clinical report that is provided (e.g., this is the impression section) (used in OBX-3)

The LOINC Consortium publishes Scope Modifier codes in another publication, Another booklet, *LOINC Modifier Codes in the ASC X12N Implementation Guide for the 277 Requests for Additional Information Transaction*.⁴

LOINC Report Subject Identifier codes and Report Part Identifier codes are described in the next sections.

⁴ The LOINC Consortium, c/o the Regenstrief Institute, 1001 West 10th Street RG-5, Indianapolis, IN 46202, 317/630-7433.

2.1.1 LOINC Report Subject Identifier Codes

Clinical reports can be identified by the type of equipment that was used to generate the data (e.g., CAT scan), the body part examined (x-ray of left wrist), the subdivision of the laboratory performing the analysis (Hematology), or a challenge to the system (glucose tolerance test). Frequently many different combinations of these facets can produce information relevant to a claim.

It would be very difficult to enumerate and isolate only the combinations of these facets that represent realistic subjects for clinical reports. Indeed, such a task would never end, because individual practices continue to refine their procedures to find combinations of measurements that use improved methods, or have fewer side effects or are more economical.

At this time, the LOINC committee has chosen to provide a set of subject identifier codes that are categorical, i.e., can apply to a group of related reports. The categories were chosen based on examinations of requests for information in support of claims. The committee will refine these codes based on industry requests.

The categories it has identified do not partition the possible reports strictly into separate sets; there is deliberate overlap. Systems that initiate requests in 277 messages should choose the LOINC Report Subject Identifier Code corresponding to the category most likely to provide useful information. Responding systems should echo the requester's LOINC code in the 275 and use the LOINC Report Subject Identifier Code that most closely identifies the report in the OBR-4 data field of the HL7 message. For example, a payer may send a 277 that includes a LOINC Report Subject Identifier Code of 11515-4, PHYSICAL THERAPY REPORT (NARRATIVE). The responding 275 message would also include 11515-4. The HL7 message within might contain one OBR-4 identified with the LOINC Report Subject Identifier Code 18735-1, PHYSICAL THERAPY INITIAL ASSESSMENT (NARRATIVE) and several OBR-4s identified with LOINC Report Subject Identifier Code 11508-9, PHYSICAL THERAPY PROGRESS NOTE (NARRATIVE).

When unsolicited attachments are sent in an X12 275 message that accompanies an 837, the sender should pick the LOINC Report Subject Identifier Codes that most closely identifies the report being sent.

2.1.2 LOINC Report Part Identifier Codes

Each LOINC Report Part Identifier Code identifies a section of a report that will be sent in an OBX segment. There are no stated requirements for the sequence of the LOINC Report Part Identifier Codes within the message. When multiple OBX segments are used to contain text that are parts of a report, the text blocks should be presented to the user in the order in which they appear in the message.

2.2 Message Structure

The HL7 ORU message (trigger event R01) is used for the electronic attachment. Its segment pattern is:

ORU	Observational Results (Unsolicited)	Chapter
MSH	Message Header	2
PID	Patient Identification	3
{OBR	Observations Report ID	7
{OBX}	Observation/Result	7
}		

The following fields are used in each segment. Fields that are not included must be null.

<i>SEQ</i>	<i>ELEMENT NAME AND DATA TYPE</i>	<i>REQUIRED VALUE</i>
MSH-1	Field Separator (ST)	
MSH-2	Encoding Characters (ST)	^~\&
MSH-7	Date/Time Of Message (TS)	
MSH-9	Message Type	ORU^R01
MSH-10	Message Control ID	
MSH-11	Processing ID	P
MSH-12	Version ID	2.3
MSH-15	Accept Acknowledgment Type	NE
MSH-16	Application Acknowledgment Type	NE
<p>Coding Example, MSH Segment.</p> <p>Scenario. (An HL7 message was prepared for inclusion in a 275 at 2:35 PM on August 12, 1998. The system which prepared the message identified it as "Regenstrief0128765419")</p> <p>Example:</p> <pre>MSH ^~\& 199808121425 ORU^R01 Regenstrief0128765419 P 2.3 NE NE</pre>		
PID-3	Patient ID (Internal ID)	Provider identification number for patient.
PID-5	Patient Name (PN)	
PID-9	Patient Alias (XPN)	
PID-11	Patient Address	
PID-18	Patient Account	
<p>Coding Example, PID Segment.</p> <p>Scenario. The HL7 message is about patient Jon Hay, who lives at 124 N. Elm St, Elmo, Utah, 85912. In the sending system the patient is identified by the number 184569. The claim that is the subject of the 275 is associated with billing account X48507924 in the sending system. In previous visits the patient has been identified as JJ Hay and John J. Hay.</p> <p>Example:</p> <pre>PID 184569 Hay^Jon^J Hay^JJ~Hay^John^J 124 Elm St^Elmo^UT^85912 X48507924</pre>		
OBR-4	Universal Service ID	<p>Code to identify attachment data element in value table.</p> <p>Component five required. This data field is of the CE data type. The HL7 CE data type has six components: code, text meaning of code, coding system, local code, text meaning of local code, coding system of local code (usually "L").</p> <p>The fourth, fifth, and sixth components are generally optional. When used, they represent a local code used in the sending system that is used as an alternative identification for what is in components one through three. Even when components four and six are provided, component five is generally optional.</p> <p>The above notwithstanding, when an OBR segment is used to identify a Report Subject Identifier, components five must contain a textual description of the subject of report according to the nomenclature of the sending system.</p> <p>Components four through six may also be used to give a code that corresponds to the textual description and to identify the coding system used in the sending system. If component four is populated, component six is populated according to HL79016.</p>
OBR-7	Observation date/time	HL7 Time-stamp format that represents the clinically relevant date and time. In the case of observations taken directly from a subject, it is the actual date and time the observation was obtained. In the case of a specimen-associated study, this field shall represent the date and time the specimen was collected or obtained.

<i>SEQ</i>	<i>ELEMENT NAME AND DATA TYPE</i>	<i>REQUIRED VALUE</i>
OBR-13	Relevant clinical information (ST)	This free-text field contains any additional clinical information about the patient or specimen. This field is used to report the suspected diagnosis and clinical findings on requests for interpreted diagnostic studies. Examples include reporting the amount of inspired carbon dioxide for blood gasses, the point in the menstrual cycle for cervical pap tests, and other conditions that influence test interpretations. Senders may choose to send this information in a more structured form as a series of OBX segments that immediately follow the OBR segment.
OBR-15	Specimen source (CM)	<p>This field identifies the site where the specimen was obtained. Due to variations in the clinical situation and specific practices, specimen information may be found in one or more data fields. This data field is one possible source. Other possibilities include OBX-3 and OBX-5. Specimen information will be in OBX-3 when the LOINC code implies the specimen source (e.g., 18767-4, BLOOD GAS TESTS). Even in the case of observations whose name implies the source, additional source information may be required and specified in OBR-15, e.g., culture drawn from left arm.</p> <p>Specimen information will be in OBX-5 when it is part of a block of text that is a constituent of the report.</p> <p>When OBR-15 is present, the first component contains the specimen source name (as text) or code with the text explanation of the code in the second subcomponent. Refer to HL7 table 0070 - Source of Specimen for valid entries.</p> <p>The second component should include free text additives to the specimen such as Heparin, EDTA, or oxalate, when applicable.</p> <p>The third is a free text component describing the method of collection when that information is a part of the order. When the method of collection is logically an observation result, it should be included as a result segment.</p> <p>The fourth component specifies the body site from which the specimen was obtained, and the fifth is the site modifier. For example, the site could be antecubital fossa, and the site modifier "right." The components of the CE fields become subcomponents. Refer to HL7 table 0163 - Administrative Site for valid entries.</p> <p>The fifth component indicates whether the specimen is frozen as part of the collection method. Suggested values are F (Frozen); R (Refrigerated). If the component is blank, the specimen is assumed to be at room temperature.</p>
OBR-31	Reason for study (CE)	This optional field is code or text that accompanied the order. The code and code set is that used by the sender (possibly none.) If the field is populated, component 2 (the text) must be present, the code and coding system are optional.

<i>SEQ</i>	<i>ELEMENT NAME AND DATA TYPE</i>	<i>REQUIRED VALUE</i>
OBR-32	Principal result interpreter (CM)	<p>This field identifies the physician or other clinician that interpreted the observation and is responsible for the report content.</p> <p>This complex field contains the name and unique identification number. In other HL7 applications, it is used to contain additional information. For that reason, portions of this field that might appear in components of other data fields, appear as subcomponents here.</p> <p>Except for the subcomponents listed below, the receiver should ignore all data sent in this field.</p> <p>As always in HL7, components are shown separated by “^” and subcomponents are shown separated by “&”.</p> <p><ID number> & <family name> & <given name> & <middle initial or name> & <suffix (e.g., JR. III) > & <prefix (e.g., DR)> & <degree (e.g., MD)> & <source table></p> <p>ID number: once the NPI is fully implemented the NPI number will be the only identifier allowed. Until complete implementation is achieved, other identifiers such as state license numbers or UPIN are allowed.</p> <p>Source table: should indicate the authority assigning the identifier as follows: NPI (National Provider Identifier), UPIN, or XX, where XX is the two-letter US Postal Service abbreviation for the state of the licensing authority.</p>
<p>Coding Example, OBR Segment.</p> <p>Scenario. While reviewing a claim for a retrograde left heart catheterization, the payer requests the cardiac catheterization report using the LOINC report subject identifier 18745-0 (Cardiac catheterization report) in an X12 277 transaction. The provider echoes the LOINC code in components 1-3 of OBR-4, and then includes the CPT code in components 4-6. While the LOINC report subject identifier specifies a category including all the different cardiac catheterization procedures, the CPT code is specific to the actual procedure performed.</p> <p>Example:</p> <pre>OBR 18745-0^CARDIAC CATHETERIZATION REPORT^LN^93510 Left heart catheterization, retrograde, from the brachial artery, axillary artery or femoral artery; percutaneous^C4</pre>		
OBR-2	Value Type	Code to identify data type of OBX-5, see value table.
OBR-3	Observation Identifier	See value table. Each observation contains a part of the report identified by the LOINC code. When there is a minimum of structure the entire report may be sent as a single OBX.
OBR-4	Observation Sub-ID	May be sent at the option of the sender. to group OBX segments into logical units. The receiver can ignore this field.
OBR-5	Observation Value and code source	See value table.
OBR-6	Units	See value table.
OBR-7	Reference range (ST)	May be sent at the option of the sender. Rarely used for structured reports.
OBR-8	Abnormal flags (ID)	May be sent at the option of the sender. Rarely used for structured reports.
OBR-9	Probability (NM)	May be sent at the option of the sender. Rarely used for structured reports.
OBR-10	Nature of abnormal test (ID)	May be sent at the option of the sender. Rarely used for structured reports.
OBR-11	Observ result status (CE)	See section 2.3.
OBR-14	Date time of the observation. (TS)	Identifies the clinically significant time associated with the observation.
OBR-15	Producer's ID (ST)	May be sent at the option of the sender. Not meaningful to the receiver.

<i>SEQ</i>	<i>ELEMENT NAME AND DATA TYPE</i>	<i>REQUIRED VALUE</i>
OBX-16	Responsible observer (XCN)	May be sent at the option of the sender. Identification numbers in this field are based on the local system that originated the report.
OBX-17	Observation method (CE)	May be sent at the option of the sender.
Coding Example, OBX Segment.		
<p>Scenario. The staff practitioner name (LOINC code 18774-0) in the discharge note was Ken Cure, MD. The data is transmitted in HL7 PN (person name) format. The value F in OBX-11 is required.</p>		
<pre>OBX PN 18771-6^PROVIDER SIGNING NAME^LN Cure^Ken^^^MD F</pre>		

2.3 Use of OBX-11, Observ Result Status

In the provider's information systems environment, HL7 messages are used to send preliminary, partial, updated, final, and corrected results, and to report that no result will be available for an order, because the specimen was unusable or for other reasons. The values available for this field are designed to support these use cases, and to reflect the status of a result at various points in its life cycle.

The use cases for sending supporting documentation to not support updating a result, once it has been sent the payer. The provider must use this data field to describe the status of the information at the time that it was extracted for transmission to the payer. Accordingly, the following values, which are a subset of HL7 Table 0085, may be used.

Where the source data is administrative, provider systems do not usually track the update status of data so precisely. If the update status is not tracked, the provider shall send "F".

- C At some time prior to sending the information to the payer, a correction was posted to the provider's database. This value is the corrected value.
- R Results entered -- not verified at the time of transmission to the payer
- S Partial results
- F Final
- P Preliminary
- X No result can be obtained for this request/specimen

3 LOINC Codes

3.1 LOINC Report Subject Identifier Codes

The following codes may be used as report subject identifiers as described in section 2.1.1.

<i>LOINC code</i>	<i>Report Subject</i>	<i>Structure</i>
18733-6	AMBULATORY VISIT NOTE (NARRATIVE) (ATTENDING PHYSICIAN)	GENERAL
11485-0	ANESTHESIA RECORD TOTAL (NARRATIVE)	GENERAL
18742-7	ARTHROSCOPY REPORT (NARRATIVE)	GENERAL
18741-9	ATTENDING PHYSICIAN PROGRESS NOTE (NARRATIVE)	GENERAL
18743-5	AUTOPSY REPORT (NARRATIVE)	GENERAL
18744-3	BRONCHOSCOPY RESPIRATORY SYSTEM, REPORT	GENERAL

	(NARRATIVE)	
18745-0	CARDIAC CATHETERIZATION HEART, REPORT (NARRATIVE)	GENERAL
11486-8	CHEMOTHERAPY RECORD TOTAL (NARRATIVE)	GENERAL
11514-7	CHIROPRACTIC REPORT (NARRATIVE)	GENERAL
18746-8	COLONOSCOPY LOWER GI TRACT, REPORT (NARRATIVE)	GENERAL
11488-4	CONSULTATION NOTE (NARRATIVE)	GENERAL
11487-6	CONSULTATION REQUEST (NARRATIVE)	GENERAL
11540-2	CT ABDOMEN, REPORT (NARRATIVE)	GENERAL
11538-6	CT CHEST, REPORT (NARRATIVE)	GENERAL
11539-4	CT HEAD, REPORT (NARRATIVE)	GENERAL
18747-6	CT REPORT (NARRATIVE)	GENERAL
11526-1	CYTOLOGY REPORT (NARRATIVE)	GENERAL
18748-4	DIAGNOSTIC IMAGING REPORT (NARRATIVE)	GENERAL
11490-0	DISCHARGE NOTE (NARRATIVE) (PHYSICIAN)	HOSP DISCH
11522-0	ECHO HEART, REPORT (NARRATIVE)	CARDIAC ECHO
18760-9	ECHO REPORT (NARRATIVE)	GENERAL
11523-8	EEG BRAIN, REPORT (NARRATIVE)	GENERAL
11524-6	EKG HEART, REPORT (NARRATIVE)	EKG
18749-2	ELECTROMYEOLOGRAM REPORT (NARRATIVE)	GENERAL
18750-0	ELECTROPHYSIOLOGY HEART, REPORT (NARRATIVE)	GENERAL
15507-7	EMERGENCY VISIT NOTE (NARRATIVE)	GENERAL
18751-8	ENDOSCOPY UPPER GI TRACT, REPORT (NARRATIVE)	GENERAL
18752-6	EXERCISE STRESS TEST REPORT (NARRATIVE)	GENERAL
18753-4	FLEXIBLE SIGMOIDOSCOPY LOWER GI TRACT, REPORT (NARRATIVE)	GENERAL
11492-6	HISTORY AND PHYSICAL NOTES (NARRATIVE)	GENERAL
10155-0	HISTORY OF ALLERGIES (NARRATIVE) (REPORTED)	GENERAL
18754-2	HOLTER MONITOR HEART, REPORT (NARRATIVE)	GENERAL
15508-5	LABOR AND DELIVERY RECORD TOTAL (NARRATIVE)	GENERAL
11503-0	MEDICAL RECORD TOTAL (NARRATIVE)	GENERAL
11541-0	MRI HEAD, REPORT (NARRATIVE)	GENERAL
18755-9	MRI REPORT (NARRATIVE)	GENERAL
18756-7	MRI SPINE, REPORT (NARRATIVE)	GENERAL
18757-5	NUCLEAR MEDICINE REPORT (NARRATIVE)	GENERAL
11543-6	NURSERY RECORD TOTAL (NARRATIVE)	GENERAL
11536-0	NURSING REPORT (NARRATIVE)	GENERAL
11525-3	OBSTETRIC ECHO PELVIS+FETUS, REPORT (NARRATIVE)	GENERAL
18734-4	OCCUPATIONAL THERAPY INITIAL ASSESSMENT (NARRATIVE)	GENERAL
11507-1	OCCUPATIONAL THERAPY PROGRESS NOTE (NARRATIVE)	GENERAL
11521-2	OCCUPATIONAL THERAPY REPORT (NARRATIVE)	GENERAL
11504-8	OPERATIVE NOTE (NARRATIVE)	OP NOTE
18758-3	PET SCAN REPORT (NARRATIVE)	GENERAL
18735-1	PHYSICAL THERAPY INITIAL ASSESSMENT (NARRATIVE)	GENERAL
11508-9	PHYSICAL THERAPY PROGRESS NOTE (NARRATIVE)	GENERAL
11515-4	PHYSICAL THERAPY REPORT (NARRATIVE)	GENERAL

18736-9	PHYSICIAN INITIAL ASSESSMENT (NARRATIVE)	GENERAL
11516-2	PHYSICIAN REPORT (NARRATIVE)	GENERAL
18737-7	PODIATRY INITIAL ASSESSMENT (NARRATIVE)	GENERAL
11509-7	PODIATRY PROGRESS NOTE (NARRATIVE)	GENERAL
11517-0	PODIATRY REPORT (NARRATIVE)	GENERAL
11505-5	PROCEDURE NOTE (NARRATIVE) (PHYSICIAN)	GENERAL
11506-3	PROGRESS NOTE (NARRATIVE)	GENERAL
11527-9	PSYCHIATRIC REPORT (NARRATIVE)	GENERAL
18738-5	PSYCHOLOGY INITIAL ASSESSMENT (NARRATIVE)	GENERAL
11510-5	PSYCHOLOGY PROGRESS NOTE (NARRATIVE)	GENERAL
11518-8	PSYCHOLOGY REPORT (NARRATIVE)	GENERAL
11528-7	RADIOLOGY REPORT (NARRATIVE)	RADIOLOGY
18739-3	SOCIAL SERVICE INITIAL ASSESSMENT (NARRATIVE)	GENERAL
11519-6	SOCIAL SERVICE REPORT (NARRATIVE)	GENERAL
18740-1	SPEECH THERAPY INITIAL ASSESSMENT (NARRATIVE)	GENERAL
11512-1	SPEECH THERAPY PROGRESS NOTE (NARRATIVE)	GENERAL
11520-4	SPEECH THERAPY REPORT (NARRATIVE)	GENERAL
18759-1	SPIROMETRY RESPIRATORY SYSTEM, REPORT (NARRATIVE)	GENERAL
11529-5	SURGICAL PATHOLOGY REPORT (NARRATIVE)	GENERAL
11534-5	TEMPERATURE CHART TOTAL (NARRATIVE)	GENERAL
18761-7	TRANSFER SUMMARY	GENERAL
18762-5	VISIT NOTE (NARRATIVE) (CHIROPRACTER)	VISIT NOTE
18763-3	VISIT NOTE (NARRATIVE) (CONSULTING MD)	VISIT NOTE
18764-1	VISIT NOTE (NARRATIVE) (NURSE PRACTITIONER)	VISIT NOTE
18765-8	VISIT NOTE (NARRATIVE) (PODIATRIST)	VISIT NOTE
18766-6	VISIT NOTE (NARRATIVE) (PSYCHOLOGIST)	VISIT NOTE
11542-8	VISIT NOTE TOTAL (NARRATIVE)	VISIT NOTE

3.2 Scope Modification Codes

Another booklet, *LOINC Modifier Codes in the ASC X12N Implementation Guide for the 277 Requests for Additional Information Transaction* provides code values for modifying the scope of requests for information in the 277 transaction and describing the scope of information in a 275 transaction.

3.3 Report Structures

The Report Structure column in the table in section 3.1 refers to a pattern of report parts as described in this section. Specific reports are defined by the value tables in section 4.

The general report structure, which is defined in the following table, may be used for any of the report subjects. When the table entry in section 3.1 contains a report structure other than general, the sender may use the general structure or it may use the specified structure.

When using the general report structure, the sender may include only one OBX segment which contains TX in OBX-2, the Report Subject Identifier Code in OBX-3, and the text of the report in OBX-5.

The sender may also break the report into several sections using any HL7 Type Code in OBX-2, any published LOINC code in OBX-3, and a value appropriate to the HL7 Type Code in OBX-5.

If the type code is NM and units are appropriate, they must be specified in OBX-6. If OBX-6 is populated, component two must contain the spelled-out designation for the units.

If the type code in OBX-2 is CE, the second component of OBX-5 (the text that describes the code value) must not be null.

When the sender elects to use multiple OBX segments in the GENERAL structure, the second component of OBX-3 (the text description of the LOINC code) must be present.

3.3.1 Coding Example

Scenario: A message was created on August 14, 1998 at 5:39:24 AM.

The patient name is Patient H. Sample. The medical record ID of the patient for the sending institution is 6910828. The billing account number within the sending institution that is associated with the claim is 773789090.

The message contains a discharge note identified by LOINC code 11490-0.

The entire report is sent as a block of text in a single OBX segment. The LOINC code in OBX-3 is the same, 11490-0. The data type is text (TX). The value in OBX-11 (F) indicates that this is a final report. The repetition separator (~) separates paragraphs of the text.

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MSH|^&|||19980814053924||ORU^R01|970814053924670|P|2.3||NE|NE
PID||6910828^Y^C8||Sample^Patient^H|||||||773789090
OBR|||11490-0^^LN^^DISCHARGE NOTE
OBX|TX|11490-0^^LN||STAFF PRACTITIONER NAME: C. Cure,~~ STAFF PRACTITIONER ID:202-
03-0405~~ HOSPITAL DISCHARGE DX: Metastatic breast cancer. 2. Malignant
pleural effusion~~ HOSPITAL DISCHARGE PROCEDURES: 1. Thoracoscopy with chest
tube placement and pleurodesis~~ HISTORY OF PRESENT ILLNESS: The patient is a
very pleasant, 74-year-old female with a history of breast cancer that was
originally diagnosed in 1971. At that time she had a radical mastectomy with
postoperative radiotherapy. In 1974 she developed a chest wall recurrence and was
treated with further radiation therapy. She then went without evidence of disease
for many years until 1989 when she developed bone metastases with involvement of
her sacroiliac joint, right trochanter, and left sacral area. She was started on
Tamoxifen at that point in time and has done well until recently when she
developed shortness of breath and was found to have a larger pleural effusion.
This has been tapped on two occasions and has rapidly reaccumulated so she was
admitted at this time for thoracoscopy with pleurodesis. Of note, her CA15-3 was
44 in March of 1996 and recently was found to be 600.~~ HOSPITAL DISCHARGE
PHYSICAL FINDINGS: Physical examination at the time of admission revealed a thin,
pleasant female in mild respiratory distress. She had no adenopathy. She had
decreased breath sounds three fourths of the way up on the right side. The left
lung was mostly clear although there were a few scattered rales. Cardiac
examination revealed a regular rate and rhythm without murmurs. She had no
hepatosplenomegaly and no peripheral clubbing, cyanosis, or edema.~~ HOSPITAL
DISCHARGE STUDIES SUMMARY: A chest x-ray showed a large pleural effusion on the
right.~~ HOSPITAL COURSE: The patient was admitted. A CT scan was performed
which showed a possibility that the lung was trapped by tumor and that there were
some adhesions. The patient then underwent thoracoscopy which confirmed the
presence of a pleural peel of tumor and multiple adhesions which were taken down.
Two chest tubes were subsequently placed. These were left in place for
approximately four days after which a TALC slurry was infused and the chest tubes
were removed the following day. Because of the significant pleural peel and the
trapped lungs, it is clearly possible that the pleurodesis will not be successful
and this was explained to the patient and the family prior to the procedure.
Of note, we started her on Megace during this hospitalization because she was
having significant nausea and vomiting with the Arimidex that she had been
taking.~~ HOSPITAL DISCHARGE FOLLOWUP: The patient is being transferred to an
extended-care facility in Jasper to be closer to home, where she will remain until
she has enough strength to go home. It is possible that the fluid may
reaccumulate and require repeat tapping despite the pleurodesis that was
performed. Hopefully, however, with the combination of pleurodesis and the Megace
that she was started on, she will have improvement of her cancer and a decrease in
her pulmonary symptomatology. Overall, however, her prognosis is poor because of
her debilitated state and the status of her lungs. She is being discharged on
Tylenol with Codeine as needed for pain, Megace, and a Multivitamin. She will
have a follow-up appointment with Dr. Follow in three weeks with a chest x-ray.
They have been instructed to call us in the interim should there be any
problems.~~ PROVIDER.SIGNING NAME: C. Care, M.D.~~ PROVIDER.SIGNING ID:202-03-
0405|||||F

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4 Value Tables for Specific Report Structures

If the report subject is supported by a specific report structure, as designated in the Structure column of the table in 3.1, the sender may elect to use the pattern of OBX segments defined in the following sections.

4.1 Cardiac Echo

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBR-4: 17979-6	MITRAL VALVE ANTERIOR LEAFLET, A-C DURATION (US M-MODE)		0..1	
OBX-3: 17979-6		NM	1..1	OBX-6^3: iso+
OBR-4: 17980-4	MITRAL VALVE ANTERIOR LEAFLET, A-C SLOPE (US M-MODE)		0..1	
OBX-3: 17980-4		NM	1..1	OBX-6^3: iso+
OBR-4: 17981-2	AORTIC VALVE, ACCELERATION (US DOPPLER)		0..1	
OBX-3: 17981-2		NM	1..1	OBX-6^3: iso+
OBR-4: 17982-0	PULMONIC VALVE, ACCELERATION (US DOPPLER)		0..1	
OBX-3: 17982-0		NM	1..1	OBX-6^3: iso+
OBR-4: 17983-8	TRICUSPID VALVE, ACCELERATION (US DOPPLER)		0..1	
OBX-3: 17983-8		NM	1..1	OBX-6^3: iso+
OBR-4: 18835-9	AORTIC VALVE, AREA METHOD (NARRATIVE)		0..1	
OBX-3: 18835-9		TX	1..1	
OBR-4: 17985-3	HEART, AP DIMENSION LEFT ATRIUM/AP DIMENSION AORTA ROOT RATIO (ECHO)		0..1	
OBX-3: 17985-3		NM	1..1	OBX-6^3: iso+
OBR-4: 18010-9	AORTA, DIAMETER (ECHO)		0..1	
OBX-3: 18010-9		NM	1..1	OBX-6^3: iso+
OBR-4: 18011-7	AORTA ARCH, DIAMETER (ECHO)		0..1	
OBX-3: 18011-7		NM	1..1	OBX-6^3: iso+
OBR-4: 18012-5	AORTA ASCENDING, DIAMETER (ECHO)		0..1	
OBX-3: 18012-5		NM	1..1	OBX-6^3: iso+
OBR-4: 18013-3	AORTA DESCENDING, DIAMETER (ECHO)		0..1	
OBX-3: 18013-3		NM	1..1	OBX-6^3: iso+
OBR-4: 18014-1	AORTA ISTHMUS, DIAMETER (ECHO)		0..1	
OBX-3: 18014-1		NM	1..1	OBX-6^3: iso+
OBR-4: 18015-8	AORTA ROOT, DIAMETER (ECHO)		0..1	
OBX-3: 18015-8		NM	1..1	OBX-6^3: iso+
OBR-4: 18016-6	AORTIC VALVE ORIFICE, DIAMETER (ECHO)		0..1	
OBX-3: 18016-6		NM	1..1	OBX-6^3: iso+
OBR-4: 18018-2	HEART VENTRICLE LEFT OUTFLOW-TRACT, DIAMETER (ECHO)		0..1	
OBX-3: 18018-2		NM	1..1	OBX-6^3: iso+
OBR-4: 18017-4	MITRAL VALVE ORIFICE, DIAMETER (ECHO)		0..1	
OBX-3: 18017-4		NM	1..1	OBX-6^3: iso+
OBR-4: 18019-0	PULMONARY ARTERY LEFT, DIAMETER (ECHO)		0..1	
OBX-3: 18019-0		NM	1..1	OBX-6^3: iso+
OBR-4: 18020-8	PULMONARY ARTERY MAIN, DIAMETER (ECHO)		0..1	
OBX-3: 18020-8		NM	1..1	OBX-6^3: iso+
OBR-4: 18021-6	PULMONARY ARTERY RIGHT, DIAMETER (ECHO)		0..1	
OBX-3: 18021-6		NM	1..1	OBX-6^3: iso+
OBR-4: 18022-4	PULMONIC VALVE ORIFICE, DIAMETER (ECHO)		0..1	
OBX-3: 18022-4		NM	1..1	OBX-6^3: iso+
OBR-4: 18023-2	TRICUSPID VALVE ORIFICE, DIAMETER (ECHO)		0..1	
OBX-3: 18023-2		NM	1..1	OBX-6^3: iso+
OBR-4: 18024-0	HEART ATRIUM LEFT, DIAMETER ANTERIOR-POSTERIOR SYSTOLE (US M-MODE)		0..1	
OBX-3: 18024-0		NM	1..1	OBX-6^3: iso+

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBR-4: 18025-7	HEART, DIAMETER ANTERIOR-POSTERIOR SYSTOLE/DIAMETER AORTA ROOT RATIO (ECHO)		0..1	
OBX-3: 18025-7		NM	1..1	OBX-6^3: iso+
OBR-4: 18043-0	HEART VENTRICLE LEFT, EJECTION FRACTION VFR (ECHO)		0..1	
OBX-3: 18043-0		NM	1..1	OBX-6^3: iso+
OBR-4: 18054-7	HEART VENTRICLE SEPTUM, FRACTIONAL THICKNESS LENFR (US 2D)		0..1	
OBX-3: 18054-7		NM	1..1	OBX-6^3: iso+
OBR-4: 18057-0	MITRAL VALVE, GRADIENT MAX PRESSURE (US DOPPLER)		0..1	
OBX-3: 18057-0		NM	1..1	OBX-6^3: iso+
OBR-4: 18058-8	PULMONIC VALVE, GRADIENT MAX PRESSURE (US DOPPLER)		0..1	
OBX-3: 18058-8		NM	1..1	OBX-6^3: iso+
OBR-4: 18059-6	MITRAL VALVE, GRADIENT MEAN PRESSURE (US DOPPLER)		0..1	
OBX-3: 18059-6		NM	1..1	OBX-6^3: iso+
OBR-4: 18060-4	PULMONIC VALVE, GRADIENT MEAN PRESSURE (US DOPPLER)		0..1	
OBX-3: 18060-4		NM	1..1	OBX-6^3: iso+
OBR-4: 18061-2	AORTIC VALVE, GRADIENT SYSTOLE MAX PRESSURE (US DOPPLER DERIVED FULL BERNOULLI)		0..1	
OBX-3: 18061-2		NM	1..1	OBX-6^3: iso+
OBR-4: 18062-0	AORTIC VALVE, GRADIENT SYSTOLE MAX PRESSURE (US DOPPLER DERIVED SIMPLIFIED BERNOULLI)		0..1	
OBX-3: 18062-0		NM	1..1	OBX-6^3: iso+
OBR-4: 18064-6	HEART VENTRICLE LEFT OUTFLOW-TRACT, GRADIENT SYSTOLE MAX PRESSURE (US DOPPLER)		0..1	
OBX-3: 18064-6		NM	1..1	OBX-6^3: iso+
OBR-4: 18065-3	TRICUSPID VALVE REGURGITANT JET, GRADIENT SYSTOLE MAX PRESSURE (US DOPPLER)		0..1	
OBX-3: 18065-3		NM	1..1	OBX-6^3: iso+
OBR-4: 18063-8	AORTIC VALVE, GRADIENT SYSTOLE MEAN PRESSURE (US DOPPLER DERIVED SIMPLIFIED BERNOULLI)		0..1	
OBX-3: 18063-8		NM	1..1	OBX-6^3: iso+
OBR-4: 18066-1	AORTIC VALVE, GRADIENT SYSTOLE MEAN PRESSURE (US DOPPLER DERIVED FULL BERNOULLI)		0..1	
OBX-3: 18066-1		NM	1..1	OBX-6^3: iso+
OBR-4: 19006-6	CARDIAC ECHO IMAGING DEVICE, IMAGE QUALITY (NARRATIVE) (ECHO)		0..1	
OBX-3: 19006-6		TX	1..1	
OBR-4: 18068-7	AORTIC VALVE, INTERVAL FROM Q-WAVE TO AORTIC VALVE OPENS (EKG US)		0..1	
OBX-3: 18068-7		NM	1..1	OBX-6^3: iso+
OBR-4: 18069-5	HEART ATRIUM RIGHT, INTRACHAMBER MEAN PRESSURE (ESTIMATED FROM JUGULAR VENOUS DISTENTION)		0..1	
OBX-3: 18069-5		NM	1..1	OBX-6^3: iso+
OBR-4: 18070-3	HEART ATRIUM RIGHT, INTRACHAMBER MEAN PRESSURE (ECHO)		0..1	
OBX-3: 18070-3		NM	1..1	OBX-6^3: iso+
OBR-4: 18078-6	HEART VENTRICLE RIGHT, MAJOR AXIS DIASTOLE MAX LENGTH (US 2D)		0..1	
OBX-3: 18078-6		NM	1..1	OBX-6^3: iso+
OBR-4: 18079-4	HEART VENTRICLE RIGHT, MAJOR AXIS SYSTOLE MIN LENGTH (US 2D)		0..1	

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBX-3: 18079-4		NM	1..1	OBX-6^3: iso+
OBR-4: 18087-7	HEART VENTRICLE LEFT, MYOCARDIUM MASS (ECHO)		0..1	
OBX-3: 18087-7		NM	1..1	OBX-6^3: iso+
OBR-4: 18089-3	AORTIC VALVE, ORIFICE AREA (ECHO)		0..1	
OBX-3: 18089-3		NM	1..1	OBX-6^3: iso+
OBR-4: 18095-0	PULMONARY ARTERY MAIN, ORIFICE AREA (ECHO)		0..1	
OBX-3: 18095-0		NM	1..1	OBX-6^3: iso+
OBR-4: 18096-8	PULMONIC VALVE, ORIFICE AREA (US CONTINUITY)		0..1	
OBX-3: 18096-8		NM	1..1	OBX-6^3: iso+
OBR-4: 18097-6	MITRAL VALVE, ORIFICE MIN AREA (US DOPPLER PRESSURE HALFTIME)		0..1	
OBX-3: 18097-6		NM	1..1	OBX-6^3: iso+
OBR-4: 18106-5	CARDIAC ECHO STUDY, PROCEDURE		0..1	
OBX-3: 18106-5		TX	1..1	
OBR-4: 18836-7	CARDIAC STRESS STUDY, PROCEDURE (NARRATIVE)		0..1	
OBX-3: 18836-7		TX	1..1	
OBR-4: 18837-5	HEART VENTRICLE LEFT, SEGMENTAL WALL APPEARANCE FINDING (NARRATIVE) (ECHO)		0..1	
OBX-3: 18837-5		TX	1..1	
OBR-4: 18118-0	HEART VENTRICLE LEFT, SEGMENTAL WALL MOTION FINDING (NARRATIVE) (ECHO)		0..1	
OBX-3: 18118-0		TX	1..1	
OBR-4: 18141-2	ECHO CARDIOVASCULAR CENTRAL, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 18141-2		TX	1..1	
OBR-4: 18143-8	ECHO HEART CHAMBERS, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 18143-8		TX	1..1	
OBR-4: 18144-6	ECHO HEART VALVES, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 18144-6		TX	1..1	
OBR-4: 18146-1	CARDIOVASCULAR CENTRAL, STUDY OBSERVATION OVERALL (NARRATIVE) (ECHO)		0..1	
OBX-3: 18146-1		TX	1..1	
OBR-4: 18838-3	CARDIAC ECHO STUDY, TRANSDUCER SITE (NARRATIVE)		0..1	
OBX-3: 18838-3		TX	1..1	
OBR-4: 18839-1	CARDIAC ECHO IMAGING DEVICE, ULTRASOUND CLASS (NARRATIVE)		0..1	
OBX-3: 18839-1		TX	1..1	
OBR-4: 18840-9	HEART VENTRICLE LEFT, WALL MOTION INDEX (NARRATIVE) (ECHO)		0..1	
OBX-3: 18840-9		TX	1..1	

4.2 EKG

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBR-4: 9866-5	HEART, AXIS (NARRATIVE) (EKG)		0..1	
OBX-3: 9866-5		TX	1..1	
OBR-4: 9867-3	HEART, CARDIAC PACEMAKER PROSTHETIC (NARRATIVE) (EKG)		0..1	
OBX-3: 9867-3		TX	1..1	
OBR-4: 18843-3	HEART, COMPARISON STUDY (NARRATIVE) (EKG)		0..1	
OBX-3: 18843-3		TX	1..1	
OBR-4: 8598-5	HEART, COMPARISON STUDY DATE AND TIME (EKG)		0..1	

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBX-3: 8598-5		TS	1..1	
OBR-4: 9868-1	HEART, CONDUCTION (NARRATIVE) (EKG)		0..1	
OBX-3: 9868-1		TX	1..1	
OBR-4: 18844-1	HEART, EKG IMPRESSION (NARRATIVE) (EKG)		0..1	
OBX-3: 18844-1		TX	1..1	
OBR-4: 9869-9	HEART, HYPERTROPHY (NARRATIVE) (EKG)		0..1	
OBX-3: 9869-9		TX	1..1	
OBR-4: 9872-3	HEART, MYOCARDIAL ISCHEMIA (NARRATIVE) (EKG)		0..1	
OBX-3: 9872-3		TX	1..1	
OBR-4: 8626-4	HEART, P WAVE AXIS ANGLE (EKG)		0..1	
OBX-3: 8626-4		NM	1..1	OBX-6^3: iso+
OBR-4: 18516-5	REFERENCE BEAT, P WAVE AXIS FRONTAL PLANE ANGLE (EKG)		0..1	
OBX-3: 18516-5		NM	1..1	OBX-6^3: iso+
OBR-4: 18506-6	HEART, P WAVE AXIS HORIZONTAL PLANE ANGLE (EKG)		0..1	
OBX-3: 18506-6		NM	1..1	OBX-6^3: iso+
OBR-4: 8627-2	HEART, P WAVE DURATION (EKG)		0..1	
OBX-3: 8627-2		NM	1..1	OBX-6^3: iso+
OBR-4: 18512-4	REFERENCE BEAT, P WAVE OFFSET TIME (EKG)		0..1	
OBX-3: 18512-4		NM	1..1	OBX-6^3: iso+
OBR-4: 18511-6	REFERENCE BEAT, P WAVE ONSET TIME (EKG)		0..1	
OBX-3: 18511-6		NM	1..1	OBX-6^3: iso+
OBR-4: 18504-1	HEART, PP INTERVAL (EKG)		0..1	
OBX-3: 18504-1		NM	1..1	OBX-6^3: iso+
OBR-4: 8625-6	HEART, PR INTERVAL (EKG)		0..1	
OBX-3: 8625-6		NM	1..1	OBX-6^3: iso+
OBR-4: 8631-4	HEART, Q WAVE DURATION (EKG)		0..1	
OBX-3: 8631-4		NM	1..1	OBX-6^3: iso+
OBR-4: 8632-2	HEART, QRS AXIS ANGLE (EKG)		0..1	
OBX-3: 8632-2		NM	1..1	OBX-6^3: iso+
OBR-4: 18517-3	REFERENCE BEAT, QRS AXIS FRONTAL PLANE ANGLE (EKG)		0..1	
OBX-3: 18517-3		NM	1..1	OBX-6^3: iso+
OBR-4: 18507-4	HEART, QRS AXIS HORIZONTAL PLANE ANGLE (EKG)		0..1	
OBX-3: 18507-4		NM	1..1	OBX-6^3: iso+
OBR-4: 9873-1	HEART, QRS COMPLEX (NARRATIVE) (EKG)		0..1	
OBX-3: 9873-1		TX	1..1	
OBR-4: 8633-0	HEART, QRS DURATION (EKG)		0..1	
OBX-3: 8633-0		NM	1..1	OBX-6^3: iso+
OBR-4: 18514-0	REFERENCE BEAT, QRS OFFSET TIME (EKG)		0..1	
OBX-3: 18514-0		NM	1..1	OBX-6^3: iso+
OBR-4: 18513-2	REFERENCE BEAT, QRS ONSET TIME (EKG)		0..1	
OBX-3: 18513-2		NM	1..1	OBX-6^3: iso+
OBR-4: 8634-8	HEART, QT INTERVAL (EKG)		0..1	
OBX-3: 8634-8		NM	1..1	OBX-6^3: iso+
OBR-4: 18845-8	REFERENCE BEAT TYPE (NARRATIVE) (EKG)		0..1	
OBX-3: 18845-8		TX	1..1	
OBR-4: 9874-9	HEART, RHYTHM SEGMENT (NARRATIVE) (EKG)		0..1	
OBX-3: 9874-9		TX	1..1	
OBR-4: 18505-8	HEART, RR INTERVAL (EKG)		0..1	
OBX-3: 18505-8		NM	1..1	OBX-6^3: iso+
OBR-4: 18510-8	HEART, ST SEGMENT AXIS HORIZONTAL PLANE ANGLE (EKG)		0..1	
OBX-3: 18510-8		NM	1..1	OBX-6^3: iso+
OBR-4: 9875-6	HEART, ST-T SEGMENT (NARRATIVE) (EKG)		0..1	
OBX-3: 9875-6		TX	1..1	
OBR-4: 18810-2	HEART, STUDY OBSERVATION OVERALL FINDING (NARRATIVE) (EKG)		0..1	

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBX-3: 18810-2		TX	1..1	
OBR-4: 8638-9	HEART, T WAVE AXIS ANGLE (EKG)		0..1	
OBX-3: 8638-9		NM	1..1	OBX-6^3: iso+
OBR-4: 18518-1	REFERENCE BEAT, T WAVE AXIS FRONTAL PLANE ANGLE (EKG)		0..1	
OBX-3: 18518-1		NM	1..1	OBX-6^3: iso+
OBR-4: 18515-7	REFERENCE BEAT, T WAVE OFFSET TIME (EKG)		0..1	
OBX-3: 18515-7		NM	1..1	OBX-6^3: iso+
OBR-4: 8621-5	HEART, VENTRICULAR ECTOPICS RATE (EKG)		0..1	
OBX-3: 8621-5		NM	1..1	OBX-6^3: iso+
OBR-4: 9876-4	VENTRICULAR MORPHOLOGY (NARRATIVE) (EKG)		0..1	
OBX-3: 9876-4		TX	1..1	

4.3 OB Echo

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBR-4: 11616-0	FETUS HEART, ACTIVITY FINDING (NARRATIVE) (ULTRASOUND)		0..1	
OBX-3: 11616-0		TX	1..1	
OBR-4: 11618-6	FETUS LIMBS, ACTIVITY FINDING (NARRATIVE) (ULTRASOUND)		0..1	
OBX-3: 11618-6		TX	1..1	
OBR-4: 11620-2	FETUS RESPIRATORY SYSTEM, ACTIVITY FINDING (NARRATIVE) (ULTRASOUND)		0..1	
OBX-3: 11620-2		TX	1..1	
OBR-4: 11627-7	FETUS AMNIOTIC FLUID, INDEX SUM LENGTH (ULTRASOUND DERIVED)		0..1	
OBX-3: 11627-7		NM	1..1	OBX-6^3: iso+
OBR-4: 11636-8	BIRTHS LIVE (REPORTED)		0..1	
OBX-3: 11636-8		NM	1..1	OBX-6^3: iso+
OBR-4: 11637-6	BIRTHS PRETERM (REPORTED)		0..1	
OBX-3: 11637-6		NM	1..1	OBX-6^3: iso+
OBR-4: 11638-4	BIRTHS STILL LIVING (REPORTED)		0..1	
OBX-3: 11638-4		NM	1..1	OBX-6^3: iso+
OBR-4: 11639-2	BIRTHS TERM (REPORTED)		0..1	
OBX-3: 11639-2		NM	1..1	OBX-6^3: iso+
OBR-4: 11640-0	BIRTHS TOTAL (REPORTED)		0..1	
OBX-3: 11640-0		NM	1..1	OBX-6^3: iso+
OBR-4: 11727-5	FETUS, BODY WEIGHT (ULTRASOUND ESTIMATED)		0..1	
OBX-3: 11727-5		NM	1..1	OBX-6^3: iso+
OBR-4: 11766-3	FETUS, BODY WEIGHT PERCENTILE PERCENTILE (COMP OF EST FETAL WGT W STD POP DIST AT SAME ESTGA)		0..1	
OBX-3: 11766-3		NM	1..1	OBX-6^3: iso+
OBR-4: 11767-1	MOTHER BODY WEIGHT PERCENTILE PERCENTILE (COMP OF EST FETAL WGT W STD POP DIST AT SAME ESTGA)		0..1	
OBX-3: 11767-1		NM	1..1	OBX-6^3: iso+
OBR-4: 11768-9	FETUS, BODY WEIGHT PERCENTILE RANGE PERCENTILE (CATEGORIZATION BY COMPARISON WITH STANDARDS)		0..1	
OBX-3: 11768-9		NM	1..1	OBX-6^3: iso+
OBR-4: 11769-7	MOTHER BODY WEIGHT PERCENTILE RANGE PERCENTILE (CATEGORIZATION BY COMPARISON WITH STANDARDS)		0..1	
OBX-3: 11769-7		NM	1..1	OBX-6^3: iso+
OBR-4: 11778-8	DELIVERY DATE (CLINICAL ESTIMATE)		0..1	
OBX-3: 11778-8		DT	1..1	
OBR-4: 11779-6	DELIVERY DATE (ESTIMATED FROM LAST MENSTRUAL PERIOD)		0..1	

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBX-3: 11779-6		DT	1..1	
OBR-4: 11780-4	DELIVERY DATE (ESTIMATED FROM OVULATION DATE)		0..1	
OBX-3: 11780-4		DT	1..1	
OBR-4: 11781-2	DELIVERY DATE (ULTRASOUND COMPOSITE ESTIMATED)		0..1	
OBX-3: 11781-2		DT	1..1	
OBR-4: 11867-9	CERVIX, EFFACEMENT PERCENTILE (PALPATION)		0..1	
OBX-3: 11867-9		NM	1..1	OBX-6^3: iso+
OBR-4: 18846-6	EXAMINATION LEVEL ULTRASOUND (NARRATIVE)		0..1	
OBX-3: 18846-6		NM	1..1	OBX-6^3: iso+
OBR-4: 18847-4	PELVIS, FETAL POSITION (NARRATIVE) (PALPATION)		0..1	
OBX-3: 18847-4		TX	1..1	
OBR-4: 18848-2	PELVIS, FETAL POSITION (NARRATIVE) (ULTRASOUND)		0..1	
OBX-3: 18848-2		TX	1..1	
OBR-4: 18849-0	PELVIS, FETAL PRESENTATION (NARRATIVE) (PALPATION)		0..1	
OBX-3: 18849-0		TX	1..1	
OBR-4: 18850-8	PELVIS, FETAL PRESENTATION (NARRATIVE) (ULTRASOUND)		0..1	
OBX-3: 18850-8		TX	1..1	
OBR-4: 11878-6	FETUSES (ULTRASOUND)		0..1	
OBX-3: 11878-6		NM	1..1	OBX-6^3: iso+
OBR-4: 11879-4	OVARY LEFT, FOLLICLES (ULTRASOUND)		0..1	
OBX-3: 11879-4		NM	1..1	OBX-6^3: iso+
OBR-4: 11880-2	OVARY RIGHT, FOLLICLES (ULTRASOUND)		0..1	
OBX-3: 11880-2		NM	1..1	OBX-6^3: iso+
OBR-4: 11881-0	UTERUS, FUNDAL HEIGHT (TAPE MEASURE)		0..1	
OBX-3: 11881-0		NM	1..1	OBX-6^3: iso+
OBR-4: 11883-6	FETUS, GENDER FINDING (NARRATIVE) (ULTRASOUND)		0..1	
OBX-3: 11883-6		TX	1..1	
OBR-4: 11884-4	FETUS, GESTATIONAL AGE (CLINICAL ESTIMATE)		0..1	
OBX-3: 11884-4		NM	1..1	OBX-6^3: iso+
OBR-4: 11885-1	FETUS, GESTATIONAL AGE (ESTIMATED FROM LAST MENSTRUAL PERIOD)		0..1	
OBX-3: 11885-1		NM	1..1	OBX-6^3: iso+
OBR-4: 11886-9	FETUS, GESTATIONAL AGE (ESTIMATED FROM OVULATION DATE)		0..1	
OBX-3: 11886-9		NM	1..1	OBX-6^3: iso+
OBR-4: 11887-7	FETUS, GESTATIONAL AGE (ESTIMATED FROM SELECTED DELIVERY DATE)		0..1	
OBX-3: 11887-7		NM	1..1	OBX-6^3: iso+
OBR-4: 11888-5	FETUS, GESTATIONAL AGE (ULTRASOUND COMPOSITE ESTIMATED)		0..1	
OBX-3: 11888-5		NM	1..1	OBX-6^3: iso+
OBR-4: 18851-6	FETUS PLACENTA, GRADE (NARRATIVE) (ULTRASOUND)		0..1	
OBX-3: 18851-6		ST	1..1	
OBR-4: 11947-9	FETUS, HEAD CIRCUMFERENCE/ABDOMINAL CIRCUMFERENCE RATIO (ULTRASOUND DERIVED)		0..1	
OBX-3: 11947-9		NM	1..1	OBX-6^3: iso+
OBR-4: 11948-7	FETUS, HEART RATE RATE (ULTRASOUND MEASURED)		0..1	
OBX-3: 11948-7		NM	1..1	OBX-6^3: iso+
OBR-4: 11949-5	FETUS, IDENTIFICATION CRITERIA FINDING (ULTRASOUND)		0..1	
OBX-3: 11949-5		ST	1..1	

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBR-4: 11950-3	FETUS, IDENTIFICATION CRITERIA FINDING (NARRATIVE) (ULTRASOUND)		0..1	
OBX-3: 11950-3		TX	1..1	
OBR-4: 11951-1	FETUS, IDENTIFIER		0..1	
OBX-3: 11951-1		ST	1..1	
OBR-4: 11952-9	FETUS UMBILICAL CORD PLACENTA, INSERTION SITE FINDING (NARRATIVE) (ULTRASOUND)		0..1	
OBX-3: 11952-9		TX	1..1	
OBR-4: 11955-2	LAST MENSTRUAL PERIOD DATE AND TIME (REPORTED)		0..1	
OBX-3: 11955-2		TS	1..1	
OBR-4: 11957-8	FETUS, LENGTH CROWN RUMP (ULTRASOUND MEASURED)		0..1	
OBX-3: 11957-8		NM	1..1	OBX-6^3: iso+
OBR-4: 11976-8	OVULATION DATE (REPORTED)		0..1	
OBX-3: 11976-8		TS	1..1	
OBR-4: 11977-6	PARITY (REPORTED)		0..1	
OBX-3: 11977-6		NM	1..1	OBX-6^3: iso+
OBR-4: 12029-5	ULTRASOUND FETUS ABDOMEN, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12029-5		TX	1..1	
OBR-4: 12030-3	ULTRASOUND FETUS ABDOMINAL WALL, STUDY OBSERVATION		0..1	
OBX-3: 12030-3		ST	1..1	
OBR-4: 12031-1	ULTRASOUND FETUS ABDOMINAL WALL, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12031-1		TX	1..1	
OBR-4: 12032-9	ULTRASOUND FETUS AORTA ASCENDING, STUDY OBSERVATION		0..1	
OBX-3: 12032-9		ST	1..1	
OBR-4: 12033-7	ULTRASOUND FETUS AORTA ASCENDING, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12033-7		TX	1..1	
OBR-4: 12034-5	ULTRASOUND FETUS AORTA DESCENDING, STUDY OBSERVATION		0..1	
OBX-3: 12034-5		ST	1..1	
OBR-4: 12035-2	ULTRASOUND FETUS AORTA DESCENDING, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12035-2		TX	1..1	
OBR-4: 12037-8	ULTRASOUND FETUS AORTA, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12037-8		TX	1..1	
OBR-4: 12039-4	ULTRASOUND FETUS AORTIC ARCH, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12039-4		TX	1..1	
OBR-4: 12041-0	ULTRASOUND FETUS CEREBELLUM, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12041-0		TX	1..1	
OBR-4: 12043-6	ULTRASOUND FETUS CEREBRUM, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12043-6		TX	1..1	
OBR-4: 19021-5	PALPATION CERVIX, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 19021-5		TX	1..1	
OBR-4: 12048-5	ULTRASOUND FETUS COLON, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12048-5		TX	1..1	
OBR-4: 12050-1	ULTRASOUND FETUS CRANIUM, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12050-1		TX	1..1	

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBR-4: 12052-7	ULTRASOUND FETUS DIAPHRAGM, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12052-7		TX	1..1	
OBR-4: 12054-3	ULTRASOUND FETUS DUCTAL ARCH, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12054-3		TX	1..1	
OBR-4: 12056-8	ULTRASOUND FETUS FACE, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12056-8		TX	1..1	
OBR-4: 12058-4	ULTRASOUND FETUS HEAD CHOROID PLEXUS, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12058-4		TX	1..1	
OBR-4: 12059-2	ULTRASOUND FETUS HEAD FOURTH VENTRICLE, STUDY OBSERVATION		0..1	
OBX-3: 12059-2		NM	1..1	OBX-6^3: iso+
OBR-4: 12060-0	ULTRASOUND FETUS HEAD FOURTH VENTRICLE, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12060-0		TX	1..1	
OBR-4: 12062-6	ULTRASOUND FETUS HEAD INTRACRANIAL ANATOMY, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12062-6		TX	1..1	
OBR-4: 12064-2	ULTRASOUND FETUS HEAD LATERAL CEREBRAL VENTRICLES, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12064-2		TX	1..1	
OBR-4: 12066-7	ULTRASOUND MEASURED FETUS HEAD POSTERIOR FOSSA, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12066-7		TX	1..1	
OBR-4: 12067-5	ULTRASOUND MEASURED FETUS HEAD THIRD VENTRICLE, STUDY OBSERVATION		0..1	
OBX-3: 12067-5		NM	1..1	OBX-6^3: iso+
OBR-4: 12068-3	ULTRASOUND MEASURED FETUS HEAD THIRD VENTRICLE, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12068-3		TX	1..1	
OBR-4: 12070-9	ULTRASOUND FETUS HEAD, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12070-9		TX	1..1	
OBR-4: 12072-5	ULTRASOUND FETUS HEART AORTIC VALVE, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12072-5		TX	1..1	
OBR-4: 12073-3	ULTRASOUND FETUS HEART ATRIA, STUDY OBSERVATION		0..1	
OBX-3: 12073-3		ST	1..1	
OBR-4: 12074-1	ULTRASOUND FETUS HEART ATRIA, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12074-1		TX	1..1	
OBR-4: 12076-6	ULTRASOUND FETUS HEART CHAMBERS, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12076-6		TX	1..1	
OBR-4: 12078-2	ULTRASOUND FETUS HEART GREAT VESSELS, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12078-2		TX	1..1	
OBR-4: 12080-8	ULTRASOUND FETUS HEART INTRAVENTRICULAR SEPTUM, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12080-8		TX	1..1	
OBR-4: 12081-6	ULTRASOUND FETUS HEART MITRAL VALVE, STUDY OBSERVATION		0..1	
OBX-3: 12081-6		NM	1..1	OBX-6^3: iso+
OBR-4: 12082-4	ULTRASOUND FETUS HEART MITRAL VALVE, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12082-4		TX	1..1	

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBR-4: 12083-2	ULTRASOUND FETUS HEART PULMONARY VALVE, STUDY OBSERVATION		0..1	
OBX-3: 12083-2		NM	1..1	OBX-6^3: iso+
OBR-4: 12084-0	ULTRASOUND FETUS HEART TRICUSPID VALVE, STUDY OBSERVATION		0..1	
OBX-3: 12084-0		NM	1..1	OBX-6^3: iso+
OBR-4: 12085-7	ULTRASOUND FETUS HEART TRICUSPID VALVE, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12085-7		TX	1..1	
OBR-4: 12087-3	ULTRASOUND FETUS HEART VALVES, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12087-3		TX	1..1	
OBR-4: 12088-1	ULTRASOUND FETUS HEART VENTRICULAR OUTFLOW TRACT LEFT, STUDY OBSERVATION		0..1	
OBX-3: 12088-1		NM	1..1	OBX-6^3: iso+
OBR-4: 12089-9	ULTRASOUND FETUS HEART VENTRICULAR OUTFLOW TRACT LEFT, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12089-9		TX	1..1	
OBR-4: 12090-7	ULTRASOUND FETUS HEART VENTRICULAR OUTFLOW TRACT RIGHT, STUDY OBSERVATION		0..1	
OBX-3: 12090-7		NM	1..1	OBX-6^3: iso+
OBR-4: 12091-5	ULTRASOUND FETUS HEART VENTRICULAR OUTFLOW TRACT RIGHT, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12091-5		TX	1..1	
OBR-4: 12093-1	ULTRASOUND FETUS INTESTINE, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12093-1		TX	1..1	
OBR-4: 12095-6	ULTRASOUND FETUS KIDNEY LEFT, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12095-6		TX	1..1	
OBR-4: 12097-2	ULTRASOUND FETUS KIDNEY RIGHT, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12097-2		TX	1..1	
OBR-4: 12099-8	ULTRASOUND FETUS KIDNEY, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12099-8		TX	1..1	
OBR-4: 12101-2	ULTRASOUND FETUS LIMBS, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12101-2		TX	1..1	
OBR-4: 12103-8	ULTRASOUND FETUS NUCHAL FOLD, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12103-8		TX	1..1	
OBR-4: 12105-3	ULTRASOUND FETUS PULMONARY ARTERY, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12105-3		TX	1..1	
OBR-4: 12107-9	ULTRASOUND FETUS PULMONARY VEIN, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12107-9		TX	1..1	
OBR-4: 12109-5	ULTRASOUND FETUS SMALL BOWEL, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12109-5		TX	1..1	
OBR-4: 12111-1	ULTRASOUND FETUS SPINE, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12111-1		TX	1..1	
OBR-4: 12113-7	ULTRASOUND FETUS STOMACH, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12113-7		TX	1..1	
OBR-4: 12115-2	ULTRASOUND FETUS THORAX, STUDY OBSERVATION (NARRATIVE)		0..1	

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBX-3: 12115-2		TX	1..1	
OBR-4: 12117-8	ULTRASOUND FETUS UMBILICAL CORD, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12117-8		TX	1..1	
OBR-4: 12119-4	ULTRASOUND FETUS URINARY BLADDER, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12119-4		TX	1..1	
OBR-4: 12121-0	ULTRASOUND FETUS VENA CAVA INFERIOR, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12121-0		TX	1..1	
OBR-4: 12123-6	ULTRASOUND FETUS VENA CAVA SUPERIOR, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12123-6		TX	1..1	
OBR-4: 12125-1	ULTRASOUND FETUS VENA CAVA, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12125-1		TX	1..1	
OBR-4: 12128-5	ULTRASOUND FETUS YOLK SAC, STUDY OBSERVATION (NARRATIVE)		0..1	
OBX-3: 12128-5		TX	1..1	
OBR-4: 12130-1	FETUS, STUDY OBSERVATION GENERAL (NARRATIVE) (ULTRASOUND)		0..1	
OBX-3: 12130-1		TX	1..1	
OBR-4: 12132-7	STUDY OBSERVATION GENERAL (NARRATIVE) (ULTRASOUND)		0..1	
OBX-3: 12132-7		TX	1..1	
OBR-4: 12145-9	ENDOMETRIUM, THICKNESS (ULTRASOUND MEASURED)		0..1	
OBX-3: 12145-9		NM	1..1	OBX-6^3: iso+
OBR-4: 12146-7	FETUS NUCHAL FOLD, THICKNESS (ULTRASOUND MEASURED)		0..1	
OBX-3: 12146-7		NM	1..1	OBX-6^3: iso+
OBR-4: 12147-5	FETUS PLACENTA, THICKNESS (ULTRASOUND MEASURED)		0..1	
OBX-3: 12147-5		NM	1..1	OBX-6^3: iso+
OBR-4: 19008-2	TRANSDUCER SITE (NARRATIVE)		0..1	
OBX-3: 19008-2		TX	1..1	
OBR-4: 12157-4	ULTRASONOGRAPHER GRAVIDITY NUMBER		0..1	
OBX-3: 12157-4		NM	1..1	OBX-6^3: iso+
OBR-4: 12167-3	FETUS AMNIOTIC FLUID, VOLUME AMNIOTIC FLUID (ULTRASOUND)		0..1	
OBX-3: 12167-3		ST	1..1	
OBR-4: 12170-7	FETUS HEAD, WIDTH HEMISPHERE (ULTRASOUND MEASURED)		0..1	
OBX-3: 12170-7		NM	1..1	OBX-6^3: iso+
OBR-4: 12171-5	FETUS HEAD LATERAL CEREBRAL VENTRICLES, WIDTH TRANSVERSE (ULTRASOUND MEASURED)		0..1	
OBX-3: 12171-5		NM	1..1	OBX-6^3: iso+

4.4 Hospital Discharge Summary (HOSP DISCH)

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBR-4: 10164-2	HISTORY OF PRESENT ILLNESS (NARRATIVE) (REPORTED)		0..1	
OBX-3: 10164-2		TX	1..1	
OBR-4: 8656-1	HOSPITAL ADMISSION DATE		0..1	
OBX-3: 8656-1		TS	1..1	
OBR-4: 8646-2	HOSPITAL ADMISSION DX FINDING		0..1	
OBX-3: 8646-2		CE	1..1	OBX-5^3: I9C
OBR-4: 18841-7	HOSPITAL CONSULTATIONS (NARRATIVE)		0..1	

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBX-3: 18841-7		TX	1..1	
OBR-4: 8648-8	HOSPITAL COURSE FINDING (NARRATIVE)		0..1	
OBX-3: 8648-8		TX	1..1	
OBR-4: 8649-6	HOSPITAL DISCHARGE DATE		0..1	
OBX-3: 8649-6		TS	1..1	
OBR-4: 8650-4	HOSPITAL DISCHARGE DISPOSITION (NARRATIVE)		0..1	
OBX-3: 8650-4		TX	1..1	
OBR-4: 11535-2	HOSPITAL DISCHARGE DX (NARRATIVE)		0..1	
OBX-3: 11535-2		TX	1..1	
OBR-4: 8651-2	HOSPITAL DISCHARGE DX		1..n	
OBX-3: 8651-2		CE	1..n	OBX-5^3: I9C
OBR-4: 11544-4	HOSPITAL DISCHARGE FOLLOWUP FINDING (NARRATIVE)		0..1	
OBX-3: 11544-4		TX	1..1	
OBR-4: 18842-5	HOSPITAL DISCHARGE HISTORY FINDING (NARRATIVE)		0..1	
OBX-3: 18842-5		TX	1..1	
OBR-4: 8653-8	HOSPITAL DISCHARGE INSTRUCTIONS TEXT (NARRATIVE)		0..1	
OBX-3: 8653-8		TX	1..1	
OBR-4: 10183-2	HOSPITAL DISCHARGE MEDICATIONS FINDING (NARRATIVE)		0..1	
OBX-3: 10183-2		TX	1..1	
OBR-4: 10184-0	HOSPITAL DISCHARGE PHYSICAL FINDINGS (NARRATIVE)		0..1	
OBX-3: 10184-0		TX	1..1	
OBR-4: 10185-7	HOSPITAL DISCHARGE PROCEDURES FINDING (NARRATIVE)		0..1	
OBX-3: 10185-7		TX	1..1	
OBR-4: 8655-3	HOSPITAL DISCHARGE PROCEDURES FINDING		0..1	
OBX-3: 8655-3		CE	1..1	OBX-5^3: C4
OBR-4: 11493-4	HOSPITAL DISCHARGE STUDIES SUMMARY (NARRATIVE)		0..1	
OBX-3: 11493-4		TX	1..1	
OBR-4: 18776-5	TREATMENT PLAN (NARRATIVE)		0..1	
OBX-3: 18776-5		TX	1..1	
OBR-4: 11513-9	PROVIDER SIGNING IDENTIFIER		0..1	
OBX-3: 11513-9		CE	1..1	OBX-5^3: NPI
OBR-4: 18771-6	PROVIDER SIGNING NAME		0..1	
OBX-3: 18771-6		PN	1..1	
OBR-4: 18775-7	PROVIDER, STAFF PRACTITIONER IDENTIFIER Repeat identifier and name as a pair when multiple staff practitioners are associated with the report.		0..n	
OBX-3: 18775-7		CE	1..1	OBX-5^3: NPI
OBR-4: 18774-0	PROVIDER, STAFF PRACTITIONER NAME		0..n	
OBX-3: 18774-0		PN	1..1	

4.4.1 Coding Example

Scenario. A message was created on August 14, 1998 at 5:39:24 AM.

The patient name is Patient H. Sample. The medical record ID of the patient for the sending institution is 6910828. The billing account number within the sending institution that is associated with the claim is 773789090.

The message contains a discharge note identified by LOINC code 11490-0.

OBX segments contain LOINC codes to identify data with the following parts of a report:

18774-0 STAFF PRACTITIONER NAME: Ken Cure, MD

18775-7 STAFF PRACTITIONER IDENTIFIER: NPI identifier 202030405

11535-2 HOSPITAL DISCHARGE DX IMPRESSION (NARRATIVE): (textual information, indicated by the TX data type in OBX-2 and the "NARR" abbreviation for *narrative* in the text value for the LOINC code.

10185-7 HOSPITAL DISCHARGE PROCEDURES FINDING (NARRATIVE): narrative.

10164-2 HISTORY OF PRESENT ILLNESS FINDING (NARRATIVE): narrative.

10184-0 HOSPITAL DISCHARGE PHYSICAL FINDINGS (NARRATIVE): narrative.

11493-4 HOSPITAL DISCHARGE STUDIES SUMMARY FINDING (NARR): narrative.

8648-8 HOSPITAL COURSE FINDING (NARRATIVE): narrative.

11544-4 HOSPITAL DISCHARGE FOLLOWUP FINDING (NARRATIVE): narrative.

18771-6 NAME OF PROVIDER SIGNING REPORT: Ken Cure, MD

11513-9 IDENTIFIER OF PROVIDER SIGNING REPORT: NPI identifier 202030405

```
MSH|^&|||19980814053924||ORU^R01|970814053924670|P|2.3||NE|NE
PID||6910828^Y^C8||Sample^Patient^H|||||||773789090
OBR||11490-0^LN^DISCHARGE NOTE
OBX|PN|18774-0^STAFF PRACTITIONER NAME^LN|Cure^Ken^^^MD|||||F
OBX|CE|18775-7^STAFF PRACTITIONER IDENTIFIER^LN|202030405^^NPI|||||F
OBX|TX|11535-2^HOSPITAL DISCHARGE DX IMPRESSION (NARRATIVE)^LN|1. Metastatic breast
cancer. 2. Malignant pleural effusion.|||||F
OBX|TX|10185-7^HOSPITAL DISCHARGE PROCEDURES FINDING (NARRATIVE)^LN|1. Thoracoscopy
with chest tube placement and pleurodesis.|||||F
OBX|TX|10164-2^HISTORY OF PRESENT ILLNESS FINDING (NARRATIVE)^LN| The patient is a very
pleasant, 74-year-old female with a history of breast cancer that was originally
diagnosed in 1971. At that time she had a radical mastectomy with postoperative
radiotherapy. In 1974 she developed a chest wall recurrence and was treated with
further radiation therapy. She then went without evidence of disease for many
years until 1989 when she developed bone metastases with involvement of her
sacroiliac joint, right trochanter, and left sacral area. She was started on
Tamoxifen at that point in time and has done well until recently when she
developed shortness of breath and was found to have a larger pleural effusion.
This has been tapped on two occasions and has rapidly reaccumulated so she was
admitted at this time for thoracoscopy with pleurodesis. Of note, her CA15-3 was
44 in March of 1996 and recently was found to be 600.|||||F
OBX|TX|10184-0^HOSPITAL DISCHARGE PHYSICAL FINDINGS (NARRATIVE)^LN|Physical examination
at the time of admission revealed a thin, pleasant female in mild respiratory
distress. She had no adenopathy. She had decreased breath sounds three fourths
of the way up on the right side. The left lung was mostly clear although there
were a few scattered rales. Cardiac examination revealed a regular rate and
rhythm without murmurs. She had no hepatosplenomegaly and no peripheral clubbing,
cyanosis, or edema.|||||F
OBX|TX|11493-4^HOSPITAL DISCHARGE STUDIES SUMMARY FINDING (NARR)^LN| A chest x-ray
showed a large pleural effusion on the right.|||||F
OBX|TX|8648-8^HOSPITAL COURSE FINDING (NARRATIVE)^LN| The patient was admitted. A CT
scan was performed which showed a possibility that the lung was trapped by tumor
and that there were some adhesions. The patient then underwent thoracoscopy which
confirmed the presence of a pleural peel of tumor and multiple adhesions which
were taken down. Two chest tubes were subsequently placed. These were left in
place for approximately four days after which a TALC slurry was infused and the
chest tubes were removed the following day. Because of the significant pleural
peel and the trapped lungs, it is clearly possible that the pleurodesis will not
be successful and this was explained to the patient and the family prior to the
procedure.~Of note, we started her on Megace during this hospitalization because
she was having significant nausea and vomiting with the Arimidex that she had been
taking.
OBX|TX|11544-4^HOSPITAL DISCHARGE FOLLOWUP FINDING (NARRATIVE)^LN| The patient is being
transferred to an extended-care facility in Jasper to be closer to home, where she
will remain until she has enough strength to go home. It is possible that the
```

fluid may reaccumulate and require repeat tapping despite the pleurodesis that was performed. Hopefully, however, with the combination of pleurodesis and the Megace that she was started on, she will have improvement of her cancer and a decrease in her pulmonary symptomatology. Overall, however, her prognosis is poor because of her debilitated state and the status of her lungs.~~She is being discharged on Tylenol with Codeine as needed for pain, Megace, and a Multivitamin. She will have a follow-up appointment with Dr. Follow in three weeks with a chest x-ray. They have been instructed to call us in the interim should there be any problems.

OBX||PN|18771-6^NAME OF PROVIDER SIGNING REPORT^LN|Cure^Ken^^^^MD|||||F
 OBX||CE|11513-9^IDENTIFIER OF PROVIDER SIGNING REPORT^LN|202030405^NPI|||||F

4.5 Operative Note (OP NOTE)

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBR-4: 11489-2	PROVIDER, DICTATING PRACTITIONER IDENTIFIER		1..1	
OBX-3: 11489-2		CE	1..1	OBX-5^3: NPI
OBR-4: 18770-8	PROVIDER, DICTATING PRACTITIONER NAME		1..1	
OBX-3: 18770-8		PN	1..1	
OBR-4: 10213-7	OPERATIVE NOTE ANESTHESIA (NARRATIVE)		0..1	
OBX-3: 10213-7		TX	1..1	
OBR-4: 8722-1	OPERATIVE NOTE ANESTHESIA		0..n	
OBX-3: 8722-1		CE	1..1	OBX-5^3: C4
OBR-4: 10214-5	OPERATIVE NOTE ANESTHESIA DURATION		0..1	
OBX-3: 10214-5		NM	1..1	OBX-6^3: iso+
OBR-4: 10830-8	OPERATIVE NOTE COMPLICATIONS (NARRATIVE)		0..n	
OBX-3: 10830-8		TX	1..1	
OBR-4: 8723-9	OPERATIVE NOTE DATE		1..1	
OBX-3: 8723-9		DT	1..1	
OBR-4: 8724-7	OPERATIVE NOTE DESCRIPTION (NARRATIVE)		1..1	
OBX-3: 8724-7		TX	1..1	
OBR-4: 8717-1	OPERATIVE NOTE ESTIMATED BLOOD LOSS VOL		0..1	
OBX-3: 8717-1		NM	1..1	OBX-6^3: iso+
OBR-4: 10215-2	OPERATIVE NOTE FINDINGS (NARRATIVE)		1..1	
OBX-3: 10215-2		TX	1..1	
OBR-4: 10216-0	OPERATIVE NOTE FLUIDS (NARRATIVE)		0..1	
OBX-3: 10216-0		TX	1..1	
OBR-4: 10217-8	OPERATIVE NOTE INDICATIONS (NARRATIVE)		0..1	
OBX-3: 10217-8		TX	1..1	
OBR-4: 8725-4	OPERATIVE NOTE OPEN CLOSING DURATION		1..1	
OBX-3: 8725-4		NM	1..1	OBX-6^3: iso+
OBR-4: 10218-6	OPERATIVE NOTE POSTOPERATIVE DX (NARRATIVE)		1..n	
OBX-3: 10218-6		TX	1..1	
OBR-4: 8719-7	OPERATIVE NOTE POSTOPERATIVE DX		0..n	
OBX-3: 8719-7		CE	1..1	OBX-5^3: I9C
OBR-4: 10219-4	OPERATIVE NOTE PREOPERATIVE DX (NARRATIVE)		1..n	
OBX-3: 10219-4		TX	1..1	
OBR-4: 8720-5	OPERATIVE NOTE PREOPERATIVE DX		0..n	
OBX-3: 8720-5		CE	1..1	OBX-5^3: I9C
OBR-4: 10220-2	OPERATIVE NOTE PREP TIME DURATION		0..1	
OBX-3: 10220-2		NM	1..1	OBX-6^3: iso+
OBR-4: 8729-6	OPERATIVE NOTE PROCEDURE		1..n	
OBX-3: 8729-6		CE	1..1	OBX-5^3: C4
OBR-4: 10221-0	OPERATIVE NOTE SPECIMENS TAKEN (NARRATIVE)		0..n	
OBX-3: 10221-0		TX	1..1	
OBR-4: 10222-8	OPERATIVE NOTE SURGICAL COMPLICATIONS (NARRATIVE)		0..n	

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBX-3: 10222-8		TX	1..1	
OBR-4: 10223-6	OPERATIVE NOTE SURGICAL PROCEDURE (NARRATIVE)		1..n	
OBX-3: 10223-6		TX	1..1	
OBR-4: 11513-9	PROVIDER SIGNING IDENTIFIER		1..1	
OBX-3: 11513-9		CE	1..1	OBX-5^3: NPI
OBR-4: 18771-6	PROVIDER SIGNING NAME		1..1	
OBX-3: 18771-6		PN	1..1	
OBR-4: 11531-1	SURGERY, SURGEON RESIDENT IDENTIFIER		0..n	
OBX-3: 11531-1		CE	1..1	OBX-5^3: NPI
OBR-4: 18772-4	SURGERY, SURGEON RESIDENT NAME		0..n	
OBX-3: 18772-4		PN	1..1	
OBR-4: 11532-9	SURGERY, SURGEON STAFF IDENTIFIER		0..n	
OBX-3: 11532-9		CE	1..1	OBX-5^3: NPI
OBR-4: 18773-2	SURGERY, SURGEON STAFF NAME		0..n	
OBX-3: 18773-2		PN	1..1	
OBR-4: 18852-4	SURGERY, SURGICAL DRAINS (NARRATIVE)		0..1	
OBX-3: 18852-4		TX	1..1	

4.6 Radiology

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBR-4: 18781-5	PROVIDER, ORDERING PRACTITIONER NAME		1..1	
OBX-3: 18781-5		PN	1..1	
OBR-4: 18780-7	PROVIDER, ORDERING PRACTITIONER IDENTIFIER		1..1	
OBX-3: 18780-7		CE	1..1	OBX-5^3: NPI
OBR-4: 18785-6	REASON FOR STUDY (NARRATIVE) (RADIOLOGY)		1..1	
OBX-3: 18785-6		TX	1..1	
OBR-4: 18779-9	COMPARISON STUDY DATE AND TIME (RADIOLOGY)		0..1	
OBX-3: 18779-9		TS	1..1	
OBR-4: 18834-2	COMPARISON STUDY (NARRATIVE) (RADIOLOGY)		0..n	
OBX-3: 18834-2		TX	1..1	
OBR-4: 18782-3	RADIOLOGY STUDY OBSERVATION (NARRATIVE)		1..n	
OBX-3: 18782-3		TX	1..1	
OBR-4: 19005-8	X-RAY IMPRESSION (NARRATIVE)		1..n	
OBX-3: 19005-8		TX	1..1	
OBR-4: 18783-1	RADIOLOGY STUDY RECOMMENDATION (NARRATIVE)		0..n	
OBX-3: 18783-1		TX	1..1	
OBR-4: 11489-2	PROVIDER, DICTATING PRACTITIONER IDENTIFIER		1..1	
OBX-3: 11489-2		CE	1..1	OBX-5^3: NPI
OBR-4: 18770-8	PROVIDER, DICTATING PRACTITIONER NAME		1..1	
OBX-3: 18770-8		PN	1..1	
OBR-4: 18771-6	PROVIDER SIGNING NAME		1..1	
OBX-3: 18771-6		PN	1..1	
OBR-4: 11513-9	PROVIDER SIGNING IDENTIFIER		1..1	
OBX-3: 11513-9		CE	1..1	OBX-5^3: NPI

4.7 Visit Note

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBR-4: 18630-4	PRIMARY DIAGNOSIS		0..1	
OBX-3: 18630-4		CE	1..1	OBX-5^3: I9C
OBR-4: 18777-3	PRIMARY DIAGNOSIS (NARRATIVE)		0..1	
OBX-3: 18777-3		TX	1..1	

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBR-4: 11489-2	PROVIDER, DICTATING PRACTITIONER IDENTIFIER		0..1	
OBX-3: 11489-2		CE	1..1	OBX-5^3: NPI
OBR-4: 18770-8	PROVIDER, DICTATING PRACTITIONER NAME		0..1	
OBX-3: 18770-8		PN	1..1	
OBR-4: 10164-2	HISTORY OF PRESENT ILLNESS (NARRATIVE) (REPORTED)		0..1	
OBX-3: 10164-2		TX	1..1	
OBR-4: 11394-4	ELBOW, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)		0..1	
OBX-3: 11394-4		TX	1..1	
OBR-4: 11397-7	FOOT, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)		0..1	
OBX-3: 11397-7		TX	1..1	
OBR-4: 11398-5	FOREARM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)		0..1	
OBX-3: 11398-5		TX	1..1	
OBR-4: 11399-3	GASTROINTESTINAL SYSTEM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)		0..1	
OBX-3: 11399-3		TX	1..1	
OBR-4: 11400-9	GENITALIA, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)		0..1	
OBX-3: 11400-9		TX	1..1	
OBR-4: 11401-7	GENITALIA FEMALE, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)		0..1	
OBX-3: 11401-7		TX	1..1	
OBR-4: 11402-5	GENITALIA MALE, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)		0..1	
OBX-3: 11402-5		TX	1..1	
OBR-4: 11403-3	GROIN, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)		0..1	
OBX-3: 11403-3		TX	1..1	
OBR-4: 11404-1	HAND, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)		0..1	
OBX-3: 11404-1		TX	1..1	
OBR-4: 11406-6	HIP, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)		0..1	
OBX-3: 11406-6		TX	1..1	
OBR-4: 11407-4	KNEE, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)		0..1	
OBX-3: 11407-4		TX	1..1	
OBR-4: 11410-8	MUSCULOSKELETAL SYSTEM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)		0..1	
OBX-3: 11410-8		TX	1..1	
OBR-4: 11411-6	NECK, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)		0..1	
OBX-3: 11411-6		TX	1..1	
OBR-4: 11412-4	RESPIRATORY SYSTEM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)		0..1	
OBX-3: 11412-4		TX	1..1	
OBR-4: 11413-2	SHOULDER, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)		0..1	
OBX-3: 11413-2		TX	1..1	
OBR-4: 11414-0	THIGH, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)		0..1	
OBX-3: 11414-0		TX	1..1	
OBR-4: 11415-7	WRIST, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)		0..1	
OBX-3: 11415-7		TX	1..1	
OBR-4: 11385-2	ANKLE, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)		0..1	

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBX-3: 11385-2		TX	1..1	
OBR-4: 11386-0	ARM UPPER, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)		0..1	
OBX-3: 11386-0		TX	1..1	
OBR-4: 11387-8	AXILLA, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)		0..1	
OBX-3: 11387-8		TX	1..1	
OBR-4: 11388-6	BUTTOCKS, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)		0..1	
OBX-3: 11388-6		TX	1..1	
OBR-4: 11391-0	CHEST, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)		0..1	
OBX-3: 11391-0		TX	1..1	
OBR-4: 10210-3	PHYSICAL FINDINGS GENERAL STATUS (NARRATIVE) (OBSERVED)		0..1	
OBX-3: 10210-3		TX	1..1	
OBR-4: 18776-5	TREATMENT PLAN (NARRATIVE)		0..1	
OBX-3: 18776-5		TX	1..1	
OBR-4: 11513-9	PROVIDER SIGNING IDENTIFIER		1..1	
OBX-3: 11513-9		CE	1..1	OBX-5^3: NPI
OBR-4: 18771-6	PROVIDER SIGNING NAME		1..1	
OBX-3: 18771-6		PN	1..1	
OBR-4: 18775-7	PROVIDER, STAFF PRACTITIONER IDENTIFIER Repeat identifier and name as a pair when multiple staff practitioners are associated with the report.		0..n	
OBX-3: 18775-7		CE	1..1	OBX-5^3: NPI
OBR-4: 18774-0	PROVIDER, STAFF PRACTITIONER NAME		0..n	
OBX-3: 18774-0		PN	1..1	

5 Response Code Sets

This section describes response codes that may be used in component 3 of OBX-5, when OBX-2 indicates a CE data type. These code sets may also be used in component 3 of OBX-6 when OBX-2 indicates a numeric data type. An entry in the value table refers to these code sets by a short abbreviation, such as “ans+”. These abbreviations are used in the headings of the subsections of this section.

The values for some code sets appear directly in this document. In other cases, the section cites another document as the source.

5.1 ans+: Extended ANSI Units Codes

ANSI X3.50-1986 and extensions as defined in HL7 Version 2.3, Figure 7-13.

5.2 C4: CPT-4

Procedure coding from American Medical Association, P.O. Box 10946, Chicago IL 60610.

5.3 HL70070: Specimen Source Codes

Code set maintained by Health Level 7 giving the source of a specimen for a test..

Code	Specimen Source Codes	Code	Specimen Source Codes
ABS	Abscess	ASP	Aspirate
AMN	Amniotic fluid	BBL	Blood bag

Code	Specimen Source Codes
BDY	Whole body
BIFL	Bile fluid
BLD	Whole blood
BLDA	Blood arterial
BLDC	Blood capillary
BLDV	Blood venous
BON	Bone
BPH	Basophils
BPU	Blood product unit
BRN	Burn
BRO	Bronchial
BRTH	Breath (use EXHLD)
CALC	Calculus (=Stone)
CBLD	Cord blood
CDM	Cardiac muscle
CNJT	Conjunctiva
CNL	Cannula
COL	Colostrum
CSF	Cerebral spinal fluid
CTP	Catheter tip
CUR	Curettage
CVM	Cervical mucus
CVX	Cervix
CYST	Cyst
DIAF	Dialysis fluid
DOSE	Dose med or substance
DRN	Drain
DUFL	Duodenal fluid
EAR	Ear
EARW	Ear wax (cerumen)
ELT	Electrode
ENDC	Endocardium
ENDM	Endometrium
EOS	Eosinophils
EXHLD	Exhaled gas (=breath)
EYE	Eye
FIB	Fibroblasts
FIST	Fistula
FLT	Filter
FLU	Body fluid, unsp
GAS	Gas
GAST	Gastric fluid/contents
GEN	Genital
GENC	Genital cervix
GENL	Genital lochia
GENV	Genital vaginal
HAR	Hair
IHG	Inhaled Gas
ISLT	Isolate
IT	Intubation tube
LAM	Lamella
LIQ	Liquid NOS
LN	Line
LNA	Line arterial
LNV	Line venous

Code	Specimen Source Codes
LYM	Lymphocytes
MAC	Macrophages
MAR	Marrow
MBLD	Menstrual blood
MEC	Meconium
MILK	Breast milk
MLK	Milk
NAIL	Nail
NOS	Nose (nasal passage)
ORH	Other
PAFL	Pancreatic fluid
PAT	Patient
PLAS	Plasma
PLB	Plasma bag
PLC	Placenta
PLR	Pleural fluid (thoracentesis fld)
PMN	Polymorphonuclear neutrophils
PPP	Platelet poor plasma
PRP	Platelet rich plasma
PRT	Peritoneal fluid /ascites
PUS	Pus
RBC	Erythrocytes
RT	Route of medicine
SAL	Saliva
SEM	Seminal fluid
SER	Serum
SKM	Skeletal muscle
SKN	Skin
SNV	Synovial fluid (Joint fluid)
SPRM	Spermatozoa
SPT	Sputum
SPTC	Sputum - coughed
SPTT	Sputum - tracheal aspirate
STL	Stool = Fecal
STON	Stone (use CALC)
SWT	Sweat
TEAR	Tears
THRB	Thrombocyte (platelet)
THRT	Throat
TISG	Tissue gall bladder
TISPL	Tissue placenta
TISS	Tissue
TISU	Tissue ulcer
TLGI	Tissue large intestine
TLNG	Tissue lung
TSMI	Tissue small intestine
TUB	Tube NOS
ULC	Ulcer
UMB	Umbilical blood
UMED	Unknown medicine
UR	Urine
URC	Urine clean catch
URNS	Urine sediment

Code	Specimen Source Codes
URT	Urine catheter
URTH	Urethra
USUB	Unknown substance
VOM	Vomitus
WAT	Water
WBC	Leukocytes
WICK	Wick

Code	Specimen Source Codes
WND	Wound
WNDA	Wound abscess
WNDD	Wound drainage
WNDE	Wound exudate
XXX	To be specified in another part of the message

5.4 HL70085: HL7 Observation Results Status

HL7 table describes the status for an observation contained in an OBX segment.

Code	HL7 Observation Results Status.	Code	HL7 Observation Results Status.
C	This item is a correction to a previous result at the provider site.	F	Final
R	Results entered -- not verified	P	Preliminary
S	Partial results	X	No result can be obtained for this request/specimen

5.5 HL70103: Processing ID

Description of whether HL7 messages represent production, testing, or training transactions.

5.6 HL70125: HL7 OBX Data Types

All the data types that may be used in OBX-5.

Code	HL7 OBX Data Types	Code	HL7 OBX Data Types
CE	coded	PT	processing type
CK	composite ID with check digit	SI	sequence ID
CM	composite	ST	string data
CP	composite price	TQ	timing and quantity
CQ	composite quantity with units	TS	time stamp
CX	extended composite ID	TX	text
DT	date	XAD	extended address
EI	entity identifier	XCN	extended composite id number
FT	formatted text data	XON	extended composite name and identification number for organizations
HD	hierarchic designator	XPN	extended person name
ID	coded value for HL7 defined tables	XTN	extended telecommunication number
IS	coded value for user-defined tables		
JCC	job code/class		
NM	numeric		
PL	person location		

5.7 HL70136: HL7 Yes-No Indicator

HL7 Yes and No Indicators

Code	HL7 Yes-No Indicator
N	No
Y	Yes

5.8 HL70161: Medication Substitution Specification

HL7-maintained table describing whether substitution is permitted when a prescription is filled.

Code	Medication Substitution Specification.
------	--

Code	Medication Substitution Specification.
G	Allow generic substitutions
N	Substitutions are NOT authorized.
T	Allow therapeutic substitutions

5.9 HL70162: Route of Medicine Administration

HL7 codes for route of medicine administration. Items marked with "*" are used primarily for respiratory therapy and anesthesia delivery.

Code	Route of Medicine Administration	Code	Route of Medicine Administration
AP	Apply Externally	MTH	Mouth/Throat
B	Buccal	NG	Nasogastric
DT	Dental	NP	Nasal Prongs*
EP	Epidural	NS	Nasal
ET	Endotracheal Tube*	NT	Nasotracheal Tube
GTT	Gastronomy Tube	OP	Ophthalmic
GU	GU Irrigant	OT	Otic
IA	Intra-arterial	OTH	Other/Miscellaneous
IB	Intrabursal	PF	Perfusion
IC	Intracardiac	PO	Oral
ICV	Intracervical (uterus)	PR	Rectal
ID	Intradermal	RM	Rebreather Mask*
IH	Inhalation	SC	Subcutaneous
IHA	Intrahepatic artery	SD	Soaked Dressing
IM	Intramuscular	SL	Sublingual
IMR	Immerse (Soak) Body Part	TD	Transdermal
IN	Intranasal	TL	Translingual
IO	Intraocular	TP	Topical
IP	Intraperitoneal	TRA	Tracheostomy*
IS	Intrasynovial	UR	Urethral
IT	Intrathecal	VG	Vaginal
IU	Intrauterine	VM	Ventimask
IV	Intravenous	WND	Wound
MM	Mucous Membrane		

5.10 HL70163: Administrative Site

Code set maintained by Health Level 7 giving body sites used for administering medications and taking specimens.

Code	Administrative Site	Code	Administrative Site
BE	Bilateral Ears	LIJ	Left Internal Jugular
BN	Bilateral Nares	LLAQ	Left Lower Abd Quadrant
BU	Buttock	LLFA	Left Lower Forearm
CT	Chest Tube	LMFA	Left Mid Forearm
LA	Left Arm	LN	Left Naris
LAC	Left Anterior Chest	LPC	Left Posterior Chest
LACF	Left Antecubital Fossa	LSC	Left Subclavian
LD	Left Deltoid	LT	Left Thigh
LE	Left Ear	LUA	Left Upper Arm
LEJ	Left External Jugular	LUAQ	Left Upper Abd Quadrant
LF	Left Foot	LUFA	Left Upper Forearm
LG	Left Gluteus Medius	LVG	Left Ventragluteal
LH	Left Hand	LVL	Left Vastus Lateralis

Code	Administrative Site	Code	Administrative Site
NB	Nebulized	RH	Right Hand
OD	Right Eye	RIJ	Right Internal Jugular
OS	Left Eye	RLAQ	Rt Lower Abd Quadrant
OU	Bilateral Eyes	RLFA	Right Lower Forearm
PA	Perianal	RMFA	Right Mid Forearm
PERIN	Perineal	RN	Right Naris
RA	Right Arm	RPC	Right Posterior Chest
RAC	Right Anterior Chest	RSC	Right Subclavian
RACF	Right Antecubital Fossa	RT	Right Thigh
RD	Right Deltoid	RUA	Right Upper Arm
RE	Right Ear	RUAQ	Right Upper Abd Quadrant
REJ	Right External Jugular	RUFA	Right Upper Forearm
RF	Right Foot	RVG	Right Ventragluteal
RG	Right Gluteus Medius	RVL	Right Vastus Lateralis

5.11 I9C: ICD-9-CM

International Classification of Diseases, Clinical Modification.

5.12 ISO+: Extended ISO Units Codes

ISO 2955-1983 and extensions as defined in HL7 Version 2.3 Figure 7-13.

5.13 NDC: National Drug Code

FDA National Drug Code.

5.14 NPI: National Provider ID

Proposed HIPAA National Provider ID. Information available from Washington Publishing Company, Gaithersburg, MD. <http://www.wpc-edi.com/>

5.15 X12PTX: HCFA/X12 Provider Taxonomy

X12 Provider Taxonomy maintained by Insurance Committee X12N Task Group 2 Working Group 15.

**Logical Observation Identifier
Names and Codes (LOINC[®]) Consortium**

**Code Tables for the HL7 “Additional Information to Support
a Healthcare Claim or Encounter” Message: Emergency
Department**

Feb 6, 1999

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Logical Observation Identifier Names and Codes (LOINC[®]) Consortium

Code Tables for the HL7 “Additional Information to Support a Healthcare Claim or Encounter” Message: Emergency Department

1 Introduction

This LOINC publication provides the code values that are used in:

- ASC X12N Implementation Guide for Use of the 275 Transaction (004020) Additional Information to Support a Health Care Claim or Encounter, which is a product of subcommittee X12N of Accredited Standards Committee X12.^{1,2}
- ASC X12N Implementation Guide for Use of the 277 Transaction (004020) Health Care Claim, Request for Additional Information
- Health Level Seven (HL7) Implementation Guide for Additional Information to Support a Healthcare Claim or Encounter.³

The format of this document and the methods used to arrive at its contents are prescribed in the HL7 Implementation Guide.

These documents together compose a proposed solution for the requirement for electronic transmission of claims attachments included in the Health Insurance Portability and Accountability Act (HIPAA). For a comprehensive understanding of the solution proposed in these documents, the following reading sequence is suggested:

- *ASC X12N Implementation Guide for Use of the 277 Transaction (004020) Health Care Claim, Request for Additional Information*
- *ASC X12N Implementation Guide for Use of the 275 Transaction (004020) Additional Information to Support a Health Care Claim or Encounter*
- *Health Level Seven (HL7) Implementation Guide for Additional Information to Support a Healthcare Claim or Encounter Version 1.0*
- *Logical Observation Identifier Names and Codes (LOINC[™]) Consortium Modifier Codes in the ASC X12N Implementation Guide for the 277 Requests for Additional Information Transaction*
- The Logical Observation Identifier Names and Codes (LOINC[®]) Consortium booklets containing the code tables for the Ambulance, Clinical Reports, Emergency Department, Laboratory Results, Medications and Rehabilitation Services messages. These booklets may be read in any order.

¹Information on this and other X12/HIPAA-related implementation guides is available from the Washington Publishing Company, Gaithersburg, MD. <http://www.wpc-edi.com/>

² Within this LOINC document, references to the transaction defined by these X12 implementation guides will be abbreviated by calling them 275 and 277.

³ Health Level Seven, Inc., 3300 Washtenaw Ave., Suite 227, Ann Arbor, MI 48104-4261. (<http://www.hl7.org>)

- One additional document serves as a reference: *Logical Observation Identifier Names and Codes (LOINC®) Consortium Codes for the HL7 and X12 Additional Information to Support a Health Care Claim or Encounter Transactions: Summary Listing*

1.1 Relationship to *Data Elements for Emergency Department Systems (DEEDS)*

The Emergency Department Electronic attachment is based on the publication *Data Elements for Emergency Department Systems (DEEDS)* from:

National Center for Injury Prevention and Control
Centers for Disease Control and Prevention
Mail Stop F-41
4770 Buford Highway, NE
Atlanta, GA 30341-3724
<http://www.cdc.gov/ncipc/pub-res/deedspage.htm>

That document provides uniform specifications for data elements that developers may choose to include in their ED systems. Release 1.0 includes eight sections that identify 156 data elements numbered 1.01 through 8.36. The Emergency Department electronic attachment includes a large subset of those data elements and adds some additional elements. The analytic notes in the value table relate specific HL7 data fields to the corresponding DEEDS data elements.

The document defines various code sets for use in the data elements. Where the DEEDS document is the source of the codes it is cited here in form of a code domain ID named "DEEDSX.YY" where "X.YY" is the number of the data element under which the codes are defined.

1.2 Revision History

<i>Date</i>	<i>Purpose</i>
Nov 23, 1998	Initial release to accompany HL7 Ballot
Feb 6, 1999	Technical corrections after ballot of HL7 Implementation Guide

2 HL7 Message Variants

All data elements for the Emergency Department Electronic Attachment are sent using the ED Message Variant, described below.

2.1 ED Message Variant

The HL7 ORU message (trigger event R01) is the basis for the ED Message Variant. Its segment pattern is:

ORU	Observational Results (Unsolicited)	Chapter
MSH	Message Header	2
PID	Patient Identification	3
{OBR	Observations Report ID	7
{OBX}	Observation/Result	7
}		

The following fields are used in each segment. Fields that are not included must be null. The column labeled Analysis Reference is used to correlate the information with the Data Elements for Emergency Department Systems.

SEQ	ELEMENT NAME	REQUIRED VALUE	ANALYSIS REFERENCE
MSH-1	Field Separator	(recommended)	
MSH-2	Encoding Characters	^~\& (recommended)	
MSH-7	Date/Time Of Message		
MSH-9	Message Type	ORU^R01	
MSH-10	Message Control ID		
MSH-11	Processing ID	P	
MSH-12	Version ID	2.3	
MSH-15	Accept Acknowledgment Type	NE	
MSH-16	Application Acknowledgment Type	NE	
<p>Coding Example, MSH Segment.</p> <p>Scenario. (An HL7 message was prepared for inclusion in a 275 at 2:35 PM on August 12, 1998. The system which prepared the message identified it as “Regenstrief0128765419”)</p> <p>Example:</p> <pre>MSH ^~\& 199808121425 ORU^R01 Regenstrief0128765419 P 2.3 NE NE</pre>			
PID-3	Patient ID (Internal ID)	Provider identification number for patient.	DEEDS 1.01
PID-5	Patient Name		DEEDS 1.02
PID-9	Patient Alias		DEEDS 1.03
PID-11	Patient Address		DEEDS 1.08
PID-18	Patient Account		DEEDS 1.10
<p>Coding Example, PID Segment.</p> <p>Scenario. The HL7 message is about patient Jon J Jay, who lives at 124 N. Elm St, Elmo, Utah, 85912. In the sending system the patient is identified by the number 184569. The claim that is the subject of the 275 is associated with billing account X48507924 in the sending system. In previous visits the patient has been identified as JJ Jay and John J. Jay.</p> <p>Example:</p> <pre>PID 184569 Jay^Jon^J Jay^JJ~Jay^John^J 124 Elm St^^Elmo^UT^85912 X48507924</pre>			

SEQ	ELEMENT NAME	REQUIRED VALUE	ANALYSIS REFERENCE
OBR-4	Universal Service ID	Code to identify attachment data element in value table.	
<p>Coding Example, OBR Segment.</p> <p>Scenario. The message was sent in response to a 277 that requested the referral source (LOINC code 11293-8).</p> <p>Example:</p> <pre>OBR 11293-8</pre>			
OBR-2	Value Type	Code to identify data type of OBX-5, see value table.	
OBR-3	Observation Identifier	See value table.	
OBR-4	Observation Sub-ID	Always empty unless described differently for specific LOINC codes.	
OBR-5	Observation Value and code source (redo example)	See value table.	
OBR-6	Units	See value table.	
OBR-11	Observ result status	See section 2.1.1.	
OBR-14	Date time of the observation.	Always empty except as described for specific LOINC codes.	
OBR-17	Observation method	Usually empty,	Deeds 5.19
<p>The above notwithstanding, a slightly different set of rules is used to populate OBXs that are (a) sent under an OBR with LOINC code 18703-9, ED PROCEDURE RESULT OBSERVATION, and (b), represent Laboratory results that originated in an automated system which reports results using HL7 messages. Such OBXs should be populated as described in <i>LOINC Code Tables for the HL7 "Additional Information to Support a Healthcare Claim or Encounter" Message: Laboratory Results</i>, a companion to this booklet. See example below, in 2.1.1.</p>			
<p>Coding Example, OBX Segment.</p> <p>Scenario. The referral source (LOINC code 11293-8) was "law enforcement referral" (code value 50 according to DEEDS question 4.05).</p> <p>Example:</p> <pre>OBX CE 11293-8 50^DEED4.05 F</pre>			
<p>Coding Example, Complete HL7 Message.</p> <p>Scenario. (An HL7 message was prepared for inclusion in a 275 at 2:35 PM on August 12, 1998. The system which prepared the message identified it as "Regenstrief0128765419") The HL7 message is about patient Rev. Jon Francis Therev, who lives at 11. Elm, Apt 6, Elmo, Utah, 85912. In the sending system the patient is identified by the number 184569. The claim that is the subject of the 275 is associated with billing account X485024 in the sending system. The message was prepared in response to a 277 which requested the first heartbeat rate (LOINC 18708-8) and the first unassisted breathing rate (LOINC 18686-6). The heart beat rate was 87. This question requires the inclusion of the measurement method in a response. (LOINC 11327-4). In this case the heart beat rate was measured by automatic device (DEEDS code 20). The first unassisted breathing rate could not be measured because the patient was on a ventilator. This is represented by DEEDS code 777.</p>			
<p>Example:</p> <pre>MSH ^~\& 199808121425 ORU^R01 Regenstrief0128765419 P 2.3 NE NE PID 184569 Therev^Jon^Francis^Rev 11 Elm^Apt 6^Elmo^UT^85912 X485024 OBR 18708-8^LN OBX NM 11328-2^LN 87 F OBX CE 11327-4^LN 20^DEEDS4.22 F OBR 18686-6^LN OBX CE 18687-4^LN 777^DEED4.24 F</pre>			

2.1.1 Reports in OBX-5

Two Emergency Department data elements are general, offering the places to send heterogeneous data that are specific to the encounter. These are:

- 18698-1, ED CLINICAL FINDING INFORMATION (COMPOSITE), corresponding to DEEDS elements 5.14-5.16.
- 18703-9, ED PROCEDURE INFORMATION (COMPOSITE), corresponding to DEEDS elements 6.09 and 6.10.

In each case, the LOINC code in an OBR indicates signals that a set of OBX segments follow to describe and contain the information that is being sent. The patterns are shown below.

<i>OBR-4</i>	<i>OBX-2</i>	<i>OBX-3</i>	<i>OBX-5</i>
18698-1	CE (varies)	18697-3 (varies)	<p>ED CLINICAL FINDING DATA SOURCE, a code describing the source of the information, e.g., the law officer transporting the patient.</p> <p>ED CLINICAL FINDING, the actual clinical information. The LOINC codes for OBX-3 are listed in table DEEDS5.14.</p> <p>Frequently, this is a block of narrative text. However, the sender has the option to send a code chosen from a nationally available code set. If it sends a code, the sender <i>must</i> send the text description of the code in component 2 of OBX-5.</p> <p>The sender populates the OBX-2 field with an HL7 type appropriate to the LOINC code in OBX-3.</p> <p>Scenario: The following information was reported by the patient. (A data source of "reported by patient" is code 10 in DEEDS5.19). History of present illness (LOINC 8684-3), crushing substernal chest pain associated with shortness of breath for one hour. Patient's cigarette use (LOINC 8663-7) is two packs/day.</p> <p>Example:</p> <pre>OBR 18698-1^^LN<cr> OBX CE 18697-3^^LN 10^^DEEDS5.19 F<cr> OBX TX 8684-3^^LN crushing substernal chest pain associated with shortness of breath for one hour F<cr> OBX NM 8663-7^^LN 2 F<cr></pre>
<i>OBR-4</i>	<i>OBX-2</i>	<i>OBX-3</i>	<i>OBX-5</i>
18703-9	(varies)	(varies)	<p>One or more additional OBXs follow the OBX with 11314-2. The additional OBXs compose the procedure result that may take many forms. These include: a panel of lab results; a single result; a single block of text which comprises the entire report; or a report that is structured into multiple sections, each of which is sent as a block of text in its own OBX segment.</p> <p>As always, OBX-2 will indicate the data type for the value in OBX-5.</p> <p>OBX-3 will contain a LOINC code that identifies the result, or part of a result, in OBX-5. All of the LOINC codes are potentially useful for OBX-3. They are not listed separately in this document. They are available for download over the Internet.</p>

<i>OBR-4</i>	<i>OBX-2</i>	<i>OBX-3</i>	<i>OBX-5</i>			
Units (OBX-6), Observation result status (OBX-11), Date-time of the Observation (OBX-14), and Observation Method (OBX-17) may contain values as described for the Emergency Department message variant.						
Scenario: Laboratory results obtained during the ED visit contained a battery of results as reported below.						
LOINC Code	Test	Value	Units	Normal	Flag	Date/Time Observer ID
4544-3	hematocrit	45		39-49		10/2/1995 6:38 PM 860
789-8	erythrocytes count	4.94	10*6/mm3	4.30-5.90		10/2/1995 6:38 PM 860
787-2	mean corpuscular volume	91	fL	90-98		10/2/1995 6:38 PM 860
5907-1	platelets count	233	10*3/mm3	150-450		10/2/1995 6:38 PM 860
6690-2	leukocytes count	25	10*3/mm3	3.2-9.8	H	10/2/1995 6:38 PM 860
770-8	neutrophils/100 leukocytes	83.1	%	37.0-80.0	H	10/2/1995 6:38 PM 860
706-2	basophils/100 leukocytes	10.1	%	10.0-50.0		10/2/1995 6:38 PM 860
5905-5	monocytes/100 leukocytes	6.3	%	0.0-12.0		10/2/1995 6:38 PM 860
713-8	eosinophils/100 leukocytes	0.3	%	0.0-7.0		10/2/1995 6:38 PM 860
706-2	basophils/100 leukocytes	0.2	%	0.0-2.0		10/2/1995 6:38 PM 860
752-6	neutrophils count	20.8	10*3/mm3	2.0-7.0	H	10/2/1995 6:38 PM 860
731-0	lymphocytes count	2.5	10*3/mm3	0.6-3.5		10/2/1995 6:38 PM 860
742-7	monocytes count	1.6	10*3/mm3	0.0-0.9	H	10/2/1995 6:38 PM 860
711-2	eosinophils count	0.08	10*3/mm3	0.00-0.70		10/2/1995 6:38 PM 860
704-7	basophils count	0.04	10*3/mm3	0.00-0.20		10/2/1995 6:38 PM 860
Example:						
<pre> OBR 18703-9^^LN<cr> OBX NM 4544-3^HEMATOCRIT (AUTOMATED)^LN 45 39-49 F 19951002185800 860<cr> OBX NM 789-8^ERYTHROCYTES COUNT (AUTOMATED)^LN 4.94 10*12/mm3 4.30-5.90 F 19951002185800 860<cr> OBX NM 787-2^ERYTHROCYTE MEAN CORPUSCULAR VOLUME (AUTOMATED COUNT)^LN 91 fL 90-98 F 19951002185800 860<cr> OBX NM 5907-1^PLATELETS COUNT (AUTOMATED)^LN 233 10*9/mm3 150-450 F 19951002185800 860<cr> OBX NM 6690-2^LEUKOCYTES COUNT (AUTOMATED)^LN 25 10*9/mm3 3.2-9.8 H F 19951002185800 860<cr> OBX NM 770-8^NEUTROPHILS/100 LEUKOCYTES (AUTOMATED)^LN 83.1 % 37.0-80.0 H F 19951002185800 860<cr> OBX NM 706-2^BASOPHILS/100 LEUKOCYTES (AUTOMATED)^LN 10.1 % 10.0-50.0 F 19951002185800 860<cr> OBX NM 5905-5^MONOCYTES/100 LEUKOCYTES (AUTOMATED)^LN 6.3 % 0.0-12.0 F 19951002185800 860<cr> OBX NM 713-8^EOSINOPHILS/100 LEUKOCYTES (AUTOMATED)^LN 0.3 % 0.0-7.0 F 19951002185800 860<cr> </pre>						

2.1.2 Use of OBX-11, Observ Result Status

In the provider's information systems environment, HL7 messages are used to send preliminary, partial, updated, final, and corrected results, and to report that no result will be available for an order, because the specimen was unusable or for other reasons. The values available for this field are designed to support these use cases, and to reflect the status of a result at various points in its life cycle.

The use cases for sending supporting documentation to not support updating a result, once it has been sent the payer. The provider must use this data field to describe the status of the information

at the time that it was extracted for transmission to the payer. Accordingly, the following values, which are a subset of HL7 Table 0085, may be used.

Where the source data is administrative, provider systems do not usually track the update status of data so precisely. If the update status is not tracked, the provider shall send "F".

- C At some time prior to sending the information to the payer, a correction was posted to the provider's database. This value is the corrected value.
- R Results entered -- not verified at the time of transmission to the payer
- S Partial results
- F Final
- P Preliminary
- X No result can be obtained for this request/specimen

3 LOINC Codes

3.1 Emergency Department Supporting Documentation

The following LOINC codes shall be used to designate Emergency Department supporting documentation in a 277 request for, or a 275 transmission of, supporting documentation for a healthcare claim.

3.2 Scope Modification Codes

Another booklet, *LOINC Modifier Codes in the ASC X12N Implementation Guide for the 277 Requests for Additional Information Transaction*⁴ provides code values for modifying the scope of requests for information in an X12 277 transaction. Those codes apply to all electronic attachments, including this one.

3.3 Data Elements

The LOINC code below is used to designate the entire set of data elements associated with Emergency Department. When used in a 277, it requests all the data elements listed below. When used in a 275, it indicates that the entire set is being sent.

<i>LOINC code</i>	<i>Observation Name</i>
18679-1	EMERGENCY DEPARTMENT SUPPORTING DOCUMENTATION

The following Emergency Department data elements are described in this document. The accompanying LOINC codes may be used in 275 and 277 transactions as defined in the associated ASC X12N Implementation Guides. In addition, the LOINC codes are used in the OBR-4 field in HL7 ORU message.

⁴ The LOINC Consortium, c/o the Regenstrief Institute, 1001 West 10th Street RG-5, Indianapolis, IN 46202, 317/630-7433.

<i>LOINC code</i>	<i>Name</i>
18710-4	PROVIDER, PRIMARY PRACTITIONER (COMPOSITE)
18699-9	PROVIDER, ED PRACTITIONER (COMPOSITE)
18693-2	PROVIDER, ED CONSULTANT PRACTITIONER (COMPOSITE)
18704-7	PROVIDER, ED REFERRING PRACTITIONER (COMPOSITE)
11288-8	EMS TRANSPORT, ARRIVAL TIME DOCUMENTED DATE AND TIME
11459-5	EMS SYSTEM, TRANSPORT MODE
11319-1	EMS SYSTEM, TRANSPORT UNIT IDENTIFIER
11318-3	EMS SYSTEM, TRANSPORT AGENCY IDENTIFIER
11293-8	ED REFERRAL, SOURCE
11292-0	CHIEF COMPLAINT (NARRATIVE) (REPORTED)
11371-2	INITIAL ENCOUNTER FOR CHIEF COMPLAINT
11283-9	FIRST ACUITY ASSESSMENT
11454-6	FIRST RESPONSIVENESS ASSESSMENT
11324-1	FIRST GLASGOW SCORE EYE OPENING
11326-6	FIRST GLASGOW SCORE VERBAL
11325-8	FIRST GLASGOW SCORE MOTOR
18684-1	FIRST BLOOD PRESSURE (COMPOSITE)
18708-8	ARTERIAL SYSTEM, FIRST HEART BEAT (COMPOSITE)
18686-6	FIRST BREATH RATE (COMPOSITE)
18688-2	FIRST BODY TEMPERATURE (COMPOSITE)
18690-8	FIRST BODY WEIGHT (COMPOSITE)
11372-0	INJURY, ACTIVITY ASSOCIATED WITH
11457-9	INJURY, SAFETY EQUIPMENT USED DURING
18605-6	MEDICATION CURRENT (COMPOSITE) (REPORTED)
18698-1	ED CLINICAL FINDING INFORMATION (COMPOSITE)
18703-9	ED PROCEDURE INFORMATION (COMPOSITE)
18610-6	MEDICATION ADMINISTERED (COMPOSITE)
18617-1	MEDICATION DISCHARGE (COMPOSITE)
18624-7	ED PROBLEM (NARRATIVE) (REPORTED)

4 Value Table

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBR-4: 18710-4	PROVIDER, PRIMARY PRACTITIONER (COMPOSITE) (Supplement to DEEDS definitions).		1..1	
OBX-3: 18711-2	PROVIDER, PRIMARY PRACTITIONER NAME	PN	1..1	
OBX-3: 18600-7	PROVIDER, PRIMARY PRACTITIONER IDENTIFIER Unique Identifying Number of the Professional who established the Plan of Treatment	CE	1..1	OBX-5^3: NPI
	Once the NPI is fully implemented the NPI number will be the only identifier allowed. Until complete implementation is achieved, other identifiers such as state license numbers or UPIN are allowed.			
	Component 3 should indicate the authority assigning the identifier as follows: NPI (National Provider Identifier), UPIN, or XX, where XX is the two-letter US Postal Service abbreviation for the state of the licensing authority.			
OBX-3: 18601-5	PROVIDER, PRIMARY PRACTITIONER PROFESSION HCFA/X12 code for practitioner type. See Deeds 2.04.	CE	1..1	OBX-5^3: X12PTX
OBR-4: 18699-9	PROVIDER, ED PRACTITIONER (COMPOSITE) The professional responsible for the care. ED practitioner NPI identification number, profession, and role. Deeds 2.08, 2.09, 2.10.		1..1	
OBX-3: 18700-5	PROVIDER, ED PRACTITIONER NAME The name of the responsible practitioner.	PN	1..1	
OBX-3: 18602-3	PROVIDER, ED PRACTITIONER IDENTIFIER Once the NPI is fully implemented the NPI number will be the only identifier allowed. Until complete implementation is achieved, other identifiers such as state license numbers or UPIN are allowed.	CE	1..1	OBX-5^3: NPI
	Component 3 should indicate the authority assigning the identifier as follows: NPI (National Provider Identifier), UPIN, or XX, where XX is the two-letter US Postal Service abbreviation for the state of the licensing authority.			
	DEEDS 2.08			
OBX-3: 18701-3	PROVIDER, ED PRACTITIONER PROFESSION HCFA/X12 code for practitioner type. See Deeds 2.09.	CE	1..1	OBX-5^3: X12PTX
OBX-3: 18702-1	PROVIDER, ED PRACTITIONER ROLE Deeds code for ED practitioner role. See Deeds 2.10.	CE	1..1	OBX-5^3: DEEDS2.10
OBR-4: 18693-2	PROVIDER, ED CONSULTANT PRACTITIONER (COMPOSITE) Deeds 2.10, 2.11, 2.12.		0..n	
OBX-3: 11298-7	PROVIDER, ED CONSULTANT PRACTITIONER IDENTIFIER Once the NPI is fully implemented the NPI number will be the only identifier allowed. Until complete implementation is achieved, other identifiers such as state license numbers or UPIN are allowed.	CE	1..1	OBX-5^3: NPI
	Component 3 should indicate the authority assigning the identifier as follows: NPI (National Provider Identifier), UPIN, or XX, where XX is the two-letter US Postal Service abbreviation for the state of the licensing authority.			
	Deeds 2.11.			

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBX-3: 18694-0	PROVIDER, ED CONSULTANT PRACTITIONER NAME (This is a supplement to the DEEDS definition.)	PN	1..1	
OBX-3: 11299-5	PROVIDER, ED CONSULTANT PRACTITIONER PROFESSION HCFA/X12 code for practitioner type. See Deeds 2.12.	CE	1..1	OBX-5^3: X12PTX
OBX-3: 18702-1	PROVIDER, ED PRACTITIONER ROLE Deeds code for ED practitioner role. See Deeds 2.10.	CE	1..1	OBX-5^3: DEEDS2.10
OBR-4: 18704-7	PROVIDER, ED REFERRING PRACTITIONER (COMPOSITE) (Supplement to DEEDS definitions).		0..1	
OBX-3: 18706-2	PROVIDER, ED REFERRING PRACTITIONER IDENTIFIER Once the NPI is fully implemented the NPI number will be the only identifier allowed. Until complete implementation is achieved, other identifiers such as state license numbers or UPIN are allowed. Component 3 should indicate the authority assigning the identifier as follows: NPI (National Provider Identifier), UPIN, or XX, where XX is the two-letter US Postal Service abbreviation for the state of the licensing authority. (Supplement to DEEDS definitions).	CE	1..1	OBX-5^3: NPI
OBX-3: 18705-4	PROVIDER, ED REFERRING PRACTITIONER NAME	PN	1..1	
OBX-3: 18707-0	PROVIDER, ED REFERRING PRACTITIONER PROFESSION HCFA/X12 code for practitioner type. (Supplement to DEEDS definitions).	CE	1..1	OBX-5^3: X12PTX
OBR-4: 11288-8	EMS TRANSPORT, ARRIVAL TIME DOCUMENTED DATE AND TIME The date and time the event was first documented. See Deeds 4.01.		1..1	
OBX-3: 11288-8		TS	1..1	
OBR-4: 11459-5	EMS SYSTEM, TRANSPORT MODE Mode of transport to the ED. See Deeds 4.02.		1..1	
OBX-3: 11459-5		CE	1..1	OBX-5^3: DEEDS4.02
OBR-4: 11319-1	EMS SYSTEM, TRANSPORT UNIT IDENTIFIER See Deeds 4.03.		1..1	
OBX-3: 11319-1	Use code^description^coding system. If none or unknown use "" in component 1 and do not send other components.	CX	1..1	
OBR-4: 11318-3	EMS SYSTEM, TRANSPORT AGENCY IDENTIFIER See Deeds 4.04.		1..1	
OBX-3: 11318-3	If none or unknown use "" in component 1 and do not send other components. Local coding system.	CX	1..1	
OBR-4: 11293-8	ED REFERRAL, SOURCE See Deeds 4.05.		1..1	
OBX-3: 11293-8	The coded source of the referral. 10 Self-referral 20 EMS transport decision 30 Practitioner or health care facility referral 40 Internal facility referral or transfer 50 Law enforcement referral 60 Acute care hospital transfer 70 Other health care facility transfer 88 Other 99 Unknown mode of transport	CE	1..1	OBX-5^3: DEEDS4.05

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBR-4: 11292-0	CHIEF COMPLAINT (NARRATIVE) (REPORTED) Until a specific national code domain for chief complaint is developed this data must be sent as a text field. This may be the textual interpretation of a code used in the sending system or it may be narrative.		1..1	
OBX-3: 11292-0		TX	1..1	
OBR-4: 11371-2	INITIAL ENCOUNTER FOR CHIEF COMPLAINT See Deeds 4.07.		1..1	
OBX-3: 11371-2	Determination if the patient has been seen before for this complaint. See DEEDS 1.0 data element 4.07 for coding system. Enter "" if not reported. 1 Yes 2 No (chief complaint attributable to illness or injury, but this is not the initial encounter) 8 Other (chief complaint not attributable to illness or injury) 9 Unknown	CE	1..1	OBX-5^3: DEEDS4.07
OBR-4: 11283-9	FIRST ACUITY ASSESSMENT See Deeds 4.08.		0..1	
OBX-3: 11283-9	First ED Acuity Assessment 10 Requires immediate evaluation or treatment 20 Requires prompt evaluation or treatment 30 Time to evaluation or treatment not critical 99 Unknown	CE	1..1	OBX-5^3: DEEDS4.08
OBR-4: 11454-6	FIRST RESPONSIVENESS ASSESSMENT See Deeds 4.12.		1..1	
OBX-3: 11454-6	Coded ED responsiveness assessment.	CE	1..1	OBX-5^3: DEEDS4.12
OBR-4: 11324-1	FIRST GLASGOW SCORE EYE OPENING See Deeds 4.14.		1..1	
OBX-3: 11324-1	Glasgow Eye Opening Component Assessment 1 None 2 Opens eyes in response to painful stimulation 3 Opens eyes in response to verbal stimulation 4 Opens eyes spontaneously 8 Not assessed 9 Unknown	CE	0..1	OBX-5^3: DEEDS4.14
OBR-4: 11326-6	FIRST GLASGOW SCORE VERBAL See Deeds 4.15.		1..1	
OBX-3: 11326-6	Glasgow Verbal Component Assessment	CE	0..1	OBX-5^3: DEEDS4.15
OBR-4: 11325-8	FIRST GLASGOW SCORE MOTOR See Deeds 4.16.		1..1	
OBX-3: 11325-8	Glasgow Motor Component Assessment	CE	0..1	OBX-5^3: DEEDS4.16
OBR-4: 18684-1	FIRST BLOOD PRESSURE (COMPOSITE) Initial Blood Pressure. If the blood pressure values are not sent, send the Special Circumstances alternative. See Deeds 4.18 and 4.20.		1..1	
OBX-3: 18685-8	FIRST BLOOD PRESSURE SPECIAL CIRCUMSTANCES Send instead of pressure to explain why not measured. 777 Not measurable, but pulse palpable 888 Not measured 999 Unknown	CE	0..1	OBX-5^3: DEEDS4.18
OBX-3: 11378-7	ARTERIAL SYSTEM, FIRST INTRAVASCULAR SYSTOLIC PRESSURE Systolic Blood Pressure. Send measured pressure.	NM	0..1	OBX-6^3: iso+
OBX-3: 11377-9	ARTERIAL SYSTEM, FIRST INTRAVASCULAR DIASTOLIC PRESSURE Diastolic Blood Pressure. Send pressure when measured.	NM	0..1	OBX-6^3: iso+

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBR-4: 18708-8	ARTERIAL SYSTEM, FIRST HEART BEAT (COMPOSITE) Heart Rate. See Deeds 4.21 and 4.22.		0..1	
OBX-3: 11328-2	ARTERIAL SYSTEM, FIRST HEART BEAT RATE Heart Rate. Enter measured Rate.	NM	0..1	
or OBX-3: 18709-6	FIRST HEART BEAT SPECIAL CIRCUMSTANCES Heart Rate. Send instead of rate to explain why not measured. 888 not measured 999 unknown	CE	0..1	OBX-5^3: DEEDS4.21
OBX-3: 11327-4	ARTERIAL SYSTEM, FIRST HEART BEAT METHOD Heart Rate Method 10 Pulse rate measured by palpation 20 Pulse rate measured by automated device 30 Heart rate measured by palpation or auscultation 40 Heart rate measured by automated device 99 Unknown 9999 Unknown	CE	0..1	OBX-5^3: DEEDS4.22
OBR-4: 18686-6	FIRST RESPIRATION RATE (COMPOSITE) Patient's unassisted respiratory rate. See Deeds 4.24.		0..1	
OBX-3: 11291-2	FIRST RESPIRATION RATE Patient's unassisted respiratory rate when measured.. Enter rate (per minute).	NM	0..1	
or OBX-3: 18687-4	FIRST RESPIRATION RATE SPECIAL CIRCUMSTANCES Send instead of rate when not measured to explain reason. 666 Agonal respirations 777 Respiratory assistance with manual or mechanical ventilation 888 Not measured 999 Unknown	CE	0..1	OBX-5^3: DEEDS4.24
OBR-4: 18688-2	FIRST BODY TEMPERATURE (COMPOSITE) See Deeds 4.26.		0..1	
OBX-3: 11289-6	FIRST BODY TEMPERATURE Temperature Reading. Enter measured temperature to the nearest tenth degree. See Deeds 4.26.	NM	0..1	OBX-6^3: iso+
or OBX-3: 18689-0	FIRST BODY TEMPERATURE SPECIAL CIRCUMSTANCES 8888 Not measured 9999 Unknown	CE	0..1	OBX-5^3: DEEDS4.26
OBX-3: 11290-4	FIRST BODY TEMPERATURE SITE Temperature Reading Route. Enter code or simply text in component 2. See Deeds 4.27. 1 Oral 2 Tympanic membrane 3 Rectal 4 Axillary 5 Urinary bladder 8 Other 9 Unknown	CE	0..1	OBX-5^3: DEEDS4.27
OBR-4: 18690-8	FIRST BODY WEIGHT (COMPOSITE) Measured Weight in ED. See Deeds 4.29.		0..1	
OBX-3: 18692-4	FIRST BODY WEIGHT SPECIAL CIRCUMSTANCES Send instead of measured weight to explain why not measured. 88888 Not measured 99999 Unknown	CE	0..1	OBX-5^3: DEEDS4.29
or OBX-3: 18833-4	FIRST BODY WEIGHT (MEASURED) Weight measured in ED in kilograms, recorded to the nearest tenth. mi Miles	NM	0..1	OBX-6: kg^^ans+
OBR-4: 11372-0	INJURY, ACTIVITY ASSOCIATED WITH Type of activity patient was involved in at the time of the injury. Deeds 5.06.		0..n	

LOINC code	Value	OBX-2	Rep	OBX 5/6
OBX-3: 11372-0		CE	1..1	OBX-5^3: DEEDS5.06
OBR-4: 11457-9	INJURY, SAFETY EQUIPMENT USED DURING See Deeds 5.08. Repeat the OBX as many times as necessary to describe the use or non-use of identified safety equipment.		0..1	
OBX-3: 11457-9		CE	0..n	OBX-5^3: DEEDS5.08
OBR-4: 18605-6	MEDICATION CURRENT (COMPOSITE) (REPORTED) Current therapeutic medication.,		0..n	
OBX-3: 18606-4	MEDICATION CURRENT, NAME + IDENTIFIER Send as an NDC code or simply as free text in component 2. Deeds 5.09.	CE	1..1	OBX-5^3: NDC
OBX-3: 18607-2	MEDICATION CURRENT, DOSE Deeds 5.10 & 5.11.	NM	1..1	OBX-5^3: iso+
OBX-3: 18608-0	MEDICATION CURRENT, TIMING + QUANTITY Deeds 5.12.	TQ	1..1	
OBX-3: 18609-8	MEDICATION CURRENT, ROUTE Deeds 5.13.	CE	1..1	OBX-5^3: HL70162
OBR-4: 18698-1	ED CLINICAL FINDING INFORMATION (COMPOSITE) ED Clinical Finding. This element is repeated numerous times to describe the findings for a typical Emergency Department visit. The manner of representing the findings is described in Section 2.		0..n	
OBX-3: 18697-3	ED CLINICAL FINDING DATA SOURCE See Deeds 5.19.	CE	1..1	OBX-5^3: DEEDS5.19
OBX-3: (varies)	Populate the OBX-2 field with an HL7 type appropriate to the LOINC code in the second OBX segment of this group. National codes may be used when the CE data type is specified, but the transmission must include the text explanation of the code in the second component of the OBX-5 field.	*	1..1	
	The values that may appear in OBX-3 are listed in DEEDS5.14.			
OBR-4: 18703-9	ED PROCEDURE INFORMATION (COMPOSITE) This element will repeat as required to report the procedure results associated with the ED visit. The pattern of OBX segments will vary in order to accommodate the heterogeneous data associated with the visit. This is described in section 2. See DEEDS 6.09.		0..n	
OBX-3: Z9999-9	(varies) OBX segments with various LOINC codes in OBX-3 and data types in OBX-2 that vary according to the LOINC code. See section 2.	*	1..n	
OBR-4: 18610-6	MEDICATION ADMINISTERED (COMPOSITE) Medications administered in the ED.		0..n	
OBX-3: 18611-4	MEDICATION ADMINISTERED, NAME + IDENTIFIER The medication administered, reported as an NDC code or simply as free text in component 2. Deeds 7.04.	CE	1..1	OBX-5^3: NDC
OBX-3: 18615-5	MEDICATION ADMINISTERED, DOSE Dose and units. Supplement with another OBX with medicine strength when units are complex or determined as unit per time. See Deeds 7.05, Deeds 7.06.	NM	1..1	OBX-5^3: iso+
OBX-3: 18616-3	MEDICATION ADMINISTERED, STRENGTH Used when the units used with "Dose" do not specify strength or strength/per time. These units can be a "compound quantity;" i.e., the units may express a quantity per unit of time. For example, micrograms per hour (ug/h) is an acceptable value. These compound units are contained in the ISO+ table.	NM	0..1	

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBX-3: 18614-8	MEDICATION ADMINISTERED, TIMING See Deeds 7.07.	TQ	1..1	
OBX-3: 18612-2	MEDICATION ADMINISTERED, ROUTE The route of administration of the medicine. See Deeds 7.05, Deeds 7.06.	CE	1..1	OBX-5^3: HL70162
OBR-4: 18617-1	MEDICATION DISCHARGE (COMPOSITE)		0..n	
OBX-3: 18618-9	MEDICATION DISCHARGE, NAME + IDENTIFIER Can be sent as text description only in component 2. If the NDC code is sent, the text description must be included in component 2.	CE	1..1	OBX-5^3: NDC
	Examples			
	0008-0581-02^Ativan injection 2 mg per ml^NDC			
	^Ibuprofen^			
	Deeds 8.16.			
OBX-3: 18619-7	MEDICATION DISCHARGE, DOSE The dose and units. Supplement with another OBX for Strength when units are complex or determined as unit per time. See Deeds 8.17, Deeds 8.18.	NM	1..1	OBX-6^3: iso+
OBX-3: 18620-5	MEDICATION DISCHARGE, TIMING + QUANTITY See Deeds 8.19.	TQ	1..1	
OBX-3: 18621-3	MEDICATION DISCHARGE, ROUTE Deeds 8.20.	CE	1..1	OBX-5^3: HL70162
OBX-3: 18622-1	MEDICATION DISCHARGE, AMOUNT DISPENSED The amount dispensed and units for the amount. This must be in simple units that reflect the actual quantity of the substance to be dispensed. It does not include compound units. See Deeds 8.21.	NM	1..1	
OBX-3: 18623-9	MEDICATION DISCHARGE, REFILLS Number of refills prescribed. See Deeds 8.22.	NM	1..1	
OBR-4: 18624-7	ED PROBLEM (NARRATIVE) (REPORTED) Practitioner's description of condition or problem for which services were provided, recorded at time of disposition. See Deeds 8.23.		1..n	
OBX-3: 18624-7		TX	1..n	

4.1 Coding Example

<p>Message Header: (An HL7 version 2.3 message was prepared for inclusion in a 275 at 2:35 PM on August 12, 1998. The system which prepared the message identified it as "Regens0128765419")</p>	<pre>MSH ^~\& 199808121425 ORU^R01 Regens0128765419 P 2.3 NE NE</pre>
<p>Patient Identification: Rev. Jon Francis Therev, who lives at 11. Elm, Apt 6, Elmo, Utah, 85912. In the sending system the patient is identified by the number 184569. The claim that is the subject of the 275 is associated with billing account X485024 in the sending system.</p>	<pre>PID 184569 Therev^Jon^Francis^^Rev 11 Elm^Apt 6^ Elmo^UT^85912 X485024</pre>
<p>Primary Care Practitioner: John Smith, MD National Provider Identifier: 46720934 Professional Designation by HCFA Taxonomy: 203BF0100Y (Physician /Osteopath Family Practice)</p>	<pre>OBR 18710-4^^LN<cr> OBX PN 18711-2^^LN Smith^John^J^^DR^MD F<cr> OBX CE 18600-7^^LN 46720934^^NPI F<cr> OBX CE 18601-5^^LN 203BF0100Y^Physician/Osteopath Family Practice^X12PTX F<cr></pre>
<p>ED PRACTITIONER # 1: Ashan J. Havelachk, MD National Provider Identifier: 2093467 Professional Designation by HCFA Taxonomy: 203BE0004Y (Emergency Physician) ED Practitioner Role: ED attending or staff physician ED PRACTITIONER # 2: Donald Duque, RN State ID: 2093467 (Utah) Professional Designation by HCFA Taxonomy: 793BE0004Y (Nurse Practitioner) ED Practitioner Role: Nurse Practitioner</p>	<pre>OBR 18699-9^^LN<cr> OBX PN 18700-5^^LN Havelachk^Ashan^J^^DR^MD F<cr> OBX CE 18602-3^^LN 2093467^^NPI F<cr> OBX CE 18701-3^^LN 203BE0004Y^Emergency Physician ^X12PTX F<cr> OBX CE 18702-1^^LN 100^^DEEDS2.10 F<cr> OBR 18699-9^^LN<cr> OBX PN 18700-5^^LN Duque^Donald^^RN F<cr> OBX CE 18602-3^^LN 2093467^^UT F<cr> OBX CE 18701-3^^LN 793BE0004Y^^X12PTX F<cr> OBX CE 18702-1^^LN 210^^DEEDS2.10 F<cr></pre>
<p>Patient arrived by ambulance at: 8:23 MST on August 5, 1995</p>	<pre>OBR 11288-8^^LN<cr> OBX TS 11288-8^^LN 1998050823-0800 F<cr></pre>
<p>Mode of transport: ground ambulance</p>	<pre>OBR 11459-5^^LN<cr> OBX CE 11459-5^^LN 10^^L F<cr></pre>
<p>EMS TRANSPORT UNIT IDENTIFIER: unknown</p>	<pre>OBR 11319-1^^LN<cr> OBX CX 11318-3^^LN "" F<cr></pre>
<p>EMS Transport Agency: ID# 23, Emergencies R Us</p>	<pre>OBR 11318-3^^LN<cr> OBX CX 11319-1^^LN 23^^Emergencies R Us F<cr></pre>
<p>ED Referral Source: EMS transport decision</p>	<pre>OBR 11293-8^^LN<cr> OBX CE 11293-8^^LN 20^^DEEDS4.05 F<cr></pre>
<p>Chief Complaint: Chest pain</p>	<pre>OBR 11292-0^^LN<cr> OBX TX 11292-0^^LN Chest Pain F<cr></pre>
<p>Is this the first encounter for the chief complaint? Yes</p>	<pre>OBR 11371-2^^LN<cr> OBX CE 11371-2^^LN 1^^DEEDS4.07 F<cr></pre>
<p>First acuity assessment: required</p>	<pre>OBR 11283-9^^LN<cr> OBX CE 11283-9^^LN 10^^Deeds4.08 F<cr></pre>

immediate evaluation or treatment	
First heart beat rate: 97, measured by automatic device	OBR 18708-8^^LN OBX NM 11328-2^^LN 97 F OBX CE 11327-4^^LN 20^^DEEDS4.22 F
First unassisted breathing rate: could not be measured because the patient was on a ventilator	OBR 18686-6^^LN OBX CE 18687-4^^LN 777^^DEED4.24 F
Clinical findings, history of present illness: crushing substernal chest pain associated with shortness of breath for one hour. Smokes two packs of cigarettes/day	OBR 18698-1^^LN<cr> OBX CE 18697-3^^LN 10^^DEEDS5.19 F<cr> OBX TX 8684-3^^LN crushing substernal chest pain associated with shortness of breath for one hour F<cr> OBX NM 8663-7^^LN 2 F<cr>
ED Problem: probable myocardial infarction	OBR 18624-7^^LN<cr> OBX TX 18624-7^^LN Probable MI F<cr>

5 Response Code Sets

This section describes response codes that may be used in component 3 of OBX-5, when OBX-2 indicates a CE data type. These code sets may also be used in component 3 of OBX-6 when OBX-2 indicates a numeric data type. An entry in the value table refers to these code sets by a short abbreviation, such as “ans+”. These abbreviations are used in the headings of the subsections of this section.

The values for some code sets appear directly in this document. In other cases, the section cites another document as the source.

5.1 ans+: Extended ANSI Units Codes

ANSI X3.50-1986 and extensions as defined in HL7 Version 2.3, Figure 7-13.

5.2 DEEDS2.10: DEEDS Code for ED Practitioner Role

See DEEDS data element 2.10

<u>Code</u>	<u>DEEDS Code for ED Practitioner Role</u>	<u>Code</u>	<u>DEEDS Code for ED Practitioner Role</u>
100	ED attending or staff physician	500	Nurse's aide
110	ED resident (includes interns, house staff at all postgraduate levels, and fellows)	510	ED technician
120	Non-ED-based attending or staff physician (includes primary care physicians and other attending or staff physicians called to the ED once the patient arrives)	520	Phlebotomy technician
130	Non-ED-based resident (includes interns, house staff at all postgraduate levels, and fellows working on the service of a non- ED-based attending or staff physician)	530	ECG technician
200	Registered nurse	540	Radiologic technologist or technician
210	Nurse practitioner	550	Other technician or technologist
220	Attending nurse practitioner	600	Social worker
230	Other advanced practice nurse (clinical nurse specialist, nurse anesthetist, or nurse midwife)	700	Medical student
240	Licensed practical nurse or licensed vocational nurse	710	Registered nurse student
300	Physician assistant	720	Nurse practitioner student
400	Respiratory therapist	730	Other advanced practice nurse student (clinical nurse specialist, Nurse anesthetist, or nurse midwife)
		740	Licensed practical nurse or licensed vocational nurse student
		750	Physician assistant student
		760	Nurse's aide, technician, or technologist student
		770	Other student practitioner
		888	Other role

<u>Code</u>	<u>DEEDS Code for ED Practitioner Role</u>
999	Unknown role

5.3 DEEDS4.02: Mode of Transport to ED (Deeds 4.02)

Patient's mode of transport to the ED. See DEEDS Data Element 4.02.

<u>Code</u>	<u>Mode of Transport to ED (Deeds 4.02)</u>	<u>Code</u>	<u>Mode of Transport to ED (Deeds 4.02)</u>
10	Ground ambulance	60	Walk-in following transport via public transportation
20	Helicopter ambulance	70	Walk-in following nonambulance, law enforcement transport
30	Fixed-wing air ambulance	80	Walk-in, not otherwise specified
40	Ambulance, not otherwise specified	88	Other mode of transport
50	Walk-in following transport via private transportation	99	Unknown mode of transport

5.4 DEEDS4.05: ED Source of Referral (Deeds Element 4.05)

Kind of individual or group who decided the patient should seek care at the ED.

<u>Code</u>	<u>ED Source of Referral (Deeds Element 4.05)</u>	<u>Code</u>	<u>ED Source of Referral (Deeds Element 4.05)</u>
10	Self-referral	60	Acute care hospital transfer
20	EMS transport decision	70	Other health care facility transfer
30	Practitioner or health care facility referral	88	Other
40	Internal facility referral or transfer	99	Unknown mode of transport
50	Law enforcement referral		

5.5 DEEDS4.07: Code for ED Initial Visit for Complaint

Codes whether this is the initial visit for the current instance of the chief complain.

<u>Code</u>	<u>Code for ED Initial Visit for Complaint</u>	<u>Code</u>	<u>Code for ED Initial Visit for Complaint</u>
1	Yes	8	Other (chief complaint not attributable to illness or injury)
2	No (chief complaint attributable to illness or injury, but this is not the initial encounter)	9	Unknown

5.6 DEEDS4.08: DEEDS Code for Acuity Assessment

See DEEDS Data Element 4.08.

<u>Code</u>	<u>DEEDS Code for Acuity Assessment</u>	<u>Code</u>	<u>DEEDS Code for Acuity Assessment</u>
10	Requires immediate evaluation or treatment	30	Time to evaluation or treatment not critical
20	Requires prompt evaluation or treatment	99	Unknown

5.7 DEEDS4.12: ED Responsiveness Assessment DEEDS 4.12

Code for ED Responsiveness Assessment

<u>Code</u>	<u>ED Responsiveness Assessment DEEDS 4.12</u>	<u>Code</u>	<u>ED Responsiveness Assessment DEEDS 4.12</u>
1	Alert. The patient is fully responsive, aware of the environment, and capable of responding appropriately to questions about orientation to person, place, and time.	3	Painful response. The patient does not respond to verbal stimuli but does respond to pain by withdrawing from the pain source, pushing in the direction of the pain source, flexing extremities, or extending extremities.
2	Verbal response. The patient is not fully alert but responds to verbal stimuli.	4	Unresponsive. The patient does not respond to any stimuli.
		9	Unknown

5.8 DEEDS4.14: DEEDS Glasgow Eye Opening Assessment

See DEEDS Data Element 4.14.

<u>Code</u>	<u>DEEDS Glasgow Eye Opening Assessment</u>	<u>Code</u>	<u>DEEDS Glasgow Eye Opening Assessment</u>
1	None	4	Opens eyes spontaneously
2	Opens eyes in response to painful stimulation	8	Not assessed
3	Opens eyes in response to verbal stimulation	9	Unknown

5.9 DEEDS4.15: DEEDS Glasgow Verbal Component Assessment

See DEEDS Data Element 4.15.

<u>Code</u>	<u>DEEDS Glasgow Verbal Component Assessment</u>	<u>Code</u>	<u>DEEDS Glasgow Verbal Component Assessment</u>
1	None	5	non-infant: Oriented and appropriate speech; non-verbal infant: Coos and babbles
2	Nonspecific sounds	8	Not assessed
3	non-infant: Inappropriate words; non-verbal infant: Cries to pain, screams to pain	9	Unknown
4	non-infant: Confused conversation or speech; non-verbal infant: Irritable cries		

5.10 DEEDS4.16: DEEDS Glasgow Motor Component Assessment

See DEEDS Data Element 4.16.

<u>Code</u>	<u>DEEDS Glasgow Motor Component Assessment</u>	<u>Code</u>	<u>DEEDS Glasgow Motor Component Assessment</u>
1	None	6	Adult: Obeys commands with appropriate motor response; infant or child: Normal spontaneous movement
2	Adult: Extensor posturing in response to painful stimulation; infant or child: Abnormal extension (decerebrate)	8	Not assessed
3	Adult: Flexor posturing in response to painful stimulation; infant or child: Abnormal flexion (decorticate)	9	Unknown
4	Adult: General withdrawal in response to painful stimulation; infant or child: Withdraws to pain		
5	Adult: Localization of painful stimulation; infant or child: Withdraws to touch		

5.11 DEEDS4.18: DEEDS Systolic Blood Pressure Special Situation

See DEEDS Data Element 4.18.

<u>Code</u>	<u>DEEDS Systolic Blood Pressure Special Situation</u>	<u>Code</u>	<u>DEEDS Systolic Blood Pressure Special Situation</u>
777	Not measurable, but pulse palpable	999	Unknown
888	Not measured		

5.12 DEEDS4.21: DEEDS Heart Rate Special Circumstances Codes

See DEEDS Data Element 4.21.

<u>Code</u>	<u>DEEDS Heart Rate Special Circumstances Codes</u>
888	not measured
999	unknown

5.13 DEEDS4.22: DEEDS Heart Rate Method

See DEEDS Data Element 4.22.

<u>Code</u>	<u>DEEDS Heart Rate Method</u>	<u>Code</u>	<u>DEEDS Heart Rate Method</u>
10	Pulse rate measured by palpation	40	Heart rate measured by automated device
20	Pulse rate measured by automated device	99	Unknown
30	Heart rate measured by palpation or auscultation	9999	Unknown

5.14 DEEDS4.24: DEEDS Respiratory Rate Special Circumstances Codes

See DEEDS Data Element 4.24.

<u>Code</u>	<u>DEEDS Respiratory Rate Special Circumstances Codes</u>	<u>Code</u>	<u>DEEDS Respiratory Rate Special Circumstances Codes</u>
666	Agonal respirations	888	Not measured
777	Respiratory assistance with manual or mechanical ventilation	999	Unknown

5.15 DEEDS4.26: DEEDS Pt Temperature Special Circumstances Codes

See DEEDS Data Element 4.26.

<u>Code</u>	<u>DEEDS Pt Temperature Special Circumstances Codes</u>
8888	Not measured
9999	Unknown

5.16 DEEDS4.27: DEEDS Pt Temperature Route

See DEEDS Data Element 4.27.

<u>Code</u>	<u>DEEDS Pt Temperature Route</u>	<u>Code</u>	<u>DEEDS Pt Temperature Route</u>
1	Oral	5	Urinary bladder
2	Tympanic membrane	8	Other
3	Rectal	9	Unknown
4	Axillary		

5.17 DEEDS4.29: DEEDS Weight Special Circumstances Codes

See DEEDS Data Element 4.29.

<u>Code</u>	<u>DEEDS Weight Special Circumstances Codes</u>
88888	Not measured
99999	Unknown

5.18 DEEDS5.06: DEEDS Injury Activity

See DEEDS Data Element 5.06.

<u>Code</u>	<u>DEEDS Injury Activity</u>
10	Sports. Comprises exercises with functional purpose (e.g., golf, jogging, riding, school sports and athletics, skiing, swimming, trekking, water-skiing). Includes activities described as a ballgame, but excludes those described as play with ball.
20	Leisure. Comprises activities with the purpose of entertainment or recreation (e.g., performing hobby activities or going to the cinema, a dance, or a party). Includes activities described as play with ball, but excludes activities described as a ball game.
30	Paid work. Comprises manual or professional work for salary, bonus, or other income.
40	Unpaid work. Comprises duties for which one would not normally gain an income. Includes volunteer work and domestic duties (e.g., caring for children and relatives, cleaning, cooking, gardening, and maintaining a household). Excludes learning activities (e.g., attending school or university).

<u>Code</u>	<u>DEEDS Injury Activity</u>
50	Educational activity. Comprises learning activities (e.g., attending school or university). Excludes apprenticeship.
60	Vital activity. Comprises resting, sleeping, eating, or engaging in other vital activities.
88	Other specified activity
99	Unknown activity

5.19 DEEDS5.08: DEEDS Safety Equipment Use

See DEEDS Data Element 5.08.

<u>Code</u>	<u>DEEDS Safety Equipment Use</u>	<u>Code</u>	<u>DEEDS Safety Equipment Use</u>
010	Shoulder belt	080	Air bag, not otherwise specified
020	Lap belt	090	Child safety seat
030	Seat belt, not otherwise specified	100	Helmet
040	Driver's front air bag	110	Eye protection
050	Passenger's front air bag	120	Protective clothing
060	Front air bag, not otherwise specified	130	Personal flotation device
070	Side air bag	888	Other protective gear

5.20 DEEDS5.14: ED Clinical Finding Type

LOINC Codes Established for Clinical Findings.

Note that some topics may have more than one codes, according to the manner in which the observation was collected (e.g. reported by patient vs. observed) or the form of the response information (e.g., narrative, measured numeric value, percentile, code, etc.) See the discussion of LOINC codes in the HL7 Implementation Guide for more information.

<u>Code</u>	<u>ED Clinical Finding Type</u>
10191-5	ABDOMEN, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
8694-2	ABDOMEN, PHYSICAL FINDINGS (OBSERVED)
11286-2	ALCOHOL BINGE EPISODES RATE (REPORTED)
11287-0	ALCOHOLIC DRINKS PER DRINKING DAY RATE (REPORTED)
11359-7	ALLERGIC & IMMUNOLOGIC, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
11352-2	ALLERGIC & IMMUNOLOGIC, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
11385-2	ANKLE, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11416-5	ANKLE, PHYSICAL FINDINGS (OBSERVED)
11386-0	ARM UPPER, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11417-3	ARM UPPER, PHYSICAL FINDINGS (OBSERVED)
8462-4	ARTERIAL SYSTEM, INTRAVASCULAR DIASTOLIC PRESSURE
8478-0	ARTERIAL SYSTEM, INTRAVASCULAR MEAN PRESSURE
8480-6	ARTERIAL SYSTEM, INTRAVASCULAR SYSTOLIC PRESSURE
8479-8	ARTERIAL SYSTEM, INTRAVASCULAR SYSTOLIC PRESSURE (PALPATION)
11387-8	AXILLA, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11418-1	AXILLA, PHYSICAL FINDINGS (OBSERVED)
10192-3	BACK, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
8695-9	BACK, PHYSICAL FINDINGS (OBSERVED)
8310-5	BODY TEMPERATURE
11353-0	BREASTS, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
11360-5	BREASTS, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
10193-1	BREASTS, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
8696-7	BREASTS, PHYSICAL FINDINGS (OBSERVED)
11388-6	BUTTOCKS, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11419-9	BUTTOCKS, PHYSICAL FINDINGS (OBSERVED)
11389-4	CALF, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11420-7	CALF, PHYSICAL FINDINGS (OBSERVED)
10168-3	CARDIOVASCULAR SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
8660-3	CARDIOVASCULAR SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
11390-2	CARDIOVASCULAR SYSTEM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)

<u>Code</u>	<u>ED Clinical Finding Type</u>
11421-5	CARDIOVASCULAR SYSTEM, PHYSICAL FINDINGS (OBSERVED)
11392-8	CHEST WALL, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11423-1	CHEST WALL, PHYSICAL FINDINGS (OBSERVED)
11391-0	CHEST, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11422-3	CHEST, PHYSICAL FINDINGS (OBSERVED)
10154-3	CHIEF COMPLAINT (NARRATIVE) (REPORTED)
8661-1	CHIEF COMPLAINT (REPORTED)
8663-7	CIGARETTES SMOKED CURRENT (PACK/DAY) (REPORTED)
8664-5	CIGARETTES SMOKED TOTAL (PACK/YR) (REPORTED)
11294-6	CURRENT EMPLOYMENT (NARRATIVE) (REPORTED)
11295-3	CURRENT EMPLOYMENT (REPORTED)
10194-9	DEEP TENDON REFLEXES, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
8697-5	DEEP TENDON REFLEXES, PHYSICAL FINDINGS (OBSERVED)
10195-6	EAR, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
8698-3	EAR, PHYSICAL FINDINGS (OBSERVED)
11393-6	EARS & NOSE & MOUTH & THROAT, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11424-9	EARS & NOSE & MOUTH & THROAT, PHYSICAL FINDINGS (OBSERVED)
11354-8	EARS & NOSE & SINUSES & MOUTH & THR, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
11361-3	EARS & NOSE & SINUSES & MOUTH & THR, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
11394-4	ELBOW, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11425-6	ELBOW, PHYSICAL FINDINGS (OBSERVED)
10170-9	ENDOCRINE SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
8668-6	ENDOCRINE SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
11396-9	EXTREMITIES, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11395-1	EXTREMITIES, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11427-2	EXTREMITIES, PHYSICAL FINDINGS (OBSERVED)
11426-4	EXTREMITIES, PHYSICAL FINDINGS (OBSERVED)
10197-2	EYE, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
8699-1	EYE, PHYSICAL FINDINGS (OBSERVED)
10171-7	EYES, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
8669-4	EYES, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
10157-6	FAMILY, HISTORY OF FAMILY MEMBER DISEASES (NARRATIVE) (REPORTED)
8670-2	FAMILY, HISTORY OF FAMILY MEMBER DISEASES (REPORTED)
11320-9	FEEDING AND DIETARY STATUS (NARRATIVE) (REPORTED)
11321-7	FEEDING AND DIETARY STATUS (REPORTED)
11397-7	FOOT, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11428-0	FOOT, PHYSICAL FINDINGS (OBSERVED)
11398-5	FOREARM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11429-8	FOREARM, PHYSICAL FINDINGS (OBSERVED)
11362-1	GASTROINTESTINAL SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
11355-5	GASTROINTESTINAL SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
11399-3	GASTROINTESTINAL SYSTEM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11430-6	GASTROINTESTINAL SYSTEM, PHYSICAL FINDINGS (OBSERVED)
11322-5	GENERAL HEALTH (NARRATIVE) (REPORTED)
11323-3	GENERAL HEALTH (REPORTED)
11401-7	GENITALIA FEMALE, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11432-2	GENITALIA FEMALE, PHYSICAL FINDINGS (OBSERVED)
11402-5	GENITALIA MALE, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11433-0	GENITALIA MALE, PHYSICAL FINDINGS (OBSERVED)
11400-9	GENITALIA, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11431-4	GENITALIA, PHYSICAL FINDINGS (OBSERVED)
11356-3	GENITOURINARY SYSTEMS, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
11363-9	GENITOURINARY SYSTEMS, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
10198-0	GENITOURINARY TRACT, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
8700-7	GENITOURINARY TRACT, PHYSICAL FINDINGS (OBSERVED)
9267-6	GLASGOW COMA SCORE EYE OPENING
9268-4	GLASGOW COMA SCORE MOTOR

<u>Code</u>	<u>ED Clinical Finding Type</u>
9269-2	GLASGOW COMA SCORE TOTAL
9270-0	GLASGOW COMA SCORE VERBAL
11403-3	GROIN, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11434-8	GROIN, PHYSICAL FINDINGS (OBSERVED)
11404-1	HAND, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11435-5	HAND, PHYSICAL FINDINGS (OBSERVED)
10199-8	HEAD, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
8701-5	HEAD, PHYSICAL FINDINGS (OBSERVED)
8867-4	HEART BEAT RATE
10200-4	HEART, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11405-8	HEART, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
8702-3	HEART, PHYSICAL FINDINGS (OBSERVED)
11436-3	HEART, PHYSICAL FINDINGS (OBSERVED)
10172-5	HEMATOLOGIC SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
8673-6	HEMATOLOGIC SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
11406-6	HIP, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11437-1	HIP, PHYSICAL FINDINGS (OBSERVED)
11329-0	HISTORY GENERAL (NARRATIVE) (REPORTED)
11330-8	HISTORY OF ALCOHOL USE (NARRATIVE) (REPORTED)
11331-6	HISTORY OF ALCOHOL USE (REPORTED)
10155-0	HISTORY OF ALLERGIES (NARRATIVE) (REPORTED)
8658-7	HISTORY OF ALLERGIES (REPORTED)
11332-4	HISTORY OF COGNITIVE FUNCTION (NARRATIVE) (REPORTED)
11333-2	HISTORY OF COGNITIVE FUNCTION (REPORTED)
10158-4	HISTORY OF FUNCTIONAL STATUS (NARRATIVE) (REPORTED)
8671-0	HISTORY OF FUNCTIONAL STATUS (REPORTED)
11334-0	HISTORY OF GROWTH+DEVELOPMENT (NARRATIVE) (REPORTED)
11335-7	HISTORY OF GROWTH+DEVELOPMENT (REPORTED)
11336-5	HISTORY OF HOSPITALIZATIONS (NARRATIVE) (REPORTED)
11337-3	HISTORY OF HOSPITALIZATIONS (REPORTED)
11338-1	HISTORY OF MAJOR ILLNESSES AND INJURIES (NARRATIVE) (REPORTED)
11339-9	HISTORY OF MAJOR ILLNESSES AND INJURIES (REPORTED)
10160-0	HISTORY OF MEDICATION USE (NARRATIVE) (REPORTED)
11340-7	HISTORY OF OCCUPATION (NARRATIVE) (REPORTED)
11341-5	HISTORY OF OCCUPATION (REPORTED)
11342-3	HISTORY OF OTHER NONMEDICAL DRUG USE (NARRATIVE) (REPORTED)
11343-1	HISTORY OF OTHER NONMEDICAL DRUG USE (REPORTED)
11344-9	HISTORY OF OTHER SOCIAL FACTORS (NARRATIVE) (REPORTED)
11345-6	HISTORY OF OTHER SOCIAL FACTORS (REPORTED)
11346-4	HISTORY OF OUTPATIENT VISITS (NARRATIVE) (REPORTED)
11347-2	HISTORY OF OUTPATIENT VISITS (REPORTED)
11348-0	HISTORY OF PAST ILLNESS (NARRATIVE) (REPORTED)
11349-8	HISTORY OF PAST ILLNESS (REPORTED)
10164-2	HISTORY OF PRESENT ILLNESS (NARRATIVE) (REPORTED)
8684-3	HISTORY OF PRESENT ILLNESS (REPORTED)
10165-9	HISTORY OF PSYCHIATRIC SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
8685-0	HISTORY OF PSYCHIATRIC SYMPTOMS & DISEASES (REPORTED)
11350-6	HISTORY OF SEXUAL BEHAVIOR (NARRATIVE) (REPORTED)
11351-4	HISTORY OF SEXUAL BEHAVIOR (REPORTED)
10166-7	HISTORY OF SOCIAL FUNCTION (NARRATIVE) (REPORTED)
8689-2	HISTORY OF SOCIAL FUNCTION (REPORTED)
10167-5	HISTORY OF SURGICAL PROCEDURES (NARRATIVE) (REPORTED)
8690-0	HISTORY OF SURGICAL PROCEDURES (REPORTED)
11366-2	HISTORY OF TOBACCO USE (NARRATIVE) (REPORTED)
11367-0	HISTORY OF TOBACCO USE (REPORTED)
10182-4	HISTORY OF TRAVEL (NARRATIVE) (REPORTED)
8691-8	HISTORY OF TRAVEL (REPORTED)
11369-6	IMMUNIZATION STATUS (NARRATIVE) (REPORTED)
11370-4	IMMUNIZATION STATUS (REPORTED)
11364-7	INTEGUMENTARY SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)

<u>Code</u>	<u>ED Clinical Finding Type</u>
11357-1	INTEGUMENTARY SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
8674-4	INTERVIEWEE, HISTORY SOURCE
11407-4	KNEE, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11438-9	KNEE, PHYSICAL FINDINGS (OBSERVED)
11379-5	LEVEL OF EDUCATION TIME (REPORTED)
11380-3	MARITAL STATUS AND LIVING ARRANGEMENTS (NARRATIVE) (REPORTED)
11381-1	MARITAL STATUS AND LIVING ARRANGEMENTS (REPORTED)
10190-7	MENTAL STATUS FINDING (NARRATIVE) (OBSERVED)
8693-4	MENTAL STATUS FINDING (OBSERVED)
11409-0	MOUTH & THROAT & TEETH, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11408-2	MOUTH & THROAT & TEETH, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11439-7	MOUTH & THROAT & TEETH, PHYSICAL FINDINGS (OBSERVED)
11440-5	MOUTH & THROAT & TEETH, PHYSICAL FINDINGS (OBSERVED)
10173-3	MUSCULOSKELETAL SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
8680-1	MUSCULOSKELETAL SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
11410-8	MUSCULOSKELETAL SYSTEM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11441-3	MUSCULOSKELETAL SYSTEM, PHYSICAL FINDINGS (OBSERVED)
11411-6	NECK, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11442-1	NECK, PHYSICAL FINDINGS (OBSERVED)
8672-8	NEUROLOGIC SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
8681-9	NEUROLOGIC SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
10202-0	NEUROLOGIC SYSTEM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
8705-6	NEUROLOGIC SYSTEM, PHYSICAL FINDINGS (OBSERVED)
10203-8	NOS, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
8706-4	NOS, PHYSICAL FINDINGS (OBSERVED)
10204-6	PELVIS, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
8707-2	PELVIS, PHYSICAL FINDINGS (OBSERVED)
11384-5	PHYSICAL EXAMINATION BY ORGAN SYSTEMS FINDING (OBSERVED)
10209-5	PHYSICAL FINDINGS BALANCE+COORDINATION (NARRATIVE) (OBSERVED)
8712-2	PHYSICAL FINDINGS BALANCE+COORDINATION (OBSERVED)
10210-3	PHYSICAL FINDINGS GENERAL STATUS (NARRATIVE) (OBSERVED)
8713-0	PHYSICAL FINDINGS GENERAL STATUS (OBSERVED)
11447-0	PHYSICAL FINDINGS HEMATOLOGIC+LYMPHATIC +IMMUNOLOGIC (NARRATIVE) (OBSERVED)
11448-8	PHYSICAL FINDINGS HEMATOLOGIC+LYMPHATIC +IMMUNOLOGIC (OBSERVED)
10211-1	PHYSICAL FINDINGS SENSATION (NARRATIVE) (OBSERVED)
8714-8	PHYSICAL FINDINGS SENSATION (OBSERVED)
10212-9	PHYSICAL FINDINGS STRENGTH (NARRATIVE) (OBSERVED)
8715-5	PHYSICAL FINDINGS STRENGTH (OBSERVED)
11450-4	PROBLEM LIST (REPORTED)
11451-2	PSYCHIATRIC FINDINGS (NARRATIVE) (OBSERVED)
11452-0	PSYCHIATRIC FINDINGS (OBSERVED)
11358-9	PSYCHIATRIC, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
11365-4	PSYCHIATRIC, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
10205-3	RECTUM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
8708-0	RECTUM, PHYSICAL FINDINGS (OBSERVED)
8688-4	REPRODUCTIVE SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
10176-6	REPRODUCTIVE SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
9279-1	RESPIRATORY SYSTEM, BREATHS RATE
8686-8	RESPIRATORY SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
10177-4	RESPIRATORY SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
11412-4	RESPIRATORY SYSTEM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11443-9	RESPIRATORY SYSTEM, PHYSICAL FINDINGS (OBSERVED)
11455-3	REVIEW OF SYMPTOMS AND DISEASES (NARRATIVE) (REPORTED)
11456-1	REVIEW OF SYMPTOMS AND DISEASES (REPORTED)
10188-1	REVIEW OF SYSTEMS OVERVIEW (NARRATIVE) (REPORTED)
10189-9	REVIEW OF SYSTEMS OVERVIEW (REPORTED)
11413-2	SHOULDER, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11444-7	SHOULDER, PHYSICAL FINDINGS (OBSERVED)

<u>Code</u>	<u>ED Clinical Finding Type</u>
10178-2	SKIN, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
8666-0	SKIN, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
10206-1	SKIN, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
8709-8	SKIN, PHYSICAL FINDINGS (OBSERVED)
11414-0	THIGH, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11445-4	THIGH, PHYSICAL FINDINGS (OBSERVED)
10207-9	THORAX+LUNGS, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
8710-6	THORAX+LUNGS, PHYSICAL FINDINGS (OBSERVED)
10181-6	URINARY TRACT, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
8692-6	URINARY TRACT, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
10208-7	VESSELS, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
8711-4	VESSELS, PHYSICAL FINDINGS (OBSERVED)
11415-7	WRIST, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11446-2	WRIST, PHYSICAL FINDINGS (OBSERVED)

5.21 DEEDS5.19: DEEDS Clinical Finding Data Source

See DEEDS Data Element 5.18

<u>Code</u>	<u>DEEDS Clinical Finding Data Source</u>	<u>Code</u>	<u>DEEDS Clinical Finding Data Source</u>
10	Patient	90	Other practitioner
20	Paramedic/emergency medical technician	100	Acquaintance
30	Parent	110	Bystander
40	Spouse/partner	120	Law enforcement personnel
50	Other family member	130	Existing medical records
60	Caretaker	888	Other source
70	Nurse	999	Unknown source
80	Physician		

5.22 HL70085: HL7 Observation Results Status.

HL7 table describes the status for an observation contained in an OBX segment.

<u>Code</u>	<u>HL7 Observation Results Status</u>	<u>Code</u>	<u>HL7 Observation Results Status</u>
C	This item is a correction to a previous result at the provider site.	F	Final
R	Results entered -- not verified	P	Preliminary
S	Partial results	X	No result can be obtained for this request/specimen

5.23 HL70103: Processing ID

Description of whether HL7 messages represent production, testing, or training transactions.

5.24 HL70125: HL7 OBX Data Types

All the data types that may be used in OBX-5.

<u>Code</u>	<u>HL7 OBX Data Types</u>	<u>Code</u>	<u>HL7 OBX Data Types</u>
CE	coded	NM	numeric
CK	composite ID with check digit	PL	person location
CM	composite	PT	processing type
CP	composite price	SI	sequence ID
CQ	composite quantity with units	ST	string data
CX	extended composite ID	TQ	timing and quantity
DT	date	TS	time stamp
EI	entity identifier	TX	text
FT	formatted text data	XAD	extended address
HD	hierarchic designator	XCN	extended composite id number
ID	coded value for HL7 defined tables	XON	extended composite name and identification number for organizations
IS	coded value for user-defined tables	XPN	extended person name
JCC	job code/class		

Code **HL7 OBX Data Types**
 XTN extended telecommunication number

5.25 HL70162: Route of Medicine Administration

HL7 codes for route of medicine administration. Items marked with "*" are used primarily for respiratory therapy and anesthesia delivery.

Code	Route of Medicine Administration	Code	Route of Medicine Administration
AP	Apply Externally	MTH	Mouth/Throat
B	Buccal	NG	Nasogastric
DT	Dental	NP	Nasal Prongs*
EP	Epidural	NS	Nasal
ET	Endotracheal Tube*	NT	Nasotracheal Tube
GTT	Gastronomy Tube	OP	Ophthalmic
GU	GU Irrigant	OT	Otic
IA	Intra-arterial	OTH	Other/Miscellaneous
IB	Intrabursal	PF	Perfusion
IC	Intracardiac	PO	Oral
ICV	Intracervical (uterus)	PR	Rectal
ID	Intradermal	RM	Rebreather Mask*
IH	Inhalation	SC	Subcutaneous
IHA	Intrahepatic artery	SD	Soaked Dressing
IM	Intramuscular	SL	Sublingual
IMR	Immerse (Soak) Body Part	TD	Transdermal
IN	Intranasal	TL	Translingual
IO	Intraocular	TP	Topical
IP	Intraperitoneal	TRA	Tracheostomy*
IS	Intrasynovial	UR	Urethral
IT	Intrathecal	VG	Vaginal
IU	Intrauterine	VM	Ventimask
IV	Intravenous	WND	Wound
MM	Mucous Membrane		

5.26 iso+: Extended ISO Units Codes

ISO 2955-1983 and extensions as defined in HL7 Version 2.3 Figure 7-13.

5.27 NDC: National Drug Code

FDA National Drug Code.

5.28 NPI: National Provider ID

Proposed HIPAA National Provider ID. Information available from Washington Publishing Company, Gaithersburg, MD. <http://www.wpc-edi.com/> and from the Department of Health and Human Services Administrative Simplification web site: <http://aspe.os.dhhs.gov/admsimp/>

5.29 X12PTX: HCFA/X12 Provider Taxonomy

X12 Provider Taxonomy maintained by Insurance Committee X12N Task Group 2 Working Group 15.

**Logical Observation Identifier
Names and Codes (LOINC[®]) Consortium**

**Code Tables for the HL7 “Additional Information
to Support a Healthcare Claim or Encounter” Message:
Laboratory Results**

Feb 6, 1999

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Logical Observation Identifier Names and Codes (LOINC[®]) Consortium

Code Tables for the HL7 “Additional Information to Support a Healthcare Claim or Encounter” Message: Laboratory Results

1 Introduction

This LOINC publication provides the code values that are used in:

- *ASC X12N Implementation Guide for Use of the 275 Transaction (004020) Additional Information to Support a Health Care Claim or Encounter*, which is a product of subcommittee X12N of Accredited Standards Committee X12^{1,2}
- *ASC X12N Implementation Guide for Use of the 277 Transaction (004020) Health Care Claim, Request for Additional Information*
- *Health Level Seven (HL7) Implementation Guide for Additional Information to Support a Healthcare Claim or Encounter*.³

The format of this document and the methods used to arrive at its contents are prescribed in the HL7 Implementation Guide. For a comprehensive understanding of the solution proposed in these documents, the following reading sequence is suggested:

- *ASC X12N Implementation Guide for Use of the 277 Transaction (004020) Health Care Claim, Request for Additional Information*
- *ASC X12N Implementation Guide for Use of the 275 Transaction (004020) Additional Information to Support a Health Care Claim or Encounter*
- *Health Level Seven (HL7) Implementation Guide for Additional Information to Support a Healthcare Claim or Encounter Version 1.0*
- *Logical Observation Identifier Names and Codes (LOINC[™]) Consortium Modifier Codes in the ASC X12N Implementation Guide for the 277 Requests for Additional Information Transaction*
- The Logical Observation Identifier Names and Codes (LOINC[®]) Consortium booklets containing the code tables for the Ambulance, Clinical Reports, Emergency Department, Laboratory Results, Medications and Rehabilitation Services messages. These booklets may be read in any order.
- One additional document serves as a reference: *Logical Observation Identifier Names and Codes (LOINC[®]) Consortium Codes for the HL7 and X12 Additional Information to Support a Health Care Claim or Encounter Transactions: Summary Listing*

¹Information on this and other X12/HIPAA-related implementation guides is available from the Washington Publishing Company, Gaithersburg, MD. <http://www.wpc-edi.com/>

² Within this LOINC document, references to the transaction defined by these X12 implementation guides will be abbreviated by calling them 275 and 277.

³ Health Level Seven inc., 3300 Washtenaw Ave., Suite 227, Ann Arbor, MI 48104-4261. (<http://www.hl7.org>)

1.1 Specifying Laboratory Observations

As of May 1997, there were in excess of 8,000 LOINC codes identifying various kinds of lab observations. When a payer sends a request for supporting documentation, it could not enumerate all the different way that, say allergy results, might be identified. Instead, LOINC identifies specific codes for requests, Report Subject Identifiers. Whereas most LOINC codes are assigned values in the database to create the narrowest possible interpretation, Report Subject Identifiers are chosen to have sufficient breadth to allow the payer to request a useful subset of all laboratory data with a single code.

The provider will respond with the appropriate observations that available, identified the specific LOINC code.

1.2 Limitations for Sending Laboratory Results

Laboratory results are transmitted using the HL7 ORU message. There are a variety of implementation models for the ORU message in sending lab results. HIPAA regulations impose a requirement for implementation without trading partner agreements. Receiving systems must be able to process all messages that are consistent with the message variant and use of LOINC codes expressed here.

In order to describe a workable set of requirements for the receiving systems, the ORU message variant for lab results in claims attachments imposes a specific set of implementation requirements that limit the information and format variations that may be sent as a claims attachment.

The limitations are:

- The patient must be identified.
- Observations must be transmitted in a single message, without reference to previous or subsequent messages.
- Only the segments MSH, PID, OBR, and OBX may be used.
- Values may only be sent which are correctly characterized by the *Observ result status* field, OBX-11.
- If a specimen was taken, but results cannot be obtained, it is acceptable to send X in OBX-11 and the reason that results cannot be obtained in OBX-5. In this case the data type in OBX-2 must be ST or TX.
- Other than an exception report described above, the data in OBX-5 must represent the information described by the LOINC code in OBX-3.
- Any data that is sent in OBX-5 in coded form must include, in its component 2, the textual interpretation of the code.
- Units must be sent using the HL7 iso+ scheme.
- Microbiology susceptibility studies are not covered at this time.

1.3 Revision History

<i>Date</i>	<i>Purpose</i>
Nov 23, 1998	Initial release
Feb 6, 1999	Technical corrections after ballot of HL7 Implementation Guide

2 HL7 Clinical Report Message Variant

All data elements for Textual Report Electronic Attachments are sent using the Clinical Report Message Variant, described below. It is used to transmit textual and structured information.

2.1 LOINC Codes and Structure

LOINC codes are used for several different purposes in the two X12 transactions and HL7 message that are used to request and provide clinical reports. The table below identifies four specific uses of LOINC codes and describes their use within the messages.

<i>Message/Transaction</i>	<i>X12 277</i>	<i>X12 275</i>	<i>HL7 ORU</i>
<i>Purpose of Message</i>	request further information in support of a claim	supply further information in support of a claim	transmit the clinical report within the X12 275
<i>LOINC Scope Modifier</i>	modify the scope of a request for information	describe the scope of a the information in the transaction (e.g., this is the worst result for the last 30 days)	not applicable
<i>LOINC Report Subject Identifier</i>	identify a category of clinical report that is requested (e.g., send any blood count results)	identify the subject of the clinical report that is provided (e.g., this is a set of blood count results)	identify the subject of the clinical report that is provided (e.g., this is a set of blood count results) (used in OBR-4)
<i>LOINC Report Part Identifier</i>	not applicable for laboratory results	not applicable for laboratory results	identify a specific result from the requested category (e.g., this is the leukocyte count) (used in OBX-3)

The LOINC Consortium publishes Scope Modifier codes in another publication, *Modifier Codes in X12 277 Requests for Additional Information Transactions*.

LOINC Report Subject Identifier codes and Report Part Identifier codes are described in the next sections.

2.2 Message Structure

The HL7 ORU message (trigger event R01) is used for the electronic attachment. Its segment pattern is:

ORU	Observational Results (Unsolicited)	Chapter
MSH	Message Header	2
PID	Patient Identification	3
{OBR	Observations Report ID	7
{OBX}	Observation/Result	7
}		

The following fields are used in each segment. Fields that are not described below must be null.

<i>SEQ</i>	<i>ELEMENT NAME AND DATA TYPE</i>	<i>REQUIRED VALUE</i>
MSH-1	Field Separator (ST)	
MSH-2	Encoding Characters (ST)	^~\&
MSH-7	Date/Time Of Message (TS)	
MSH-9	Message Type	ORU^R01
MSH-10	Message Control ID	
MSH-11	Processing ID	P
MSH-12	Version ID	2.3
MSH-15	Accept Acknowledgment Type	NE
MSH-16	Application Acknowledgment Type	NE
<p>Coding Example, MSH Segment.</p> <p>Scenario. (An HL7 message was prepared for inclusion in a 275 at 2:35 PM on August 12, 1998. The system which prepared the message identified it as "Regenstrief0128765419")</p> <p>Example:</p> <pre>MSH ^~\& 199808121425 ORU^R01 Regenstrief0128765419 P 2.3 NE NE</pre>		
PID-3	Patient ID (Internal ID)	Provider identification number for patient.
PID-5	Patient Name (PN)	
PID-9	Patient Alias (XPN)	
PID-11	Patient Address	
PID-18	Patient Account	
<p>Coding Example, PID Segment.</p> <p>Scenario. The HL7 message is about patient Jon Hay, who lives at 124 N. Elm St, Elmo, Utah, 85912. In the sending system the patient is identified by the number 184569. The claim that is the subject of the 275 is associated with billing account X48507924 in the sending system. In previous visits the patient has been identified as JJ Hay and John J. Hay.</p> <p>Example:</p> <pre>PID 184569 Hay^Jon^J Hay^JJ~Hay^John^J 124 Elm St^Elmo^UT^85912 x48507924</pre>		
OBR-4	Universal Service ID	<p>Code to identify the collection of OBX segments that follow the OBR. This field usually identifies the group of observations that were ordered as an orderable item, and is represented in a coding system other than LOINC.</p> <p>When sending claims attachments, however, the first component of OBR-4 must always be a LOINC code. The sender should use the appropriate report subject identifier or other LOINC that identifies the set of observations in the OBXs. The sender should not change the grouping of OBX segments that would have existed with the non-LOINC code in OBR-4. Instead, it should move the non-LOINC code to position four, with the text explanation in component five and the coding system identified in component six.</p> <p>Component five required. This data field is of the CE data type. The HL7 CE data type has six components: code, text meaning of code, coding system, local code, text meaning of local code, coding system of local code (usually "L").</p> <p>The fourth, fifth, and sixth components are generally optional. When used, they represent a local code used in the sending system that is used as an alternative identification for what is in components one through three. Even when components four and six are provided, component five is generally optional.</p> <p>Receiving systems cannot count on finding a code from a preestablished coding system in component four. It can rely on the text in component five to provide its users with grouping information.</p> <p>It can also rely on the LOINC codes in OBX-3 to specifically and individually identify the lab results contained in the message.</p>

SEQ	ELEMENT NAME AND DATA TYPE	REQUIRED VALUE
OBR-7	Observation date/time	Not used; see OBX-14.
OBR-13	Relevant clinical information (ST)	This free-text field contains any additional clinical information about the patient or specimen. This field is used to report the suspected diagnosis and clinical findings on requests for interpreted diagnostic studies. Examples include reporting the amount of inspired carbon dioxide for blood gasses, the point in the menstrual cycle for cervical pap tests, and other conditions that influence test interpretations. Senders may choose to send this information in a more structured form as a series of OBX segments that immediately follow the OBR segment.
OBR-15	Specimen source (CM)	<p>This field identifies the site where the specimen was obtained. Due to variations in the clinical situation and specific practices, specimen information may be found in one or more data fields. This data field is one possible source. Other possibilities include OBX-3 and OBX-5. Specimen information will be in OBX-3 when the LOINC code implies the specimen source (e.g. 18767-4, BLOOD GAS TESTS). Even in the case of observations whose name implies the source, additional source information may be required and specified in OBR-15, e.g., culture drawn from left arm.</p> <p>Specimen information will be in OBX-5 when it is part of a block of text that is a constituent of the report.</p> <p>When OBR-15 is present, the first component contains the specimen source name (as text) or code with the text explanation of the code in the second subcomponent. Refer to HL7 table 0070 - Source of Specimen for valid entries.</p> <p>The second component should include free text additives to the specimen such as Heparin, EDTA, or oxalate, when applicable.</p> <p>The third is a free text component describing the method of collection when that information is a part of the order. When the method of collection is logically an observation result, it should be included as a result segment.</p> <p>The fourth component specifies the body site from which the specimen was obtained, and the fifth is the site modifier. For example, the site could be antecubital fossa, and the site modifier "right." The components of the CE fields become subcomponents. Refer to HL7 table 0163 - Administrative Site for valid entries.</p> <p>The fifth component indicates whether the specimen is frozen as part of the collection method. Suggested values are F (Frozen); R (Refrigerated). If the component is blank, the specimen is assumed to be at room temperature.</p>
OBR-31	Reason for study (CE)	This optional field is code or text that accompanied the order. The code and code set is that used by the sender (possibly none.) If the field is populated, component 2 (the text) must be present, the code and coding system are optional.

<i>SEQ</i>	<i>ELEMENT NAME AND DATA TYPE</i>	<i>REQUIRED VALUE</i>
OBR-32	Principal result interpreter (CM)	<p>This field identifies the physician or other clinician that interpreted the observation and is responsible for the report content.</p> <p>This complex field contains the name and unique identification number. In other HL7 applications, it is used to contain additional information. For that reason, portions of this field that might appear in components of other data fields, appear as subcomponents here.</p> <p>Except for the subcomponents listed below, the receiver should ignore all data sent in this field.</p> <p>As always in HL7, components are shown separated by “^” and subcomponents are shown separated by “&”.</p> <p><ID number> & <family name> & <given name> & <middle initial or name> & <suffix (e.g., JR, III) > & <prefix (e.g., DR)> & <degree (e.g., MD)> & <source table></p> <p>ID number: once the NPI is fully implemented the NPI number will be the only identifier allowed. Until complete implementation is achieved, other identifiers such as state license numbers or UPIN are allowed.</p> <p>Source table: should indicate the authority assigning the identifier as follows: NPI (National Provider Identifier), UPIN, or XX, where XX is the two-letter US Postal Service abbreviation for the state of the licensing authority.</p>
<p>Coding Example, OBR Segment.</p> <p>Scenario. The segments that follow the OBR were created from an “automated blood count with auto diff” test. They conform to the Laboratory Subject Identifier LOINC code 18768-2, CELL COUNTS+DIFFERENTIAL TESTS (COMPOSITE). The specimen (blood) is implied by the test name, so it is not included in the OBR segment. The principle interpreter of the test is John Smith, MD, UPIN number 146782</p> <p>Example:</p> <pre>OBR 9527539462010120 18768-2, CELL COUNTS+DIFFERENTIAL TESTS (COMPOSITE)^LN^2010120^ AUTO BLOOD CT WITH AUTO DIFF^LN 146782&SMITH&JOHN&&&& MD&UPIN<CR></pre>		
OBR-2	Value Type	Code to identify data type of OBX-5, see value table.
OBR-3	Observation Identifier	See value table.
OBR-4	Observation Sub-ID	May be sent at the option of the sender. to group OBX segments into logical units. The receiver can ignore this field.
OBR-5	Observation Value and code source	See value table.
OBR-6	Units	See value table.
OBR-7	Reference range (ST)	May be sent at the option of the sender.
OBR-8	Abnormal flags (ID)	May be sent at the option of the sender.
OBR-9	Probability (NM)	May be sent at the option of the sender.
OBR-10	Nature of abnormal test (ID)	May be sent at the option of the sender.
OBR-11	Observ result status (CE)	See section 2.3.
OBR-14	Date time of the observation. (TS)	Identifies the clinically significant time associated with the observation. In the case of observations taken directly from a subject, it is the actual date and time the observation was obtained. In the case of a specimen-associated study, this field shall represent the date and time the specimen was collected or obtained.
OBR-15	Producer's ID (ST)	May be sent at the option of the sender. Not meaningful to the receiver.
OBR-16	Responsible observer (XCN)	May be sent at the option of the sender. Identification numbers in this field are based on the local system that originated the report.
OBR-17	Observation method (CE)	May be sent at the option of the sender.

<i>SEQ</i>	<i>ELEMENT NAME AND DATA TYPE</i>	<i>REQUIRED VALUE</i>
Coding Example, OBX Segment.		
<p>Scenario. One of the values reported was the automated white blood cell (leukocyte) count. The value was 25×10^3 cells per cubic millimeter. The normal range for this patient is 3.2 – 9.8, so the result is flagged as “high” (H). The result is final (F). The specimen was taken on Oct 2, 1995 at 6:58 PM. The result was approved by a professional identified with number 860.</p>		
<pre>OBX NM 6690-2^LEUKOCYTES COUNT (AUTOMATED)^LN 25 10*3/mm3 3.2- 9.8 H F 19951002185800 860<CR></pre>		

2.3 Use of OBX-11, Observ Result Status

In the provider’s information systems environment, HL7 messages are used to send preliminary, partial, updated, final, and corrected results, and to report that no result will be available for an order, because the specimen was unusable or for other reasons. The values available for this field are designed to support these use cases, and to reflect the status of a result at various points in its life cycle.

The use cases for sending supporting documentation to not support updating a result, once it has been sent the payer. The provider must use this data field to describe the status of the information at the time that it was extracted for transmission to the payer. Accordingly, the following values, which are a subset of HL7 Table 0085, may be used.

- C At some time prior to sending the information to the payer, a correction was posted to the provider’s database. This value is the corrected value.
- R Results entered -- not verified at the time of transmission to the payer
- S Partial results
- F Final
- P Preliminary
- X No result can be obtained for this request/specimen

3 LOINC Codes

3.1 LOINC Report Subject Identifier Codes

The following codes may be used as report subject identifiers as described in section 2.1.

<i>LOINC code</i>	<i>Name</i>
18716-1	ALLERGY TESTS (COMPOSITE)
18717-9	BLOOD BANK TESTS (COMPOSITE)
18767-4	BLOOD GAS TESTS (COMPOSITE)
18768-2	CELL COUNTS+DIFFERENTIAL TESTS (COMPOSITE)
18718-7	CELL MARKER TESTS (COMPOSITE)
18719-5	CHEMISTRY TESTS (COMPOSITE)
18720-3	COAGULATION TESTS (COMPOSITE)
18722-9	FERTILITY TESTS (COMPOSITE)
18723-7	HEMATOLOGY TESTS (COMPOSITE)
18724-5	HLA TESTS (COMPOSITE)
18725-2	MICROBIOLOGY TESTS (COMPOSITE)
18726-0	RADIOLOGY TESTS (COMPOSITE)
18727-8	SEROLOGY TESTS (COMPOSITE)
18721-1	THERAPEUTIC DRUG MONITORING TESTS (COMPOSITE)

<i>LOINC code</i>	<i>Name</i>
18728-6	TOXICOLOGY TESTS (COMPOSITE)
18729-4	URINALYSIS TESTS (COMPOSITE)

3.2 Scope Modification Codes

The LOINC publication *Modifier Codes in the ASC X12N 277 Request for Additional Information Implementation Guide*⁴ provides code values for modifying the scope of requests for information in an X12 277 transaction. Those codes apply to all electronic attachments, including this one.

3.3 Coding Example

Scenario: A payer was reviewing a claim for a patient named Patient H. Sample for an encounter that occurred on October 2, 1995. The payer sends a 277 with the following LOINC codes, 18729-4, URINALYSIS TESTS (COMPOSITE); 18725-2, MICROBIOLOGY TESTS (COMPOSITE); and 18768-2, CELL COUNTS+DIFFERENTIAL TESTS (COMPOSITE).

A response message was created on October 22, 1995 at 6:38:00 PM. The medical record ID of the patient for the sending institution is 6910828. The billing account number within the sending institution that is associated with the claim is 773789090.

The response includes results from one complete urinalysis that was ordered for the patient and an automated blood count. These sets of results are identified in OBR segments, each of which is followed by a group of OBX segments with individual results..

In the first, OBR-4, Universal Service ID, has the LOINC code 18729-4 repeated from the request in components 1-3 and the nomenclature for the test as ordered in component 4-6:

3500500^URINALYSIS COMPLETE^L. The useful information from the last three components is component 5, “urinalysis complete”. The OBXs convey the following information.

<i>Data type</i>	<i>LOINC Code</i>	<i>Result name</i>	<i>Result value</i>	<i>Units</i>	<i>Normal Range</i>	<i>Ab-normal flag</i>	<i>Clinically relevant date/time</i>	<i>ID of respons. interp.</i>
TX	5778-6	urine color	STRAW				10/2/1995 6:38 PM	647
TX	5767-9	urine appearance	CLEAR				10/2/1995 6:38 PM	647
TX	2349-9	urine glucose	1+		NEG	A	10/2/1995 6:38 PM	647
TX	1977-8	urine bilirubin	NEG		NEG		10/2/1995 6:38 PM	647
TX	2514-8	urine ketones	NEG		NEG		10/2/1995 6:38 PM	647
NM	5810-7	urine specific gravity	1.007		1.005-1.030		10/2/1995 6:38 PM	647
NM	2756-5	urine pH	6		5.0-8.0		10/2/1995 6:38 PM	647
NM	3107-0	urine urobilinogen	0.2	mg/dL	0.2-1.0		10/2/1995 6:38 PM	647
NM	798-9	urine erythrocytes	1	/(hpf)	0-3		10/2/1995 6:38 PM	647

⁴ The LOINC Consortium, c/o the Regenstrief Institute, 1001 West 10th Street RG-5, Indianapolis, IN 46202, 317/630-7433.

In the second OBR, the Universal Service ID has the LOINC code 18768-2, followed by the local nomenclature that identifies the actual battery: 2010120^AUTO BLOOD CT WITH AUTO DIFF^LN. The OBXs contain the following information.

Data type	LOINC Code	Result name	Result value	Units	Normal Range	Ab-normal flag	Clinically relevant date/time	ID of respons. interp.
NM	4544-3	hematocrit	45		39-49		10/2/1995 6:38 PM	860
NM	789-8	erythrocytes count	4.94	10*6/mm3	4.30-5.90		10/2/1995 6:38 PM	860
NM	787-2	mean corpuscular volume	91	fL	90-98		10/2/1995 6:38 PM	860
NM	5907-1	platelets count	233	10*3/mm3	150-450		10/2/1995 6:38 PM	860
NM	6690-2	leukocytes count	25	10*3/mm3	3.2-9.8	H	10/2/1995 6:38 PM	860
NM	770-8	neutrophils/100 leukocytes	83.1	%	37.0-80.0	H	10/2/1995 6:38 PM	860
NM	736-9	lymphocytes/100 leukocytes	10.1	%	10.0-50.0		10/2/1995 6:38 PM	860
NM	5905-5	monocytes/100 leukocytes	6.3	%	0.0-12.0		10/2/1995 6:38 PM	860
NM	713-8	eosinophils/100 leukocytes	0.3	%	0.0-7.0		10/2/1995 6:38 PM	860
NM	706-2	basophils/100 leukocytes	0.2	%	0.0-2.0		10/2/1995 6:38 PM	860
NM	752-6	neutrophils count	20.8	10*3/mm3	2.0-7.0	H	10/2/1995 6:38 PM	860
NM	731-0	lymphocytes count	2.5	10*3/mm3	0.6-3.5		10/2/1995 6:38 PM	860
NM	742-7	monocytes count	1.6	10*3/mm3	0.0-0.9	H	10/2/1995 6:38 PM	860
NM	711-2	eosinophils count	0.08	10*3/mm3	0.00-0.70		10/2/1995 6:38 PM	860
NM	704-7	basophils count	0.04	10*3/mm3	0.00-0.20		10/2/1995 6:38 PM	860

Sample message:

```
MSH|^~\&|LABGL1|DMCRES||19951022183800||ORU^R01|LABGL1199510221838581|P|2.3||NE|NE <CR>
PID||6910828^Y^C8||Sample^Patient^H|||||||773789090
OBR||18729-4^URINALYSIS TESTS (COMPOSITE)^LN^3500500^URINALYSIS COMPLETE^L<CR>
OBX|TX|5778-6^URINE COLOR^LN|STRAW||||F||19951002183800|647<CR>
OBX|TX|5767-9^URINE APPEARANCE^LN|CLEAR||||F||19951002183800|647<CR>
OBX|TX|2349-9^URINE GLUCOSE^LN|1+|NEG|A||||F||19951002183800|647<CR>
OBX|TX|1977-8^URINE BILIRUBIN^LN|NEG|NEG||||F||19951002183800|647<CR>
OBX|TX|2514-8^URINE KETONES TEST STRIP^LN|NEG|NEG||||F||19951002183800|647<CR>
OBX|NM|5810-7^URINE SPECIFIC GRAVITY (REFRACTOMETRY)^LN|1.007|1.005-1.030||||F||19951002183800|647<CR>
OBX|NM|2756-5^URINE PH^LN|5.5|5.0-8.0||||F||19951002183800|647<CR>
OBX|NM|3107-0^URINE UROBILINOGEN^LN|0.2|mg/dL|0.2 - 1.0||||F||19951002183800|647<CR>
OBX|NM|798-9^URINE ERYTHROCYTES (AUTOMATED COUNT)^LN|1|(hpf)|0-3||||F||19951002183800|647<CR>
OBR||9527539462010120|18768-2^CELL COUNTS+DIFFERENTIAL TESTS
(COMPOSITE)^LN^2010120^AUTO BLOOD CT WITH AUTO DIFF^L||19951002180500|||||19951002182500|||1793558<CR>
OBX|NM|4544-3^HEMATOCRIT (AUTOMATED)^LN|45|39-49||||F||19951002185800|860<CR>
OBX|NM|789-8^ERYTHROCYTES COUNT (AUTOMATED)^LN|4.94|10*12/mm3|4.30-5.90||||F||19951002185800|860<CR>
```

OBX|NM|787-2^ERYTHROCYTE MEAN CORPUSCULAR VOLUME (AUTOMATED COUNT)^LN||91|fL|90-98|||F|
 ||19951002185800||860<CR>
 OBX|NM|5907-1^PLATELETS COUNT (AUTOMATED)^LN||233|10*9/mm3|150-450|||F|||
 19951002185800||860<CR>
 OBX|NM|6690-2^LEUKOCYTES COUNT (AUTOMATED)^LN||25|10*9/mm3|3.2-9.8|H||F|||
 19951002185800||860<CR>
 OBX|NM|770-8^NEUTROPHILS/100 LEUKOCYTES (AUTOMATED)^LN||83.1|%|37.0-80.0|H||F|||
 19951002185800||860<CR>
 OBX|NM|736-9^LYMPHOCYTES/100 LEUKOCYTES (AUTOMATED)^LN||10.1|%|10.0-50.0|||F|||
 19951002185800||860<CR>
 OBX|NM|5905-5^MONOCYTES/100 LEUKOCYTES (AUTOMATED)^LN||6.3|%|0.0-12.0|||F|||
 19951002185800||860<CR>
 OBX|NM|713-8^EOSINOPHILS/100 LEUKOCYTES (AUTOMATED)^LN||0.3|%|0.0-7.0|||F|||
 19951002185800||860<CR>
 OBX|NM|706-2^BASOPHILS/100 LEUKOCYTES (AUTOMATED)^LN||0.2|%|0.0-2.0|||F|||
 19951002185800||860<CR>
 OBX|NM|752-6^NEUTROPHILS COUNT (AUTOMATED)^LN||20.8|10*9/mm3|2.0-7.0|H||F|||
 19951002185800||860<CR>
 OBX|NM|731-0^LYMPHOCYTES COUNT (AUTOMATED)^LN||2.5|10*9/mm3|0.6-3.5|||F|||
 19951002185800||860<CR>
 OBX|NM|742-7^MONOCYTES COUNT (AUTOMATED)^LN||1.6|10*9/mm3|0.0-0.9|H||F|||
 19951002185800||860<CR>
 OBX|NM|711-2^EOSINOPHILS COUNT (AUTOMATED)^LN||0.08|10*9/mm3|0.00-0.70|||F|||
 19951002185800||860<CR>
 OBX|NM|704-7^BASOPHILS COUNT (AUTOMATED)^LN||0.04|10*9/mm3|0.00-0.20|||F|||
 19951002185800||860<CR>

4 Value Tables for Specific Report Structures

The set of LOINC codes for laboratory observations is very large.

LOINC Consortium publishes it for download over the Internet at *URL to be provided later*.

5 Response Code Sets

This section describes response codes that may be used in component 3 of OBX-5, when OBX-2 indicates a CE data type. These code sets may also be used in component 3 of OBX-6 when OBX-2 indicates a numeric data type and in certain other fields as described in for the HL7 Message Variant in section 2.2.

5.1 ans+: Extended ANSI Units Codes

ANSI X3.50-1986 and extensions as defined in HL7 Version 2.3, Figure 7-13.

5.2 HL70070: Specimen Source Codes

Code set maintained by Health Level 7 giving the source of a specimen for a test.

Code	Specimen Source Codes	Code	Specimen Source Codes
ABS	Abscess	EARW	Ear wax (cerumen)
AMN	Amniotic fluid	ELT	Electrode
ASP	Aspirate	ENDC	Endocardium
BBL	Blood bag	ENDM	Endometrium
BDY	Whole body	EOS	Eosinophils
BIFL	Bile fluid	EXHLD	Exhaled gas (=breath)
BLD	Whole blood	EYE	Eye
BLDA	Blood arterial	FIB	Fibroblasts
BLDC	Blood capillary	FIST	Fistula
BLDV	Blood venous	FLT	Filter
BON	Bone	FLU	Body fluid, unsp
BPH	Basophils	GAS	Gas
BPU	Blood product unit	GAST	Gastric fluid/contents
BRN	Burn	GEN	Genital
BRO	Bronchial	GENC	Genital cervix
BRTH	Breath (use EXHLD)	GENL	Genital lochia
CALC	Calculus (=Stone)	GENV	Genital vaginal
CBLD	Cord blood	HAR	Hair
CDM	Cardiac muscle	IHG	Inhaled Gas
CNJT	Conjunctiva	ISLT	Isolate
CNL	Cannula	IT	Intubation tube
COL	Colostrum	LAM	Lamella
CSF	Cerebral spinal fluid	LIQ	Liquid NOS
CTP	Catheter tip	LN	Line
CUR	Curette	LNA	Line arterial
CVM	Cervical mucus	LNV	Line venous
CVX	Cervix	LYM	Lymphocytes
CYST	Cyst	MAC	Macrophages
DIAF	Dialysis fluid	MAR	Marrow
DOSE	Dose med or substance	MBLD	Menstrual blood
DRN	Drain	MEC	Meconium
DUFL	Duodenal fluid	MILK	Breast milk
EAR	Ear	MLK	Milk

Code	Specimen Source Codes	Code	Specimen Source Codes
NAIL	Nail	THRB	Thrombocyte (platelet)
NOS	Nose (nasal passage)	THRT	Throat
ORH	Other	TISG	Tissue gall bladder
PAFL	Pancreatic fluid	TISPL	Tissue placenta
PAT	Patient	TISS	Tissue
PLAS	Plasma	TISU	Tissue ulcer
PLB	Plasma bag	TLGI	Tissue large intestine
PLC	Placenta	TLNG	Tissue lung
PLR	Pleural fluid (thoracentesis fld)	TSMI	Tissue small intestine
PMN	Polymorphonuclear neutrophils	TUB	Tube NOS
PPP	Platelet poor plasma	ULC	Ulcer
PRP	Platelet rich plasma	UMB	Umbilical blood
PRT	Peritoneal fluid /ascites	UMED	Unknown medicine
PUS	Pus	UR	Urine
RBC	Erythrocytes	URC	Urine clean catch
RT	Route of medicine	URNS	Urine sediment
SAL	Saliva	URT	Urine catheter
SEM	Seminal fluid	URTH	Urethra
SER	Serum	USUB	Unknown substance
SKM	Skeletal muscle	VOM	Vomitus
SKN	Skin	WAT	Water
SNV	Synovial fluid (Joint fluid)	WBC	Leukocytes
SPRM	Spermatozoa	WICK	Wick
SPT	Sputum	WND	Wound
SPTC	Sputum - coughed	WNDA	Wound abscess
SPTT	Sputum - tracheal aspirate	WNDD	Wound drainage
STL	Stool = Fecal	WNDE	Wound exudate
STON	Stone (use CALC)	XXX	To be specified in another part of the message
SWT	Sweat		
TEAR	Tears		

5.3 HL70085: HL7 Observation Results Status

HL7 table describes the status for an observation contained in an OBX segment.

Code	HL7 Observation Results Status.
C	This item is a correction to a previous result at the provider site.
R	Results entered -- not verified
S	Partial results
F	Final
P	Preliminary
X	No result can be obtained for this request/specimen

5.4 HL70103: Processing ID

Description of whether HL7 messages represent production, testing, or training transactions.

5.5 HL70163: Administrative Site

Code set maintained by Health Level 7 giving body sites used for administering medications and taking specimens.

Code	Administrative Site	Code	Administrative Site
BE	Bilateral Ears	LACF	Left Antecubital Fossa
BN	Bilateral Nares	LD	Left Deltoid
BU	Buttock	LE	Left Ear
CT	Chest Tube	LEJ	Left External Jugular
LA	Left Arm	LF	Left Foot
LAC	Left Anterior Chest	LG	Left Gluteus Medius

Code	Administrative Site
LH	Left Hand
LIJ	Left Internal Jugular
LLAQ	Left Lower Abd Quadrant
LLFA	Left Lower Forearm
LMFA	Left Mid Forearm
LN	Left Naris
LPC	Left Posterior Chest
LSC	Left Subclavian
LT	Left Thigh
LUA	Left Upper Arm
LUAQ	Left Upper Abd Quadrant
LUFA	Left Upper Forearm
LVG	Left Ventragluteal
LVL	Left Vastus Lateralis
NB	Nebulized
OD	Right Eye
OS	Left Eye
OU	Bilateral Eyes
PA	Perianal
PERIN	Perineal
RA	Right Arm

Code	Administrative Site
RAC	Right Anterior Chest
RACF	Right Antecubital Fossa
RD	Right Deltoid
RE	Right Ear
REJ	Right External Jugular
RF	Right Foot
RG	Right Gluteus Medius
RH	Right Hand
RIJ	Right Internal Jugular
RLAQ	Rt Lower Abd Quadrant
RLFA	Right Lower Forearm
RMFA	Right Mid Forearm
RN	Right Naris
RPC	Right Posterior Chest
RSC	Right Subclavian
RT	Right Thigh
RUA	Right Upper Arm
RUAQ	Right Upper Abd Quadrant
RUFA	Right Upper Forearm
RVG	Right Ventragluteal
RVL	Right Vastus Lateralis

**Logical Observation Identifier
Names and Codes (LOINC[®]) Consortium**

**Code Tables for the HL7 “Additional Information
to Support a Healthcare Claim or Encounter” Message:
Medications**

Feb 6, 1999

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Logical Observation Identifier Names and Codes (LOINC®) Consortium

Code Tables for the HL7 “Additional Information to Support a Healthcare Claim or Encounter” Message: Medications

1 Introduction

This LOINC publication provides the code values that are used in:

- ASC X12N Implementation Guide for Use of the 275 Transaction (004020) Additional Information to Support a Health Care Claim or Encounter, which is a product of subcommittee X12N of Accredited Standards Committee X12^{1,2}
- ASC X12N Implementation Guide for Use of the 277 Transaction (004020) Health Care Claim, Request for Additional Information
- Health Level Seven (HL7) Implementation Guide for Additional Information to Support a Healthcare Claim or Encounter.³

The format of this document and the methods used to arrive at its contents are prescribed in the HL7 Implementation Guide.

These documents together compose a proposed solution for the requirement for electronic transmission of claims attachments included in the Health Insurance Portability and Accountability Act (HIPAA). For a comprehensive understanding of the solution proposed in these documents, the following reading sequence is suggested:

- *ASC X12N Implementation Guide for Use of the 277 Transaction (004020) Health Care Claim, Request for Additional Information*
- *ASC X12N Implementation Guide for Use of the 275 Transaction (004020) Additional Information to Support a Health Care Claim or Encounter*
- *Health Level Seven (HL7) Implementation Guide for Additional Information to Support a Healthcare Claim or Encounter Version 1.0*
- *Logical Observation Identifier Names and Codes (LOINC™) Consortium Modifier Codes in the ASC X12N Implementation Guide for the 277 Requests for Additional Information Transaction*
- The Logical Observation Identifier Names and Codes (LOINC®) Consortium booklets containing the code tables for the Ambulance, Clinical Reports, Emergency Department, Laboratory Results, Medications and Rehabilitation Services messages. These booklets may be read in any order.

¹Information on this and other X12/HIPAA-related implementation guides is available from the Washington Publishing Company, Gaithersburg, MD. <http://www.wpc-edi.com/>

² Within this LOINC document, references to the transaction defined by these X12 implementation guides will be abbreviated by calling them 275 and 277.

³ Health Level Seven, Inc., 3300 Washtenaw Ave., Suite 227, Ann Arbor, MI 48104-4261. (<http://www.hl7.org>)

- One additional document serves as a reference: *Logical Observation Identifier Names and Codes (LOINC®) Consortium Codes for the HL7 and X12 Additional Information to Support a Health Care Claim or Encounter Transactions: Summary Listing*

This document applies to transactions that request or send medication information between providers and payers. It is not applicable to transactions involving retail pharmacies or other organizations in the pharmaceutical supply chain.

1.1 Using the HL7 ORU Message to Send Medications

HL7 has determined that the ORU message shall be the only message that is included in X12N 275 transactions. This approach simplifies the programming that must be performed to process the very heterogeneous kinds of data that may be sent as claims attachments. For this reason, a special interpretation of the ORU message is used to describe medications in claims attachments.

1.1.1 Textual and Structured Data

The information systems that will support the preparation of claims attachments vary in the manner in which they collect and store medication information. There are two common variations:

- a single block of text that comprises the entire report of a medication
- a structured series of fields that separately identify the medication, and describe its strength, dosage, regimen, and refills (where applicable).

The second option may use text for some of the fields and codes or numeric quantities for others. Furthermore, they may use a local or proprietary code to identify a medication, whereas HIPAA regulations mandate the use of NDC codes.

Because of the variations in practice, those that send medication information within X12N 275 transactions have two options: they can send it as structured data, or they can send it as a block of text. However, the structured form is specified in a way that will minimize the programming complexity for creating a textual display of the information. Whichever form the sending system chooses, receiving systems will always be able to display the medication information. As the providers' systems become more sophisticated, they can be expected to send more structured data. In the future, receiving systems may be able to introduce opportunistic process improvements for those cases where structured and coded medication data is sent.

Whether the data is sent as a block of text or in structured form, the use of a specific LOINC code implies certain requirements to send information. For example, the LOINC codes for prescription information in narrative and structured form both imply sending the medication name, form, dose, route, refill, and substitution information.

1.1.2 Usage Scenarios

By definition, all transmissions of medication information for a claims attachment are intended to support adjudication of the claim. Separate LOINC codes exist to request information about:

- **current medications**—therapeutic medications the patient is taking directly prior to or contemporaneously with the encounters that comprise the claim, but were not prescribed or administered as part of the treatments associated with the claim
- **medications administered**—medications given to the patient by a provider in the course of the treatments that are covered by the associated claim

- **discharge medications**—therapeutic medications that the provider prescribes, or advises the patient to buy over the counter, for use after an encounter covered by the claim. Despite the use of the word “discharge”, this category includes the medications prescribed during a single clinic visit if that visit is the subject of the claim.

The pattern of information that the provider will have varies depending on the use case, as described below.

Current medications. Generally, a provider learns this by asking the patient or an agent, neither of who is a trained healthcare professional. Frequently, the information received is incomplete. The goal is simply to transmit whatever information can be captured, so a narrative form is used and there is little specified as to the required content. However, it is conceivable that some of the current medication information may come from prescriptions that have been recorded in an electronic medical record system prior to the current encounter, so an option also exists for the sender to send this information in a structured, coded format.

Medications administered. Medications that are administered during the course of an encounter have differing information patterns according to the manner of administration:

- The medication may be administered in a discrete dose—an injection, tablet, lozenge, a set of puffs on an inhaler, 15 ml of a liquid, etc.
- The medication may be administered as a continuous process over an identified period of time, with a specific rate of administration of medication per unit time, as with medications given intravenously.
- The medication may be self-administered in a series of discrete doses over a period of time.

Discharge medications. Where a prescription is required for the medication, the information usually includes a refill authorization (possibly zero) and instructions with respect to substitution when the prescription is filled. Advice on the use of over-the-counter medications normally does not include this information.

1.2 Document Revision History

<i>Date</i>	<i>Purpose</i>
Nov 23, 1998	Update for comments and title.
Feb 6, 1999	Technical corrections after ballot of HL7 Implementation Guide.

2 HL7 Medications Message Variant

All data elements for Textual Report Electronic Attachments are sent using the Medications Message Variant, described below. It is used to transmit textual and structured information.

2.1 LOINC Codes and Structure

LOINC codes are used for several different purposes in the two X12 transactions and HL7 message that are used to request and provide clinical reports. The table below identifies five specific uses of LOINC codes and describes their use within the messages.

Transaction	X12 277	X12 275	HL7 ORU
Purpose of Message	<i>request further information in support of a claim</i>	<i>supply further information in support of a claim</i>	<i>transmit the clinical report within the X12 275</i>
LOINC Scope Modifier	modify the scope of a request for information (e.g., send medications administered over a 90-day period)	describe the scope of the information being sent (e.g., these are medications that were administered over a 90-day period)	(not used)
LOINC Report Subject Identifier	identify a category of medications that is requested (e.g., send the medications that were administered during the encounters covered by the claim)	identify a category of medications that is being sent and a form of expression (e.g., this message includes the medications that were administered during the encounters covered by the claim)	(not used)
LOINC Report Response Codes	(not used)	(not used)	identify a category of medications that is included within a group of OBX segments and a form of expression (e.g., the following block of OBXs describes one of the medications that was administered during the encounters covered by the claim, expressed as structured data) (used in OBR-4)
LOINC Report Part Identifier	(not used)	(not used)	identify the part of the medication information that is in a specific OBX segment (e.g., this is the route of administration) (used in OBX-3)

The LOINC Consortium publishes Scope Modifier codes in another publication, *Modifier Codes in X12 277 Requests for Additional Information Transaction*.

LOINC Report Subject Identifier codes are in section 3.1 and Report Part Identifier codes are in section 4.1.

2.2 Message Structure

The HL7 ORU message (trigger event R01) is used for the electronic attachment. Its segment pattern is:

ORU	Observational Results (Unsolicited)	Chapter
MSH	Message Header	2
PID	Patient Identification	3
{OBR	Observations Report ID	7
{OBX}	Observation/Result	7
}		

The following fields are used in each segment. Fields that are not included must be null.

<i>SEQ</i>	<i>ELEMENT NAME AND DATA TYPE</i>	<i>REQUIRED VALUE</i>
MSH-1	Field Separator (ST)	
MSH-2	Encoding Characters (ST)	^~\&
MSH-7	Date/Time Of Message (TS)	
MSH-9	Message Type	ORU^R01
MSH-10	Message Control ID	
MSH-11	Processing ID	P
MSH-12	Version ID	2.3
MSH-15	Accept Acknowledgment Type	NE
MSH-16	Application Acknowledgment Type	NE
<p>Coding Example, MSH Segment.</p> <p>Scenario. (An HL7 message was prepared for inclusion in a 275 at 2:35 PM on August 12, 1998. The system which prepared the message identified it as "Regenstrief0128765419")</p> <p>Example:</p> <pre>MSH ^~\& 199808121425 ORU^R01 Regenstrief0128765419 P 2.3 NE NE</pre>		
PID-3	Patient ID (Internal ID)	Provider identification number for patient.
PID-5	Patient Name (PN)	
PID-9	Patient Alias (XPN)	
PID-11	Patient Address	
PID-18	Patient Account	
<p>Coding Example, PID Segment.</p> <p>Scenario. The HL7 message is about patient Jon Hay, who lives at 124 N. Elm St, Elmo, Utah, 85912. The sending system identifies the patient using the number 184569. The claim that is the subject of the 275 is associated with billing account X48507924 in the sending system. In previous visits the patient has been identified as JJ Hay and John J. Hay.</p> <p>Example:</p> <pre>PID 184569 Hay^Jon^J Hay^JJ~Hay^John^J 124 Elm St^^Elmo^UT^85912 X48507924<cr></pre>		
OBR-4	Universal Service ID	Code to identify the kind of medication information described in the OBX segments that follow (e.g., the current medications that the patient reports taking).
OBR-7	Observation date/time	HL7 Time-stamp format that represents the most clinically relevant date and time available. In the case of current medications, this represents the time at which the report was taken. In the case of medications prescribed for the patient to take after the encounters associated with the claim, this represents the time the prescription was given to the patient. In the case of medications administered during the encounters associated with a claim, this represents the time the first dose of the regimen was administered. If time-of-day information is not available, the sender may send only the date.

<i>SEQ</i>	<i>ELEMENT NAME AND DATA TYPE</i>	<i>REQUIRED VALUE</i>
Coding Example, OBR Segment. Scenario. While reviewing a claim for an urgent care visit on October 30, 1998, the payer requests the medications administered using the LOINC report subject identifier 18611-4. The provider echoes the LOINC code in components 1-3 of OBR-4. The medication was administered at 12:53 PM. Example: <pre>OBR 18611-4^^LN 199810301253<cr></pre>		
OBX-2	Value Type	Code to identify data type of OBX-5, see value table.
OBX-3	Observation Identifier	See value table.
OBX-5	Observation Value and code source	See value table.
OBX-6	Units	See value table.
OBX-11	Observ result status (CE)	Always send F .
Coding Example, OBX Segment. Scenario. The administered medication, sent in coded form, (LOINC code 18611-4) was Ativan 2 mg/ml. The value F in OBX-11 is required. <pre>OBX CE 18611-4 0008-0581-02^Ativan injection 2 mg per ml^NDC F</pre>		

2.2.1 Special Considerations for the National Drug Codes (NDC)

HIPAA regulations require that when medications are identified with a code, the National Drug Code be used. In order to facilitate receiver processing, the instructions associated with the LOINC code for a coded medication require that the sender include text that is associated with the NDC code in OBX-5, component 2.

A code from the NDC identifies not only the medication, but also information about the manufacturer, strength, form, and packaging. The same medication in the same form may have different codes for dozens of different manufacturers, and each manufacturer may have separate codes depending on the number of tablets or amount of fluid in a wholesale package, etc.

The large number of codes for the same medication represents a challenge when the NDC code is being used to describe medications administered or prescribed. Accordingly, HL7 has established specific rules for interpreting NDC codes in claims attachment messages. *The NDC code shall be used to determine the medication, manufacturer and form of a medication. The packaging information, however, shall be ignored.* For example, suppose a report of the administration of a medication uses the NDC code 00031180725, for Dimetane 2 mg/5 ml Elixir 480 ml. If the dosage is 10 ml, it is clear that the patient received 10 ml of the medicine, rather than the 480 ml that was originally in the stock bottle. Indeed, if the patient's bottle were filled from a 960 ml bottle (which would have a different NDC code) that would not be clinically relevant.

Although the mandated use of a code from the NDC in the prescription identifies a manufacturer, there is generally no assurance that the patient will receive a medication from that manufacturer. In most cases, the NDC code is overly specific in describing the intent of a doctor's prescription.

The codes in the NDC often, but not always, imply the route of administration. In some cases the labeled route of administration and the ordered route of administration may differ, as when a medication labeled for IM injection is included in an IV bag. For simplified programming, the

LOINC codes support sending the dosage and route information separately in all cases, even when the message identifies the medication using an NDC code.

Frequently a single NDC code describes a product that includes a mixture of active ingredients in differing strengths. For example, NDC code 00135-0108-42 describes a liquid product, Novahistine DH, in which each 5 ml of the liquid contains 10 mg codeine phosphate, 2 mg chlorpheniramine maleate, and 30 mg pseudoephedrine hydrochloride.

The NDC code can be used to determine a unit of administration, which is distinct from the package count. Where the medication is dispensed in discrete units (tablets, puffs on an inhaler, etc.), one of those units is the unit of administration. Where the medication is a liquid, ointment, or other amorphous substance, the NDC code specifies a measurement that is the denominator in one or more ratios that characterize the strength of the active ingredients. (In the Novahistine DH example, above, the unit of administration is 1 ml. This does not imply that an order would necessarily be given for 1 ml of the medication; it implies that the dosage will be described in terms of the number of ml of the liquid, which includes active ingredients and excipients.)

Claims attachment messages that specify a dosage amount specify it in terms of the number of units of administration. This approach allows consistent treatment for medications that have a single ingredient and combinations.

Where the message is structured, but does not use the NDC code, the textual information that describes the medication must give the information necessary for a person to determine the form, strength and unit of administration. (For example, “Ampicillin 250 mg tablets” rather than just “Ampicillin”.) However, when the text names a product that is offered in only one strength, it is not necessary to describe the strength of the ingredients. (For example, an order for Novahistine DH would be adequately described as “Novahistine DH liquid”, but an order for Tylenol with 60 mg codeine would require “Tylenol w/ codeine tablet, 300 mg-60 mg”, because other strengths are available.)

2.2.2 Reporting the “Give” Amount

Certain LOINC codes identify OBX segments that describe the quantity of a medication that was or will be given. The content of the OBX-5 and OBX-6 fields in these segments depends on the application. Generally, the “give” amount is one dose of the medication. If the medication is in a discrete form (e.g., lozenges) OBX-5 describes the number of those items to be given and OBX-6, the units, is empty.

If the medication is in an amorphous form (e.g., an ointment), OBX-5 contains the quantity that constitutes a dose and OBX-6 contains the units for that quantity. For example, an order for Novahistine DH might have a “give” amount 5 in OBX-5 and `mL^^iso+` in OBX-6.

However, if the administration of the medication was continuous, the “give” amount is described in terms of a number of units of administration per unit time. For example, if reporting Penicillin G Potassium, 2000000 u/50 ml, administered continuously, the value in OBX-5 might be 10 and OBX-6 might contain `mL/hr^^iso+`.

2.2.3 Complex Medication Regimens and the HL7 TQ Datatype

Where a structured message describes a prescription for a complex regimen or a planned use of a medication, the required information pattern can be very involved. Many sending systems and receiving systems do not have the functional depth to generate or interpret such messages. This is

particularly burdensome on receiving systems because, under HIPAA regulations, there cannot be trading partner agreements that would exclude the use of specific options.

The LOINC codes herein and the restrictions on the use of the HL7 Timing and Quantity data type combine to limit the complexity of medication regimens that can be described in a claims attachment message. Regimens that are more complex must be sent using a narrative description in component 8, leaving other components empty.

Data fields of the TQ data type may be populated only as described here. The first component, if present, shall be "1". If not present, the default value is "1".

The second component is the pattern of doses. It conforms to HL7 version 2.3 with these exclusions: the specification U and Q<integer>J<integer> are not allowed in the first subcomponent; the second subcomponent must be null.

The third component is the duration of doses. It is only used for continuously administered medications.

Component 8 may be used to amplify the meaning of the field. It may be the only component if the other options are insufficient to describe the pattern.

The other components are not used.

Examples:

<code>^PRN Q6H</code>	administer the medication as required, but no more frequently than every six hours
<code>^Q6H</code>	administer the medication every six hours
<code>^^^^^^Tuesday and Saturday</code>	administer the medication Tuesdays and Saturdays
<code>^C^H8</code>	administer the medication continuously for 8 hours.

2.2.4 Reporting the Administration of Medication Mixtures

When a system prepares a structured message describing medications that have been administered it can describe most mixtures by repeating the OBR segment, including the date and time in OBR-7 for each separate administration of each medication, even when the medications were administered together in an IV.

2.2.5 Coding Examples

The following table focuses on the key portions of messages for specific scenarios. There are examples with complete messages after the value table.

<i>Scenario</i>	<i>OBR-4</i>	<i>OBX-3</i>	<i>OBX-5</i>	<i>OBX-6</i>
Current medications, narrative report (a second medication, included under the same OBR)	19009-0	19009-0	Vasotec 10 mg QD	(empty)
		19009-0	unspecified thyroid medication, small white tablet	(empty)
Discharge medications, narrative report; discrete, over-the-counter medication	19010-8	19010-8	naproxen sodium 220 mg tablets, 1 tablet PO Q12H	(empty)
Discharge medications, narrative report; discrete, prescribed medication	19010-8	19010-8	Levoxyl 0.1 mg tablets, 1 tab PO QD, 30 tablets, 3 refills. Do not substitute.	(empty)
Discharge medications, narrative report, amorphous medication, strength implied by name	19010-8	19010-8	Novahistine DH liquid, 5 ml PO Q8H, 150 ml, no refills	(empty)
Discharge medications, narrative report; amorphous medication, strength explicitly stated	19010-8	19010-8	phenobarbital elixir, 20 mg/5 ml, 15 ml PO PRN Q12H, 120 ml, 1 refill	(empty)
discharge medication, structured report; discrete medication, prescription give quantity timing route dispense quantity refills	18617-1	18618-9	00839-7132-06^Diazepam, HL Moore Drug Exch 5 mg tablet^NDC	(empty)
		18619-7	1	(empty)
		18620-5	^Q6H PRN	(empty)
		18621-3	PO	(empty)
		18622-1	15	(empty)
		18623-9	0	(empty)
medication administered, narrative report; strength explicitly stated	19011-6	19011-6	Ativan injection 2 mg per ml, 1 ml IM	(empty)
medication administered narrative report; IV, continuous administration	19011-6	19011-6	IV D5W < 1/2 NS 100 cc/hr +f 20 meq KCl/L, 2.5 hours	(empty)
medication administered, structured report; amorphous medication, strength explicit give quantity give interval route	18610-6	18611-4	00074-3210-01^2 ml Diazepam 5, Abbott, 5 mg/ml^NDC	(empty)
		18615-5	2	ml^^iso+
		18614-8	^Once	(empty)
		18612-2	IM	(empty)

3 LOINC Codes

3.1 Scope Modification Codes

Another booklet, *LOINC Modifier Codes in the ASC X12N Implementation Guide for the 277 Requests for Additional Information Transaction*⁴ provides code values for modifying the scope of requests for information in an X12 277 transaction. Those codes apply to all electronic attachments, including this one.

3.2 LOINC Report Subject Identifier Codes

The codes in the first column of the table below may be used as report subject identifiers in 277 requests for more information and unsolicited 275 transactions. For each report subject identifier, the codes in the second column may appear in the OBR segments of the corresponding HL7 response message. Each such response code is further described in the Value Tables, below in section 4.1.

<i>LOINC Report Subject ID code</i>	<i>LOINC Report Response Codes</i>	<i>Report Subject or Response Specified</i>
19013-2	19009-0	MEDICATIONS CURRENT REPORT REQUEST MEDICATION CURRENT (NARRATIVE) (REPORTED)
	18605-6	MEDICATION CURRENT (COMPOSITE) (REPORTED)
19014-0	19010-8	MEDICATIONS DISCHARGE REPORT REQUEST MEDICATION DISCHARGE (NARRATIVE)
	18617-1	MEDICATION DISCHARGE (COMPOSITE)
19015-7	19011-6	MEDICATIONS ADMINISTERED REPORT REQUEST MEDICATION ADMINISTERED (NARRATIVE)
	18610-6	MEDICATION ADMINISTERED (COMPOSITE)

⁴ The LOINC Consortium, c/o the Regenstrief Institute, 1001 West 10th Street RG-5, Indianapolis, IN 46202, 317/630-7433.

4 LOINC Codes for Report Subject Parts

4.1 Value Table

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBR-4: 19009-0	MEDICATION CURRENT (NARRATIVE) (REPORTED) The best description available from the patient or other source of current therapeutic medication, completely described in a single block of text.		0..n	
OBX-3: 19009-0	Examples: Vasotec 10 mg QD or blood pressure medication	TX	1..1	
OBR-4: 18605-6	MEDICATION CURRENT (COMPOSITE) (REPORTED) Current therapeutic medication.		0..n	
OBX-3: 18606-4	MEDICATION CURRENT, NAME + IDENTIFIER Send as an NDC code or simply as free text in component 2.	CE	1..1	OBX-5^3: NDC
OBX-3: 18607-2	MEDICATION CURRENT, DOSE The amount of the medication given in each dose. This amount is expressed in terms of the administration units associated with the NDC code or text description in the preceding OBX segment. See instructions and examples in the definition of the message variant.	NM	1..1	OBX-5^3: iso+
OBX-3: 18608-0	MEDICATION CURRENT, TIMING + QUANTITY See instructions and examples in the definition of the message variant.	TQ	1..1	
OBX-3: 18609-8	MEDICATION CURRENT, ROUTE	CE	1..1	OBX-5^3: HL70162
OBR-4: 19010-8	MEDICATION DISCHARGE (NARRATIVE) Medications the patient is to take after the conclusion of the encounter; medications prescribed or that the patient was advised to purchase over the counter. This LOINC code is used to send each medication as a single block of text that includes the name of the medication, strength, form, dosage, route, timing, dispensed amount and number of refills. If the prescription is for a brand name, state whether substitution or another brand name or a generic is permitted.		0..n	
OBX-3: 19010-8	Examples: diazepam 5 mg tablets, 1 tab PO Q6H PRN for back pain, 15 tablets, no refills Levoxyl 0.1 mg tablets, 1 tab PO QD, 30 tablets, 3 refills. Do not substitute. (The punctuation in the examples is not required.)	TX	1..1	

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBR-4: 18617-1	<p>MEDICATION DISCHARGE (COMPOSITE) Medications the patient to take after the conclusion of the encounter; medications prescribed or that the patient was advised to purchase over the counter. This LOINC code is used to send each medication in a structured form.</p> <p>In rare cases, prescriptions may call for heterogeneous doses or for continuous administration over a period of time. A pattern of heterogeneous doses may be sent as multiple prescriptions (e.g., one prescription for one tablet every other day and another for two tablets every other day).</p> <p>Alternatively, such prescriptions may be sent as a single block of text using LOINC code 19010-8.</p>		0..1	
OBX-3: 18618-9	<p>MEDICATION DISCHARGE, NAME + IDENTIFIER Can be sent as text description only in component 2. If so, the text must include the medication and the form.</p> <p>If the NDC code is sent, the text description must be included in component 2.</p> <p>Examples</p> <p>0008-0581-02^Ativan injection 2 mg per ml^NDC</p> <p>^Ibuprofen 200 mg tablets^</p>	CE	1..1	OBX-5^3: NDC
OBX-3: 18619-7	<p>MEDICATION DISCHARGE, DOSE The amount of the medication given in each dose, in terms of the administration units defined by the information in the segment with LOINC code 18618-9.</p> <p>See instructions and examples in the definition of the message variant.</p>	NM	1..1	OBX-6^3: iso+
OBX-3: 18620-5	<p>MEDICATION DISCHARGE, TIMING + QUANTITY</p> <p>See instructions and examples in the definition of the message variant.</p>	TQ	1..1	
OBX-3: 18621-3	<p>MEDICATION DISCHARGE, ROUTE</p>	CE	1..1	OBX-5^3: HL70162
OBX-3: 18622-1	<p>MEDICATION DISCHARGE, AMOUNT DISPENSED The amount dispensed and units for the amount.</p> <p>See instructions and examples in the definition of the message variant.</p> <p>Not used for over-the-counter medications.</p>	NM	1..1	
OBX-3: 18623-9	<p>MEDICATION DISCHARGE, REFILLS Number of refills prescribed.</p>	NM	1..1	
OBX-3: 19012-4	<p>MEDICATION DISCHARGE, SUBSTITUTION INSTRUCTION Not used for over-the-counter medications. G Allow generic substitutions N Substitutions are NOT authorized. T Allow therapeutic substitutions</p>	CE	1..1	OBX-5^3: HL70161

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBR-4: 19011-6	MEDICATION ADMINISTERED (NARRATIVE) Medications administered during the encounter, sent as a single block of text that includes the name of the medication, strength, form, dosage, route and administration regimen. Time of administration should be in OBR-7.		0..n	
OBX-3: 19011-6	Examples: IV D5W < 1/2 NS 100 cc/hr +f 20 meq KCl/L, 2.5 hours Tylenol #3 tablet, 1 tablet PO	TX	1..1	
OBR-4: 18610-6	MEDICATION ADMINISTERED (COMPOSITE) Medications administered in the course of the encounter. In some cases, the administration may have involved multiple, heterogeneous doses. A pattern of heterogeneous doses may be sent as multiple items (e.g., one item for one tablet Q2H and another for two tablets Q2H, where the start times in OBR-7 are offset by 1 hour). In some cases, medications may be administered continuously for a period of time. Continuously administered medications may be reported here by sending the total amount administered. Alternatively, complex regimens or continuous administration regimens may be sent as a single block of text using LOINC code 19011-6.		0..n	
OBX-3: 18611-4	MEDICATION ADMINISTERED, NAME + IDENTIFIER Can be sent as text description only in component 2. If so, the text must include the medication and the form. If the NDC code is sent, the text description must be included in component 2. Examples 0008-0581-02^Ativan injection 2 mg per ml^NDC ^Ibuprofen 200 mg tablets^	CE	1..1	OBX-5^3: NDC
OBX-3: 18615-5	MEDICATION ADMINISTERED, DOSE The amount of the medication given in each dose. See instructions and examples in the definition of the message variant.	NM	1..1	OBX-5^3: iso+
OBX-3: 18614-8	MEDICATION ADMINISTERED, TIMING See instructions and examples in the definition of the message variant.	TQ	1..1	
OBX-3: 18612-2	MEDICATION ADMINISTERED, ROUTE	CE	1..1	OBX-5^3: HL70162

4.2 Narrative Coding Example

Scenario. A message was created on August 14, 1998 at 5:39:24 AM.

The patient name is Patient H. Sample. The medical record ID of the patient for the sending institution is 6910828. The billing account number within the sending institution that is associated with the claim is 773789090. The encounter took place on July 17, 1998.

The message contains the current and discharge medications for a clinic visit.

The current medications were:

- unspecified blood pressure medicine, 1 brown tablet per day.

The discharge medications are:

- prescription: diazepam 5 mg tablets, 1 tablet per day by mouth as needed up to four times a day for back pain, 15 tablets, no refills
- over-the-counter: Aleve, 1 tablet by mouth as needed up to twice a day for back pain.

```
MSH|^&|||19980814053924||ORU^R01|970814053924670|P|2.3||NE|NE<cr>
PID||6910828^Y^C8|Sample^Patient^H|||||||773789090<cr>
OBR||19009-0^^LN||19980717<cr>
OBX|TX|19009-0^^LN|unspecified blood pressure medicine, 1 brown tablet per
    day |||||F<cr>
OBR||19010-8^^LN||19980717<cr>
OBX|TX|19010-8^^LN|diazepam 5 mg tablets, 1 tablet PO Q6H PRN for back pain,
    15 tablets, no refills|||||F<cr>
OBR||19010-8^^LN||19980717<cr>
OBX|TX|19010-8^^LN|naproxen sodium 220 mg tablets, 1 tablet PO Q12H PRN for
    back pain|||||F<cr>
```

4.3 Structured Coding Example

Scenario. A message was created on August 14, 1998 at 5:39:24 AM.

The patient name is Patient H. Sample. The medical record ID of the patient for the sending institution is 6910828. The billing account number within the sending institution that is associated with the claim is 773789090.

The message contains the current medications reported by the patient, the medicines administered and the discharge medications for a clinic visit.

The medication administered was:

- diazepam 5 mg/ml, 2 ml, intramuscular injection

The discharge medications are:

- prescription: diazepam 5 mg tablets, 1 tablet by mouth as needed up to four times a day, dispense 15 tablets, no refills
- over-the-counter: Aleve, 1 tablet as needed up to twice a day.

They were prescribed during an encounter that took place on July 17, 1998.

```
MSH|^&|||19980814053924||ORU^R01|970814053924670|P|2.3||NE|NE<cr>
PID||6910828^Y^C8|Sample^Patient^H|||||||773789090<cr>
OBR||18610-6^^LN||199807171018<cr>
OBX|CE|18611-4^^LN|00074-3210-01^2 ml Diazepam 5, Abbott, 5
    mg/ml^NDC|||||F<cr>
OBX|NM|18615-5^^LN|2|ml^^iso+|||||F<cr>
OBX|TQ|18614-8^^LN|^Once|||||F<cr>
OBX|CE|18612-2^^LN|IM^^HL70162|||||F<cr>
OBR||18617-1^^LN||19980717<cr>
OBX|CE|18618-9^^LN|00839-7132-06^Diazepam, HL Moore Drug Exch 5 mg
    tablet^NDC|||||F<cr>
OBX|NM|18619-7^^LN|1|||||F<cr>
OBX|TQ|18620-5^^LN|^Q6H PRN|||||F<cr>
OBX|CE|18621-3^^LN|PO^^HL70162|||||F<cr>
```

```

OBX|NM|18622-1^^LN|15|||||F<cr>
OBX|NM|18623-9^^LN|0|||||F<cr>
OBX|CE|18618-9^^LN|25866-1050-60^Naproxen Aleve 220mg Cap^NDC|||||F<cr>
OBX|NM|18619-7^^LN|220|mg^^iso+|||||F<cr>
OBX|TQ|18620-5^^LN|^PRN Q6H|||||F<cr>
OBX|CE|18621-3^^LN|PO^^HL70162|||||F<cr>

```

5 Response Code Sets

This section describes response codes that may be used in various data fields. An entry in the description of the message variant or the value table refers to these code sets by a short abbreviation, such as “ans+”. These abbreviations are used in the headings of the subsections of this section.

The values for some code sets appear directly in this document. In other cases, the section cites another source.

5.1 ans+: Extended ANSI Units Codes

ANSI X3.50-1986 and extensions as defined in HL7 Version 2.3, Figure 7-13.

5.2 HL70085: HL7 Observation Results Status

HL7 table describes the status for an observation contained in an OBX segment.

Code	HL7 Observation Results Status	Code	HL7 Observation Results Status
C	This item is a correction to a previous result at the provider site.	F	Final
R	Results entered -- not verified	P	Preliminary
S	Partial results	X	No result can be obtained for this request/specimen

5.3 HL70103: Processing ID

Description of whether HL7 messages represent production, testing, or training transactions.

5.4 HL70161: Medication Substitution Specification

HL7-maintained table describing whether substitution is permitted when a prescription is filled.

Code	Medication Substitution Specification
G	Allow generic substitutions
N	Substitutions are NOT authorized.
T	Allow therapeutic substitutions

5.5 HL70162: Route of Medicine Administration

HL7 codes for route of medicine administration. Items marked with "*" are used primarily for respiratory therapy and anesthesia delivery.

Code	Route of Medicine Administration	Code	Route of Medicine Administration
AP	Apply Externally	ID	Intradermal
B	Buccal	IH	Inhalation
DT	Dental	IHA	Intrahepatic artery
EP	Epidural	IM	Intramuscular
ET	Endotracheal Tube*	IMR	Immerse (Soak) Body Part
GTT	Gastronomy Tube	IN	Intranasal
GU	GU Irrigant	IO	Intraocular
IA	Intra-arterial	IP	Intraperitoneal
IB	Intrabursal	IS	Intrasynovial
IC	Intracardiac	IT	Intrathecal
ICV	Intracervical (uterus)	IU	Intrauterine

Code	Route of Medicine Administration
IV	Intravenous
MM	Mucous Membrane
MTH	Mouth/Throat
NG	Nasogastric
NP	Nasal Prongs*
NS	Nasal
NT	Nasotrachial Tube
OP	Ophthalmic
OT	Otic
OTH	Other/Miscellaneous
PF	Perfusion
PO	Oral
PR	Rectal

Code	Route of Medicine Administration
RM	Rebreather Mask*
SC	Subcutaneous
SD	Soaked Dressing
SL	Sublingual
TD	Transdermal
TL	Translingual
TP	Topical
TRA	Tracheostomy*
UR	Urethral
VG	Vaginal
VM	Ventimask
WN	Wound
D	

5.6 iso+: Extended ISO Units Codes

ISO 2955-1983 and extensions as defined in HL7 Version 2.3 Figure 7-13.

5.7 NDC: National Drug Code

FDA National Drug Code.

**Logical Observation Identifier
Names and Codes (LOINC[®]) Consortium**

**Code Tables for the HL7 “Additional Information to Support
a Healthcare Claim or Encounter” Message:
Rehabilitation Services**

Feb 6, 1999

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Logical Observation Identifier Names and Codes (LOINC[®]) Consortium

Code Tables for the HL7 “Additional Information to Support a Healthcare Claim or Encounter” Message: Rehabilitation Services

1 Introduction

This LOINC publication provides the code values that are used in:

- ASC X12N Implementation Guide for Use of the 275 Transaction (004020) Additional Information to Support a Health Care Claim or Encounter, which is a product of subcommittee X12N of Accredited Standards Committee X12^{1,2}
- ASC X12N Implementation Guide for Use of the 277 Transaction (004020) Health Care Claim, Request for Additional Information
- Health Level Seven (HL7) Implementation Guide for Additional Information to Support a Healthcare Claim or Encounter.³

The format of this document and the methods used to arrive at its contents are prescribed in the HL7 Implementation Guide.

These documents together compose a proposed solution for the requirement for electronic transmission of claims attachments included in the Health Insurance Portability and Accountability Act (HIPAA). For a comprehensive understanding of the solution proposed in these documents, the following reading sequence is suggested:

- *ASC X12N Implementation Guide for Use of the 277 Transaction (004020) Health Care Claim, Request for Additional Information*
- *ASC X12N Implementation Guide for Use of the 275 Transaction (004020) Additional Information to Support a Health Care Claim or Encounter*
- *Health Level Seven (HL7) Implementation Guide for Additional Information to Support a Healthcare Claim or Encounter Version 1.0*
- *Logical Observation Identifier Names and Codes (LOINC[™]) Consortium Modifier Codes in the ASC X12N Implementation Guide for the 277 Requests for Additional Information Transaction*
- The Logical Observation Identifier Names and Codes (LOINC[®]) Consortium booklets containing the code tables for the Ambulance, Clinical Reports, Emergency Department, Laboratory Results, Medications and Rehabilitation Services messages. These booklets may be read in any order.

¹Information on this and other X12/HIPAA-related implementation guides is available from the Washington Publishing Company, Gaithersburg, MD. <http://www.wpc-edi.com/>

² Within this LOINC document, references to the transaction defined by these X12 implementation guides will be abbreviated by calling them 275 and 277.

³ Health Level Seven, Inc., 3300 Washtenaw Ave., Suite 227, Ann Arbor, MI 48104-4261. (<http://www.hl7.org>)

- One additional document serves as a reference: *Logical Observation Identifier Names and Codes (LOINC®) Consortium Codes for the HL7 and X12 Additional Information to Support a Health Care Claim or Encounter Transactions: Summary Listing*

1.1 Revision History

<i>Date</i>	<i>Purpose</i>
Nov 23, 1998	Initial release to accompany HL7 Ballot.
Feb 6, 1999	Initial release to accompany HL7 Ballot.

2 HL7 Message Variants

All data elements for Rehabilitation Services are sent using the Rehabilitation Services Message Variant, described below.

2.1 Rehabilitation Services Message Variant

The HL7 ORU message (trigger event R01) is the basis for the Rehabilitation Services Message Variant. Its segment pattern is:

<u>ORU</u>	<u>Observational Results (Unsolicited)</u>	<u>Chapter</u>
MSH	Message Header	2
PID	Patient Identification	3
{OBR	Observations Report ID	7
{OBX}	Observation/Result	7
}		

The following fields are used in each segment. Fields that are not included must be null. The column labeled Analysis Reference is used to correlate the information with the Data Elements for Rehabilitation Services Systems.

SEQ	ELEMENT NAME	REQUIRED VALUE
MSH-1	Field Separator	(recommended)
MSH-2	Encoding Characters	^~\& (recommended)
MSH-7	Date/Time Of Message	
MSH-9	Message Type	ORU^R01
MSH-10	Message Control ID	
MSH-11	Processing ID	P
MSH-12	Version ID	2.3
MSH-15	Accept Acknowledgment Type	NE
MSH-16	Application Acknowledgment Type	NE
<p>Coding Example, MSH Segment.</p> <p>Scenario. (An HL7 message was prepared for inclusion in a 275 at 2:35 PM on August 12, 1998. The system that prepared the message identified it as "Regenstrief0128765419")</p> <p>Example:</p> <pre>MSH ^~\& 199808121425 ORU^R01 Regenstrief0128765419 P 2.3 NE NE<CR></pre>		
PID-3	Patient ID (Internal ID)	Provider identification number for patient, required.
PID-5	Patient Name	Required.
PID-9	Patient Alias	
PID-11	Patient Address	
PID-18	Patient Account	
<p>Coding Example, PID Segment.</p> <p>Scenario. The HL7 message is about transportation for patient Jon J Jay, who lives at 124 N. Elm St, Elmo, Utah, 85912. In the sending system the patient is identified by the number 184569. The claim that is the subject of the 275 is associated with billing account X48507924 in the sending system. In previous services, the patient has been identified as JJ Jay and John J. Jay.</p> <p>Example:</p> <pre>PID 184569 Jay^Jon^J Jay^JJ~Jay^John^J 124 Elm St^^Elmo^UT^85912 X48507924<CR></pre>		
OBR-4	Universal Service ID	Code to identify attachment data element in value table.
<p>Coding Example, OBR Segment.</p> <p>Scenario. The message was sent in response to a 277 that requested the history of present alcohol and/or substance abuse (LOINC code 18663-5).</p> <p>Example:</p> <pre>OBR 18663-5^^LN</pre>		
OBX-2	Value Type	Code to identify data type of OBX-5, see value table.
OBX-3	Observation Identifier	See value table.
OBX-4	Observation Sub-ID	Always empty except as described under field notes.
OBX-5	Observation Value and code source	See value table.
OBX-6	Units	See value table.
OBX-11	Observ result status	Always send "F".
<p>Coding Example, OBX Segment.</p> <p>Scenario. A physician provides the following assessment.</p> <p>Example:</p> <pre>OBX TX 18663-5 310 Patient is a 15-year old white male who reports consuming alcohol daily since age thirteen. He claims that his current alcohol consumption has been from various beverages averaging in excess of 500 ml of ethanol per day. ~There is evidence of substantial acquired physiological tolerance for alcohol.~He dropped out of school in October and reports blackouts and episodes of combative behavior. F<CR></pre>		

3 LOINC Codes

3.1 Rehabilitation Services Supporting Documentation

The following LOINC codes shall be used to designate 3.1 Rehabilitation Services supporting documentation in a 277 request for, or a 275 transmission of, supporting documentation for a healthcare claim.

3.2 Scope Modification Codes

Another booklet, *LOINC Modifier Codes in the ASC X12N Implementation Guide for the 277 Requests for Additional Information Transaction*⁴ provides code values for modifying the scope of requests for information in an X12 277 transaction. Those codes apply to all electronic attachments, including this one.

3.3 Data Elements

This document provides the LOINC codes for rehabilitation plans associated with eight disciplines, identified below:

<i>Discipline</i>	<i>Abbreviation</i>
Alcohol/Substance Abuse Rehabilitation	AS
Cardiac Rehabilitation	CR
Medical Social Services	MS
Occupational Therapy	OT
Physical Therapy	PT
Psychiatric Rehabilitation	PS
Respiratory Therapy	RT
Skilled Nursing	SN

The table below lists all the LOINC codes for all data elements used for any of the disciplines. Most data elements are used for all eight disciplines. However, some data elements are specific to a discipline. The table below gives the combined list of data elements. Where a data element is specific to one or more discipline, this is noted with an abbreviation from the table above. Data elements that are not so noted are used for all disciplines.

The LOINC code below is used to designate the entire set of data elements associated with Rehabilitation Services. When used in a 277 it requests all the data elements listed below. When used in a 275 it indicates that the entire set is being sent.

<i>LOINC code</i>	<i>Observation Name</i>
18677-5	REHABILITATION TREATMENT PLAN

When a provider sends a complete Rehabilitation Services Plan with this code, it shall include all general data elements and those specific to the discipline of the rehabilitation discipline covered in the associated claim, provided that information is available. (For example, a submission of a plan might exclude 18642-9, the hospitalization date range, if there were no prior hospitalization.)

The above notwithstanding, when a payer uses a 277 to request specific information with respect to a claim, it may use any of the LOINC codes in the table below, even if such a LOINC code is

⁴ The LOINC Consortium, c/o the Regenstrief Institute, 1001 West 10th Street RG-5, Indianapolis, IN 46202, 317/630-7433.

not designated as being associated with the discipline covered in the claim or service line. For example, upon review of a claim for Physical Therapy, if a payer determines that it is necessary to request the rationale for the rehabilitation plan, it may do so using LOINC code 18660-1, REHABILITATION TREATMENT PLAN, JUSTIFICATION (NARRATIVE).

<i>LOINC code</i>	<i>Data Element Name</i>	<i>Discipline-specific</i>
18626-2	REHABILITATION TREATMENT PLAN, NEW/REVISED	
18627-0	PRIMARY DX FOR TREATMENT PLAN, DATE ONSET OR EXACERBATION	
18628-8	REHABILITATION TREATMENT PLAN, START DATE	
18629-6	REHABILITATION TREATMENT PLAN, CLINICAL DISCIPLINE	
19007-4	PRIMARY DIAGNOSIS (COMPOSITE)	
18631-2	REHABILITATION TREATMENT PLAN, DIAGNOSIS ADDRESSED BY PLAN	
18632-0	REHABILITATION TREATMENT PLAN, AUTHOR OF TREATMENT PLAN (COMPOSITE)	
18637-9	REHABILITATION TREATMENT PLAN, VISIT FREQUENCY	
18639-5	REHABILITATION TREATMENT PLAN, DATE RANGE (FROM/THROUGH) DESCRIBED BY PLAN (COMPOSITE)	
18642-9	HOSPITALIZATION LEADING TO REHABILITATION TREATMENT PLAN, DATE RANGE (COMPOSITE)	
18645-2	REHABILITATION TREATMENT PLAN, CONTINUATION STATUS	
18646-0	REHABILITATION TREATMENT PLAN, DATE ATTENDING MD REFERRED PATIENT	
18647-8	REHABILITATION TREATMENT PLAN, DATE ATTENDING MD SIGNED	
18648-6	REHABILITATION TREATMENT PLAN, DATE REHAB PROFESSIONAL SIGNED	
18649-4	REHABILITATION TREATMENT PLAN, SIGNATURE OF RESPONSIBLE ATTENDING PHYSICIAN ON FILE	
18650-2	REHABILITATION TREATMENT PLAN, SIGNATURE OF RESPONSIBLE REHABILITATION PROFESSIONAL ON FILE	
18651-0	MEDICATIONS ADMINISTERED (COMPOSITE)	PS
18652-8	REHABILITATION TREATMENT PLAN, PROGNOSIS FOR REHABILITATION	PS
18653-6	REHABILITATION TREATMENT PLAN, ESTIMATED DATE OF COMPLETION	
18654-4	REHABILITATION TREATMENT PLAN, DATE OF LAST PLAN OF TREATMENT CERTIFICATION	
18655-1	REHABILITATION TREATMENT PLAN, PAST MEDICAL HISTORY+LEVEL OF FUNCTION (NARRATIVE)	
18656-9	REHABILITATION TREATMENT PLAN, INITIAL ASSESSMENT (NARRATIVE)	
18657-7	REHABILITATION TREATMENT PLAN, PLAN OF TREATMENT (NARRATIVE)	
18658-5	REHABILITATION TREATMENT PLAN, PROGRESS NOTE+ATTAINMENT OF GOALS (NARRATIVE)	
18659-3	REHABILITATION TREATMENT PLAN, REASON TO CONTINUE (NARRATIVE)	
18660-1	REHABILITATION TREATMENT PLAN, JUSTIFICATION (NARRATIVE)	PS
18661-9	PSYCHIATRIC SYMPTOMS (NARRATIVE)	PS
18662-7	REHABILITATION TREATMENT PLAN, CHIEF COMPLAINT+REASON FOR REFERRAL+REASON FOR RELAPSE IF KNOWN (NARRATIVE)	AS
18663-5	HISTORY OF PRESENT ALCOHOL AND/OR SUBSTANCE ABUSE (NARRATIVE)	AS
18664-3	REHABILITATION TREATMENT PLAN, FOLLOWUP APPROACH (COMPOSITE)	AS

<i>LOINC code</i>	<i>Data Element Name</i>	<i>Discipline- specific</i>
18669-2	REHABILITATION TREATMENT PLAN, LEVEL OF PATIENT PARTICIPATION	AS
18670-0	REHABILITATION TREATMENT PLAN, DATE OF NEXT PLANNED REHABILITATION TREATMENT (COMPOSITE)	AS
18671-8	NEXT PLAN OF TREATMENT (NARRATIVE)	
18672-6	ALCOHOL/DRUG ABUSE SYMPTOMS WITH PHYSIOLOGICAL DEPENDENCE INDICATOR	AS
18673-4	REHABILITATION REMISSION STATUS	AS
18674-2	LONGEST PERIOD OF SOBRIETY FOR ABUSED SUBSTANCE	AS

4 Value Table

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBR-4: 18626-2	REHABILITATION TREATMENT PLAN, NEW/REVISED		1..1	
OBX-3: 18626-2	700 original 701 updated	CE	1..1	OBX-5^3: HL79002
OBR-4: 18627-0	PRIMARY DX FOR TREATMENT PLAN, DATE ONSET OR EXACERBATION		1..1	
OBX-3: 18627-0	Date of Onset/Exacerbation of Primary Diagnosis	DT	1..1	
OBR-4: 18628-8	REHABILITATION TREATMENT PLAN, START DATE		1..1	
OBX-3: 18628-8		DT	1..1	
OBR-4: 18629-6	REHABILITATION TREATMENT PLAN, CLINICAL DISCIPLINE		1..1	
	Discipline/Therapy Type			
OBX-3: 18629-6	Discipline/Therapy Type AS Alcohol/Substance Abuse CR Cardiac Rehabilitation MS Medical Social Services OT Occupational Therapy PS Psychiatric PT Physical Therapy RT Respiratory Therapy SN Skilled Nursing	CE	1..1	OBX-5^3: HL79004
OBR-4: 18820-1	PRIMARY DIAGNOSIS IDENTIFIER		1..1	
	Diagnosis code and narrative description of the problem addressed in the rehabilitation plan.			
OBX-3: 18820-1	ICD-9 code. Include the text in component 2.	CE	1..1	OBX-5^3: I9C
OBR-4: 18631-2	REHABILITATION TREATMENT PLAN, DIAGNOSIS ADDRESSED BY PLAN (COMPOSITE)		1..1	
	Treatment Diagnosis Code/Narrative.			
OBX-3: 18821-9	DIAGNOSIS ADDRESSED BY PLAN IDENTIFIER Treatment Diagnosis Code. ICD-9.	CE	1..1	OBX-5^3: I9C
OBX-3: 18822-7	DIAGNOSIS ADDRESSED BY PLAN (NARRATIVE) Narrative that describes the treatment diagnosis from the rehabilitation plan.	TX	1..1	
OBR-4: 18632-0	REHABILITATION TREATMENT PLAN, AUTHOR OF TREATMENT PLAN (COMPOSITE)		1..1	
	Professional who established the Plan of Treatment; required if a plan is in the message.			
OBX-3: 18633-8	REHABILITATION TREATMENT PLAN, AUTHOR NAME	PN	1..1	
OBX-3: 18730-2	REHABILITATION TREATMENT PLAN, AUTHOR IDENTIFIER Unique Identifying Number of the Professional who established the Plan of Treatment	CE	1..1	OBX-5^3: NPI
	Once the Federal National Provider Identifier (NPI) is fully implemented the NPI number will be the only identifier allowed. Until complete implementation is achieved, other identifiers such as state license numbers or UPIN are allowed.			
	Component 3 should indicate the authority assigning the identifier as follows: NPI (National Provider Identifier), UPIN, or XX, where XX is the two-letter US Postal Service abbreviation for the state of the licensing authority.			
OBX-3: 18634-6	REHABILITATION TREATMENT PLAN, AUTHOR PROFESSION X12 Provider Taxonomy.	CE	1..1	OBX-5^3: X12PTX
OBR-4: 18637-9	REHABILITATION TREATMENT PLAN, VISIT FREQUENCY		1..1	

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBX-3: 18637-9	Frequency. First three components of TQ field only. The first component is the frequency. The only acceptable values for the second component are PRN or Q<number><period>, where <number> is an integer and <period> is D (days), W (weeks) or L (months). Use Q13W for a time period measured in quarter-years. If <integer> is missing it is assumed to be 1. The third component, duration, is always a number of days, expressed as D<integer>. Examples: 1^QD^D10 1 visit daily for 10 day 2^QW^D70 2 visits per week for 10 weeks (70 days) ^PRN^365D As required for one year.	TQ	1..1	
OBR-4: 18639-5	REHABILITATION TREATMENT PLAN, DATE RANGE (FROM/THROUGH) DESCRIBED BY PLAN (COMPOSITE)		1..1	
OBX-3: 18640-3	REHABILITATION TREATMENT PLAN, START DATE	DT	1..1	
OBX-3: 18641-1	REHABILITATION TREATMENT PLAN, END DATE	DT	1..1	
OBR-4: 18642-9	HOSPITALIZATION LEADING TO REHABILITATION TREATMENT PLAN, DATE RANGE (COMPOSITE)		1..1	
OBX-3: 18643-7	HOSPITALIZATION LEADING TO REHABILITATION TREATMENT PLAN, START DATE	DT	1..1	
OBX-3: 18644-5	HOSPITALIZATION LEADING TO REHABILITATION TREATMENT PLAN, END DATE	DT	1..1	
OBR-4: 18645-2	REHABILITATION TREATMENT PLAN, CONTINUATION STATUS		1..1	
OBX-3: 18645-2	C continue D discontinue	CE	1..1	OBX-5^3: HL79003
OBR-4: 18646-0	REHABILITATION TREATMENT, DATE ATTENDING MD REFERRED PATIENT FOR		1..1	
OBX-3: 18646-0	Date Attending Physician Referred Patient for Rehabilitation Services	DT	1..1	
OBR-4: 18647-8	REHABILITATION TREATMENT PLAN, DATE ATTENDING MD SIGNED		1..1	
OBX-3: 18647-8		DT	1..1	
OBR-4: 18648-6	REHABILITATION TREATMENT PLAN, DATE REHABILITATION PROFESSIONAL SIGNED		1..1	
OBX-3: 18648-6		DT	1..1	
OBR-4: 18649-4	REHABILITATION TREATMENT PLAN, SIGNATURE OF RESPONSIBLE ATTENDING PHYSICIAN ON FILE		1..1	
OBX-3: 18649-4	N No Y Yes	CE	1..1	OBX-5^3: HL70136
OBR-4: 18650-2	REHABILITATION TREATMENT PLAN, SIGNATURE OF RESPONSIBLE REHABILITATION PROFESSIONAL ON FILE		1..1	
OBX-3: 18650-2	N No Y Yes	CE	1..1	OBX-5^3: HL70136
OBR-4: 18651-0	MEDICATION ADMINISTERED (COMPOSITE) Identify all medications that are administered part of the Psychiatric Rehabilitation Plan within the dates of service of the associated claim.		0..n	
OBX-3: 18816-9	NAME + IDENTIFIER Send as NDC code, but populate second component of the CE field with the drug name. Sender may send just the drug name, but no code.	CE	1..1	OBX-5^3: NDC

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBX-3: 18817-7	DOSE	NM	1..1	OBX-6^3: iso+
OBX-3: 18818-5	TIMING + QUANTITY Send only the first two components: quantity and timing. Quantity is the number of items to provide each time the medicine is administered (e.g., give two tablets for each dose.) The default is one. Interval states how frequently to give the dose as described in the HL7 Implementation Guide. Examples: two tablets, three times a day: 2^TID one tablet each morning: ^QAM.	TQ	1..1	
OBX-3: 18819-3	ROUTE	CE	1..1	OBX-5^3: HL70162
OBR-4: 18652-8	REHABILITATION TREATMENT PLAN, PROGNOSIS FOR REHABILITATION		1..1	
OBX-3: 18652-8	1 poor 2 guarded 3 fair 4 good 5 excellent	CE	1..1	OBX-5^3: HL79005
OBR-4: 18653-6	REHABILITATION TREATMENT, ESTIMATED DATE OF COMPLETION Estimated date of completion for Outpatient Rehab		1..1	
OBX-3: 18653-6	Estimated date of completion for Outpatient Rehab	DT	0..1	
OBR-4: 18654-4	REHABILITATION TREATMENT PLAN, DATE OF LAST PLAN OF TREATMENT CERTIFICATION		0..1	
OBX-3: 18654-4		DT	0..1	
OBR-4: 18655-1	REHABILITATION TREATMENT PLAN, PAST MEDICAL HISTORY+LEVEL OF FUNCTION (NARRATIVE)		1..1	
OBX-3: 18655-1		TX	1..1	
OBR-4: 18656-9	REHABILITATION TREATMENT PLAN, INITIAL ASSESSMENT (NARRATIVE)		1..1	
OBX-3: 18656-9		TX	1..1	
OBR-4: 18657-7	REHABILITATION TREATMENT PLAN, PLAN OF TREATMENT (NARRATIVE)		1..1	
OBX-3: 18657-7	Include functional goals.	TX	1..1	
OBR-4: 18658-5	REHABILITATION TREATMENT, PROGRESS NOTE+ATTAINMENT OF GOALS (NARRATIVE)		1..1	
OBX-3: 18658-5		TX	0..1	
OBR-4: 18659-3	REHABILITATION TREATMENT PLAN, REASON TO CONTINUE (NARRATIVE)		1..1	
OBX-3: 18659-3		TX	0..1	
OBR-4: 18660-1	REHABILITATION TREATMENT PLAN, JUSTIFICATION (NARRATIVE)		1..1	
OBX-3: 18660-1		TX	0..1	
OBR-4: 18661-9	PSYCHIATRIC SYMPTOMS (NARRATIVE) For psychiatric rehabilitation only. Send psychiatric symptoms including present behavior.		1..1	
OBX-3: 18661-9		TX	0..1	
OBR-4: 18662-7	REHABILITATION TREATMENT PLAN, CHIEF COMPLAINT+REASON FOR REFERRAL+REASON FOR RELAPSE IF KNOWN (NARRATIVE)		1..1	
OBX-3: 18662-7		TX	0..1	
OBR-4: 18663-5	HISTORY OF PRESENT ALCOHOL AND/OR SUBSTANCE ABUSE (NARRATIVE)		1..1	
OBX-3: 18663-5		TX	0..1	

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBR-4: 18664-3	REHABILITATION TREATMENT PLAN, FOLLOWUP APPROACH (COMPOSITE) Agency or individual who will follow up after treatment, and the methodology and frequency of follow up. Send information about the agency or person. If both agency and person are sent, the person should be affiliated with the agency.		0..1	
OBX-3: 18665-0	REHABILITATION TREATMENT PLAN, NAME OF AGENCY THAT WILL FOLLOW UP	ST	0..1	
OBX-3: 18666-8	REHABILITATION TREATMENT PLAN, NAME OF PERSON THAT WILL FOLLOW UP AFTER	PN	0..1	
OBX-3: 18667-6	REHABILITATION TREATMENT PLAN, METHODOLOGY FOR FOLLOW UP (NARRATIVE)	TX	1..1	
OBX-3: 18668-4	REHABILITATION TREATMENT PLAN, FREQUENCY OF ASSESSMENTS FOR FOLLOW UP Send number of assessments per period of time.	TQ	1..1	OBX-6^3: HL79015
	First two components of TQ field only. The first component is the frequency. The only acceptable values for the second component are Q<number><period>, where <number is an integer> and <period> is D (days), W (weeks) or L (months). Use Q13W for a time period measured in quarter-years. If <integer> is missing it is assumed to be 1.			
	Examples: ^QW 1 followup per week 2^QL 2 visits per month /sec per second /min per minute /hr per hour /d per day /wk per week /mo per month /yr per year			
OBR-4: 18669-2	REHABILITATION TREATMENT PLAN, LEVEL OF PATIENT PARTICIPATION		1..1	
OBX-3: 18669-2		TX	1..1	
OBR-4: 18670-0	REHABILITATION TREATMENT PLAN, DATE OF NEXT PLANNED REHABILITATION TREATMENT (COMPOSITE)		1..1	
OBX-3: 18640-3	REHABILITATION TREATMENT PLAN, START DATE	DT	1..1	
OBX-3: 18641-1	REHABILITATION TREATMENT PLAN, END DATE	DT	1..1	
OBR-4: 18671-8	NEXT PLAN OF TREATMENT TEXT (NARRATIVE)		1..1	
OBX-3: 18671-8		TX	1..1	
OBR-4: 18672-6	ALCOHOL/DRUG ABUSE SYMPTOMS WITH PHYSIOLOGICAL DEPENDENCE INDICATOR		1..1	
OBX-3: 18672-6	N No Y Yes	CE	1..1	OBX-5^3: HL70136
OBR-4: 18673-4	REHABILITATION PROBLEM REMISSION STATUS		1..1	
OBX-3: 18673-4	1 Early Full Remission 2 Early Partial Remission 3 Sustained Full Remission 4 Sustained Partial Remission	CE	1..1	OBX-5^3: HL79006
OBR-4: 18674-2	LONGEST PERIOD OF SOBRIETY FOR ABUSED SUBSTANCE (COMPOSITE) Use for alcohol/substance abuse rehabilitation.		0..n	
OBX-3: 18675-9	SUBSTANCE ABUSED (NARRATIVE) Substance	TX	1..1	

<i>LOINC code</i>	<i>Value</i>	<i>OBX-2</i>	<i>Rep</i>	<i>OBX 5/6</i>
OBX-3: 18676-7	LONGEST PERIOD OF SOBRIETY Specify units for the period of sobriety in OBX-6 dy days mo months wk weeks	NM	1..1	OBX-6^3: sobprd

4.1 Coding Example

Scenario: The following message encodes a Psychiatric Rehabilitation plan for patient Jon J. Jay with medical record number 184569. The account number of the sending institution associated with this case is X48507924.

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PRINCIPAL DIAGNOSIS CODE 296.4, BIPOLAR AFFECTIVE D/O
NO OTHER DIAGNOSIS CODES
START OF CARE/ADMISSION DATE 061298
STATEMENT FROM 071798 THRU 073198
PHYSICIAN: JOHN E. SMITH,
NEW JERSEY IDENTIFIER: 1298379
HCFA PROVIDER TAXONOMY CODE: Psychiatrist (203BP0800Y)
REFERRAL DATE: 061298
SIGNATURE DATE: 062298
REHAB PROFESSIONAL: JONAH J. JONES, MS
NEW JERSEY IDENTIFIER: 3582901
HCFA PROVIDER TAXONOMY CODE: Psychologist (103T00000N)
SIGNATURE DATE PLAN OF TREATMENT 062298
PRIOR HOSPITAL DATES: FROM 032697 THRU 032997
DATE OF ONSET/EXACERBATION OF PRIN DX: 032697
ADMISSION DATE/START OF CARE: 061298
TOTAL VISITS FROM S TART OF CARE: 1
TREATMENT DIAGNOSIS CODE 296.4 NARRATIVE BIPOLAR AFFECTIVE D/O

PLAN OF TREATMENT
DATE ESTABLISHED 061298
FROM 062298 THRU 092298 FREQUENCY/DURATION: NUMBER 1
FREQUENCY PERIOD DA DURATION 030 EST COMPLETION DATE 123198
DATE LAST CERT (not applicable)
PROGNOSIS 2

MEDICAL HISTORY/PRIOR FUNCTIONAL LEVEL
PATIENT HAS HAD MULTIPLE PSYCHIATRIC HOSPITALIZATIONS OVER MANY YEARS, MOST
RECENTLY 2 INPATIENT ADMISSIONS TO GENERAL HOSPITAL FOR SUICIDAL IDEATION AND SEVERE
ANXIETY. PATIENT HAS BEEN UN OR UNDEREMPLOYED SINCE SUICIDE DEATH OF HIS TWIN
BROTHER.

INITIAL ASSESSMENT
PATIENT IS EXTREMELY ANXIOUS, AGITATED AND NEDDY, CANNOT HOLD EMPLOYMENT, HAS
DIFFICULTY ATTENDING PROGRAM REGULARLY, AND CANNOT SIT IN GROUPS FOR 10 MINUTES AT
A TIME. RETURNS TO HOSPITAL INPATIENT WARDS WHENEVER ANXIETY BECOMES
OVERWHELMING, WHICH IS OFTEN.

FUNCTIONAL GOALS
GOAL 1: PATIENT IS WORKING TO COME UP WITH ALTERNATIVES TO INPATIENT HOSPITALIZATION
WHEN HE FEELS ABANDONED OR ANXIOUS
GOAL 2: PATIENT IS EXPECTED TO RETURN TO THE LEVEL OF EMPLOYMENT THAT IS
COMMENSURATE WITH HIS COGNITIVE ABILITIES.

PLAN OF TREATMENT
915/90853 GROUP THERAPY: SYMPTOM MANAGEMENT 3X WEEK WITH PSYCHOLOGY

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LABWORK 1X MONTH: TO MONOITOR LITHIUM LEVEL FOR THERAPEUTIC LEVEL.

MEDICATION ADMIN.:

LITHIUM LEVEL 600 MG PO QAM, 900 MG PO QHS : THIOTHIXENE 5
MG PO TID: BENZTROPINE 1 MG PO TID : INDOMETHACIN 50 MG PO TID

PROGRESS REPORT

915/90853 GROUP THERAPY: SYMPTOM MANAGEMENT ON 7/17,22,24,27,29,31 WITH
PSYCHOLOGIST: PATIENT MADE ATTEMPTS TO COME AND PARTICIPATE IN SYMPTOM
MANAGEMENT GROUP. PATIENT WAS URGED TO USE ANXIETY CONTROL TECHNIQUES HE HAD
BEEN TAUGHT TO TOLERATE INCREASING LONGER STAGES IN GROUP. PATIENT RESPONDED BY
BEING ABLE TO STAY AND PARTICIPATE IN GROUP 50% LONGER.
LABWORK DONE ON {DATE}07/17/98 {TEST}LITHIUM LEVEL {RESULT}90 {JUSTIF.}ROUTINE
MONITORING OF THERAPEUTIC RESPONSE.

CONTINUED TREATMENT

PATIENT HAS ACTIVE ANXIETY SYMPTOMS AND SUICIDAL IDEATION AND REQUIRES THIS
LEVEL OF CARE TO HELP PREVENT RELAPSE AND INPATIENT TREATMENT.

JUSTIFICATION FOR ADMISSION

PATIENT HAD SEVERAL RECENT PSYCHIATRIC HOSPITALIZAITONS FOR ANXIETY AND SUICIDAL
IDEATION, AND REQUIRED TEH SUPPORT AND STRUCTURE OF DAY HOSPITAL PROGRAM TO
PREVENT RELAPSE AND REHOSPITALIZATION.

SYMPTOMS/PRESENT BEHAVIOR

PATIENT WAS AGITATED, ANXIOUS AND NEEDY, EXPRESSION FEARS OF ABANDONMENT AND
PASSIVE SUICIDAL IDEATION. PATIENT REQUIRED FREQUENT REINFORCEMENT IN ORDER TO
CONTINUE TO FUNCTION OUTSIDE OF AN INPATIENT PSYCHIATRIC WARD.

Coding example: all the segments in the right column of the table below constitute the single
HL7 message that conveys this report. The left column provides help in relating the example to
the scenario and to the Value Table.

Message Header	MSH ^~\& 199808121425 ORU^R01 Regenstrief0128765419 P 2.3 NE NE<CR>
Patient Identification	PID 184569 Jay^Jon^J 124 Elm St^^Elmo^UT^85912 X48507924<CR>
Status: new	OBR 18626-2^^LN<CR> OBX CE 18626-2^^LN 700^^HL79002 F<CR>
Primary Dx Date: 3/26/97	OBR 18627-0^^LN<CR> OBX DT 18627-0^^LN 19970326 F<CR>
Start date of rehab plan: 6/22/98	OBR 18628-8^^LN<CR> OBX DT 18628-8^^LN 19980622 F<CR>
Rehab Discipline: Psych	OBR 18629-6^^LN<CR> OBX CE 18629-6^^LN PS^^HL79004 F<CR>
Primary Diagnosis: 296.4	OBR 19007-4^^LN<CR> OBX CE 18630-4^^LN 296.4^^I9 F<CR> OBX TX 18777-3^^LN BIPOLAR AFFECTIVE D/O F<CR>
Plan Diagnosis: 296.4	OBR 18631-2^^LN<CR> OBX CE 18631-2^^LN 296.84^^I9 F<CR> OBX TX 18777-3^^LN BIPOLAR AFFECTIVE D/O F<CR>
Professional who prescribed the plan: name, ID number, and professional designation	OBR 18632-0^^LN<CR> OBX PN 18633-8^^LN SMITH^JOHN^E^^MD F<CR> OBX CE 18730-2^^LN 1298379^^NJ F<CR> OBX CE 18634-6^^LN 203BP0800Y^^X12PTX F<CR>
Plan signature date: 6/22/98	OBR 18635-3^^LN<CR> OBX DT 18635-3^^LN 19980622 F<CR>
3 visits/wk for 90 days	OBR 18637-9^^LN<CR> OBX TQ 18637-9^^LN 3^QW^90D F<CR>
Plan start and end dates 6/22/98 – 9/22/98	OBR 18639-5^^LN<CR> OBX DT 18640-3^^LN 19980622 F<CR> OBX DT 18641-1^^LN 19980922 F<CR>
Prior hospitalization dates: 3/26/97 – 3/29/97	OBR 18642-9^^LN<CR> OBX DT 18643-7^^LN 19970326 F<CR> OBX DT 18644-5^^LN 19970329 F<CR>
Plan continuation status: continue	OBR 18645-2^^LN<CR> OBX CE 18645-2^^LN C^^HL79003 F<CR>
Referral date: 6/12/98	OBR 18646-0^^LN<CR> OBX DT 18646-0^^LN 19980612 F<CR>
Date plan signed by attending MD: 6/28	OBR 18647-8^^LN<CR> OBX DT 18647-8^^LN 19980628 F<CR>
Date signed by rehab professional: 6/28	OBR 18648-6^^LN<CR> OBX DT 18648-6^^LN 19980628 F<CR>
Signature of attending on file: yes	OBR 18649-4^^LN<CR> OBX CE 18649-4^^LN Y^^HL70136 F<CR>
Signature of rehab professional on file: yes	OBR 18650-2^^LN<CR> OBX CE 18650-2^^LN Y^^HL70136 F<CR>
Planned Psych Medications Lithium 600 mg by mouth each morning and 900 mg by mouth before sleeping.	OBR 18651-0^^LN<CR> OBX CE 18816-9^^LN ^LITHIUM F<CR> OBX NM 18817-7^^LN 600 mg^^iso+ F<CR> OBX TQ 18818-5^^LN ^QAM F<CR> OBX CE 18819-3^^LN PO^^HL70162 F<CR> OBR 18651-0^^LN<CR> OBX CE 18816-9^^LN ^LITHIUM F<CR>

Thiothixene 5 mg by mouth three times a day.	<p>OBX NM 18817-7^LN 900 mg^iso+ F<CR></p> <p>OBX TQ 18818-5^LN ^QHS F<CR></p> <p>OBX CE 18819-3^LN PO^HL70162 F<CR></p> <p>OBR 18651-0^LN<CR></p> <p>OBX CE 18816-9^LN ^THIOTHIXENE F<CR></p> <p>OBX NM 18817-7^LN 5 mg^iso+ F<CR></p> <p>OBX TQ 18818-5^LN ^TID F<CR></p> <p>OBX CE 18819-3^LN PO^HL70162 F<CR></p> <p>OBR 18651-0^LN<CR></p>
Benzotropine 1 mg by mouth three times a day.	<p>OBX CE 18816-9^LN ^BENZTROPINE F<CR></p> <p>OBX NM 18817-7^LN 5 mg^iso+ F<CR></p> <p>OBX TQ 18818-5^LN ^TID F<CR></p> <p>OBX CE 18819-3^LN PO^HL70162 F<CR></p> <p>OBR 18651-0^LN<CR></p>
Indomethacin 50 mg by mouth three times a day.	<p>OBX CE 18816-9^LN ^INDOMETHACIN F<CR></p> <p>OBX NM 18817-7^LN 50 mg^iso+ F<CR></p> <p>OBX TQ 18818-5^LN ^TID F<CR></p> <p>OBX CE 18819-3^LN PO^HL70162 F<CR></p>
Prognosis: guarded	<p>OBR 18652-8^LN<CR></p> <p>OBX CE 18652-8^LN 2^HL79005 F<CR></p>
Estimated completion date: 12/31/98	<p>OBR 18653-6^LN<CR></p> <p>OBX DT 18653-6^LN 19981231 F<CR></p>
Date of last certification (no data sent)	
Medical History and Functional Level	<p>OBR 18655-1^LN<CR></p> <p>OBX TX 18655-1^LN PATIENT HAS HAD MULTIPLE PSYCHIATRIC HOSPITALIZATIONS OVER MANY YEARS, MOST RECENTLY 2 INPATIENT ADMISSIONS TO GENERAL HOSPITAL FOR SUICIDAL IDEATION AND SEVERE ANXIETY. PATIENT HAS BEEN UN OR UNDEREMPLOYED SINCE SUICIDE DEATH OF HIS TWIN BROTHER F<CR></p>
Initial Assessment	<p>OBR 18656-9^LN<CR></p> <p>OBX TX 18656-9^LN PATIENT IS EXTREMELY ANXIOUS, AGITATED AND NEEDY, CANNOT HOLD EMPLOYMENT, HAS DIFFICULTY ATTENDING PROGRAM REGULARLY, AND CANNOT SIT IN GROUPS FOR 10 MINUTES AT A TIME. RETURNS TO HOSPITAL INPATIENT WARDS WHENEVER ANXIETY BECOMES OVERWHELMING, WHICH IS OFTEN. F<CR></p>
Plan of Treatment	<p>OBR 18657-7^LN<CR></p> <p>OBX TX 18657-7^LN FUNCTIONAL GOALS~~GOAL 1: PATIENT IS WORKING TO COME UP WITH ALTERNATIVES TO INPATIENT HOSPITALIZATION WHEN HE FEELS ABANDONED OR ANXIOUS~~GOAL 2: PATIENT IS EXPECTED TO RETURN TO THE LEVEL OF EMPLOYMENT THAT IS COMMENSURATE WITH HIS COGNITIVE ABILITIES.~~PLAN OF TREATMENT~~915/90853 GROUP THERAPY: SYMPTOM MANAGEMENT 3X WEEK WITH PSYCHOLOGY~~LABWORK 1X MONTH: TO MONOITOR LITHIUM LEVEL FOR THERAPEUTIC LEVEL. F<CR></p>
Progress Note	<p>OBR 18658-5^LN<CR></p> <p>OBX TX 18658-5^LN 915/90853 GROUP THERAPY: SYMPTOM MANAGEMENT ON 7/17,22,24,27,29,31 WITH PSYCHOLOGIST: PATIENT MADE ATTEMPTS TO COME AND PARTICIPATE IN SYMPTOM MANAGEMENT GROUP. PATIENT WAS URGED TO USE ANXIETY CONTROL TECHNIQUES HE HAD BEEN TAUGHT TO TOLERATE INCREASING LONGER STAGES IN GROUP. PATIENT RESPONDED BY BEING ABLE TO STAY AND PARTICIPATE IN GROUP 50% LONGER.~~LABWORK DONE ON {DATE}07/17/98 {TEST}LITHIUM LEVEL {RESULT}90 {JUSTIF.}ROUTINE MONITORING OF THERAPEUTIC RESPONSE. F<CR></p>
Reason to continue treatment plan	<p>OBR 18659-3^LN<CR></p> <p>OBX TX 18659-3^LN PATIENT HAS ACTIVE ANXIETY SYMPTOMS AND SUICIDAL IDEATION AND REQUIRES THIS LEVEL OF CARE TO HELP PREVENT RELAPSE AND INPATIENT TREATMENT. F<CR></p>

Justification for rehabilitation	OBR 18660-1^^LN<CR> OBX TX 18660-1^^LN PATIENT HAD SEVERAL RECENT PSYCHIATRIC HOSPITALIZAITONS FOR ANXIETY AND SUICIDAL IDEATION, AND REQUIRED TEH SUPPORT AND STRUCTURE OF DAY HOSPITAL PROGRAM TO PREVENT RELAPSE AND REHOSPITALIZATION. F<CR>
Psychiatric symptoms	OBR 18661-9^^LN<CR> OBX TX 18661-9^^LN PATIENT WAS AGITATED, ANXIOUS AND NEEDY, EXPRESSION FEARS OF ABANDONMENT AND PASSIVE SUICIDAL IDEATION. PATIENT REQUIRED FREQUENT REINFORCEMENT IN ORDER TO CONTINUE TO FUNCTION OUTSIDE OF AN INPATIENT PSYCHIATRIC WARD. F<CR>

5 Response Code Sets

This section describes response codes that may be used in component 3 of OBX-5, when OBX-2 indicates a CE data type. These code sets may also be used in component 3 of OBX-6 when OBX-2 indicates a numeric data type. An entry in the value table refers to these code sets by a short abbreviation, such as “ans+”. These abbreviations are used in the headings of the subsections of this section.

The values for some code sets appear directly in this document. In other cases, the section cites another document as the source.

5.1 ans+: Extended ANSI Units Codes

ANSI X3.50-1986 and extensions as defined in HL7 Version 2.3, Figure 7-13.

5.2 HL70085: HL7 Observation Results Status.

HL7 table describes the status for an observation contained in an OBX segment.

<u>Code</u>	<u>HL7 Observation Results Status.</u>	<u>Code</u>	<u>HL7 Observation Results Status.</u>
C	This item is a correction to a previous result at the provider site.	F	Final
R	Results entered -- not verified	P	Preliminary
S	Partial results	X	No result can be obtained for this request/specimen

5.3 HL70103: Processing ID

Description of whether HL7 messages represent production, testing, or training transactions.

5.4 HL70136: HL7 Yes-No Indicator

HL7 Yes and No Indicators

<u>Code</u>	<u>HL7 Yes-No Indicator</u>
N	No
Y	Yes

5.5 HL70162: Route of Medicine Administration

HL7 codes for route of medicine administration. Items marked with "*" are used primarily for respiratory therapy and anesthesia delivery.

<u>Code</u>	<u>Route of Medicine Administration</u>	<u>Code</u>	<u>Route of Medicine Administration</u>
AP	Apply Externally	IHA	Intrahepatic artery
B	Buccal	IM	Intramuscular
DT	Dental	IMR	Immerse (Soak) Body Part
EP	Epidural	IN	Intranasal
ET	Endotracheal Tube*	IO	Intraocular
GTT	Gastronomy Tube	IP	Intraperitoneal
GU	GU Irrigant	IS	Intrasynovial
IA	Intra-arterial	IT	Intrathecal
IB	Intrabursal	IU	Intrauterine
IC	Intracardiac	IV	Intravenous
ICV	Intracervical (uterus)	MM	Mucous Membrane
ID	Intradermal	MTH	Mouth/Throat
IH	Inhalation	NG	Nasogastric

<u>Code</u>	<u>Route of Medicine Administration</u>
NP	Nasal Prongs*
NS	Nasal
NT	Nasotracheal Tube
OP	Ophthalmic
OT	Otic
OTH	Other/Miscellaneous
PF	Perfusion
PO	Oral
PR	Rectal
RM	Rebreather Mask*
SC	Subcutaneous

<u>Code</u>	<u>Route of Medicine Administration</u>
SD	Soaked Dressing
SL	Sublingual
TD	Transdermal
TL	Translingual
TP	Topical
TRA	Tracheostomy*
UR	Urethral
VG	Vaginal
VM	Ventimask
WND	Wound

5.6 HL79002: Claims Attachment Rehab Plan Status

Indicates whether a message describes the original plan or a revision.

Answer list changes specified by Data Coordination Committee, maintained by LOINC.

<u>Code</u>	<u>Claims Attachment Rehab Plan Status</u>
700	original
701	updated

5.7 HL79003: Continue/Discontinue

Indication whether an action should be continued or discontinued.

Maintained by HL7.

<u>Code</u>	<u>Continue/Discontinue</u>
C	continue
D	discontinue

5.8 HL79004: Rehabilitative Services Discipline/Therapy Type

Discipline or therapy type associated with Rehabilitative Service attachments.

Answer list changes specified by Data Coordination Committee, maintained by LOINC.

<u>Code</u>	<u>Rehabilitative Services Discipline/Therapy Type</u>	<u>Code</u>	<u>Rehabilitative Services Discipline/Therapy Type</u>
AS	Alcohol/Substance Abuse	PS	Psychiatric
CR	Cardiac Rehabilitation	PT	Physical Therapy
MS	Medical Social Services	RT	Respiratory Therapy
OT	Occupational Therapy	SN	Skilled Nursing

5.9 HL79005: Rehabilitation Prognosis

Prognosis for a rehabilitation services plan of treatment.

Answer list changes specified by Data Coordination Committee, maintained by LOINC.

<u>Code</u>	<u>Rehabilitation Prognosis</u>	<u>Code</u>	<u>Rehabilitation Prognosis</u>
1	poor	4	good
2	guarded	5	excellent
3	fair		

5.10 HL79006: Rehabilitation Services Remission Status

Remission status for a rehabilitation services plan of treatment.

Answer list changes specified by Data Coordination Committee, maintained by LOINC.

<u>Code</u>	<u>Rehabilitation Services Remission Status</u>
1	Early Full Remission
2	Early Partial Remission

<u>Code</u>	<u>Rehabilitation Services Remission Status</u>
3	Sustained Full Remission
4	Sustained Partial Remission

5.11 HL79015: Frequency Base Period

This is a domain drawn from the HL7 iso+ system of units. It consists of codes to represent the denominator in an expression of frequency.

<u>Code</u>	<u>Frequency Base Period</u>
/sec	per second
/min	per minute
/hr	per hour
/d	per day

<u>Code</u>	<u>Frequency Base Period</u>
/wk	per week
/mo	per month
/yr	per year

5.12 I9C : ICD-9-CM

International Classification of Diseases, Clinical Modification.

5.13 iso+: Extended ISO Units Codes

ISO 2955-1983 and extensions as defined in HL7 Version 2.3 Figure 7-13.

5.14 NDC: National Drug Code

FDA National Drug Code.

5.15 NPI: National Provider ID

Proposed HIPAA National Provider ID. Information available from Washington Publishing Company, Gaithersburg, MD. <http://www.wpc-edi.com/>

5.16 sobprd: Units for Period of Sobriety

Valid units for the period of sobriety

<u>Code</u>	<u>Units for Period of Sobriety</u>
dy	days
mo	months
wk	weeks

5.17 X12PTX: HCFA/X12 Provider Taxonomy

X12 Provider Taxonomy maintained by Insurance Committee X12N Task Group 2 Working Group 15.

**Logical Observation Identifier
Names and Codes (LOINC™) Consortium**

**Modifier Codes in the
ASC X12N Implementation Guide for the
277 Requests for Additional Information Transaction**

Feb 6, 1999

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Logical Observation Identifier Names and Codes (LOINC™) Consortium

Modifier Codes in the ASC X12N Implementation Guide for the 277 Request for Additional Information Transaction

1 Introduction

This LOINC publication provides the code values that are used in:

- *ASC X12N Implementation Guide for Use of the 275 Transaction (004020) Additional Information to Support a Health Care Claim or Encounter*, which is a product of subcommittee X12N of Accredited Standards Committee X12^{1,2}
- *ASC X12N Implementation Guide for Use of the 277 Transaction (004020) Health Care Claim, Request for Additional Information*
- *Health Level Seven (HL7) Implementation Guide for Additional Information to Support a Healthcare Claim or Encounter*.³

The format of this document and the methods used to arrive at its contents are prescribed in the HL7 Implementation Guide.

These documents together compose a proposed solution for the requirement for electronic transmission of claims attachments included in the Health Insurance Portability and Accountability Act (HIPAA). For a comprehensive understanding of the solution proposed in these documents, the following reading sequence is suggested:

- *ASC X12N Implementation Guide for Use of the 277 Transaction (004020) Health Care Claim, Request for Additional Information*
- *ASC X12N Implementation Guide for Use of the 275 Transaction (004020) Additional Information to Support a Health Care Claim or Encounter*
- *Health Level Seven (HL7) Implementation Guide for Additional Information to Support a Healthcare Claim or Encounter Version 1.0*
- *Logical Observation Identifier Names and Codes (LOINC™) Consortium Modifier Codes in the ASC X12N Implementation Guide for the 277 Requests for Additional Information Transaction*
- The Logical Observation Identifier Names and Codes (LOINC®) Consortium booklets containing the code tables for the Ambulance, Clinical Reports, Emergency Department,

¹Information on this and other X12/HIPAA-related implementation guides is available from the Washington Publishing Company, Gaithersburg, MD. <http://www.wpc-edi.com/>

² Within this LOINC document, references to the transaction defined by these X12 implementation guides will be abbreviated by calling them 275 and 277.

³ Health Level Seven, Inc., 3300 Washtenaw Ave., Suite 227, Ann Arbor, MI 48104-4261. (<http://www.hl7.org>)

Laboratory Results, Medications and Rehabilitation Services messages. These booklets may be read in any order.

- One additional document serves as a reference: *Logical Observation Identifier Names and Codes (LOINC®) Consortium Codes for the HL7 and X12 Additional Information to Support a Health Care Claim or Encounter Transactions: Summary Listing*

The X12 transactions use LOINC codes to identify information that is requested (277) or sent (275). They also use LOINC codes to modify the scope of the request and to indicate the scope of the information being sent.

By their nature, 277 Requests for Additional Information are limited to information that relates to the date of service and the information that is required to adjudicate a claim or a specific service that is part of the claim. Modifier codes do not alter that limitation. They simply serve to provide further limitations on the requested information.

By its placement in the 277 transaction, a request may apply to the entire claim or to an individual service that is part of the claim. In a 275, the placement of the LOINC codes indicates whether the information being sent applies to the entire claim or a specific purpose.

The codes can serve several purposes:

- to identify an **electronic attachment** that is being requested (e.g., a request for the Ambulance electronic attachment in support of a claim for ambulance services)
- to identify a **single question from an electronic attachment** that is being asked (e.g., a request for the number of miles that the ambulance drove in support of a claim for ambulance services)
- to identify a **category of clinical report** that is requested (e.g., send any reports of CAT scans of the head that are related to the claim or a specific service)
- to identify a **part of a clinical report** that is requested (e.g., send the impression section of a radiology report in support of a claim or a specific service).
- to identify a **category of laboratory results** that is requested (e.g., send any hematology results that are related to the claim or a specific service)
- to identify a **category of medication information** that is requested (e.g., send the discharge medications that are related to the claim or a specific service)
- to **modify the implicit scope of a request** (e.g., to modify a request for serology lab values to specify only the abnormal results).

This document specifies the LOINC codes that are used to modify the implicit scope of a request. The LOINC codes used for other purposes are published in other publications of the LOINC Consortium.

It is possible that a 277 request for information will consist entirely of requests that are related to specific services. The structure of the 277 requires that there be a LOINC code at the claim level, even if there are no information requests at that level. A special code is used as a placeholder, to fulfill that requirement. It specifies that none of the requests in the 277 will have an implicit scope of the entire claim. There will, of course, be LOINC codes located elsewhere in the message that make requests related to one or more specific services; otherwise there would be no need to send the message. The placeholder LOINC code is identified in section 3.

The same consideration applies to the transmission of information in a 275. If all information is linked to specific services, the special placeholder LOINC code is sent at the overall claim level.

1.1 LOINC Codes for Modifying Scope

Modifier codes are used in X12 277 request to qualify the scope of the request for information. Each request for an electronic form, question, report or part of a report can be modified by up to two LOINC codes, one from each of these categories.

- **Time window modifiers** describe the time range of the requested data with reference to the beginning and ending dates of the associated claim. For example, the modifier 18790-6 says that the data requested had a date on or before the date of service on the claim. This might be used to request a pathology report to verify the diagnosis for the claim. If no time modifier code is included in the 277, data is requested dated between the start and end service dates of the claim, inclusive.
- **Item selection modifiers** provide criteria for selecting items within the time window specified by the time modifier. For example, a request for hematology results with the default time window modifier and the item selection modifier 18796-3 requests all the abnormal values, but none of the normal values. If no item selection modifier code is included in the 277, all data of the specified type that pertains to the selected time window is requested.

1.2 Revision History

<i>Date</i>	<i>Purpose</i>
Nov 23, 1998	Example for HL7 Ballot
Feb 6, 1999	Technical corrections after ballot of HL7 Implementation Guide

2 Modifier Codes

By their nature, 277 Requests for Additional Information are limited to information that relates to the data of service and the information that is required to adjudicate a claim or a specific service that is part of the claim. Modifier codes do not alter that limitation. They simply serve to provide further limitations on the requested information.

The tables below give all claims attachment request scope modifiers.

2.1 Time Window Modifiers

LOINC code	Meaning
18789-8	Include <i>all</i> data of the selected type within the date window associated with the claim (e.g., tests performed during a hospital stay or a note written to describe a clinic visit. This is the default value; it will be assumed if no time window modifier code is included).
18790-6	Include all data of the selected type <i>on or before the date of service</i> on the claim (e.g., a pathology report to verify the diagnosis for the claim, or per-operative test results).
18791-4	Include all data of the selected type <i>within or aligned to an encounter by the same claim or encounter number</i> (e.g., Radiology report for test performed during a visit or ordered during the visit and performed within five days).
18792-2	Include all data of the selected type <i>on or after the date of service</i> of the claim (e.g., status on follow-up).
18803-7	Include all data of the selected type that represents observations made 30 days or fewer before the starting date of service for the claim.
18804-5	Include all data of the selected type that represents observations made 3 months or fewer before the starting date of service for the claim.
18805-2	Include all data of the selected type that represents observations made six months or fewer before the starting date of service for the claim.
18806-0	Include all data of the selected type that represents observations made nine months or fewer before the starting date of service for the claim.
18807-8	Include all data of the selected type that represents observations made one year or less before the starting date of service for the claim.
18793-0	<i>Use no fixed time limit</i> on data—any of the selected type are relevant no matter when obtained.

2.2 Selection Item Modifiers

LOINC code	Meaning
18794-8	Send <i>all</i> items of the specified type within the time window (e.g., if the request is for serology results, send all serology results for test made during the time window including repeats). This is the default value; it will be assumed if no time window modifier code is included.
18795-5	Send all items of the specified type within the time window <i>relevant to the claim</i> (e.g., if the request is for CT scans, send only the ones that verify the diagnosis on the claim and do not send repeats within the time window).
18796-3	Send <i>all abnormals</i> within the time window (e.g., if the request is for hematology results, send only the ones that were abnormal, including repeated administration of the same test in the time window)
18797-1	Send the <i>first abnormals</i> within the time window (e.g., if the request is for hematology results, send the first of each kind of observation that is abnormal, but do not send repeated results of the same test in the time window)
18798-9	Send the <i>last abnormals</i> within the time window (e.g., if the request is for hematology results, send only the most recent of each kind of observation within the time window that is abnormal)
18800-3	Send the <i>worst</i> abnormal result for each kind of observation in the time window (e.g., if the request is for serology results, send the first of each kind of serology result within the time window, but do not send the results of subsequent repetitions of the same tests)
18799-7	Send the <i>first</i> (i.e., oldest) result for each kind of observation in the time window (e.g., if the request is for serology results, send the first of each kind of serology result within the time window, but do not send the results of subsequent repetitions of the same tests)
18802-9	Send the <i>last</i> (most recent) within the time window (e.g., if radiology reports are requested, with no further specificity, send the only the report that includes the last radiology exam done during the time period).

3 Special Code: No Claim-Level Requests

It is possible that a 277 request for information will consist entirely of requests that are related to specific services. The structure of the 277 requires that there be a LOINC code at the claim level, even if there are no information requests at that level. A special code is used as a placeholder, to fulfill that requirement. It specifies that none of the requests in the 277 will have an implicit scope of the entire claim. There will, of course, be LOINC codes located elsewhere in the message that make requests related to one or more specific services; otherwise there would be no need to send the message. The placeholder LOINC code is identified in section 3.

<i>LOINC code</i>	<i>Meaning</i>
19016-5	X12 277, all requests for information that are included in this transaction are stated for individual services.

3.1 Coding Example

The following set of segments that are a part of a 277 message show the relationship of a claim level request and a service-line level request

Scenario: a claim for professional services includes two procedures. The payer requests the operative notes for one and the operative note and progress notes for the other.

	HL*5*3*22*0~ NM1*QC*1*JONES*PETER*M***HN*123456789A~ TRN*2*1822634845~
This is the claim level code; LOINC code 19016-5 indicates that all requests will be based on specific service lines.	STC*R4:19016-5::LOI*19980824~
	REF*EJ*JONES123~ REF*BLT*111~ DTP*472*RD8*19980807-19980812~ DTP*106*D8*19980923~
This tells the provider that the question is about Revenue Code 360. <i>NU</i> says it is a National Uniform Billing Committee Code.	SVC*NU:360*2021.75*0~
LOINC code 11504-8 states a request for the Operative Report. If there are multiple operative reports relative to the claim, the report to be selected is the one related to this service line.	STC*R4:11504-8::LOI*19980824~
(another service line)	SVC*NU:... ~
Request for the op-note and progress notes (11506-3) associated with that service line.	STC*R4:11504-8::LOI*19980824~ STC*R4:11506-3::LOI*19980824~

**Logical Observation Identifier
Names and Codes (LOINC[®]) Consortium**

**Codes for the HL7 and X12 Additional Information to Support a
Healthcare Claim or Encounter Transactions:
Summary Listing**

Feb 6, 1999

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- *Health Level Seven (HL7) Implementation Guide for Additional Information to Support a Healthcare Claim or Encounter*.³

The LOINC Consortium publishes these same codes in several topic-specific booklets. They are listed together in this document.

These documents together compose a proposed solution for the requirement for electronic transmission of claims attachments included in the Health Insurance Portability and Accountability Act (HIPAA). For a comprehensive understanding of the solution proposed in these documents, the following reading sequence is suggested:

- *ASC X12N Implementation Guide for Use of the 277 Transaction (004020) Health Care Claim, Request for Additional Information*
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- The Logical Observation Identifier Names and Codes (LOINC®) Consortium booklets containing the code tables for the Ambulance, Clinical Reports, Emergency Department, Laboratory Results, Medications and Rehabilitation Services messages. These booklets may

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³ Health Level Seven, Inc., 3300 Washtenaw Ave., Suite 227, Ann Arbor, MI 48104-4261. (<http://www.hl7.org>)

be read in any order.

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1.1 Verbal Representation of LOINC Codes

The precise definition of the concept associated with a LOINC code is a series of attributes that are maintained in a database. The precision of the definitions sometimes makes them difficult for a new reader to understand. The attributes occasionally have an internal structure that is articulated with special characters. For example, the System attribute for LOINC code 12062-6 is “HEAD.INTRACRANIAL ANATOMY^FETUS”. There are numerous abbreviations associated with specific attributes.

The attributes represent different aspects of a concept. To the new reader, or to a reader who is seeing them without the benefit of the attribute labels, the description of a concept can appear redundant. For example, the LOINC code 11947-9 might be described using all of its attributes as, “the head circumference divided by the abdominal circumference, a ratio of lengths, measured at a point in time, the measurement being made of the fetus, using the method of estimating from ultrasound information, as part of an obstetric ultrasound procedure.”

When publishing the codes it is desirable to have a single verbal description that is more easily understood. This and associated LOINC publications use a specific method for generating verbal descriptions of the concepts from the database attributes. Some characteristics of the method are listed below.

- It expands the abbreviations associated with LOINC attributes into full words or phrases.
- It omits words that represent the prevailing situation and will normally be assumed. For example, most LOINC codes describe concepts related to the patient, so this is omitted when including material from the System attribute of a concept.
- It reduces removes words generated from different attributes that might seem to be redundant. For example, LOINC code 18011-7 (AORTA ARCH, DIAMETER) is defined by a component attribute DIAMETER and a scale type of LEN (length). The word “length” is suppressed in the verbal description because it adds no additional information to the word “diameter”.
- It removes special delimiter character and reorders the subcomponents of attributes to approximate English word order.
- It is biased to produce more words if there is a risk of incorrectly describing a concept. For example, all codes that identify results described in natural language are identified with “(NARRATIVE)” even though some of them arguably could be represented no other way.
- Its output is occasionally replaced by a crafted phrase to enhance clarity.

1.2 Revision History

<i>Date</i>	<i>Purpose</i>
Nov 2, 1998	First publication.
Feb 6, 1999	Final revisions after ballot of HL7 Implementation Guide

2 Alphabetical Listing

10191-5	ABDOMEN, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	18741-9	ATTENDING PHYSICIAN PROGRESS NOTE (NARRATIVE)
8694-2	ABDOMEN, PHYSICAL FINDINGS (OBSERVED)	18743-5	AUTOPSY REPORT (NARRATIVE)
11286-2	ALCOHOL BINGE EPISODES RATE (REPORTED)	11387-8	AXILLA, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
18672-6	ALCOHOL/DRUG ABUSE SYMPTOMS WITH PHYSIOLOGICAL DEPENDENCE INDICATOR	11418-1	AXILLA, PHYSICAL FINDINGS (OBSERVED)
11287-0	ALCOHOLIC DRINKS PER DRINKING DAY RATE (REPORTED)	10192-3	BACK, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11352-2	ALLERGIC & IMMUNOLOGIC, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	8695-9	BACK, PHYSICAL FINDINGS (OBSERVED)
11359-7	ALLERGIC & IMMUNOLOGIC, HISTORY OF SYMPTOMS & DISEASES (REPORTED)	11636-8	BIRTHS LIVE (REPORTED)
18716-1	ALLERGY TESTS (COMPOSITE)	11637-6	BIRTHS PRETERM (REPORTED)
18682-5	AMBULANCE CLAIMS ATTACHMENT (COMPOSITE)	11638-4	BIRTHS STILL LIVING (REPORTED)
18733-6	AMBULATORY VISIT NOTE (NARRATIVE) (ATTENDING PHYSICIAN)	11639-2	BIRTHS TERM (REPORTED)
11485-0	ANESTHESIA RECORD TOTAL (NARRATIVE)	11640-0	BIRTHS TOTAL (REPORTED)
11385-2	ANKLE, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	18717-9	BLOOD BANK TESTS (COMPOSITE)
11416-5	ANKLE, PHYSICAL FINDINGS (OBSERVED)	18767-4	BLOOD GAS TESTS (COMPOSITE)
18011-7	AORTA ARCH, DIAMETER (ECHO)	8310-5	BODY TEMPERATURE
18012-5	AORTA ASCENDING, DIAMETER (ECHO)	8335-2	BODY WEIGHT (ESTIMATED)
18013-3	AORTA DESCENDING, DIAMETER (ECHO)	3141-9	BODY WEIGHT (MEASURED)
18014-1	AORTA ISTHMUS, DIAMETER (ECHO)	3142-7	BODY WEIGHT (STATED)
18015-8	AORTA ROOT, DIAMETER (ECHO)	18584-3	BODY WEIGHT AT EMS TRANSPORT (COMPOSITE)
18010-9	AORTA, DIAMETER (ECHO)	11353-0	BREASTS, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
18016-6	AORTIC VALVE ORIFICE, DIAMETER (ECHO)	11360-5	BREASTS, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
17981-2	AORTIC VALVE, ACCELERATION (US DOPPLER)	10193-1	BREASTS, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
18835-9	AORTIC VALVE, AREA METHOD (NARRATIVE)	8696-7	BREASTS, PHYSICAL FINDINGS (OBSERVED)
18061-2	AORTIC VALVE, GRADIENT SYSTOLE MAX PRESSURE (US DOPPLER DERIVED FULL BERNOULLI)	18744-3	BRONCHOSCOPY RESPIRATORY SYSTEM, REPORT (NARRATIVE)
18062-0	AORTIC VALVE, GRADIENT SYSTOLE MAX PRESSURE (US DOPPLER DERIVED SIMPLIFIED BERNOULLI)	11388-6	BUTTOCKS, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
18063-8	AORTIC VALVE, GRADIENT SYSTOLE MEAN PRESSURE (US DOPPLER DERIVED SIMPLIFIED BERNOULLI)	11419-9	BUTTOCKS, PHYSICAL FINDINGS (OBSERVED)
18066-1	AORTIC VALVE, GRADIENT SYSTOLE MEAN PRESSURE (US DOPPLER DERIVED FULL BERNOULLI)	11389-4	CALF, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
18068-7	AORTIC VALVE, INTERVAL FROM Q-WAVE TO AORTIC VALVE OPENS (EKG US)	11420-7	CALF, PHYSICAL FINDINGS (OBSERVED)
18089-3	AORTIC VALVE, ORIFICE AREA (ECHO)	18745-0	CARDIAC CATHETERIZATION HEART, REPORT (NARRATIVE)
11386-0	ARM UPPER, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	19006-6	CARDIAC ECHO IMAGING DEVICE, IMAGE QUALITY (NARRATIVE) (ECHO)
11417-3	ARM UPPER, PHYSICAL FINDINGS (OBSERVED)	18839-1	CARDIAC ECHO IMAGING DEVICE, ULTRASOUND CLASS (NARRATIVE)
18708-8	ARTERIAL SYSTEM, FIRST HEART BEAT (COMPOSITE)	18106-5	CARDIAC ECHO STUDY, PROCEDURE
11327-4	ARTERIAL SYSTEM, FIRST HEART BEAT METHOD	18838-3	CARDIAC ECHO STUDY, TRANSDUCER SITE (NARRATIVE)
11328-2	ARTERIAL SYSTEM, FIRST HEART BEAT RATE	18836-7	CARDIAC STRESS STUDY, PROCEDURE (NARRATIVE)
11377-9	ARTERIAL SYSTEM, FIRST INTRAVASCULAR DIASTOLIC PRESSURE	18146-1	CARDIOVASCULAR CENTRAL, STUDY OBSERVATION OVERALL (NARRATIVE) (ECHO)
11378-7	ARTERIAL SYSTEM, FIRST INTRAVASCULAR SYSTOLIC PRESSURE	10168-3	CARDIOVASCULAR SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
8462-4	ARTERIAL SYSTEM, INTRAVASCULAR DIASTOLIC PRESSURE	8660-3	CARDIOVASCULAR SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
8478-0	ARTERIAL SYSTEM, INTRAVASCULAR MEAN PRESSURE	11390-2	CARDIOVASCULAR SYSTEM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
8480-6	ARTERIAL SYSTEM, INTRAVASCULAR SYSTOLIC PRESSURE	11421-5	CARDIOVASCULAR SYSTEM, PHYSICAL FINDINGS (OBSERVED)
8479-8	ARTERIAL SYSTEM, INTRAVASCULAR SYSTOLIC PRESSURE (PALPATION)	18768-2	CELL COUNTS + DIFFERENTIAL TESTS (COMPOSITE)
18742-7	ARTHROSCOPY REPORT (NARRATIVE)	18718-7	CELL MARKER TESTS (COMPOSITE)
		11867-9	CERVIX, EFFACEMENT PERCENTILE (PALPATION)
		18719-5	CHEMISTRY TESTS (COMPOSITE)
		11486-8	CHEMOTHERAPY RECORD TOTAL (NARRATIVE)
		11392-8	CHEST WALL, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)

11423-1 CHEST WALL, PHYSICAL FINDINGS (OBSERVED)	18697-3 ED CLINICAL FINDING DATA SOURCE
11391-0 CHEST, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	18698-1 ED CLINICAL FINDING INFORMATION (COMPOSITE)
11422-3 CHEST, PHYSICAL FINDINGS (OBSERVED)	18624-7 ED PROBLEM (NARRATIVE) (REPORTED)
10154-3 CHIEF COMPLAINT (NARRATIVE) (REPORTED)	18703-9 ED PROCEDURE INFORMATION (COMPOSITE)
11292-0 CHIEF COMPLAINT (NARRATIVE) (REPORTED)	11293-8 ED REFERRAL, SOURCE
8661-1 CHIEF COMPLAINT (REPORTED)	11523-8 EEG BRAIN, REPORT (NARRATIVE)
11514-7 CHIROPRACTIC REPORT (NARRATIVE)	11524-6 EKG HEART, REPORT (NARRATIVE)
8663-7 CIGARETTES SMOKED CURRENT (PACK/DAY) (REPORTED)	11394-4 ELBOW, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
8664-5 CIGARETTES SMOKED TOTAL (PACK/YR) (REPORTED)	11425-6 ELBOW, PHYSICAL FINDINGS (OBSERVED)
18720-3 COAGULATION TESTS (COMPOSITE)	18749-2 ELECTROMYEOLOGRAM REPORT (NARRATIVE)
18746-8 COLONOSCOPY LOWER GI TRACT, REPORT (NARRATIVE)	18750-0 ELECTROPHYSIOLOGY HEART, REPORT (NARRATIVE)
18834-2 COMPARISON STUDY (NARRATIVE) (RADIOLOGY)	15507-7 EMERGENCY VISIT NOTE (NARRATIVE)
18779-9 COMPARISON STUDY DATE AND TIME (RADIOLOGY)	11318-3 EMS SYSTEM, TRANSPORT AGENCY IDENTIFIER
18592-6 CONFINED TO BED AFTER EMS TRANSPORT	11459-5 EMS SYSTEM, TRANSPORT MODE
18591-8 CONFINED TO BED BEFORE EMS TRANSPORT	11319-1 EMS SYSTEM, TRANSPORT UNIT IDENTIFIER
11488-4 CONSULTATION NOTE (NARRATIVE)	18589-2 EMS TRANSPORT, ADMITTED AT DESTINATION FACILITY
11487-6 CONSULTATION REQUEST (NARRATIVE)	11288-8 EMS TRANSPORT, ARRIVAL TIME DOCUMENTED DATE AND TIME
11540-2 CT ABDOMEN, REPORT (NARRATIVE)	18582-7 EMS TRANSPORT, DESTINATION SITE
11538-6 CT CHEST, REPORT (NARRATIVE)	18583-5 EMS TRANSPORT, DESTINATION SITE ADDRESS
11539-4 CT HEAD, REPORT (NARRATIVE)	15512-7 EMS TRANSPORT, DESTINATION SITE INFORMATION (COMPOSITE)
18747-6 CT REPORT (NARRATIVE)	18593-4 EMS TRANSPORT, DISCHARGED FROM ORIGIN INSTITUTION
11294-6 CURRENT EMPLOYMENT (NARRATIVE) (REPORTED)	15510-1 EMS TRANSPORT, DISTANCE TRANSPORTED
11295-3 CURRENT EMPLOYMENT (REPORTED)	15516-8 EMS TRANSPORT, JUSTIFICATION FOR EXTRA ATTENDANTS
11526-1 CYTOLOGY REPORT (NARRATIVE)	15515-0 EMS TRANSPORT, MEDICAL REASON FOR UNSCHEDULED TRIP
10194-9 DEEP TENDON REFLEXES, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	15514-3 EMS TRANSPORT, ORDERING PRACTITIONER
8697-5 DEEP TENDON REFLEXES, PHYSICAL FINDINGS (OBSERVED)	18812-8 EMS TRANSPORT, ORDERING PRACTITIONER IDENTIFIER
11778-8 DELIVERY DATE (CLINICAL ESTIMATE)	18813-6 EMS TRANSPORT, ORDERING PRACTITIONER NAME
11779-6 DELIVERY DATE (ESTIMATED FROM LAST MENSTRUAL PERIOD)	18580-1 EMS TRANSPORT, ORIGINATION SITE
11780-4 DELIVERY DATE (ESTIMATED FROM OVULATION DATE)	18581-9 EMS TRANSPORT, ORIGINATION SITE ADDRESS
11781-2 DELIVERY DATE (ULTRASOUND COMPOSITE ESTIMATED)	15511-9 EMS TRANSPORT, ORIGINATION SITE INFORMATION (COMPOSITE)
18822-7 DIAGNOSIS ADDRESSED BY PLAN (NARRATIVE)	18588-4 EMS TRANSPORT, PURPOSE OF STRETCHER (NARRATIVE)
18821-9 DIAGNOSIS ADDRESSED BY PLAN IDENTIFIER	15509-3 EMS TRANSPORT, RATIONALE FOR CHOICE OF DESTINATION
18748-4 DIAGNOSTIC IMAGING REPORT (NARRATIVE)	15513-5 EMS TRANSPORT, REASON FOR SCHEDULED TRIP
11490-0 DISCHARGE NOTE (NARRATIVE) (PHYSICIAN)	18814-4 EMS TRANSPORT, REASON FOR SCHEDULED TRIP
18817-7 DOSE	18815-1 EMS TRANSPORT, REASON FOR SCHEDULED TRIP ADDITIONAL SERVICE INFORMATION (NARRATIVE)
10195-6 EAR, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	15517-6 EMS TRANSPORT, TRANSPORT DIRECTION
8698-3 EAR, PHYSICAL FINDINGS (OBSERVED)	10170-9 ENDOCRINE SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
11393-6 EARS & NOSE & MOUTH & THROAT, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	8668-6 ENDOCRINE SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
11424-9 EARS & NOSE & MOUTH & THROAT, PHYSICAL FINDINGS (OBSERVED)	12145-9 ENDOMETRIUM, THICKNESS (ULTRASOUND MEASURED)
11354-8 EARS & NOSE & SINUSES & MOUTH & THR, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	18751-8 ENDOSCOPY UPPER GI TRACT, REPORT (NARRATIVE)
11361-3 EARS & NOSE & SINUSES & MOUTH & THR, HISTORY OF SYMPTOMS & DISEASES (REPORTED)	18846-6 EXAMINATION LEVEL ULTRASOUND (NARRATIVE)
18141-2 ECHO CARDIOVASCULAR CENTRAL, STUDY OBSERVATION (NARRATIVE)	18752-6 EXERCISE STRESS TEST REPORT (NARRATIVE)
18143-8 ECHO HEART CHAMBERS, STUDY OBSERVATION (NARRATIVE)	11395-1 EXTREMITIES, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
18144-6 ECHO HEART VALVES, STUDY OBSERVATION (NARRATIVE)	11396-9 EXTREMITIES, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11522-0 ECHO HEART, REPORT (NARRATIVE)	11426-4 EXTREMITIES, PHYSICAL FINDINGS (OBSERVED)
18760-9 ECHO REPORT (NARRATIVE)	11427-2 EXTREMITIES, PHYSICAL FINDINGS (OBSERVED)
18679-1 ED CLAIMS ATTACHMENT (COMPOSITE)	

10197-2 EYE, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	18684-1 FIRST BLOOD PRESSURE (COMPOSITE)
8699-1 EYE, PHYSICAL FINDINGS (OBSERVED)	18685-8 FIRST BLOOD PRESSURE SPECIAL CIRCUMSTANCES
10171-7 EYES, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	11289-6 FIRST BODY TEMPERATURE
8669-4 EYES, HISTORY OF SYMPTOMS & DISEASES (REPORTED)	18688-2 FIRST BODY TEMPERATURE (COMPOSITE)
10157-6 FAMILY, HISTORY OF FAMILY MEMBER DISEASES (NARRATIVE) (REPORTED)	11290-4 FIRST BODY TEMPERATURE SITE
8670-2 FAMILY, HISTORY OF FAMILY MEMBER DISEASES (REPORTED)	18689-0 FIRST BODY TEMPERATURE SPECIAL CIRCUMSTANCES
11320-9 FEEDING AND DIETARY STATUS (NARRATIVE) (REPORTED)	18690-8 FIRST BODY WEIGHT (COMPOSITE)
11321-7 FEEDING AND DIETARY STATUS (REPORTED)	18833-4 FIRST BODY WEIGHT (MEASURED)
18722-9 FERTILITY TESTS (COMPOSITE)	18692-4 FIRST BODY WEIGHT SPECIAL CIRCUMSTANCES
11627-7 FETUS AMNIOTIC FLUID, INDEX SUM LENGTH (ULTRASOUND DERIVED)	11324-1 FIRST GLASGOW SCORE EYE OPENING
12167-3 FETUS AMNIOTIC FLUID, VOLUME (ULTRASOUND)	11325-8 FIRST GLASGOW SCORE MOTOR
12171-5 FETUS HEAD LATERAL CEREBRAL VENTRICLES, WIDTH TRANSVERSE (ULTRASOUND MEASURED)	11326-6 FIRST GLASGOW SCORE VERBAL
12170-7 FETUS HEAD, WIDTH HEMISPHERE (ULTRASOUND MEASURED)	18709-6 FIRST HEART BEAT SPECIAL CIRCUMSTANCES
11616-0 FETUS HEART, ACTIVITY FINDING (NARRATIVE) (ULTRASOUND)	11291-2 FIRST RESPIRATION RATE
11618-6 FETUS LIMBS, ACTIVITY FINDING (NARRATIVE) (ULTRASOUND)	18686-6 FIRST RESPIRATION RATE (COMPOSITE)
12146-7 FETUS NUCHAL FOLD, THICKNESS (ULTRASOUND MEASURED)	18687-4 FIRST RESPIRATION RATE SPECIAL CIRCUMSTANCES
18851-6 FETUS PLACENTA, GRADE (NARRATIVE) (ULTRASOUND)	11454-6 FIRST RESPONSIVENESS ASSESSMENT
12147-5 FETUS PLACENTA, THICKNESS (ULTRASOUND MEASURED)	18753-4 FLEXIBLE SIGMOIDOSCOPY LOWER GI TRACT, REPORT (NARRATIVE)
11620-2 FETUS RESPIRATORY SYSTEM, ACTIVITY FINDING (NARRATIVE) (ULTRASOUND)	11397-7 FOOT, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11952-9 FETUS UMBILICAL CORD PLACENTA, INSERTION SITE FINDING (NARRATIVE) (ULTRASOUND)	11428-0 FOOT, PHYSICAL FINDINGS (OBSERVED)
11727-5 FETUS, BODY WEIGHT (ULTRASOUND ESTIMATED)	11398-5 FOREARM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11766-3 FETUS, BODY WEIGHT PERCENTILE (COMP OF EST FETAL WGT W STD POP DIST AT SAME ESTGA)	11429-8 FOREARM, PHYSICAL FINDINGS (OBSERVED)
11768-9 FETUS, BODY WEIGHT PERCENTILE RANGE (CATEGORIZATION BY COMPARISON WITH STANDARDS)	11355-5 GASTROINTESTINAL SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
11883-6 FETUS, GENDER FINDING (NARRATIVE) (ULTRASOUND)	11362-1 GASTROINTESTINAL SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
11884-4 FETUS, GESTATIONAL AGE (CLINICAL ESTIMATE)	11399-3 GASTROINTESTINAL SYSTEM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11885-1 FETUS, GESTATIONAL AGE (ESTIMATED FROM LAST MENSTRUAL PERIOD)	11430-6 GASTROINTESTINAL SYSTEM, PHYSICAL FINDINGS (OBSERVED)
11886-9 FETUS, GESTATIONAL AGE (ESTIMATED FROM OVULATION DATE)	11322-5 GENERAL HEALTH (NARRATIVE) (REPORTED)
11887-7 FETUS, GESTATIONAL AGE (ESTIMATED FROM SELECTED DELIVERY DATE)	11323-3 GENERAL HEALTH (REPORTED)
11888-5 FETUS, GESTATIONAL AGE (ULTRASOUND COMPOSITE ESTIMATED)	11401-7 GENITALIA FEMALE, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11947-9 FETUS, HEAD CIRCUMFERENCE/ABDOMINAL CIRCUMFERENCE RATIO (ULTRASOUND DERIVED)	11432-2 GENITALIA FEMALE, PHYSICAL FINDINGS (OBSERVED)
11948-7 FETUS, HEART RATE (ULTRASOUND MEASURED)	11402-5 GENITALIA MALE, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11950-3 FETUS, IDENTIFICATION CRITERIA FINDING (NARRATIVE) (ULTRASOUND)	11433-0 GENITALIA MALE, PHYSICAL FINDINGS (OBSERVED)
11949-5 FETUS, IDENTIFICATION CRITERIA FINDING (ULTRASOUND)	11400-9 GENITALIA, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11951-1 FETUS, IDENTIFIER	11431-4 GENITALIA, PHYSICAL FINDINGS (OBSERVED)
11957-8 FETUS, LENGTH CROWN RUMP (ULTRASOUND MEASURED)	11356-3 GENITOURINARY SYSTEMS, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
12130-1 FETUS, STUDY OBSERVATION GENERAL (NARRATIVE) (ULTRASOUND)	11363-9 GENITOURINARY SYSTEMS, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
11878-6 FETUSES (ULTRASOUND)	10198-0 GENITOURINARY TRACT, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11283-9 FIRST ACUITY ASSESSMENT	8700-7 GENITOURINARY TRACT, PHYSICAL FINDINGS (OBSERVED)
	9267-6 GLASGOW COMA SCORE EYE OPENING
	9268-4 GLASGOW COMA SCORE MOTOR
	9269-2 GLASGOW COMA SCORE TOTAL
	9270-0 GLASGOW COMA SCORE VERBAL
	11403-3 GROIN, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
	11434-8 GROIN, PHYSICAL FINDINGS (OBSERVED)
	11404-1 HAND, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
	11435-5 HAND, PHYSICAL FINDINGS (OBSERVED)

10199-8 HEAD, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	18505-8 HEART, RR INTERVAL (EKG)
8701-5 HEAD, PHYSICAL FINDINGS (OBSERVED)	18510-8 HEART, ST SEGMENT AXIS HORIZONTAL PLANE ANGLE (EKG)
18024-0 HEART ATRIUM LEFT, DIAMETER ANTERIOR-POSTERIOR SYSTOLE (US M-MODE)	9875-6 HEART, ST-T SEGMENT (NARRATIVE) (EKG)
18070-3 HEART ATRIUM RIGHT, INTRACHAMBER MEAN PRESSURE (ECHO)	18810-2 HEART, STUDY OBSERVATION OVERALL FINDING (NARRATIVE) (EKG)
18069-5 HEART ATRIUM RIGHT, INTRACHAMBER MEAN PRESSURE (ESTIMATED FROM JUGULAR VENOUS DISTENTION)	8638-9 HEART, T WAVE AXIS ANGLE (EKG)
8867-4 HEART BEAT RATE	8621-5 HEART, VENTRICULAR ECTOPICS RATE (EKG)
18018-2 HEART VENTRICLE LEFT OUTFLOW-TRACT, DIAMETER (ECHO)	10172-5 HEMATOLOGIC SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
18064-6 HEART VENTRICLE LEFT OUTFLOW-TRACT, GRADIENT SYSTOLE MAX PRESSURE (US DOPPLER)	8673-6 HEMATOLOGIC SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
18043-0 HEART VENTRICLE LEFT, EJECTION FRACTION (ECHO)	18723-7 HEMATOLOGY TESTS (COMPOSITE)
18087-7 HEART VENTRICLE LEFT, MYOCARDIUM MASS (ECHO)	11406-6 HIP, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
18837-5 HEART VENTRICLE LEFT, SEGMENTAL WALL APPEARANCE FINDING (NARRATIVE) (ECHO)	11437-1 HIP, PHYSICAL FINDINGS (OBSERVED)
18118-0 HEART VENTRICLE LEFT, SEGMENTAL WALL MOTION FINDING (NARRATIVE) (ECHO)	11492-6 HISTORY AND PHYSICAL NOTES (NARRATIVE)
18840-9 HEART VENTRICLE LEFT, WALL MOTION INDEX (NARRATIVE) (ECHO)	11329-0 HISTORY GENERAL (NARRATIVE) (REPORTED)
18078-6 HEART VENTRICLE RIGHT, MAJOR AXIS DIASTOLE MAX LENGTH (US 2D)	11330-8 HISTORY OF ALCOHOL USE (NARRATIVE) (REPORTED)
18079-4 HEART VENTRICLE RIGHT, MAJOR AXIS SYSTOLE MIN LENGTH (US 2D)	11331-6 HISTORY OF ALCOHOL USE (REPORTED)
18054-7 HEART VENTRICLE SEPTUM, FRACTIONAL THICKNESS (US 2D)	10155-0 HISTORY OF ALLERGIES (NARRATIVE) (REPORTED)
17985-3 HEART, AP DIMENSION LEFT ATRIUM/AP DIMENSION AORTA ROOT RATIO (ECHO)	8658-7 HISTORY OF ALLERGIES (REPORTED)
9866-5 HEART, AXIS (NARRATIVE) (EKG)	11332-4 HISTORY OF COGNITIVE FUNCTION (NARRATIVE) (REPORTED)
9867-3 HEART, CARDIAC PACEMAKER PROSTHETIC (NARRATIVE) (EKG)	11333-2 HISTORY OF COGNITIVE FUNCTION (REPORTED)
18843-3 HEART, COMPARISON STUDY (NARRATIVE) (EKG)	10158-4 HISTORY OF FUNCTIONAL STATUS (NARRATIVE) (REPORTED)
8598-5 HEART, COMPARISON STUDY DATE AND TIME (EKG)	8671-0 HISTORY OF FUNCTIONAL STATUS (REPORTED)
9868-1 HEART, CONDUCTION (NARRATIVE) (EKG)	11334-0 HISTORY OF GROWTH + DEVELOPMENT (NARRATIVE) (REPORTED)
18025-7 HEART, DIAMETER ANTERIOR-POSTERIOR SYSTOLE/DIAMETER AORTA ROOT RATIO (ECHO)	11335-7 HISTORY OF GROWTH + DEVELOPMENT (REPORTED)
18844-1 HEART, EKG IMPRESSION (NARRATIVE) (EKG)	11336-5 HISTORY OF HOSPITALIZATIONS (NARRATIVE) (REPORTED)
9869-9 HEART, HYPERTROPHY (NARRATIVE) (EKG)	11337-3 HISTORY OF HOSPITALIZATIONS (REPORTED)
9872-3 HEART, MYOCARDIAL ISCHEMIA (NARRATIVE) (EKG)	11338-1 HISTORY OF MAJOR ILLNESSES AND INJURIES (NARRATIVE) (REPORTED)
8626-4 HEART, P WAVE AXIS ANGLE (EKG)	11339-9 HISTORY OF MAJOR ILLNESSES AND INJURIES (REPORTED)
18506-6 HEART, P WAVE AXIS HORIZONTAL PLANE ANGLE (EKG)	10160-0 HISTORY OF MEDICATION USE (NARRATIVE) (REPORTED)
8627-2 HEART, P WAVE DURATION (EKG)	11340-7 HISTORY OF OCCUPATION (NARRATIVE) (REPORTED)
10200-4 HEART, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	11341-5 HISTORY OF OCCUPATION (REPORTED)
11405-8 HEART, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	11342-3 HISTORY OF OTHER NONMEDICAL DRUG USE (NARRATIVE) (REPORTED)
8702-3 HEART, PHYSICAL FINDINGS (OBSERVED)	11343-1 HISTORY OF OTHER NONMEDICAL DRUG USE (REPORTED)
11436-3 HEART, PHYSICAL FINDINGS (OBSERVED)	11344-9 HISTORY OF OTHER SOCIAL FACTORS (NARRATIVE) (REPORTED)
18504-1 HEART, PP INTERVAL (EKG)	11345-6 HISTORY OF OTHER SOCIAL FACTORS (REPORTED)
8625-6 HEART, PR INTERVAL (EKG)	11346-4 HISTORY OF OUTPATIENT VISITS (NARRATIVE) (REPORTED)
8631-4 HEART, Q WAVE DURATION (EKG)	11347-2 HISTORY OF OUTPATIENT VISITS (REPORTED)
8632-2 HEART, QRS AXIS ANGLE (EKG)	11348-0 HISTORY OF PAST ILLNESS (NARRATIVE) (REPORTED)
18507-4 HEART, QRS AXIS HORIZONTAL PLANE ANGLE (EKG)	11349-8 HISTORY OF PAST ILLNESS (REPORTED)
9873-1 HEART, QRS COMPLEX (NARRATIVE) (EKG)	18663-5 HISTORY OF PRESENT ALCOHOL AND/OR SUBSTANCE ABUSE (NARRATIVE)
8633-0 HEART, QRS DURATION (EKG)	10164-2 HISTORY OF PRESENT ILLNESS (NARRATIVE) (REPORTED)
8634-8 HEART, QT INTERVAL (EKG)	8684-3 HISTORY OF PRESENT ILLNESS (REPORTED)
9874-9 HEART, RHYTHM SEGMENT (NARRATIVE) (EKG)	10165-9 HISTORY OF PSYCHIATRIC SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
	8685-0 HISTORY OF PSYCHIATRIC SYMPTOMS & DISEASES (REPORTED)

11350-6	HISTORY OF SEXUAL BEHAVIOR (NARRATIVE) (REPORTED)	18807-8	INCLUDE ALL DATA OF THE SELECTED TYPE THAT REPRESENTS OBSERVATIONS MADE ONE YEAR OR LESS BEFORE THE STARTING DATE OF SERVICE FOR THE CLAIM
11351-4	HISTORY OF SEXUAL BEHAVIOR (REPORTED)	18791-4	INCLUDE ALL DATA OF THE SELECTED TYPE WITHIN OR ALIGNED TO AN ENCOUNTER BY THE SAME CLAIM OR ENCOUNTER
10166-7	HISTORY OF SOCIAL FUNCTION (NARRATIVE) (REPORTED)	18789-8	INCLUDE ALL DATA OF THE SELECTED TYPE WITHIN THE DATE WINDOW ASSOCIATED WITH THE CLAIM
8689-2	HISTORY OF SOCIAL FUNCTION (REPORTED)	11371-2	INITIAL ENCOUNTER FOR CHIEF COMPLAINT
10167-5	HISTORY OF SURGICAL PROCEDURES (NARRATIVE) (REPORTED)	11372-0	INJURY, ACTIVITY ASSOCIATED WITH
8690-0	HISTORY OF SURGICAL PROCEDURES (REPORTED)	11457-9	INJURY, SAFETY EQUIPMENT USED DURING
11366-2	HISTORY OF TOBACCO USE (NARRATIVE) (REPORTED)	11357-1	INTEGUMENTARY SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
11367-0	HISTORY OF TOBACCO USE (REPORTED)	11364-7	INTEGUMENTARY SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
10182-4	HISTORY OF TRAVEL (NARRATIVE) (REPORTED)	8674-4	INTERVIEWEE, HISTORY SOURCE
8691-8	HISTORY OF TRAVEL (REPORTED)	11407-4	KNEE, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
18724-5	HLA TESTS (COMPOSITE)	11438-9	KNEE, PHYSICAL FINDINGS (OBSERVED)
18754-2	HOLTER MONITOR HEART, REPORT (NARRATIVE)	15508-5	LABOR AND DELIVERY RECORD TOTAL (NARRATIVE)
8656-1	HOSPITAL ADMISSION DATE	11955-2	LAST MENSTRUAL PERIOD DATE AND TIME (REPORTED)
8646-2	HOSPITAL ADMISSION DX FINDING	11379-5	LEVEL OF EDUCATION TIME (REPORTED)
18841-7	HOSPITAL CONSULTATIONS (NARRATIVE)	18676-7	LONGEST PERIOD OF SOBRIETY
8648-8	HOSPITAL COURSE FINDING (NARRATIVE)	18674-2	LONGEST PERIOD OF SOBRIETY FOR ABUSED SUBSTANCE (COMPOSITE)
8649-6	HOSPITAL DISCHARGE DATE	11380-3	MARITAL STATUS AND LIVING ARRANGEMENTS (NARRATIVE) (REPORTED)
8650-4	HOSPITAL DISCHARGE DISPOSITION (NARRATIVE)	11381-1	MARITAL STATUS AND LIVING ARRANGEMENTS (REPORTED)
8651-2	HOSPITAL DISCHARGE DX	11503-0	MEDICAL RECORD TOTAL (NARRATIVE)
11535-2	HOSPITAL DISCHARGE DX (NARRATIVE)	18610-6	MEDICATION ADMINISTERED (COMPOSITE)
11544-4	HOSPITAL DISCHARGE FOLLOWUP FINDING (NARRATIVE)	18651-0	MEDICATION ADMINISTERED (COMPOSITE)
18842-5	HOSPITAL DISCHARGE HISTORY FINDING (NARRATIVE)	19011-6	MEDICATION ADMINISTERED (NARRATIVE)
8653-8	HOSPITAL DISCHARGE INSTRUCTIONS TEXT (NARRATIVE)	18615-5	MEDICATION ADMINISTERED, DOSE
10183-2	HOSPITAL DISCHARGE MEDICATIONS FINDING (NARRATIVE)	18611-4	MEDICATION ADMINISTERED, NAME + IDENTIFIER
10184-0	HOSPITAL DISCHARGE PHYSICAL FINDINGS (NARRATIVE)	18612-2	MEDICATION ADMINISTERED, ROUTE
8655-3	HOSPITAL DISCHARGE PROCEDURES FINDING	18616-3	MEDICATION ADMINISTERED, STRENGTH
10185-7	HOSPITAL DISCHARGE PROCEDURES FINDING (NARRATIVE)	18614-8	MEDICATION ADMINISTERED, TIMING
11493-4	HOSPITAL DISCHARGE STUDIES SUMMARY (NARRATIVE)	18605-6	MEDICATION CURRENT (COMPOSITE) (REPORTED)
18642-9	HOSPITALIZATION LEADING TO REHABILITATION TREATMENT PLAN, DATE RANGE (COMPOSITE)	19009-0	MEDICATION CURRENT (NARRATIVE) (REPORTED)
18644-5	HOSPITALIZATION LEADING TO REHABILITATION TREATMENT PLAN, END DATE	18607-2	MEDICATION CURRENT, DOSE
18643-7	HOSPITALIZATION LEADING TO REHABILITATION TREATMENT PLAN, START DATE	18606-4	MEDICATION CURRENT, NAME + IDENTIFIER
11369-6	IMMUNIZATION STATUS (NARRATIVE) (REPORTED)	18609-8	MEDICATION CURRENT, ROUTE
11370-4	IMMUNIZATION STATUS (REPORTED)	18608-0	MEDICATION CURRENT, TIMING + QUANTITY
18792-2	INCLUDE ALL DATA OF THE SELECTED TYPE ON OR AFTER THE DATE OF SERVICE OF THE CLAIM	18617-1	MEDICATION DISCHARGE (COMPOSITE)
18790-6	INCLUDE ALL DATA OF THE SELECTED TYPE ON OR BEFORE THE DATE OF SERVICE ON THE CLAIM	19010-8	MEDICATION DISCHARGE (NARRATIVE)
18803-7	INCLUDE ALL DATA OF THE SELECTED TYPE THAT REPRESENTS OBSERVATIONS MADE 30 DAYS OR FEWER BEFORE THE STARTING DATE OF SERVICE FOR THE CLAIM	18622-1	MEDICATION DISCHARGE, AMOUNT DISPENSED
18804-5	INCLUDE ALL DATA OF THE SELECTED TYPE THAT REPRESENTS OBSERVATIONS MADE 3 MONTHS OR FEWER BEFORE THE STARTING DATE OF SERVICE FOR THE CLAIM	18619-7	MEDICATION DISCHARGE, DOSE
18805-2	INCLUDE ALL DATA OF THE SELECTED TYPE THAT REPRESENTS OBSERVATIONS MADE SIX MONTHS OR FEWER BEFORE THE STARTING DATE OF SERVICE FOR THE CLAIM	18618-9	MEDICATION DISCHARGE, NAME + IDENTIFIER
18806-0	INCLUDE ALL DATA OF THE SELECTED TYPE THAT REPRESENTS OBSERVATIONS MADE NINE MONTHS OR FEWER BEFORE THE STARTING DATE OF SERVICE FOR THE CLAIM	18623-9	MEDICATION DISCHARGE, REFILLS
		18621-3	MEDICATION DISCHARGE, ROUTE
		19012-4	MEDICATION DISCHARGE, SUBSTITUTION INSTRUCTION
		18620-5	MEDICATION DISCHARGE, TIMING + QUANTITY
		10190-7	MENTAL STATUS FINDING (NARRATIVE) (OBSERVED)
		8693-4	MENTAL STATUS FINDING (OBSERVED)
		18725-2	MICROBIOLOGY TESTS (COMPOSITE)
		17979-6	MITRAL VALVE ANTERIOR LEAFLET, A-C DURATION (US M-MODE)
		17980-4	MITRAL VALVE ANTERIOR LEAFLET, A-C SLOPE (US M-MODE)

18017-4	MITRAL VALVE ORIFICE, DIAMETER (ECHO)	10215-2	OPERATIVE NOTE FINDINGS (NARRATIVE)
18057-0	MITRAL VALVE, GRADIENT MAX PRESSURE (US DOPPLER)	10216-0	OPERATIVE NOTE FLUIDS (NARRATIVE)
18059-6	MITRAL VALVE, GRADIENT MEAN PRESSURE (US DOPPLER)	10217-8	OPERATIVE NOTE INDICATIONS (NARRATIVE)
18097-6	MITRAL VALVE, ORIFICE MIN AREA (US DOPPLER PRESSURE HALFTIME)	8725-4	OPERATIVE NOTE OPEN CLOSING DURATION
11767-1	MOTHER BODY WEIGHT PERCENTILE (COMP OF EST FETAL WGT W STD POP DIST AT SAME ESTGA)	8719-7	OPERATIVE NOTE POSTOPERATIVE DX
11769-7	MOTHER BODY WEIGHT PERCENTILE RANGE PERCENTILE (CATEGORIZATION BY COMPARISON WITH STANDARDS)	10218-6	OPERATIVE NOTE POSTOPERATIVE DX (NARRATIVE)
11408-2	MOUTH & THROAT & TEETH, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	8720-5	OPERATIVE NOTE PREOPERATIVE DX
11409-0	MOUTH & THROAT & TEETH, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	10219-4	OPERATIVE NOTE PREOPERATIVE DX (NARRATIVE)
11439-7	MOUTH & THROAT & TEETH, PHYSICAL FINDINGS (OBSERVED)	10220-2	OPERATIVE NOTE PREP TIME DURATION
11440-5	MOUTH & THROAT & TEETH, PHYSICAL FINDINGS (OBSERVED)	8729-6	OPERATIVE NOTE PROCEDURE
11541-0	MRI HEAD, REPORT (NARRATIVE)	10221-0	OPERATIVE NOTE SPECIMENS TAKEN (NARRATIVE)
18755-9	MRI REPORT (NARRATIVE)	10222-8	OPERATIVE NOTE SURGICAL COMPLICATIONS (NARRATIVE)
18756-7	MRI SPINE, REPORT (NARRATIVE)	10223-6	OPERATIVE NOTE SURGICAL PROCEDURE (NARRATIVE)
10173-3	MUSCULOSKELETAL SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	11879-4	OVARY LEFT, FOLLICLES (ULTRASOUND)
8680-1	MUSCULOSKELETAL SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)	11880-2	OVARY RIGHT, FOLLICLES (ULTRASOUND)
11410-8	MUSCULOSKELETAL SYSTEM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	11976-8	OVULATION DATE (REPORTED)
11441-3	MUSCULOSKELETAL SYSTEM, PHYSICAL FINDINGS (OBSERVED)	19021-5	PALPATION CERVIX, STUDY OBSERVATION (NARRATIVE)
18816-9	NAME + IDENTIFIER	11977-6	PARITY (REPORTED)
11411-6	NECK, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	18847-4	PELVIS, FETAL POSITION (NARRATIVE) (PALPATION)
11442-1	NECK, PHYSICAL FINDINGS (OBSERVED)	18848-2	PELVIS, FETAL POSITION (NARRATIVE) (ULTRASOUND)
8672-8	NEUROLOGIC SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	18849-0	PELVIS, FETAL PRESENTATION (NARRATIVE) (PALPATION)
8681-9	NEUROLOGIC SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)	18850-8	PELVIS, FETAL PRESENTATION (NARRATIVE) (ULTRASOUND)
10202-0	NEUROLOGIC SYSTEM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	10204-6	PELVIS, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
8705-6	NEUROLOGIC SYSTEM, PHYSICAL FINDINGS (OBSERVED)	8707-2	PELVIS, PHYSICAL FINDINGS (OBSERVED)
18671-8	NEXT PLAN OF TREATMENT TEXT (NARRATIVE)	18758-3	PET SCAN REPORT (NARRATIVE)
10203-8	NOS, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	11384-5	PHYSICAL EXAMINATION BY ORGAN SYSTEMS FINDING (OBSERVED)
8706-4	NOS, PHYSICAL FINDINGS (OBSERVED)	10209-5	PHYSICAL FINDINGS BALANCE + COORDINATION (NARRATIVE) (OBSERVED)
18757-5	NUCLEAR MEDICINE REPORT (NARRATIVE)	8712-2	PHYSICAL FINDINGS BALANCE + COORDINATION (OBSERVED)
11543-6	NURSERY RECORD TOTAL (NARRATIVE)	10210-3	PHYSICAL FINDINGS GENERAL STATUS (NARRATIVE) (OBSERVED)
11536-0	NURSING REPORT (NARRATIVE)	8713-0	PHYSICAL FINDINGS GENERAL STATUS (OBSERVED)
11525-3	OBSTETRIC ECHO PELVIS + FETUS, REPORT (NARRATIVE)	11447-0	PHYSICAL FINDINGS HEMATOLOGIC + LYMPHATIC + IMMUNOLOGIC (NARRATIVE) (OBSERVED)
18734-4	OCCUPATIONAL THERAPY INITIAL ASSESSMENT (NARRATIVE)	11448-8	PHYSICAL FINDINGS HEMATOLOGIC + LYMPHATIC + IMMUNOLOGIC (OBSERVED)
11507-1	OCCUPATIONAL THERAPY PROGRESS NOTE (NARRATIVE)	10211-1	PHYSICAL FINDINGS SENSATION (NARRATIVE) (OBSERVED)
11521-2	OCCUPATIONAL THERAPY REPORT (NARRATIVE)	8714-8	PHYSICAL FINDINGS SENSATION (OBSERVED)
11504-8	OPERATIVE NOTE (NARRATIVE)	10212-9	PHYSICAL FINDINGS STRENGTH (NARRATIVE) (OBSERVED)
8722-1	OPERATIVE NOTE ANESTHESIA	8715-5	PHYSICAL FINDINGS STRENGTH (OBSERVED)
10213-7	OPERATIVE NOTE ANESTHESIA (NARRATIVE)	18735-1	PHYSICAL THERAPY INITIAL ASSESSMENT (NARRATIVE)
10214-5	OPERATIVE NOTE ANESTHESIA DURATION	11508-9	PHYSICAL THERAPY PROGRESS NOTE (NARRATIVE)
10830-8	OPERATIVE NOTE COMPLICATIONS (NARRATIVE)	11515-4	PHYSICAL THERAPY REPORT (NARRATIVE)
8723-9	OPERATIVE NOTE DATE	18736-9	PHYSICIAN INITIAL ASSESSMENT (NARRATIVE)
8724-7	OPERATIVE NOTE DESCRIPTION (NARRATIVE)	11516-2	PHYSICIAN REPORT (NARRATIVE)
8717-1	OPERATIVE NOTE ESTIMATED BLOOD LOSS VOLUME	18737-7	PODIATRY INITIAL ASSESSMENT (NARRATIVE)
		11509-7	PODIATRY PROGRESS NOTE (NARRATIVE)
		11517-0	PODIATRY REPORT (NARRATIVE)
		18630-4	PRIMARY DIAGNOSIS
		18777-3	PRIMARY DIAGNOSIS (NARRATIVE)
		18820-1	PRIMARY DIAGNOSIS IDENTIFIER
		18627-0	PRIMARY DX FOR TREATMENT PLAN, DATE ONSET OR EXACERBATION

11450-4	PROBLEM LIST (REPORTED)	10205-3	RECTUM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11505-5	PROCEDURE NOTE (NARRATIVE) (PHYSICIAN)	8708-0	RECTUM, PHYSICAL FINDINGS (OBSERVED)
11506-3	PROGRESS NOTE (NARRATIVE)	18845-8	REFERENCE BEAT TYPE (NARRATIVE) (EKG)
11513-9	PROVIDER SIGNING IDENTIFIER	18516-5	REFERENCE BEAT, P WAVE AXIS FRONTAL PLANE ANGLE (EKG)
18771-6	PROVIDER SIGNING NAME	18512-4	REFERENCE BEAT, P WAVE OFFSET TIME (EKG)
11489-2	PROVIDER, DICTATING PRACTITIONER IDENTIFIER	18511-6	REFERENCE BEAT, P WAVE ONSET TIME (EKG)
18770-8	PROVIDER, DICTATING PRACTITIONER NAME	18517-3	REFERENCE BEAT, QRS AXIS FRONTAL PLANE ANGLE (EKG)
18693-2	PROVIDER, ED CONSULTANT PRACTITIONER (COMPOSITE)	18514-0	REFERENCE BEAT, QRS OFFSET TIME (EKG)
11298-7	PROVIDER, ED CONSULTANT PRACTITIONER IDENTIFIER	18513-2	REFERENCE BEAT, QRS ONSET TIME (EKG)
18694-0	PROVIDER, ED CONSULTANT PRACTITIONER NAME	18518-1	REFERENCE BEAT, T WAVE AXIS FRONTAL PLANE ANGLE (EKG)
11299-5	PROVIDER, ED CONSULTANT PRACTITIONER PROFESSION	18515-7	REFERENCE BEAT, T WAVE OFFSET TIME (EKG)
18699-9	PROVIDER, ED PRACTITIONER (COMPOSITE)	18673-4	REHABILITATION PROBLEM REMISSION STATUS
18602-3	PROVIDER, ED PRACTITIONER IDENTIFIER	18677-5	REHABILITATION SERVICE CLAIMS ATTACHMENT (COMPOSITE)
18700-5	PROVIDER, ED PRACTITIONER NAME	18730-2	REHABILITATION TREATMENT PLAN, AUTHOR IDENTIFIER
18701-3	PROVIDER, ED PRACTITIONER PROFESSION	18633-8	REHABILITATION TREATMENT PLAN, AUTHOR NAME
18702-1	PROVIDER, ED PRACTITIONER ROLE	18632-0	REHABILITATION TREATMENT PLAN, AUTHOR OF TREATMENT PLAN (COMPOSITE)
18704-7	PROVIDER, ED REFERRING PRACTITIONER (COMPOSITE)	18634-6	REHABILITATION TREATMENT PLAN, AUTHOR PROFESSION
18706-2	PROVIDER, ED REFERRING PRACTITIONER IDENTIFIER	18662-7	REHABILITATION TREATMENT PLAN, CHIEF COMPLAINT + REASON FOR REFERRAL + REASON FOR RELAPSE IF KNOWN (NARRATIVE)
18705-4	PROVIDER, ED REFERRING PRACTITIONER NAME	18629-6	REHABILITATION TREATMENT PLAN, CLINICAL DISCIPLINE
18707-0	PROVIDER, ED REFERRING PRACTITIONER PROFESSION	18645-2	REHABILITATION TREATMENT PLAN, CONTINUATION STATUS
18780-7	PROVIDER, ORDERING PRACTITIONER IDENTIFIER	18647-8	REHABILITATION TREATMENT PLAN, DATE ATTENDING MD SIGNED
18781-5	PROVIDER, ORDERING PRACTITIONER NAME	18654-4	REHABILITATION TREATMENT PLAN, DATE OF LAST PLAN OF TREATMENT CERTIFICATION
18710-4	PROVIDER, PRIMARY PRACTITIONER (COMPOSITE)	18670-0	REHABILITATION TREATMENT PLAN, DATE OF NEXT PLANNED REHABILITATION TREATMENT (COMPOSITE)
18600-7	PROVIDER, PRIMARY PRACTITIONER IDENTIFIER	18639-5	REHABILITATION TREATMENT PLAN, DATE RANGE (FROM/THROUGH) DESCRIBED BY PLAN (COMPOSITE)
18711-2	PROVIDER, PRIMARY PRACTITIONER NAME	18648-6	REHABILITATION TREATMENT PLAN, DATE REHABILITATION PROFESSIONAL SIGNED
18601-5	PROVIDER, PRIMARY PRACTITIONER PROFESSION	18631-2	REHABILITATION TREATMENT PLAN, DIAGNOSIS ADDRESSED BY PLAN (COMPOSITE)
18775-7	PROVIDER, STAFF PRACTITIONER IDENTIFIER	18641-1	REHABILITATION TREATMENT PLAN, END DATE
18774-0	PROVIDER, STAFF PRACTITIONER NAME	18664-3	REHABILITATION TREATMENT PLAN, FOLLOWUP APPROACH (COMPOSITE)
11451-2	PSYCHIATRIC FINDINGS (NARRATIVE) (OBSERVED)	18668-4	REHABILITATION TREATMENT PLAN, FREQUENCY OF ASSESSMENTS FOR FOLLOW UP
11452-0	PSYCHIATRIC FINDINGS (OBSERVED)	18656-9	REHABILITATION TREATMENT PLAN, INITIAL ASSESSMENT (NARRATIVE)
18594-2	PSYCHIATRIC REHABILITATION PLAN CLAIMS ATTACHMENT (COMPOSITE)	18660-1	REHABILITATION TREATMENT PLAN, JUSTIFICATION (NARRATIVE)
11527-9	PSYCHIATRIC REPORT (NARRATIVE)	18669-2	REHABILITATION TREATMENT PLAN, LEVEL OF PATIENT PARTICIPATION
18661-9	PSYCHIATRIC SYMPTOMS (NARRATIVE)	18667-6	REHABILITATION TREATMENT PLAN, METHODOLOGY FOR FOLLOW UP (NARRATIVE)
11358-9	PSYCHIATRIC, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	18665-0	REHABILITATION TREATMENT PLAN, NAME OF AGENCY THAT WILL FOLLOW UP
11365-4	PSYCHIATRIC, HISTORY OF SYMPTOMS & DISEASES (REPORTED)	18666-8	REHABILITATION TREATMENT PLAN, NAME OF PERSON THAT WILL FOLLOW UP AFTER
18738-5	PSYCHOLOGY INITIAL ASSESSMENT (NARRATIVE)	18626-2	REHABILITATION TREATMENT PLAN, NEW/REVISED
11510-5	PSYCHOLOGY PROGRESS NOTE (NARRATIVE)		
11518-8	PSYCHOLOGY REPORT (NARRATIVE)		
18019-0	PULMONARY ARTERY LEFT, DIAMETER (ECHO)		
18020-8	PULMONARY ARTERY MAIN, DIAMETER (ECHO)		
18095-0	PULMONARY ARTERY MAIN, ORIFICE AREA (ECHO)		
18021-6	PULMONARY ARTERY RIGHT, DIAMETER (ECHO)		
18022-4	PULMONIC VALVE ORIFICE, DIAMETER (ECHO)		
17982-0	PULMONIC VALVE, ACCELERATION (US DOPPLER)		
18058-8	PULMONIC VALVE, GRADIENT MAX PRESSURE (US DOPPLER)		
18060-4	PULMONIC VALVE, GRADIENT MEAN PRESSURE (US DOPPLER)		
18096-8	PULMONIC VALVE, ORIFICE AREA (US CONTINUITY)		
11528-7	RADIOLOGY REPORT (NARRATIVE)		
18782-3	RADIOLOGY STUDY OBSERVATION (NARRATIVE)		
18783-1	RADIOLOGY STUDY RECOMMENDATION (NARRATIVE)		
18726-0	RADIOLOGY TESTS (COMPOSITE)		
18785-6	REASON FOR STUDY (NARRATIVE) (RADIOLOGY)		

18655-1	REHABILITATION TREATMENT PLAN, PAST MEDICAL HISTORY + LEVEL OF FUNCTION (NARRATIVE)	8666-0	SKIN, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
18657-7	REHABILITATION TREATMENT PLAN, PLAN OF TREATMENT (NARRATIVE)	10206-1	SKIN, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
18652-8	REHABILITATION TREATMENT PLAN, PROGNOSIS FOR REHABILITATION	8709-8	SKIN, PHYSICAL FINDINGS (OBSERVED)
18659-3	REHABILITATION TREATMENT PLAN, REASON TO CONTINUE (NARRATIVE)	18739-3	SOCIAL SERVICE INITIAL ASSESSMENT (NARRATIVE)
18635-3	REHABILITATION TREATMENT PLAN, SIGNATURE DATE	11519-6	SOCIAL SERVICE REPORT (NARRATIVE)
18649-4	REHABILITATION TREATMENT PLAN, SIGNATURE OF RESPONSIBLE ATTENDING PHYSICIAN ON FILE	18740-1	SPEECH THERAPY INITIAL ASSESSMENT (NARRATIVE)
18650-2	REHABILITATION TREATMENT PLAN, SIGNATURE OF RESPONSIBLE REHABILITATION PROFESSIONAL ON FILE	11512-1	SPEECH THERAPY PROGRESS NOTE (NARRATIVE)
18628-8	REHABILITATION TREATMENT PLAN, START DATE	11520-4	SPEECH THERAPY REPORT (NARRATIVE)
18640-3	REHABILITATION TREATMENT PLAN, START DATE	18759-1	SPIROMETRY RESPIRATORY SYSTEM, REPORT (NARRATIVE)
18637-9	REHABILITATION TREATMENT PLAN, VISIT FREQUENCY	12132-7	STUDY OBSERVATION GENERAL (NARRATIVE) (ULTRASOUND)
18646-0	REHABILITATION TREATMENT, DATE ATTENDING MD REFERRED PATIENT FOR	18675-9	SUBSTANCE ABUSED (NARRATIVE)
18653-6	REHABILITATION TREATMENT, ESTIMATED DATE OF COMPLETION	11531-1	SURGERY, SURGEON RESIDENT IDENTIFIER
18658-5	REHABILITATION TREATMENT, PROGRESS NOTE + ATTAINMENT OF GOALS (NARRATIVE)	18772-4	SURGERY, SURGEON RESIDENT NAME
10176-6	REPRODUCTIVE SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	11532-9	SURGERY, SURGEON STAFF IDENTIFIER
8688-4	REPRODUCTIVE SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)	18773-2	SURGERY, SURGEON STAFF NAME
9279-1	RESPIRATORY SYSTEM, BREATHS RATE	18852-4	SURGERY, SURGICAL DRAINS (NARRATIVE)
10177-4	RESPIRATORY SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	11529-5	SURGICAL PATHOLOGY REPORT (NARRATIVE)
8686-8	RESPIRATORY SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)	11534-5	TEMPERATURE CHART TOTAL (NARRATIVE)
11412-4	RESPIRATORY SYSTEM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	18721-1	THERAPEUTIC DRUG MONITORING TESTS (COMPOSITE)
11443-9	RESPIRATORY SYSTEM, PHYSICAL FINDINGS (OBSERVED)	11414-0	THIGH, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11455-3	REVIEW OF SYMPTOMS AND DISEASES (NARRATIVE) (REPORTED)	11445-4	THIGH, PHYSICAL FINDINGS (OBSERVED)
11456-1	REVIEW OF SYMPTOMS AND DISEASES (REPORTED)	10207-9	THORAX + LUNGS, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
10188-1	REVIEW OF SYSTEMS OVERVIEW (NARRATIVE) (REPORTED)	8710-6	THORAX + LUNGS, PHYSICAL FINDINGS (OBSERVED)
10189-9	REVIEW OF SYSTEMS OVERVIEW (REPORTED)	18818-5	TIMING + QUANTITY
18819-3	ROUTE	18728-6	TOXICOLOGY TESTS (COMPOSITE)
18796-3	SEND ALL ABNORMALS WITHIN THE TIME WINDOW	19008-2	TRANSDUCER SITE (NARRATIVE)
18794-8	SEND ALL ITEMS OF THE SPECIFIED TYPE WITHIN THE TIME WINDOW	18761-7	TRANSFER SUMMARY
18795-5	SEND ALL ITEMS OF THE SPECIFIED TYPE WITHIN THE TIME WINDOW RELEVANT TO THE CLAIM	18776-5	TREATMENT PLAN (NARRATIVE)
18799-7	SEND THE FIRST (I.E., OLDEST) RESULT FOR EACH KIND OF OBSERVATION IN THE TIME WINDOW	18023-2	TRICUSPID VALVE ORIFICE, DIAMETER (ECHO)
18797-1	SEND THE FIRST ABNORMALS WITHIN THE TIME WINDOW	18065-3	TRICUSPID VALVE REGURGITANT JET, GRADIENT SYSTOLE MAX PRESSURE (US DOPPLER)
18802-9	SEND THE LAST (MOST RECENT) WITHIN THE TIME WINDOW	17983-8	TRICUSPID VALVE, ACCELERATION (US DOPPLER)
18798-9	SEND THE LAST ABNORMALS WITHIN THE TIME WINDOW	12157-4	ULTRASONOGRAPHER GRAVIDITY NUMBER
18800-3	SEND THE WORST ABNORMAL RESULT FOR EACH KIND OF OBSERVATION IN THE TIME WINDOW	12029-5	ULTRASOUND FETUS ABDOMEN, STUDY OBSERVATION (NARRATIVE)
18727-8	SEROLOGY TESTS (COMPOSITE)	12030-3	ULTRASOUND FETUS ABDOMINAL WALL, STUDY OBSERVATION
11413-2	SHOULDER, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	12031-1	ULTRASOUND FETUS ABDOMINAL WALL, STUDY OBSERVATION (NARRATIVE)
11444-7	SHOULDER, PHYSICAL FINDINGS (OBSERVED)	12032-9	ULTRASOUND FETUS AORTA ASCENDING, STUDY OBSERVATION
10178-2	SKIN, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	12033-7	ULTRASOUND FETUS AORTA ASCENDING, STUDY OBSERVATION (NARRATIVE)
		12034-5	ULTRASOUND FETUS AORTA DESCENDING, STUDY OBSERVATION
		12035-2	ULTRASOUND FETUS AORTA DESCENDING, STUDY OBSERVATION (NARRATIVE)
		12037-8	ULTRASOUND FETUS AORTA, STUDY OBSERVATION (NARRATIVE)
		12039-4	ULTRASOUND FETUS AORTIC ARCH, STUDY OBSERVATION (NARRATIVE)
		12041-0	ULTRASOUND FETUS CEREBELLUM, STUDY OBSERVATION (NARRATIVE)
		12043-6	ULTRASOUND FETUS CEREBRUM, STUDY OBSERVATION (NARRATIVE)

12048-5	ULTRASOUND FETUS COLON, STUDY OBSERVATION (NARRATIVE)	12101-2	ULTRASOUND FETUS LIMBS, STUDY OBSERVATION (NARRATIVE)
12050-1	ULTRASOUND FETUS CRANIUM, STUDY OBSERVATION (NARRATIVE)	12103-8	ULTRASOUND FETUS NUCHAL FOLD, STUDY OBSERVATION (NARRATIVE)
12052-7	ULTRASOUND FETUS DIAPHRAGM, STUDY OBSERVATION (NARRATIVE)	12105-3	ULTRASOUND FETUS PULMONARY ARTERY, STUDY OBSERVATION (NARRATIVE)
12054-3	ULTRASOUND FETUS DUCTAL ARCH, STUDY OBSERVATION (NARRATIVE)	12107-9	ULTRASOUND FETUS PULMONARY VEIN, STUDY OBSERVATION (NARRATIVE)
12056-8	ULTRASOUND FETUS FACE, STUDY OBSERVATION (NARRATIVE)	12109-5	ULTRASOUND FETUS SMALL BOWEL, STUDY OBSERVATION (NARRATIVE)
12058-4	ULTRASOUND FETUS HEAD CHOROID PLEXUS, STUDY OBSERVATION (NARRATIVE)	12111-1	ULTRASOUND FETUS SPINE, STUDY OBSERVATION (NARRATIVE)
12059-2	ULTRASOUND FETUS HEAD FOURTH VENTRICLE, STUDY OBSERVATION	12113-7	ULTRASOUND FETUS STOMACH, STUDY OBSERVATION (NARRATIVE)
12060-0	ULTRASOUND FETUS HEAD FOURTH VENTRICLE, STUDY OBSERVATION (NARRATIVE)	12115-2	ULTRASOUND FETUS THORAX, STUDY OBSERVATION (NARRATIVE)
12062-6	ULTRASOUND FETUS HEAD INTRACRANIAL ANATOMY, STUDY OBSERVATION (NARRATIVE)	12117-8	ULTRASOUND FETUS UMBILICAL CORD, STUDY OBSERVATION (NARRATIVE)
12064-2	ULTRASOUND FETUS HEAD LATERAL CEREBRAL VENTRICLES, STUDY OBSERVATION (NARRATIVE)	12119-4	ULTRASOUND FETUS URINARY BLADDER, STUDY OBSERVATION (NARRATIVE)
12070-9	ULTRASOUND FETUS HEAD, STUDY OBSERVATION (NARRATIVE)	12121-0	ULTRASOUND FETUS VENA CAVA INFERIOR, STUDY OBSERVATION (NARRATIVE)
12072-5	ULTRASOUND FETUS HEART AORTIC VALVE, STUDY OBSERVATION (NARRATIVE)	12123-6	ULTRASOUND FETUS VENA CAVA SUPERIOR, STUDY OBSERVATION (NARRATIVE)
12073-3	ULTRASOUND FETUS HEART ATRIA, STUDY OBSERVATION	12125-1	ULTRASOUND FETUS VENA CAVA, STUDY OBSERVATION (NARRATIVE)
12074-1	ULTRASOUND FETUS HEART ATRIA, STUDY OBSERVATION (NARRATIVE)	12128-5	ULTRASOUND FETUS YOLK SAC, STUDY OBSERVATION (NARRATIVE)
12076-6	ULTRASOUND FETUS HEART CHAMBERS, STUDY OBSERVATION (NARRATIVE)	12066-7	ULTRASOUND MEASURED FETUS HEAD POSTERIOR FOSSA, STUDY OBSERVATION (NARRATIVE)
12078-2	ULTRASOUND FETUS HEART GREAT VESSELS, STUDY OBSERVATION (NARRATIVE)	12067-5	ULTRASOUND MEASURED FETUS HEAD THIRD VENTRICLE, STUDY OBSERVATION
12080-8	ULTRASOUND FETUS HEART INTRAVENTRICULAR SEPTUM, STUDY OBSERVATION (NARRATIVE)	12068-3	ULTRASOUND MEASURED FETUS HEAD THIRD VENTRICLE, STUDY OBSERVATION (NARRATIVE)
12081-6	ULTRASOUND FETUS HEART MITRAL VALVE, STUDY OBSERVATION	18729-4	URINALYSIS TESTS (COMPOSITE)
12082-4	ULTRASOUND FETUS HEART MITRAL VALVE, STUDY OBSERVATION (NARRATIVE)	10181-6	URINARY TRACT, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)
12083-2	ULTRASOUND FETUS HEART PULMONARY VALVE, STUDY OBSERVATION	8692-6	URINARY TRACT, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
12084-0	ULTRASOUND FETUS HEART TRICUSPID VALVE, STUDY OBSERVATION	18793-0	USE NO FIXED TIME LIMIT ON DATA—ANY OF THE SELECTED TYPE ARE RELEVANT NO MATTER WHEN OBTAINED
12085-7	ULTRASOUND FETUS HEART TRICUSPID VALVE, STUDY OBSERVATION (NARRATIVE)	11881-0	UTERUS, FUNDAL HEIGHT (TAPE MEASURE)
12087-3	ULTRASOUND FETUS HEART VALVES, STUDY OBSERVATION (NARRATIVE)	9876-4	VENTRICULAR MORPHOLOGY (NARRATIVE) (EKG)
12088-1	ULTRASOUND FETUS HEART VENTRICULAR OUTFLOW TRACT LEFT, STUDY OBSERVATION	10208-7	VESSELS, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
12089-9	ULTRASOUND FETUS HEART VENTRICULAR OUTFLOW TRACT LEFT, STUDY OBSERVATION (NARRATIVE)	8711-4	VESSELS, PHYSICAL FINDINGS (OBSERVED)
12090-7	ULTRASOUND FETUS HEART VENTRICULAR OUTFLOW TRACT RIGHT, STUDY OBSERVATION	18762-5	VISIT NOTE (NARRATIVE) (CHIROPRACTER)
12091-5	ULTRASOUND FETUS HEART VENTRICULAR OUTFLOW TRACT RIGHT, STUDY OBSERVATION (NARRATIVE)	18763-3	VISIT NOTE (NARRATIVE) (CONSULTING MD)
12093-1	ULTRASOUND FETUS INTESTINE, STUDY OBSERVATION (NARRATIVE)	18764-1	VISIT NOTE (NARRATIVE) (NURSE PRACTITIONER)
12095-6	ULTRASOUND FETUS KIDNEY LEFT, STUDY OBSERVATION (NARRATIVE)	18765-8	VISIT NOTE (NARRATIVE) (PODIATRIST)
12097-2	ULTRASOUND FETUS KIDNEY RIGHT, STUDY OBSERVATION (NARRATIVE)	18766-6	VISIT NOTE (NARRATIVE) (PSYCHOLOGIST)
12099-8	ULTRASOUND FETUS KIDNEY, STUDY OBSERVATION (NARRATIVE)	11542-8	VISIT NOTE TOTAL (NARRATIVE)
		11415-7	WRIST, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
		11446-2	WRIST, PHYSICAL FINDINGS (OBSERVED)
		19016-5	X12 277, ALL REQUESTS FOR INFORMATION THAT ARE INCLUDED IN THIS TRANSACTION ARE STATED FOR INDIVIDUAL SERVICES
		19005-8	X-RAY IMPRESSION (NARRATIVE)

3 Numerical Listing

3141-9	BODY WEIGHT (MEASURED)	8688-4	REPRODUCTIVE SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
3142-7	BODY WEIGHT (STATED)	8689-2	HISTORY OF SOCIAL FUNCTION (REPORTED)
8310-5	BODY TEMPERATURE	8690-0	HISTORY OF SURGICAL PROCEDURES (REPORTED)
8335-2	BODY WEIGHT (ESTIMATED)	8691-8	HISTORY OF TRAVEL (REPORTED)
8462-4	ARTERIAL SYSTEM, INTRAVASCULAR DIASTOLIC PRESSURE	8692-6	URINARY TRACT, HISTORY OF SYMPTOMS & DISEASES (REPORTED)
8478-0	ARTERIAL SYSTEM, INTRAVASCULAR MEAN PRESSURE	8693-4	MENTAL STATUS FINDING (OBSERVED)
8479-8	ARTERIAL SYSTEM, INTRAVASCULAR SYSTOLIC PRESSURE (PALPATION)	8694-2	ABDOMEN, PHYSICAL FINDINGS (OBSERVED)
8480-6	ARTERIAL SYSTEM, INTRAVASCULAR SYSTOLIC PRESSURE	8695-9	BACK, PHYSICAL FINDINGS (OBSERVED)
8598-5	HEART, COMPARISON STUDY DATE AND TIME (EKG)	8696-7	BREASTS, PHYSICAL FINDINGS (OBSERVED)
8621-5	HEART, VENTRICULAR ECTOPICS RATE (EKG)	8697-5	DEEP TENDON REFLEXES, PHYSICAL FINDINGS (OBSERVED)
8625-6	HEART, PR INTERVAL (EKG)	8698-3	EAR, PHYSICAL FINDINGS (OBSERVED)
8626-4	HEART, P WAVE AXIS ANGLE (EKG)	8699-1	EYE, PHYSICAL FINDINGS (OBSERVED)
8627-2	HEART, P WAVE DURATION (EKG)	8700-7	GENITOURINARY TRACT, PHYSICAL FINDINGS (OBSERVED)
8631-4	HEART, Q WAVE DURATION (EKG)	8701-5	HEAD, PHYSICAL FINDINGS (OBSERVED)
8632-2	HEART, QRS AXIS ANGLE (EKG)	8702-3	HEART, PHYSICAL FINDINGS (OBSERVED)
8633-0	HEART, QRS DURATION (EKG)	8705-6	NEUROLOGIC SYSTEM, PHYSICAL FINDINGS (OBSERVED)
8634-8	HEART, QT INTERVAL (EKG)	8706-4	NOS, PHYSICAL FINDINGS (OBSERVED)
8638-9	HEART, T WAVE AXIS ANGLE (EKG)	8707-2	PELVIS, PHYSICAL FINDINGS (OBSERVED)
8646-2	HOSPITAL ADMISSION DX FINDING	8708-0	RECTUM, PHYSICAL FINDINGS (OBSERVED)
8648-8	HOSPITAL COURSE FINDING (NARRATIVE)	8709-8	SKIN, PHYSICAL FINDINGS (OBSERVED)
8649-6	HOSPITAL DISCHARGE DATE	8710-6	THORAX + LUNGS, PHYSICAL FINDINGS (OBSERVED)
8650-4	HOSPITAL DISCHARGE DISPOSITION (NARRATIVE)	8711-4	VESSELS, PHYSICAL FINDINGS (OBSERVED)
8651-2	HOSPITAL DISCHARGE DX	8712-2	PHYSICAL FINDINGS BALANCE + COORDINATION (OBSERVED)
8653-8	HOSPITAL DISCHARGE INSTRUCTIONS TEXT (NARRATIVE)	8713-0	PHYSICAL FINDINGS GENERAL STATUS (OBSERVED)
8655-3	HOSPITAL DISCHARGE PROCEDURES FINDING	8714-8	PHYSICAL FINDINGS SENSATION (OBSERVED)
8656-1	HOSPITAL ADMISSION DATE	8715-5	PHYSICAL FINDINGS STRENGTH (OBSERVED)
8658-7	HISTORY OF ALLERGIES (REPORTED)	8717-1	OPERATIVE NOTE ESTIMATED BLOOD LOSS VOLUME
8660-3	CARDIOVASCULAR SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)	8719-7	OPERATIVE NOTE POSTOPERATIVE DX
8661-1	CHIEF COMPLAINT (REPORTED)	8720-5	OPERATIVE NOTE PREOPERATIVE DX
8663-7	CIGARETTES SMOKED CURRENT (PACK/DAY) (REPORTED)	8722-1	OPERATIVE NOTE ANESTHESIA
8664-5	CIGARETTES SMOKED TOTAL (PACK/YR) (REPORTED)	8723-9	OPERATIVE NOTE DATE
8666-0	SKIN, HISTORY OF SYMPTOMS & DISEASES (REPORTED)	8724-7	OPERATIVE NOTE DESCRIPTION (NARRATIVE)
8668-6	ENDOCRINE SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)	8725-4	OPERATIVE NOTE OPEN CLOSING DURATION
8669-4	EYES, HISTORY OF SYMPTOMS & DISEASES (REPORTED)	8729-6	OPERATIVE NOTE PROCEDURE
8670-2	FAMILY, HISTORY OF FAMILY MEMBER DISEASES (REPORTED)	8867-4	HEART BEAT RATE
8671-0	HISTORY OF FUNCTIONAL STATUS (REPORTED)	9267-6	GLASGOW COMA SCORE EYE OPENING
8672-8	NEUROLOGIC SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	9268-4	GLASGOW COMA SCORE MOTOR
8673-6	HEMATOLOGIC SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)	9269-2	GLASGOW COMA SCORE TOTAL
8674-4	INTERVIEWEE, HISTORY SOURCE	9270-0	GLASGOW COMA SCORE VERBAL
8680-1	MUSCULOSKELETAL SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)	9279-1	RESPIRATORY SYSTEM, BREATHS RATE
8681-9	NEUROLOGIC SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)	9866-5	HEART, AXIS (NARRATIVE) (EKG)
8684-3	HISTORY OF PRESENT ILLNESS (REPORTED)	9867-3	HEART, CARDIAC PACEMAKER PROSTHETIC (NARRATIVE) (EKG)
8685-0	HISTORY OF PSYCHIATRIC SYMPTOMS & DISEASES (REPORTED)	9868-1	HEART, CONDUCTION (NARRATIVE) (EKG)
8686-8	RESPIRATORY SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)	9869-9	HEART, HYPERTROPHY (NARRATIVE) (EKG)
		9872-3	HEART, MYOCARDIAL ISCHEMIA (NARRATIVE) (EKG)
		9873-1	HEART, QRS COMPLEX (NARRATIVE) (EKG)
		9874-9	HEART, RHYTHM SEGMENT (NARRATIVE) (EKG)
		9875-6	HEART, ST-T SEGMENT (NARRATIVE) (EKG)
		9876-4	VENTRICULAR MORPHOLOGY (NARRATIVE) (EKG)
		10154-3	CHIEF COMPLAINT (NARRATIVE) (REPORTED)
		10155-0	HISTORY OF ALLERGIES (NARRATIVE) (REPORTED)
		10157-6	FAMILY, HISTORY OF FAMILY MEMBER DISEASES (NARRATIVE) (REPORTED)

10158-4 HISTORY OF FUNCTIONAL STATUS (NARRATIVE) (REPORTED)	10205-3 RECTUM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
10160-0 HISTORY OF MEDICATION USE (NARRATIVE) (REPORTED)	10206-1 SKIN, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
10164-2 HISTORY OF PRESENT ILLNESS (NARRATIVE) (REPORTED)	10207-9 THORAX + LUNGS, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
10165-9 HISTORY OF PSYCHIATRIC SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	10208-7 VESSELS, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
10166-7 HISTORY OF SOCIAL FUNCTION (NARRATIVE) (REPORTED)	10209-5 PHYSICAL FINDINGS BALANCE + COORDINATION (NARRATIVE) (OBSERVED)
10167-5 HISTORY OF SURGICAL PROCEDURES (NARRATIVE) (REPORTED)	10210-3 PHYSICAL FINDINGS GENERAL STATUS (NARRATIVE) (OBSERVED)
10168-3 CARDIOVASCULAR SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	10211-1 PHYSICAL FINDINGS SENSATION (NARRATIVE) (OBSERVED)
10170-9 ENDOCRINE SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	10212-9 PHYSICAL FINDINGS STRENGTH (NARRATIVE) (OBSERVED)
10171-7 EYES, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	10213-7 OPERATIVE NOTE ANESTHESIA (NARRATIVE)
10172-5 HEMATOLOGIC SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	10214-5 OPERATIVE NOTE ANESTHESIA DURATION
10173-3 MUSCULOSKELETAL SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	10215-2 OPERATIVE NOTE FINDINGS (NARRATIVE)
10176-6 REPRODUCTIVE SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	10216-0 OPERATIVE NOTE FLUIDS (NARRATIVE)
10177-4 RESPIRATORY SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	10217-8 OPERATIVE NOTE INDICATIONS (NARRATIVE)
10178-2 SKIN, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	10218-6 OPERATIVE NOTE POSTOPERATIVE DX (NARRATIVE)
10181-6 URINARY TRACT, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	10219-4 OPERATIVE NOTE PREOPERATIVE DX (NARRATIVE)
10182-4 HISTORY OF TRAVEL (NARRATIVE) (REPORTED)	10220-2 OPERATIVE NOTE PREP TIME DURATION
10183-2 HOSPITAL DISCHARGE MEDICATIONS FINDING (NARRATIVE)	10221-0 OPERATIVE NOTE SPECIMENS TAKEN (NARRATIVE)
10184-0 HOSPITAL DISCHARGE PHYSICAL FINDINGS (NARRATIVE)	10222-8 OPERATIVE NOTE SURGICAL COMPLICATIONS (NARRATIVE)
10185-7 HOSPITAL DISCHARGE PROCEDURES FINDING (NARRATIVE)	10223-6 OPERATIVE NOTE SURGICAL PROCEDURE (NARRATIVE)
10188-1 REVIEW OF SYSTEMS OVERVIEW (NARRATIVE) (REPORTED)	10830-8 OPERATIVE NOTE COMPLICATIONS (NARRATIVE)
10189-9 REVIEW OF SYSTEMS OVERVIEW (REPORTED)	11283-9 FIRST ACUITY ASSESSMENT
10190-7 MENTAL STATUS FINDING (NARRATIVE) (OBSERVED)	11286-2 ALCOHOL BINGE EPISODES RATE (REPORTED)
10191-5 ABDOMEN, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	11287-0 ALCOHOLIC DRINKS PER DRINKING DAY RATE (REPORTED)
10192-3 BACK, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	11288-8 EMS TRANSPORT, ARRIVAL TIME DOCUMENTED DATE AND TIME
10193-1 BREASTS, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	11289-6 FIRST BODY TEMPERATURE
10194-9 DEEP TENDON REFLEXES, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	11290-4 FIRST BODY TEMPERATURE SITE
10195-6 EAR, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	11291-2 FIRST RESPIRATION RATE
10197-2 EYE, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	11292-0 CHIEF COMPLAINT (NARRATIVE) (REPORTED)
10198-0 GENITOURINARY TRACT, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	11293-8 ED REFERRAL, SOURCE
10199-8 HEAD, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	11294-6 CURRENT EMPLOYMENT (NARRATIVE) (REPORTED)
10200-4 HEART, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	11295-3 CURRENT EMPLOYMENT (REPORTED)
10202-0 NEUROLOGIC SYSTEM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	11298-7 PROVIDER, ED CONSULTANT PRACTITIONER IDENTIFIER
10203-8 NOS, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	11299-5 PROVIDER, ED CONSULTANT PRACTITIONER PROFESSION
10204-6 PELVIS, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	11318-3 EMS SYSTEM, TRANSPORT AGENCY IDENTIFIER
	11319-1 EMS SYSTEM, TRANSPORT UNIT IDENTIFIER
	11320-9 FEEDING AND DIETARY STATUS (NARRATIVE) (REPORTED)
	11321-7 FEEDING AND DIETARY STATUS (REPORTED)
	11322-5 GENERAL HEALTH (NARRATIVE) (REPORTED)
	11323-3 GENERAL HEALTH (REPORTED)
	11324-1 FIRST GLASGOW SCORE EYE OPENING
	11325-8 FIRST GLASGOW SCORE MOTOR
	11326-6 FIRST GLASGOW SCORE VERBAL
	11327-4 ARTERIAL SYSTEM, FIRST HEART BEAT METHOD
	11328-2 ARTERIAL SYSTEM, FIRST HEART BEAT RATE
	11329-0 HISTORY GENERAL (NARRATIVE) (REPORTED)
	11330-8 HISTORY OF ALCOHOL USE (NARRATIVE) (REPORTED)
	11331-6 HISTORY OF ALCOHOL USE (REPORTED)
	11332-4 HISTORY OF COGNITIVE FUNCTION (NARRATIVE) (REPORTED)

11333-2 HISTORY OF COGNITIVE FUNCTION (REPORTED)	11377-9 ARTERIAL SYSTEM, FIRST INTRAVASCULAR DIASTOLIC PRESSURE
11334-0 HISTORY OF GROWTH + DEVELOPMENT (NARRATIVE) (REPORTED)	11378-7 ARTERIAL SYSTEM, FIRST INTRAVASCULAR SYSTOLIC PRESSURE
11335-7 HISTORY OF GROWTH + DEVELOPMENT (REPORTED)	11379-5 LEVEL OF EDUCATION TIME (REPORTED)
11336-5 HISTORY OF HOSPITALIZATIONS (NARRATIVE) (REPORTED)	11380-3 MARITAL STATUS AND LIVING ARRANGEMENTS (NARRATIVE) (REPORTED)
11337-3 HISTORY OF HOSPITALIZATIONS (REPORTED)	11381-1 MARITAL STATUS AND LIVING ARRANGEMENTS (REPORTED)
11338-1 HISTORY OF MAJOR ILLNESSES AND INJURIES (NARRATIVE) (REPORTED)	11384-5 PHYSICAL EXAMINATION BY ORGAN SYSTEMS FINDING (OBSERVED)
11339-9 HISTORY OF MAJOR ILLNESSES AND INJURIES (REPORTED)	11385-2 ANKLE, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11340-7 HISTORY OF OCCUPATION (NARRATIVE) (REPORTED)	11386-0 ARM UPPER, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11341-5 HISTORY OF OCCUPATION (REPORTED)	11387-8 AXILLA, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11342-3 HISTORY OF OTHER NONMEDICAL DRUG USE (NARRATIVE) (REPORTED)	11388-6 BUTTOCKS, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11343-1 HISTORY OF OTHER NONMEDICAL DRUG USE (REPORTED)	11389-4 CALF, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11344-9 HISTORY OF OTHER SOCIAL FACTORS (NARRATIVE) (REPORTED)	11390-2 CARDIOVASCULAR SYSTEM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11345-6 HISTORY OF OTHER SOCIAL FACTORS (REPORTED)	11391-0 CHEST, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11346-4 HISTORY OF OUTPATIENT VISITS (NARRATIVE) (REPORTED)	11392-8 CHEST WALL, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11347-2 HISTORY OF OUTPATIENT VISITS (REPORTED)	11393-6 EARS & NOSE & MOUTH & THROAT, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11348-0 HISTORY OF PAST ILLNESS (NARRATIVE) (REPORTED)	11394-4 ELBOW, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11349-8 HISTORY OF PAST ILLNESS (REPORTED)	11395-1 EXTREMITIES, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11350-6 HISTORY OF SEXUAL BEHAVIOR (NARRATIVE) (REPORTED)	11396-9 EXTREMITIES, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11351-4 HISTORY OF SEXUAL BEHAVIOR (REPORTED)	11397-7 FOOT, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11352-2 ALLERGIC & IMMUNOLOGIC, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	11398-5 FOREARM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11353-0 BREASTS, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	11399-3 GASTROINTESTINAL SYSTEM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11354-8 EARS & NOSE & SINUSES & MOUTH & THR, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	11400-9 GENITALIA, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11355-5 GASTROINTESTINAL SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	11401-7 GENITALIA FEMALE, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11356-3 GENITOURINARY SYSTEMS, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	11402-5 GENITALIA MALE, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11357-1 INTEGUMENTARY SYSTEM, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	11403-3 GROIN, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11358-9 PSYCHIATRIC, HISTORY OF SYMPTOMS & DISEASES (NARRATIVE) (REPORTED)	11404-1 HAND, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11359-7 ALLERGIC & IMMUNOLOGIC, HISTORY OF SYMPTOMS & DISEASES (REPORTED)	11405-8 HEART, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11360-5 BREASTS, HISTORY OF SYMPTOMS & DISEASES (REPORTED)	11406-6 HIP, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11361-3 EARS & NOSE & SINUSES & MOUTH & THR, HISTORY OF SYMPTOMS & DISEASES (REPORTED)	11407-4 KNEE, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11362-1 GASTROINTESTINAL SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)	11408-2 MOUTH & THROAT & TEETH, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11363-9 GENITOURINARY SYSTEMS, HISTORY OF SYMPTOMS & DISEASES (REPORTED)	11409-0 MOUTH & THROAT & TEETH, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11364-7 INTEGUMENTARY SYSTEM, HISTORY OF SYMPTOMS & DISEASES (REPORTED)	11410-8 MUSCULOSKELETAL SYSTEM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11365-4 PSYCHIATRIC, HISTORY OF SYMPTOMS & DISEASES (REPORTED)	11411-6 NECK, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11366-2 HISTORY OF TOBACCO USE (NARRATIVE) (REPORTED)	11412-4 RESPIRATORY SYSTEM, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)
11367-0 HISTORY OF TOBACCO USE (REPORTED)	
11369-6 IMMUNIZATION STATUS (NARRATIVE) (REPORTED)	
11370-4 IMMUNIZATION STATUS (REPORTED)	
11371-2 INITIAL ENCOUNTER FOR CHIEF COMPLAINT	
11372-0 INJURY, ACTIVITY ASSOCIATED WITH	

11413-2 SHOULDER, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	11493-4 HOSPITAL DISCHARGE STUDIES SUMMARY (NARRATIVE)
11414-0 THIGH, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	11503-0 MEDICAL RECORD TOTAL (NARRATIVE)
11415-7 WRIST, PHYSICAL FINDINGS (NARRATIVE) (OBSERVED)	11504-8 OPERATIVE NOTE (NARRATIVE)
11416-5 ANKLE, PHYSICAL FINDINGS (OBSERVED)	11505-5 PROCEDURE NOTE (NARRATIVE) (PHYSICIAN)
11417-3 ARM UPPER, PHYSICAL FINDINGS (OBSERVED)	11506-3 PROGRESS NOTE (NARRATIVE)
11418-1 AXILLA, PHYSICAL FINDINGS (OBSERVED)	11507-1 OCCUPATIONAL THERAPY PROGRESS NOTE (NARRATIVE)
11419-9 BUTTOCKS, PHYSICAL FINDINGS (OBSERVED)	11508-9 PHYSICAL THERAPY PROGRESS NOTE (NARRATIVE)
11420-7 CALF, PHYSICAL FINDINGS (OBSERVED)	11509-7 PODIATRY PROGRESS NOTE (NARRATIVE)
11421-5 CARDIOVASCULAR SYSTEM, PHYSICAL FINDINGS (OBSERVED)	11510-5 PSYCHOLOGY PROGRESS NOTE (NARRATIVE)
11422-3 CHEST, PHYSICAL FINDINGS (OBSERVED)	11512-1 SPEECH THERAPY PROGRESS NOTE (NARRATIVE)
11423-1 CHEST WALL, PHYSICAL FINDINGS (OBSERVED)	11513-9 PROVIDER SIGNING IDENTIFIER
11424-9 EARS & NOSE & MOUTH & THROAT, PHYSICAL FINDINGS (OBSERVED)	11514-7 CHIROPRACTIC REPORT (NARRATIVE)
11425-6 ELBOW, PHYSICAL FINDINGS (OBSERVED)	11515-4 PHYSICAL THERAPY REPORT (NARRATIVE)
11426-4 EXTREMITIES, PHYSICAL FINDINGS (OBSERVED)	11516-2 PHYSICIAN REPORT (NARRATIVE)
11427-2 EXTREMITIES, PHYSICAL FINDINGS (OBSERVED)	11517-0 PODIATRY REPORT (NARRATIVE)
11428-0 FOOT, PHYSICAL FINDINGS (OBSERVED)	11518-8 PSYCHOLOGY REPORT (NARRATIVE)
11429-8 FOREARM, PHYSICAL FINDINGS (OBSERVED)	11519-6 SOCIAL SERVICE REPORT (NARRATIVE)
11430-6 GASTROINTESTINAL SYSTEM, PHYSICAL FINDINGS (OBSERVED)	11520-4 SPEECH THERAPY REPORT (NARRATIVE)
11431-4 GENITALIA, PHYSICAL FINDINGS (OBSERVED)	11521-2 OCCUPATIONAL THERAPY REPORT (NARRATIVE)
11432-2 GENITALIA FEMALE, PHYSICAL FINDINGS (OBSERVED)	11522-0 ECHO HEART, REPORT (NARRATIVE)
11433-0 GENITALIA MALE, PHYSICAL FINDINGS (OBSERVED)	11523-8 EEG BRAIN, REPORT (NARRATIVE)
11434-8 GROIN, PHYSICAL FINDINGS (OBSERVED)	11524-6 EKG HEART, REPORT (NARRATIVE)
11435-5 HAND, PHYSICAL FINDINGS (OBSERVED)	11525-3 OBSTETRIC ECHO PELVIS + FETUS, REPORT (NARRATIVE)
11436-3 HEART, PHYSICAL FINDINGS (OBSERVED)	11526-1 CYTOLOGY REPORT (NARRATIVE)
11437-1 HIP, PHYSICAL FINDINGS (OBSERVED)	11527-9 PSYCHIATRIC REPORT (NARRATIVE)
11438-9 KNEE, PHYSICAL FINDINGS (OBSERVED)	11528-7 RADIOLOGY REPORT (NARRATIVE)
11439-7 MOUTH & THROAT & TEETH, PHYSICAL FINDINGS (OBSERVED)	11529-5 SURGICAL PATHOLOGY REPORT (NARRATIVE)
11440-5 MOUTH & THROAT & TEETH, PHYSICAL FINDINGS (OBSERVED)	11531-1 SURGERY, SURGEON RESIDENT IDENTIFIER
11441-3 MUSCULOSKELETAL SYSTEM, PHYSICAL FINDINGS (OBSERVED)	11532-9 SURGERY, SURGEON STAFF IDENTIFIER
11442-1 NECK, PHYSICAL FINDINGS (OBSERVED)	11534-5 TEMPERATURE CHART TOTAL (NARRATIVE)
11443-9 RESPIRATORY SYSTEM, PHYSICAL FINDINGS (OBSERVED)	11535-2 HOSPITAL DISCHARGE DX (NARRATIVE)
11444-7 SHOULDER, PHYSICAL FINDINGS (OBSERVED)	11536-0 NURSING REPORT (NARRATIVE)
11445-4 THIGH, PHYSICAL FINDINGS (OBSERVED)	11538-6 CT CHEST, REPORT (NARRATIVE)
11446-2 WRIST, PHYSICAL FINDINGS (OBSERVED)	11539-4 CT HEAD, REPORT (NARRATIVE)
11447-0 PHYSICAL FINDINGS HEMATOLOGIC + LYMPHATIC + IMMUNOLOGIC (NARRATIVE) (OBSERVED)	11540-2 CT ABDOMEN, REPORT (NARRATIVE)
11448-8 PHYSICAL FINDINGS HEMATOLOGIC + LYMPHATIC + IMMUNOLOGIC (OBSERVED)	11541-0 MRI HEAD, REPORT (NARRATIVE)
11450-4 PROBLEM LIST (REPORTED)	11542-8 VISIT NOTE TOTAL (NARRATIVE)
11451-2 PSYCHIATRIC FINDINGS (NARRATIVE) (OBSERVED)	11543-6 NURSERY RECORD TOTAL (NARRATIVE)
11452-0 PSYCHIATRIC FINDINGS (OBSERVED)	11544-4 HOSPITAL DISCHARGE FOLLOWUP FINDING (NARRATIVE)
11454-6 FIRST RESPONSIVENESS ASSESSMENT	11616-0 FETUS HEART, ACTIVITY FINDING (NARRATIVE) (ULTRASOUND)
11455-3 REVIEW OF SYMPTOMS AND DISEASES (NARRATIVE) (REPORTED)	11618-6 FETUS LIMBS, ACTIVITY FINDING (NARRATIVE) (ULTRASOUND)
11456-1 REVIEW OF SYMPTOMS AND DISEASES (REPORTED)	11620-2 FETUS RESPIRATORY SYSTEM, ACTIVITY FINDING (NARRATIVE) (ULTRASOUND)
11457-9 INJURY, SAFETY EQUIPMENT USED DURING	11627-7 FETUS AMNIOTIC FLUID, INDEX SUM LENGTH (ULTRASOUND DERIVED)
11459-5 EMS SYSTEM, TRANSPORT MODE	11636-8 BIRTHS LIVE (REPORTED)
11485-0 ANESTHESIA RECORD TOTAL (NARRATIVE)	11637-6 BIRTHS PRETERM (REPORTED)
11486-8 CHEMOTHERAPY RECORD TOTAL (NARRATIVE)	11638-4 BIRTHS STILL LIVING (REPORTED)
11487-6 CONSULTATION REQUEST (NARRATIVE)	11639-2 BIRTHS TERM (REPORTED)
11488-4 CONSULTATION NOTE (NARRATIVE)	11640-0 BIRTHS TOTAL (REPORTED)
11489-2 PROVIDER, DICTATING PRACTITIONER IDENTIFIER	11727-5 FETUS, BODY WEIGHT (ULTRASOUND ESTIMATED)
11490-0 DISCHARGE NOTE (NARRATIVE) (PHYSICIAN)	11766-3 FETUS, BODY WEIGHT PERCENTILE (COMP OF EST FETAL WGT W STD POP DIST AT SAME ESTGA)
11492-6 HISTORY AND PHYSICAL NOTES (NARRATIVE)	11767-1 MOTHER BODY WEIGHT PERCENTILE (COMP OF EST FETAL WGT W STD POP DIST AT SAME ESTGA)
	11768-9 FETUS, BODY WEIGHT PERCENTILE RANGE (CATEGORIZATION BY COMPARISON WITH STANDARDS)

11769-7	MOTHER BODY WEIGHT PERCENTILE RANGE PERCENTILE (CATEGORIZATION BY COMPARISON WITH STANDARDS)	12050-1	ULTRASOUND FETUS CRANIUM, STUDY OBSERVATION (NARRATIVE)
11778-8	DELIVERY DATE (CLINICAL ESTIMATE)	12052-7	ULTRASOUND FETUS DIAPHRAGM, STUDY OBSERVATION (NARRATIVE)
11779-6	DELIVERY DATE (ESTIMATED FROM LAST MENSTRUAL PERIOD)	12054-3	ULTRASOUND FETUS DUCTAL ARCH, STUDY OBSERVATION (NARRATIVE)
11780-4	DELIVERY DATE (ESTIMATED FROM OVULATION DATE)	12056-8	ULTRASOUND FETUS FACE, STUDY OBSERVATION (NARRATIVE)
11781-2	DELIVERY DATE (ULTRASOUND COMPOSITE ESTIMATED)	12058-4	ULTRASOUND FETUS HEAD CHOROID PLEXUS, STUDY OBSERVATION (NARRATIVE)
11867-9	CERVIX, EFFACEMENT PERCENTILE (PALPATION)	12059-2	ULTRASOUND FETUS HEAD FOURTH VENTRICLE, STUDY OBSERVATION
11878-6	FETUSES (ULTRASOUND)	12060-0	ULTRASOUND FETUS HEAD FOURTH VENTRICLE, STUDY OBSERVATION (NARRATIVE)
11879-4	OVARY LEFT, FOLLICLES (ULTRASOUND)	12062-6	ULTRASOUND FETUS HEAD INTRACRANIAL ANATOMY, STUDY OBSERVATION (NARRATIVE)
11880-2	OVARY RIGHT, FOLLICLES (ULTRASOUND)	12064-2	ULTRASOUND FETUS HEAD LATERAL CEREBRAL VENTRICLES, STUDY OBSERVATION (NARRATIVE)
11881-0	UTERUS, FUNDAL HEIGHT (TAPE MEASURE)	12066-7	ULTRASOUND MEASURED FETUS HEAD POSTERIOR FOSSA, STUDY OBSERVATION (NARRATIVE)
11883-6	FETUS, GENDER FINDING (NARRATIVE) (ULTRASOUND)	12067-5	ULTRASOUND MEASURED FETUS HEAD THIRD VENTRICLE, STUDY OBSERVATION
11884-4	FETUS, GESTATIONAL AGE (CLINICAL ESTIMATE)	12068-3	ULTRASOUND MEASURED FETUS HEAD THIRD VENTRICLE, STUDY OBSERVATION (NARRATIVE)
11885-1	FETUS, GESTATIONAL AGE (ESTIMATED FROM LAST MENSTRUAL PERIOD)	12070-9	ULTRASOUND FETUS HEAD, STUDY OBSERVATION (NARRATIVE)
11886-9	FETUS, GESTATIONAL AGE (ESTIMATED FROM OVULATION DATE)	12072-5	ULTRASOUND FETUS HEART AORTIC VALVE, STUDY OBSERVATION (NARRATIVE)
11887-7	FETUS, GESTATIONAL AGE (ESTIMATED FROM SELECTED DELIVERY DATE)	12073-3	ULTRASOUND FETUS HEART ATRIA, STUDY OBSERVATION
11888-5	FETUS, GESTATIONAL AGE (ULTRASOUND COMPOSITE ESTIMATED)	12074-1	ULTRASOUND FETUS HEART ATRIA, STUDY OBSERVATION (NARRATIVE)
11947-9	FETUS, HEAD CIRCUMFERENCE/ABDOMINAL CIRCUMFERENCE RATIO (ULTRASOUND DERIVED)	12076-6	ULTRASOUND FETUS HEART CHAMBERS, STUDY OBSERVATION (NARRATIVE)
11948-7	FETUS, HEART RATE (ULTRASOUND MEASURED)	12078-2	ULTRASOUND FETUS HEART GREAT VESSELS, STUDY OBSERVATION (NARRATIVE)
11949-5	FETUS, IDENTIFICATION CRITERIA FINDING (ULTRASOUND)	12080-8	ULTRASOUND FETUS HEART INTRAVENTRICULAR SEPTUM, STUDY OBSERVATION (NARRATIVE)
11950-3	FETUS, IDENTIFICATION CRITERIA FINDING (NARRATIVE) (ULTRASOUND)	12081-6	ULTRASOUND FETUS HEART MITRAL VALVE, STUDY OBSERVATION
11951-1	FETUS, IDENTIFIER	12082-4	ULTRASOUND FETUS HEART MITRAL VALVE, STUDY OBSERVATION (NARRATIVE)
11952-9	FETUS UMBILICAL CORD PLACENTA, INSERTION SITE FINDING (NARRATIVE) (ULTRASOUND)	12083-2	ULTRASOUND FETUS HEART PULMONARY VALVE, STUDY OBSERVATION
11955-2	LAST MENSTRUAL PERIOD DATE AND TIME (REPORTED)	12084-0	ULTRASOUND FETUS HEART TRICUSPID VALVE, STUDY OBSERVATION
11957-8	FETUS, LENGTH CROWN RUMP (ULTRASOUND MEASURED)	12085-7	ULTRASOUND FETUS HEART TRICUSPID VALVE, STUDY OBSERVATION (NARRATIVE)
11976-8	OVULATION DATE (REPORTED)	12087-3	ULTRASOUND FETUS HEART VALVES, STUDY OBSERVATION (NARRATIVE)
11977-6	PARITY (REPORTED)	12088-1	ULTRASOUND FETUS HEART VENTRICULAR OUTFLOW TRACT LEFT, STUDY OBSERVATION
12029-5	ULTRASOUND FETUS ABDOMEN, STUDY OBSERVATION (NARRATIVE)	12089-9	ULTRASOUND FETUS HEART VENTRICULAR OUTFLOW TRACT LEFT, STUDY OBSERVATION (NARRATIVE)
12030-3	ULTRASOUND FETUS ABDOMINAL WALL, STUDY OBSERVATION	12090-7	ULTRASOUND FETUS HEART VENTRICULAR OUTFLOW TRACT RIGHT, STUDY OBSERVATION
12031-1	ULTRASOUND FETUS ABDOMINAL WALL, STUDY OBSERVATION (NARRATIVE)	12091-5	ULTRASOUND FETUS HEART VENTRICULAR OUTFLOW TRACT RIGHT, STUDY OBSERVATION (NARRATIVE)
12032-9	ULTRASOUND FETUS AORTA ASCENDING, STUDY OBSERVATION	12093-1	ULTRASOUND FETUS INTESTINE, STUDY OBSERVATION (NARRATIVE)
12033-7	ULTRASOUND FETUS AORTA ASCENDING, STUDY OBSERVATION (NARRATIVE)	12095-6	ULTRASOUND FETUS KIDNEY LEFT, STUDY OBSERVATION (NARRATIVE)
12034-5	ULTRASOUND FETUS AORTA DESCENDING, STUDY OBSERVATION	12097-2	ULTRASOUND FETUS KIDNEY RIGHT, STUDY OBSERVATION (NARRATIVE)
12035-2	ULTRASOUND FETUS AORTA DESCENDING, STUDY OBSERVATION (NARRATIVE)		
12037-8	ULTRASOUND FETUS AORTA, STUDY OBSERVATION (NARRATIVE)		
12039-4	ULTRASOUND FETUS AORTIC ARCH, STUDY OBSERVATION (NARRATIVE)		
12041-0	ULTRASOUND FETUS CEREBELLUM, STUDY OBSERVATION (NARRATIVE)		
12043-6	ULTRASOUND FETUS CEREBRUM, STUDY OBSERVATION (NARRATIVE)		
12048-5	ULTRASOUND FETUS COLON, STUDY OBSERVATION (NARRATIVE)		

12099-8	ULTRASOUND FETUS KIDNEY, STUDY OBSERVATION (NARRATIVE)	17981-2	AORTIC VALVE, ACCELERATION (US DOPPLER)
12101-2	ULTRASOUND FETUS LIMBS, STUDY OBSERVATION (NARRATIVE)	17982-0	PULMONIC VALVE, ACCELERATION (US DOPPLER)
12103-8	ULTRASOUND FETUS NUCHAL FOLD, STUDY OBSERVATION (NARRATIVE)	17983-8	TRICUSPID VALVE, ACCELERATION (US DOPPLER)
12105-3	ULTRASOUND FETUS PULMONARY ARTERY, STUDY OBSERVATION (NARRATIVE)	17985-3	HEART, AP DIMENSION LEFT ATRIUM/AP DIMENSION AORTA ROOT RATIO (ECHO)
12107-9	ULTRASOUND FETUS PULMONARY VEIN, STUDY OBSERVATION (NARRATIVE)	18010-9	AORTA, DIAMETER (ECHO)
12109-5	ULTRASOUND FETUS SMALL BOWEL, STUDY OBSERVATION (NARRATIVE)	18011-7	AORTA ARCH, DIAMETER (ECHO)
12111-1	ULTRASOUND FETUS SPINE, STUDY OBSERVATION (NARRATIVE)	18012-5	AORTA ASCENDING, DIAMETER (ECHO)
12113-7	ULTRASOUND FETUS STOMACH, STUDY OBSERVATION (NARRATIVE)	18013-3	AORTA DESCENDING, DIAMETER (ECHO)
12115-2	ULTRASOUND FETUS THORAX, STUDY OBSERVATION (NARRATIVE)	18014-1	AORTA ISTHMUS, DIAMETER (ECHO)
12117-8	ULTRASOUND FETUS UMBILICAL CORD, STUDY OBSERVATION (NARRATIVE)	18015-8	AORTA ROOT, DIAMETER (ECHO)
12119-4	ULTRASOUND FETUS URINARY BLADDER, STUDY OBSERVATION (NARRATIVE)	18016-6	AORTIC VALVE ORIFICE, DIAMETER (ECHO)
12121-0	ULTRASOUND FETUS VENA CAVA INFERIOR, STUDY OBSERVATION (NARRATIVE)	18017-4	MITRAL VALVE ORIFICE, DIAMETER (ECHO)
12123-6	ULTRASOUND FETUS VENA CAVA SUPERIOR, STUDY OBSERVATION (NARRATIVE)	18018-2	HEART VENTRICLE LEFT OUTFLOW-TRACT, DIAMETER (ECHO)
12125-1	ULTRASOUND FETUS VENA CAVA, STUDY OBSERVATION (NARRATIVE)	18019-0	PULMONARY ARTERY LEFT, DIAMETER (ECHO)
12128-5	ULTRASOUND FETUS YOLK SAC, STUDY OBSERVATION (NARRATIVE)	18020-8	PULMONARY ARTERY MAIN, DIAMETER (ECHO)
12130-1	FETUS, STUDY OBSERVATION GENERAL (NARRATIVE) (ULTRASOUND)	18021-6	PULMONARY ARTERY RIGHT, DIAMETER (ECHO)
12132-7	STUDY OBSERVATION GENERAL (NARRATIVE) (ULTRASOUND)	18022-4	PULMONIC VALVE ORIFICE, DIAMETER (ECHO)
12145-9	ENDOMETRIUM, THICKNESS (ULTRASOUND MEASURED)	18023-2	TRICUSPID VALVE ORIFICE, DIAMETER (ECHO)
12146-7	FETUS NUCHAL FOLD, THICKNESS (ULTRASOUND MEASURED)	18024-0	HEART ATRIUM LEFT, DIAMETER ANTERIOR-POSTERIOR SYSTOLE (US M-MODE)
12147-5	FETUS PLACENTA, THICKNESS (ULTRASOUND MEASURED)	18025-7	HEART, DIAMETER ANTERIOR-POSTERIOR SYSTOLE/DIAMETER AORTA ROOT RATIO (ECHO)
12157-4	ULTRASONOGRAPHER GRAVIDITY NUMBER	18043-0	HEART VENTRICLE LEFT, EJECTION FRACTION (ECHO)
12167-3	FETUS AMNIOTIC FLUID, VOLUME (ULTRASOUND)	18054-7	HEART VENTRICLE SEPTUM, FRACTIONAL THICKNESS (US 2D)
12170-7	FETUS HEAD, WIDTH HEMISPHERE (ULTRASOUND MEASURED)	18057-0	MITRAL VALVE, GRADIENT MAX PRESSURE (US DOPPLER)
12171-5	FETUS HEAD LATERAL CEREBRAL VENTRICLES, WIDTH TRANSVERSE (ULTRASOUND MEASURED)	18058-8	PULMONIC VALVE, GRADIENT MAX PRESSURE (US DOPPLER)
15507-7	EMERGENCY VISIT NOTE (NARRATIVE)	18059-6	MITRAL VALVE, GRADIENT MEAN PRESSURE (US DOPPLER)
15508-5	LABOR AND DELIVERY RECORD TOTAL (NARRATIVE)	18060-4	PULMONIC VALVE, GRADIENT MEAN PRESSURE (US DOPPLER)
15509-3	EMS TRANSPORT, RATIONALE FOR CHOICE OF DESTINATION	18061-2	AORTIC VALVE, GRADIENT SYSTOLE MAX PRESSURE (US DOPPLER DERIVED FULL BERNOULLI)
15510-1	EMS TRANSPORT, DISTANCE TRANSPORTED	18062-0	AORTIC VALVE, GRADIENT SYSTOLE MAX PRESSURE (US DOPPLER DERIVED SIMPLIFIED BERNOULLI)
15511-9	EMS TRANSPORT, ORIGINATION SITE INFORMATION (COMPOSITE)	18063-8	AORTIC VALVE, GRADIENT SYSTOLE MEAN PRESSURE (US DOPPLER DERIVED SIMPLIFIED BERNOULLI)
15512-7	EMS TRANSPORT, DESTINATION SITE INFORMATION (COMPOSITE)	18064-6	HEART VENTRICLE LEFT OUTFLOW-TRACT, GRADIENT SYSTOLE MAX PRESSURE (US DOPPLER)
15513-5	EMS TRANSPORT, REASON FOR SCHEDULED TRIP	18065-3	TRICUSPID VALVE REGURGITANT JET, GRADIENT SYSTOLE MAX PRESSURE (US DOPPLER)
15514-3	EMS TRANSPORT, ORDERING PRACTITIONER	18066-1	AORTIC VALVE, GRADIENT SYSTOLE MEAN PRESSURE (US DOPPLER DERIVED FULL BERNOULLI)
15515-0	EMS TRANSPORT, MEDICAL REASON FOR UNSCHEDULED TRIP	18068-7	AORTIC VALVE, INTERVAL FROM Q-WAVE TO AORTIC VALVE OPENS (EKG US)
15516-8	EMS TRANSPORT, JUSTIFICATION FOR EXTRA ATTENDANTS	18069-5	HEART ATRIUM RIGHT, INTRACHAMBER MEAN PRESSURE (ESTIMATED FROM JUGULAR VENOUS DISTENTION)
15517-6	EMS TRANSPORT, TRANSPORT DIRECTION	18070-3	HEART ATRIUM RIGHT, INTRACHAMBER MEAN PRESSURE (ECHO)
17979-6	MITRAL VALVE ANTERIOR LEAFLET, A-C DURATION (US M-MODE)	18078-6	HEART VENTRICLE RIGHT, MAJOR AXIS DIASTOLE MAX LENGTH (US 2D)
17980-4	MITRAL VALVE ANTERIOR LEAFLET, A-C SLOPE (US M-MODE)	18079-4	HEART VENTRICLE RIGHT, MAJOR AXIS SYSTOLE MIN LENGTH (US 2D)
		18087-7	HEART VENTRICLE LEFT, MYOCARDIUM MASS (ECHO)
		18089-3	AORTIC VALVE, ORIFICE AREA (ECHO)
		18095-0	PULMONARY ARTERY MAIN, ORIFICE AREA (ECHO)

18096-8	PULMONIC VALVE, ORIFICE AREA (US CONTINUITY)	18621-3	MEDICATION DISCHARGE, ROUTE
18097-6	MITRAL VALVE, ORIFICE MIN AREA (US DOPPLER PRESSURE HALFTIME)	18622-1	MEDICATION DISCHARGE, AMOUNT DISPENSED
18106-5	CARDIAC ECHO STUDY, PROCEDURE	18623-9	MEDICATION DISCHARGE, REFILLS
18118-0	HEART VENTRICLE LEFT, SEGMENTAL WALL MOTION FINDING (NARRATIVE) (ECHO)	18624-7	ED PROBLEM (NARRATIVE) (REPORTED)
18141-2	ECHO CARDIOVASCULAR CENTRAL, STUDY OBSERVATION (NARRATIVE)	18626-2	REHABILITATION TREATMENT PLAN, NEW/REVISED
18143-8	ECHO HEART CHAMBERS, STUDY OBSERVATION (NARRATIVE)	18627-0	PRIMARY DX FOR TREATMENT PLAN, DATE ONSET OR EXACERBATION
18144-6	ECHO HEART VALVES, STUDY OBSERVATION (NARRATIVE)	18628-8	REHABILITATION TREATMENT PLAN, START DATE
18146-1	CARDIOVASCULAR CENTRAL, STUDY OBSERVATION OVERALL (NARRATIVE) (ECHO)	18629-6	REHABILITATION TREATMENT PLAN, CLINICAL DISCIPLINE
18504-1	HEART, PP INTERVAL (EKG)	18630-4	PRIMARY DIAGNOSIS
18505-8	HEART, RR INTERVAL (EKG)	18631-2	REHABILITATION TREATMENT PLAN, DIAGNOSIS ADDRESSED BY PLAN (COMPOSITE)
18506-6	HEART, P WAVE AXIS HORIZONTAL PLANE ANGLE (EKG)	18632-0	REHABILITATION TREATMENT PLAN, AUTHOR OF TREATMENT PLAN (COMPOSITE)
18507-4	HEART, QRS AXIS HORIZONTAL PLANE ANGLE (EKG)	18633-8	REHABILITATION TREATMENT PLAN, AUTHOR NAME
18510-8	HEART, ST SEGMENT AXIS HORIZONTAL PLANE ANGLE (EKG)	18634-6	REHABILITATION TREATMENT PLAN, AUTHOR PROFESSION
18511-6	REFERENCE BEAT, P WAVE ONSET TIME (EKG)	18635-3	REHABILITATION TREATMENT PLAN, SIGNATURE DATE
18512-4	REFERENCE BEAT, P WAVE OFFSET TIME (EKG)	18637-9	REHABILITATION TREATMENT PLAN, VISIT FREQUENCY
18513-2	REFERENCE BEAT, QRS ONSET TIME (EKG)	18639-5	REHABILITATION TREATMENT PLAN, DATE RANGE (FROM/THROUGH) DESCRIBED BY PLAN (COMPOSITE)
18514-0	REFERENCE BEAT, QRS OFFSET TIME (EKG)	18640-3	REHABILITATION TREATMENT PLAN, START DATE
18515-7	REFERENCE BEAT, T WAVE OFFSET TIME (EKG)	18641-1	REHABILITATION TREATMENT PLAN, END DATE
18516-5	REFERENCE BEAT, P WAVE AXIS FRONTAL PLANE ANGLE (EKG)	18642-9	HOSPITALIZATION LEADING TO REHABILITATION TREATMENT PLAN, DATE RANGE (COMPOSITE)
18517-3	REFERENCE BEAT, QRS AXIS FRONTAL PLANE ANGLE (EKG)	18643-7	HOSPITALIZATION LEADING TO REHABILITATION TREATMENT PLAN, START DATE
18518-1	REFERENCE BEAT, T WAVE AXIS FRONTAL PLANE ANGLE (EKG)	18644-5	HOSPITALIZATION LEADING TO REHABILITATION TREATMENT PLAN, END DATE
18580-1	EMS TRANSPORT, ORIGINATION SITE	18645-2	REHABILITATION TREATMENT PLAN, CONTINUATION STATUS
18581-9	EMS TRANSPORT, ORIGINATION SITE ADDRESS	18646-0	REHABILITATION TREATMENT, DATE ATTENDING MD REFERRED PATIENT FOR
18582-7	EMS TRANSPORT, DESTINATION SITE	18647-8	REHABILITATION TREATMENT PLAN, DATE ATTENDING MD SIGNED
18583-5	EMS TRANSPORT, DESTINATION SITE ADDRESS	18648-6	REHABILITATION TREATMENT PLAN, DATE REHABILITATION PROFESSIONAL SIGNED
18584-3	BODY WEIGHT AT EMS TRANSPORT (COMPOSITE)	18649-4	REHABILITATION TREATMENT PLAN, SIGNATURE OF RESPONSIBLE ATTENDING PHYSICIAN ON FILE
18588-4	EMS TRANSPORT, PURPOSE OF STRETCHER (NARRATIVE)	18650-2	REHABILITATION TREATMENT PLAN, SIGNATURE OF RESPONSIBLE REHABILITATION PROFESSIONAL ON FILE
18589-2	EMS TRANSPORT, ADMITTED AT DESTINATION FACILITY	18651-0	MEDICATION ADMINISTERED (COMPOSITE)
18591-8	CONFINED TO BED BEFORE EMS TRANSPORT	18652-8	REHABILITATION TREATMENT PLAN, PROGNOSIS FOR REHABILITATION
18592-6	CONFINED TO BED AFTER EMS TRANSPORT	18653-6	REHABILITATION TREATMENT, ESTIMATED DATE OF COMPLETION
18593-4	EMS TRANSPORT, DISCHARGED FROM ORIGIN INSTITUTION	18654-4	REHABILITATION TREATMENT PLAN, DATE OF LAST PLAN OF TREATMENT CERTIFICATION
18594-2	PSYCHIATRIC REHABILITATION PLAN CLAIMS ATTACHMENT (COMPOSITE)	18655-1	REHABILITATION TREATMENT PLAN, PAST MEDICAL HISTORY + LEVEL OF FUNCTION (NARRATIVE)
18600-7	PROVIDER, PRIMARY PRACTITIONER IDENTIFIER	18656-9	REHABILITATION TREATMENT PLAN, INITIAL ASSESSMENT (NARRATIVE)
18601-5	PROVIDER, PRIMARY PRACTITIONER PROFESSION	18657-7	REHABILITATION TREATMENT PLAN, PLAN OF TREATMENT (NARRATIVE)
18602-3	PROVIDER, ED PRACTITIONER IDENTIFIER	18658-5	REHABILITATION TREATMENT, PROGRESS NOTE + ATTAINMENT OF GOALS (NARRATIVE)
18605-6	MEDICATION CURRENT (COMPOSITE) (REPORTED)	18659-3	REHABILITATION TREATMENT PLAN, REASON TO CONTINUE (NARRATIVE)
18606-4	MEDICATION CURRENT, NAME + IDENTIFIER	18660-1	REHABILITATION TREATMENT PLAN, JUSTIFICATION (NARRATIVE)
18607-2	MEDICATION CURRENT, DOSE		
18608-0	MEDICATION CURRENT, TIMING + QUANTITY		
18609-8	MEDICATION CURRENT, ROUTE		
18610-6	MEDICATION ADMINISTERED (COMPOSITE)		
18611-4	MEDICATION ADMINISTERED, NAME + IDENTIFIER		
18612-2	MEDICATION ADMINISTERED, ROUTE		
18614-8	MEDICATION ADMINISTERED, TIMING		
18615-5	MEDICATION ADMINISTERED, DOSE		
18616-3	MEDICATION ADMINISTERED, STRENGTH		
18617-1	MEDICATION DISCHARGE (COMPOSITE)		
18618-9	MEDICATION DISCHARGE, NAME + IDENTIFIER		
18619-7	MEDICATION DISCHARGE, DOSE		
18620-5	MEDICATION DISCHARGE, TIMING + QUANTITY		

18661-9	PSYCHIATRIC SYMPTOMS (NARRATIVE)	18717-9	BLOOD BANK TESTS (COMPOSITE)
18662-7	REHABILITATION TREATMENT PLAN, CHIEF COMPLAINT + REASON FOR REFERRAL + REASON FOR RELAPSE IF KNOWN (NARRATIVE)	18718-7	CELL MARKER TESTS (COMPOSITE)
18663-5	HISTORY OF PRESENT ALCOHOL AND/OR SUBSTANCE ABUSE (NARRATIVE)	18719-5	CHEMISTRY TESTS (COMPOSITE)
18664-3	REHABILITATION TREATMENT PLAN, FOLLOWUP APPROACH (COMPOSITE)	18720-3	COAGULATION TESTS (COMPOSITE)
18665-0	REHABILITATION TREATMENT PLAN, NAME OF AGENCY THAT WILL FOLLOW UP	18721-1	THERAPEUTIC DRUG MONITORING TESTS (COMPOSITE)
18666-8	REHABILITATION TREATMENT PLAN, NAME OF PERSON THAT WILL FOLLOW UP AFTER	18722-9	FERTILITY TESTS (COMPOSITE)
18667-6	REHABILITATION TREATMENT PLAN, METHODOLOGY FOR FOLLOW UP (NARRATIVE)	18723-7	HEMATOLOGY TESTS (COMPOSITE)
18668-4	REHABILITATION TREATMENT PLAN, FREQUENCY OF ASSESSMENTS FOR FOLLOW UP	18724-5	HLA TESTS (COMPOSITE)
18669-2	REHABILITATION TREATMENT PLAN, LEVEL OF PATIENT PARTICIPATION	18725-2	MICROBIOLOGY TESTS (COMPOSITE)
18670-0	REHABILITATION TREATMENT PLAN, DATE OF NEXT PLANNED REHABILITATION TREATMENT (COMPOSITE)	18726-0	RADIOLOGY TESTS (COMPOSITE)
18671-8	NEXT PLAN OF TREATMENT TEXT (NARRATIVE)	18727-8	SEROLOGY TESTS (COMPOSITE)
18672-6	ALCOHOL/DRUG ABUSE SYMPTOMS WITH PHYSIOLOGICAL DEPENDENCE INDICATOR	18728-6	TOXICOLOGY TESTS (COMPOSITE)
18673-4	REHABILITATION PROBLEM REMISSION STATUS	18729-4	URINALYSIS TESTS (COMPOSITE)
18674-2	LONGEST PERIOD OF SOBRIETY FOR ABUSED SUBSTANCE (COMPOSITE)	18730-2	REHABILITATION TREATMENT PLAN, AUTHOR IDENTIFIER
18675-9	SUBSTANCE ABUSED (NARRATIVE)	18733-6	AMBULATORY VISIT NOTE (NARRATIVE) (ATTENDING PHYSICIAN)
18676-7	LONGEST PERIOD OF SOBRIETY	18734-4	OCCUPATIONAL THERAPY INITIAL ASSESSMENT (NARRATIVE)
18677-5	REHABILITATION SERVICE CLAIMS ATTACHMENT (COMPOSITE)	18735-1	PHYSICAL THERAPY INITIAL ASSESSMENT (NARRATIVE)
18679-1	ED CLAIMS ATTACHMENT (COMPOSITE)	18736-9	PHYSICIAN INITIAL ASSESSMENT (NARRATIVE)
18682-5	AMBULANCE CLAIMS ATTACHMENT (COMPOSITE)	18737-7	PODIATRY INITIAL ASSESSMENT (NARRATIVE)
18684-1	FIRST BLOOD PRESSURE (COMPOSITE)	18738-5	PSYCHOLOGY INITIAL ASSESSMENT (NARRATIVE)
18685-8	FIRST BLOOD PRESSURE SPECIAL CIRCUMSTANCES	18739-3	SOCIAL SERVICE INITIAL ASSESSMENT (NARRATIVE)
18686-6	FIRST RESPIRATION RATE (COMPOSITE)	18740-1	SPEECH THERAPY INITIAL ASSESSMENT (NARRATIVE)
18687-4	FIRST RESPIRATION RATE SPECIAL CIRCUMSTANCES	18741-9	ATTENDING PHYSICIAN PROGRESS NOTE (NARRATIVE)
18688-2	FIRST BODY TEMPERATURE (COMPOSITE)	18742-7	ARTHROSCOPY REPORT (NARRATIVE)
18689-0	FIRST BODY TEMPERATURE SPECIAL CIRCUMSTANCES	18743-5	AUTOPSY REPORT (NARRATIVE)
18690-8	FIRST BODY WEIGHT (COMPOSITE)	18744-3	BRONCHOSCOPY RESPIRATORY SYSTEM, REPORT (NARRATIVE)
18692-4	FIRST BODY WEIGHT SPECIAL CIRCUMSTANCES	18745-0	CARDIAC CATHETERIZATION HEART, REPORT (NARRATIVE)
18693-2	PROVIDER, ED CONSULTANT PRACTITIONER (COMPOSITE)	18746-8	COLONOSCOPY LOWER GI TRACT, REPORT (NARRATIVE)
18694-0	PROVIDER, ED CONSULTANT PRACTITIONER NAME	18747-6	CT REPORT (NARRATIVE)
18697-3	ED CLINICAL FINDING DATA SOURCE	18748-4	DIAGNOSTIC IMAGING REPORT (NARRATIVE)
18698-1	ED CLINICAL FINDING INFORMATION (COMPOSITE)	18749-2	ELECTROMYOLOGRAM REPORT (NARRATIVE)
18699-9	PROVIDER, ED PRACTITIONER (COMPOSITE)	18750-0	ELECTROPHYSIOLOGY HEART, REPORT (NARRATIVE)
18700-5	PROVIDER, ED PRACTITIONER NAME	18751-8	ENDOSCOPY UPPER GI TRACT, REPORT (NARRATIVE)
18701-3	PROVIDER, ED PRACTITIONER PROFESSION	18752-6	EXERCISE STRESS TEST REPORT (NARRATIVE)
18702-1	PROVIDER, ED PRACTITIONER ROLE	18753-4	FLEXIBLE SIGMOIDOSCOPY LOWER GI TRACT, REPORT (NARRATIVE)
18703-9	ED PROCEDURE INFORMATION (COMPOSITE)	18754-2	HOLTER MONITOR HEART, REPORT (NARRATIVE)
18704-7	PROVIDER, ED REFERRING PRACTITIONER (COMPOSITE)	18755-9	MRI REPORT (NARRATIVE)
18705-4	PROVIDER, ED REFERRING PRACTITIONER NAME	18756-7	MRI SPINE, REPORT (NARRATIVE)
18706-2	PROVIDER, ED REFERRING PRACTITIONER IDENTIFIER	18757-5	NUCLEAR MEDICINE REPORT (NARRATIVE)
18707-0	PROVIDER, ED REFERRING PRACTITIONER PROFESSION	18758-3	PET SCAN REPORT (NARRATIVE)
18708-8	ARTERIAL SYSTEM, FIRST HEART BEAT (COMPOSITE)	18759-1	SPIROMETRY RESPIRATORY SYSTEM, REPORT (NARRATIVE)
18709-6	FIRST HEART BEAT SPECIAL CIRCUMSTANCES	18760-9	ECHO REPORT (NARRATIVE)
18710-4	PROVIDER, PRIMARY PRACTITIONER (COMPOSITE)	18761-7	TRANSFER SUMMARY
18711-2	PROVIDER, PRIMARY PRACTITIONER NAME	18762-5	VISIT NOTE (NARRATIVE) (CHIROPRACTER)
18716-1	ALLERGY TESTS (COMPOSITE)	18763-3	VISIT NOTE (NARRATIVE) (CONSULTING MD)
		18764-1	VISIT NOTE (NARRATIVE) (NURSE PRACTITIONER)
		18765-8	VISIT NOTE (NARRATIVE) (PODIATRIST)
		18766-6	VISIT NOTE (NARRATIVE) (PSYCHOLOGIST)
		18767-4	BLOOD GAS TESTS (COMPOSITE)
		18768-2	CELL COUNTS + DIFFERENTIAL TESTS (COMPOSITE)
		18770-8	PROVIDER, DICTATING PRACTITIONER NAME

18771-6	PROVIDER SIGNING NAME	18810-2	HEART, STUDY OBSERVATION OVERALL FINDING (NARRATIVE) (EKG)
18772-4	SURGERY, SURGEON RESIDENT NAME	18812-8	EMS TRANSPORT, ORDERING PRACTITIONER IDENTIFIER
18773-2	SURGERY, SURGEON STAFF NAME	18813-6	EMS TRANSPORT, ORDERING PRACTITIONER NAME
18774-0	PROVIDER, STAFF PRACTITIONER NAME	18814-4	EMS TRANSPORT, REASON FOR SCHEDULED TRIP
18775-7	PROVIDER, STAFF PRACTITIONER IDENTIFIER	18815-1	EMS TRANSPORT, REASON FOR SCHEDULED TRIP ADDITIONAL SERVICE INFORMATION (NARRATIVE)
18776-5	TREATMENT PLAN (NARRATIVE)	18816-9	NAME + IDENTIFIER
18777-3	PRIMARY DIAGNOSIS (NARRATIVE)	18817-7	DOSE
18779-9	COMPARISON STUDY DATE AND TIME (RADIOLOGY)	18818-5	TIMING + QUANTITY
18780-7	PROVIDER, ORDERING PRACTITIONER IDENTIFIER	18819-3	ROUTE
18781-5	PROVIDER, ORDERING PRACTITIONER NAME	18820-1	PRIMARY DIAGNOSIS IDENTIFIER
18782-3	RADIOLOGY STUDY OBSERVATION (NARRATIVE)	18821-9	DIAGNOSIS ADDRESSED BY PLAN IDENTIFIER
18783-1	RADIOLOGY STUDY RECOMMENDATION (NARRATIVE)	18822-7	DIAGNOSIS ADDRESSED BY PLAN (NARRATIVE)
18785-6	REASON FOR STUDY (NARRATIVE) (RADIOLOGY)	18833-4	FIRST BODY WEIGHT (MEASURED)
18789-8	INCLUDE ALL DATA OF THE SELECTED TYPE WITHIN THE DATE WINDOW ASSOCIATED WITH THE CLAIM	18834-2	COMPARISON STUDY (NARRATIVE) (RADIOLOGY)
18790-6	INCLUDE ALL DATA OF THE SELECTED TYPE ON OR BEFORE THE DATE OF SERVICE ON THE CLAIM	18835-9	AORTIC VALVE, AREA METHOD (NARRATIVE)
18791-4	INCLUDE ALL DATA OF THE SELECTED TYPE WITHIN OR ALIGNED TO AN ENCOUNTER BY THE SAME CLAIM OR ENCOUNTER	18836-7	CARDIAC STRESS STUDY, PROCEDURE (NARRATIVE)
18792-2	INCLUDE ALL DATA OF THE SELECTED TYPE ON OR AFTER THE DATE OF SERVICE OF THE CLAIM	18837-5	HEART VENTRICLE LEFT, SEGMENTAL WALL APPEARANCE FINDING (NARRATIVE) (ECHO)
18793-0	USE NO FIXED TIME LIMIT ON DATA—ANY OF THE SELECTED TYPE ARE RELEVANT NO MATTER WHEN OBTAINED	18838-3	CARDIAC ECHO STUDY, TRANSDUCER SITE (NARRATIVE)
18794-8	SEND ALL ITEMS OF THE SPECIFIED TYPE WITHIN THE TIME WINDOW	18839-1	CARDIAC ECHO IMAGING DEVICE, ULTRASOUND CLASS (NARRATIVE)
18795-5	SEND ALL ITEMS OF THE SPECIFIED TYPE WITHIN THE TIME WINDOW RELEVANT TO THE CLAIM	18840-9	HEART VENTRICLE LEFT, WALL MOTION INDEX (NARRATIVE) (ECHO)
18796-3	SEND ALL ABNORMALS WITHIN THE TIME WINDOW	18841-7	HOSPITAL CONSULTATIONS (NARRATIVE)
18797-1	SEND THE FIRST ABNORMALS WITHIN THE TIME WINDOW	18842-5	HOSPITAL DISCHARGE HISTORY FINDING (NARRATIVE)
18798-9	SEND THE LAST ABNORMALS WITHIN THE TIME WINDOW	18843-3	HEART, COMPARISON STUDY (NARRATIVE) (EKG)
18799-7	SEND THE FIRST (I.E., OLDEST) RESULT FOR EACH KIND OF OBSERVATION IN THE TIME WINDOW	18844-1	HEART, EKG IMPRESSION (NARRATIVE) (EKG)
18800-3	SEND THE WORST ABNORMAL RESULT FOR EACH KIND OF OBSERVATION IN THE TIME WINDOW	18845-8	REFERENCE BEAT TYPE (NARRATIVE) (EKG)
18802-9	SEND THE LAST (MOST RECENT) WITHIN THE TIME WINDOW	18846-6	EXAMINATION LEVEL ULTRASOUND (NARRATIVE)
18803-7	INCLUDE ALL DATA OF THE SELECTED TYPE THAT REPRESENTS OBSERVATIONS MADE 30 DAYS OR FEWER BEFORE THE STARTING DATE OF SERVICE FOR THE CLAIM	18847-4	PELVIS, FETAL POSITION (NARRATIVE) (PALPATION)
18804-5	INCLUDE ALL DATA OF THE SELECTED TYPE THAT REPRESENTS OBSERVATIONS MADE 3 MONTHS OR FEWER BEFORE THE STARTING DATE OF SERVICE FOR THE CLAIM	18848-2	PELVIS, FETAL POSITION (NARRATIVE) (ULTRASOUND)
18805-2	INCLUDE ALL DATA OF THE SELECTED TYPE THAT REPRESENTS OBSERVATIONS MADE SIX MONTHS OR FEWER BEFORE THE STARTING DATE OF SERVICE FOR THE CLAIM	18849-0	PELVIS, FETAL PRESENTATION (NARRATIVE) (PALPATION)
18806-0	INCLUDE ALL DATA OF THE SELECTED TYPE THAT REPRESENTS OBSERVATIONS MADE NINE MONTHS OR FEWER BEFORE THE STARTING DATE OF SERVICE FOR THE CLAIM	18850-8	PELVIS, FETAL PRESENTATION (NARRATIVE) (ULTRASOUND)
18807-8	INCLUDE ALL DATA OF THE SELECTED TYPE THAT REPRESENTS OBSERVATIONS MADE ONE YEAR OR LESS BEFORE THE STARTING DATE OF SERVICE FOR THE CLAIM	18851-6	FETUS PLACENTA, GRADE (NARRATIVE) (ULTRASOUND)
		18852-4	SURGERY, SURGICAL DRAINS (NARRATIVE)
		19005-8	X-RAY IMPRESSION (NARRATIVE)
		19006-6	CARDIAC ECHO IMAGING DEVICE, IMAGE QUALITY (NARRATIVE) (ECHO)
		19008-2	TRANSDUCER SITE (NARRATIVE)
		19009-0	MEDICATION CURRENT (NARRATIVE) (REPORTED)
		19010-8	MEDICATION DISCHARGE (NARRATIVE)
		19011-6	MEDICATION ADMINISTERED (NARRATIVE)
		19012-4	MEDICATION DISCHARGE, SUBSTITUTION INSTRUCTION
		19016-5	X12 277, ALL REQUESTS FOR INFORMATION THAT ARE INCLUDED IN THIS TRANSACTION ARE STATED FOR INDIVIDUAL SERVICES
		19021-5	PALPATION CERVIX, STUDY OBSERVATION (NARRATIVE)

18771-6	PROVIDER SIGNING NAME	18810-2	HEART, STUDY OBSERVATION OVERALL FINDING (NARRATIVE) (EKG)
18772-4	SURGERY, SURGEON RESIDENT NAME	18812-8	EMS TRANSPORT, ORDERING PRACTITIONER IDENTIFIER
18773-2	SURGERY, SURGEON STAFF NAME	18813-6	EMS TRANSPORT, ORDERING PRACTITIONER NAME
18774-0	PROVIDER, STAFF PRACTITIONER NAME	18814-4	EMS TRANSPORT, REASON FOR SCHEDULED TRIP
18775-7	PROVIDER, STAFF PRACTITIONER IDENTIFIER	18815-1	EMS TRANSPORT, REASON FOR SCHEDULED TRIP ADDITIONAL SERVICE INFORMATION (NARRATIVE)
18776-5	TREATMENT PLAN (NARRATIVE)	18816-9	NAME + IDENTIFIER
18777-3	PRIMARY DIAGNOSIS (NARRATIVE)	18817-7	DOSE
18779-9	COMPARISON STUDY DATE AND TIME (RADIOLOGY)	18818-5	TIMING + QUANTITY
18780-7	PROVIDER, ORDERING PRACTITIONER IDENTIFIER	18819-3	ROUTE
18781-5	PROVIDER, ORDERING PRACTITIONER NAME	18820-1	PRIMARY DIAGNOSIS IDENTIFIER
18782-3	RADIOLOGY STUDY OBSERVATION (NARRATIVE)	18821-9	DIAGNOSIS ADDRESSED BY PLAN IDENTIFIER
18783-1	RADIOLOGY STUDY RECOMMENDATION (NARRATIVE)	18822-7	DIAGNOSIS ADDRESSED BY PLAN (NARRATIVE)
18785-6	REASON FOR STUDY (NARRATIVE) (RADIOLOGY)	18833-4	FIRST BODY WEIGHT (MEASURED)
18789-8	INCLUDE ALL DATA OF THE SELECTED TYPE WITHIN THE DATE WINDOW ASSOCIATED WITH THE CLAIM	18834-2	COMPARISON STUDY (NARRATIVE) (RADIOLOGY)
18790-6	INCLUDE ALL DATA OF THE SELECTED TYPE ON OR BEFORE THE DATE OF SERVICE ON THE CLAIM	18835-9	AORTIC VALVE, AREA METHOD (NARRATIVE)
18791-4	INCLUDE ALL DATA OF THE SELECTED TYPE WITHIN OR ALIGNED TO AN ENCOUNTER BY THE SAME CLAIM OR ENCOUNTER	18836-7	CARDIAC STRESS STUDY, PROCEDURE (NARRATIVE)
18792-2	INCLUDE ALL DATA OF THE SELECTED TYPE ON OR AFTER THE DATE OF SERVICE OF THE CLAIM	18837-5	HEART VENTRICLE LEFT, SEGMENTAL WALL APPEARANCE FINDING (NARRATIVE) (ECHO)
18793-0	USE NO FIXED TIME LIMIT ON DATA—ANY OF THE SELECTED TYPE ARE RELEVANT NO MATTER WHEN OBTAINED	18838-3	CARDIAC ECHO STUDY, TRANSDUCER SITE (NARRATIVE)
18794-8	SEND ALL ITEMS OF THE SPECIFIED TYPE WITHIN THE TIME WINDOW	18839-1	CARDIAC ECHO IMAGING DEVICE, ULTRASOUND CLASS (NARRATIVE)
18795-5	SEND ALL ITEMS OF THE SPECIFIED TYPE WITHIN THE TIME WINDOW RELEVANT TO THE CLAIM	18840-9	HEART VENTRICLE LEFT, WALL MOTION INDEX (NARRATIVE) (ECHO)
18796-3	SEND ALL ABNORMALS WITHIN THE TIME WINDOW	18841-7	HOSPITAL CONSULTATIONS (NARRATIVE)
18797-1	SEND THE FIRST ABNORMALS WITHIN THE TIME WINDOW	18842-5	HOSPITAL DISCHARGE HISTORY FINDING (NARRATIVE)
18798-9	SEND THE LAST ABNORMALS WITHIN THE TIME WINDOW	18843-3	HEART, COMPARISON STUDY (NARRATIVE) (EKG)
18799-7	SEND THE FIRST (I.E., OLDEST) RESULT FOR EACH KIND OF OBSERVATION IN THE TIME WINDOW	18844-1	HEART, EKG IMPRESSION (NARRATIVE) (EKG)
18800-3	SEND THE WORST ABNORMAL RESULT FOR EACH KIND OF OBSERVATION IN THE TIME WINDOW	18845-8	REFERENCE BEAT TYPE (NARRATIVE) (EKG)
18802-9	SEND THE LAST (MOST RECENT) WITHIN THE TIME WINDOW	18846-6	EXAMINATION LEVEL ULTRASOUND (NARRATIVE)
18803-7	INCLUDE ALL DATA OF THE SELECTED TYPE THAT REPRESENTS OBSERVATIONS MADE 30 DAYS OR FEWER BEFORE THE STARTING DATE OF SERVICE FOR THE CLAIM	18847-4	PELVIS, FETAL POSITION (NARRATIVE) (PALPATION)
18804-5	INCLUDE ALL DATA OF THE SELECTED TYPE THAT REPRESENTS OBSERVATIONS MADE 3 MONTHS OR FEWER BEFORE THE STARTING DATE OF SERVICE FOR THE CLAIM	18848-2	PELVIS, FETAL POSITION (NARRATIVE) (ULTRASOUND)
18805-2	INCLUDE ALL DATA OF THE SELECTED TYPE THAT REPRESENTS OBSERVATIONS MADE SIX MONTHS OR FEWER BEFORE THE STARTING DATE OF SERVICE FOR THE CLAIM	18849-0	PELVIS, FETAL PRESENTATION (NARRATIVE) (PALPATION)
18806-0	INCLUDE ALL DATA OF THE SELECTED TYPE THAT REPRESENTS OBSERVATIONS MADE NINE MONTHS OR FEWER BEFORE THE STARTING DATE OF SERVICE FOR THE CLAIM	18850-8	PELVIS, FETAL PRESENTATION (NARRATIVE) (ULTRASOUND)
18807-8	INCLUDE ALL DATA OF THE SELECTED TYPE THAT REPRESENTS OBSERVATIONS MADE ONE YEAR OR LESS BEFORE THE STARTING DATE OF SERVICE FOR THE CLAIM	18851-6	FETUS PLACENTA, GRADE (NARRATIVE) (ULTRASOUND)
		18852-4	SURGERY, SURGICAL DRAINS (NARRATIVE)
		19005-8	X-RAY IMPRESSION (NARRATIVE)
		19006-6	CARDIAC ECHO IMAGING DEVICE, IMAGE QUALITY (NARRATIVE) (ECHO)
		19008-2	TRANSDUCER SITE (NARRATIVE)
		19009-0	MEDICATION CURRENT (NARRATIVE) (REPORTED)
		19010-8	MEDICATION DISCHARGE (NARRATIVE)
		19011-6	MEDICATION ADMINISTERED (NARRATIVE)
		19012-4	MEDICATION DISCHARGE, SUBSTITUTION INSTRUCTION
		19016-5	X12 277, ALL REQUESTS FOR INFORMATION THAT ARE INCLUDED IN THIS TRANSACTION ARE STATED FOR INDIVIDUAL SERVICES
		19021-5	PALPATION CERVIX, STUDY OBSERVATION (NARRATIVE)