

Additional Information Specification 0004:
Clinical Reports Attachment

(This specification replaces
Additional Information Message 0004:
Clinical Reports Attachment
May, 2004)

Release 3.0
Based on HL7 CDA Standard Release 2.0,
with supporting LOINC[®] Tables

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1 Introduction

This publication provides the LOINC®¹ code values specific to a clinical reports attachment for the following applications.

- Those codes that identify the attachment or attachment components used in transactions such as those defined by the ASC X12 277 *Health Care Claim Request for Additional Information* and the ASC X12 275 *Additional Information to Support a Health Care Claim or Encounter* Implementation Guides which are products of the insurance subcommittee, X12N, of Accredited Standards Committee X12.^{2,3}
- Those codes used in HL7 Clinical Document Architecture (CDA) documents designed for inclusion in the BIN segment of the 275 transaction as described in the *HL7 Additional Information Specification Implementation Guide*⁴

The format of this document and the methods used to arrive at its contents are prescribed in the *HL7 Additional Information Specification Implementation Guide*.

Section 2 of this document defines how to use CDA documents to pass clinical reports as attachments, and includes the LOINC codes of each component in an attachment. Section 3 further describes each component of a specific clinical reports attachment, indicating the cardinality, description, entry types, data types, codes, and units of each answer component.

Section 4 presents coding examples, with a narrative scenario, an XML example, and a display image of the attachment using a popular browser. Section 5 further describes the code sets used in the response to each answer part of the attachment.

Note: All LOINC codes and descriptions are copyrighted by the Regenstrief Institute, with all rights reserved. See <http://www.LOINC.org>.

1.1 Business Purpose:

Additional Information Specifications (AIS) are used to convey information associated with a specific business purpose. AISs are used to convey clinical and non-clinical additional information to support other health care transactions, such as the X12 837 claims and the X12 278 Health Care Services Review.

This Clinical Reports Attachment is used to convey health care related notes, results of diagnostic studies, clinical outcomes, and other clinical results used in analyzing and/or documenting the individual's condition and/or treatment. This does not include Laboratory Results, which are reported using the *Additional Information Specification 0005: Laboratory Results Attachment* (CDAR2AIS0005R030).

¹ LOINC® is a registered trademark of Regenstrief Institute and the LOINC Committee. The LOINC database and LOINC Users' Guide are copyright 1998-2006 Regenstrief Institute and the LOINC Committee and the LOINC database codes and names are available at no cost from <http://www.LOINC.org>. Email: LOINC@regenstrief.org

²Information on this and other X12/HIPAA-related implementation guides is available from the Washington Publishing Company, <http://www.wpc-edi.com/>

³ Within this Health Level Seven document, references to the transaction defined by these X12 implementation guides will be abbreviated by calling them 275, 277 and 278.

⁴ Health Level Seven, Inc. 3300 Washtenaw Ave., Suite 227, Ann Arbor, MI 48104-4250. (<http://www.hl7.org>)

When this attachment is used for a HIPAA transaction, please refer to the “definition” sub-section of the Claims Attachment Final Rule in the Federal Register for the HIPAA regulated standard definition of Clinical Reports.

1.2 LOINC Codes and Structure

LOINC codes are used for several purposes:

- In the 277 transaction set, LOINC codes identify the attachment type or attachment components being requested to support a claim or encounter.
- In the HL7 CDA document, LOINC codes are used to identify the attachment type, the attachment components, and their answer parts. LOINC codes may also identify the type of clinical document, if the provider has created the clinical document in CDA format. The HL7 CDA document is returned in the BIN segment of the 275 transaction set.
- LOINC modifier codes may be used in the 277 transaction to further define the specificity of a request.

For further information on the relationship and use of LOINC Codes with the X12 Transactions, and HL7 CDA Documents, see section 1.5 in the *HL7 Additional Information Specification Implementation Guide*.

1.3 Revision History

<i>Date</i>	<i>Purpose</i>
Sept 30, 1998	Initial release as separate document.
Dec 2001	Revised title and date; reconciled HL7 ballot responses.
August 2003	CDA Ballot
December 2003	Version 2.0 Publication
December 2003	Release 2.1 Ballot
May 2004	May 2004 - Release 2.1 Publication (referenced by 9-23-2005 HIPAA NPRM)
November 2006	First Informative Ballot for Release 3.0 Changes
March 2007	Second Informative Ballot for Release 3.0 Changes

1.4 Privacy Concerns in Examples

The names of natural persons that appear in the examples of this book are intentionally fictional. Any resemblance to actual natural persons, living or deceased, is purely coincidental.

1.5 HL7 Attachment-CDA Document Variants

As described in the *HL7 Additional Information Specification Implementation Guide*, there are two variants of a CDA document when used as an attachment. These are as follows:

- The **human-decision variant** (HDV) is used solely for information that will be rendered for a person to look at, in order to make a decision. The HDV is not required to have structured or coded answers. The only LOINC value used in an HDV CDA document is

the LOINC for the *Attachment Type Identifier*. HL7 provides a non-normative style sheet for this purpose. There are two further alternatives within the human-decision variant.

- It can be a single <nonXMLBody> element that contains a reference to an external file that provides the content for the body of the document, or
- It can contain a <structuredBody> element containing free text in XML elements that organize the material into sections, paragraphs, tables and lists as described in the *HL7 Additional Information Specification Implementation Guide*.
- The **computer-decision variant** (CDV) has the same content as the human-decision variant, but additional structured information and LOINC coded data is included so that a computer could provide decision support based on the document. Attachments in the CDV can be rendered for human decisions using the same style sheet that HL7 provides for rendering documents formatted according to the human-decision variant.

These variants do not differ in functional content. All variants of the same attachment have required and optional content as specified in the Additional Information Specification document for that attachment. The variants only differ with regard to whether structured and coded data is mandated.

Both variants place constraints upon what information must be present in the CDA to support the Attachment use case, described in section 1.1. Additional CDA structures (document sections, entries, et cetera), may be present to support use cases other than those defined by this AIS. Anything not explicitly prohibited by this AIS may be present in the CDA document to support use cases other than those defined herein.

1.6 Request for Information versus Request for Service

This attachment specification for clinical reports defines a “send-me-what-you-have” attachment. It asks for a set of clinical reports that have been produced in the course of the care process. **It is not asking for any additional data capture efforts.** For example, if the request for data is all chest x-ray reports, it is **not** asking the provider to obtain a chest x-ray report, but just to report any chest x-ray reports that happen to have been done.

In any attachment component answer part it may sometimes be impossible to send a required answer and necessary to send, instead, a reason why the information is not available, using a “No Information” indicator. In the human decision variant the sender shall supplement the natural language explanation of why the information is not available. In the computer-decision variant the sender shall supplement the natural language explanation of why the information is not available with appropriate use of the @nullFlavor attribute value, as described in “No Information” Indicator under the Representation of Data Types section of the *HL7 Additional Information Specification Implementation Guide*.

1.7 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 and quantitative data as a laboratory test battery. For example, an EKG will usually report 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 radiology report for example will often contain headers for the reason for the study, the

comparison study dates and results, the description of the exam and the diagnostic impression. The description may include one or two paragraphs, the impression be further divided by numbered bullets that identify each separate diagnostic conclusion. At the least structured extreme, some narrative reports contain no structure except for paragraphing.

HL7 CDA documents 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 CDA, at least the patient demographic information, the kind of report, the time of the report, and (usually) the reporting provider will be delivered as structured, and computer understandable content. The demographic information e.g., the patient chart number, name, birth date, is carried as structured information in CDA header.

As described in section 1.5, the clinical content of the report is in scanned images (human-decision variant, non-xml body), natural language text (human-decision variant, XML body) or, where the data are available to support structure, as a structure amenable to interpretation by a computer (computer-decision variant).

It is likely that most clinical report attachments will tend to send the entire report as one of the two options within the human-decision variant. The only requirements for reports passed using this method are:

- the patient must be identified
- the report must be identified with a LOINC code
- an electronic report that contains structure information must contain the blocks of text together in the sequence in which they appear in the print form of the report.

Over time, clinical report attachments with more structure will become more common. For payers that intend to have a human make a decision based on the clinical report, it will be unimportant whether the attachment is largely text or coded in detail in the computer-decision variant. In each case an XML style sheet will support rendering the information for human usage.

2 LOINC and CDA for Clinical Reports

This section defines how to use HL7 CDA documents to pass clinical reports as attachments, with LOINC encoding of the various details.

Very little is assumed about the contents of the structured information, so the approach described 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 radiology reports, EKGs, cardiac echoes, and so on.

2.1 LOINC Report Subject Identifier Codes (introduction)

Clinical reports can be classified by many different dimensions, e.g., the method used to generate the data (e.g., CAT scan), the body part examined (x-ray of left wrist), the kinds of measurements produced, e.g., blood pressure. Individual clinical reports are specified by indicating specific values for many of these dimensions.

It would be very difficult to enumerate and isolate all combinations of these facets that represent realistic subjects for all possible 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.

The Regenstrief Institute (see <http://www.Regenstrief.org>) and the LOINC Committee have provided a set of subject identifier codes that are categorical for many subjects, i.e., a given code can apply to closely related reports. The categories were chosen based on examinations of existing requests for information in support of claims. They will add to this code set based on industry requests.

Requesters (e.g., payers) can use any LOINC code that is contained in the hierarchy of Clinical-Reports-non-lab (LOINC 26443-2) as the report subject identifier in a 277 request message.

This document contains only a subset of the available Clinical Report: Report Subject Identifiers. For a complete list of Clinical Report: Report Subject Identifiers and their accompanying attributes, please refer to the LOINC database.

Many of the codes in this LOINC hierarchy are shown on the following pages; however, the full set of available codes can be viewed through the HIPAA task of RELMA, the LOINC browsing tool. (Available at: <http://www.LOINC.org>.)

Systems that initiate requests in 277 messages shall choose the LOINC Report Subject Identifier Code corresponding to the category that best represents the subject matter of interest. Responding systems shall echo the requester's LOINC code in the 275 and report the LOINC Report Subject Identifier Codes that most closely identify the delivered individual reports in the <code> element in the CDA header.

For example, a payer may send a 277 that requests a LOINC Report Subject Identifier Code of 26441-6, CARDIAC STUDIES (SET). In the CDA payloads of the 275, the provider would then return reports for the available cardiac studies e.g., EKG, Cardiac Echoes, Cardiac Catheterization, etc. that had been performed on the patient and also satisfied the constraints of any LOINC

modifier codes included in the 277. The responding 275 message might therefore include 18745-0 Cardiac Catheterization, Study and 11524-6 EKG Heart Study.

When unsolicited attachments are sent in a 275 transaction that accompanies an 837, the sender should pick the LOINC Report Subject Identifier Codes that most closely identifies the report being sent.

2.2 LOINC Report Part Identifier Codes

Each LOINC Report Part Identifier Code identifies a section of a report that will be sent in a <section> element of the XML body. There are no stated requirements for the sequence of the LOINC Report Part Identifier Codes within the document except that the text blocks should be presented in the order in which they would appear in the report in the patient's chart.

2.3 Signatures

Certain clinical reports include LOINC codes for the name and identifier of the signing practitioner. This information shall be provided in the header of CDA attachments. It may also be provided redundantly in the body with the appropriate LOINC codes.

2.4 LOINC Scope Modification Codes

Before we get into more detail about how LOINC is used inside the attachment document, note that we have one other purpose for LOINC encoding which is not otherwise described here.

The HL7 publication *LOINC Modifier Codes (for use with ASC X12 Implementation Guides when Requesting Additional Information)* provides code values for further defining the specificity of a request for additional information on the 277 Transaction. Both time window and item selection modifier codes are defined. This publication is available from HL7, and is in the download package with the AIS documents.

2.5 LOINC Report Subject Identifier Codes (with LOINC hierarchy)

Table 2.5, below, provides examples of the more common Clinical Reports request subject codes described in Section 2.1. Note that this table defines a hierarchy. To request all "Clinical-Reports-non-lab" use LOINC 26443-2 (the first row in the table) as the subject identifier in the 277 request. To request a more narrow set of reports, use more specific codes further down the hierarchy.

For example, if interested only in "Diagnostic-Studies-non-lab" use LOINC 27899-4 (on page 9 of Table 3.1) in the 277 subject identifier. In that case, the 275 would return only LOINC codes beneath 27899-4, namely, all cardiology, gastroenterology, neuromuscular, obstetrics, pathology, radiology, pulmonary, ophthalmology, optometry, and miscellaneous studies. By going further down the hierarchy you can narrow the request further. For example, if interested only in radiology studies use Radiology Studies (LOINC 18726-0) as the request subject identifies. When interested only in CT Head Study (LOINC 11539-4), use that individual code as the 277 request subject identifier.

Note that the table does not include all possible report subject identifiers that are within the scope of this attachment specification. For example, many more specific Radiology diagnostic codes exist within the LOINC database under the class of Radiology Studies (LOINC 18726-0) than are included on pages 9-11 of this document. The full available set can be reviewed through the HIPAA task of RELMA. Further, any of the more specific LOINC codes that are listed beneath

these codes (e.g., the left ventricular ejection fraction within the cardiac echo report) are also valid individual subjects for the 277 report subject identifier. (See Section 3.)

Each LOINC code beneath LOINC 26443-2 in the hierarchy is a valid subject identifier code for 277 messages. As the industry adds new diagnostic studies or clinical reports, new codes for these studies/reports will be listed within this hierarchy and these codes will also be valid subject codes for 277 requests.

Note also, that many reports may be delivered in a general or specific style as described in Section 2.6. If a report subject identifier code (third column of the following table) is "General", then it may only be transmitted in the human-decision variant because LOINC codes are not available for section headings within the report. If it contains the word "Specific" that means it can be delivered as a general structure or as a specific structure – sender's choice.

Any clinical report, which can be sent as a general style report, can also be sent as image data as defined in the *HL7 Additional Information Specification Implementation Guide*.

The fourth column references the table in section 3 that defines the LOINC codes that can be used in the specific, more structured style.

Table 2.5 - LOINC Report Subject Identifier Codes

Note: Any report noted as "Code To Be Determined" in the LOINC Code column has been submitted to Regenstrief Institute to determine the appropriate LOINC code.

LOINC Code	Report Subject	Structure Type	Section 3 Specific Structure
26443-2 CLINICAL REPORTS.NON LAB (SET)			
28650-0	CLINICAL NOTES & CHART SECTIONS (SET)		
28562-7	CHART SECTIONS (SET)		
11485-0	ANESTHESIA RECORDS	General	
11486-8	CHEMOTHERAPY RECORDS	General	
29751-5	CRITICAL CARE RECORDS	General	
29749-9	DIALYSIS RECORDS	General	
15508-5	LABOR AND DELIVERY RECORDS	General	
11503-0	MEDICAL RECORDS	General	
29750-7	NEONATAL INTENSIVE CARE RECORDS	General	
11543-6	NURSERY RECORDS	General	
29752-3	PERIOPERATIVE RECORDS	General	
11534-5	TEMPERATURE CHARTS	General	
28563-5	CARE PROVIDER NOTES (SET)		
28654-2	ATTENDING PHYSICIAN INITIAL ASSESSMENT	General	
18733-6	ATTENDING PHYSICIAN VISIT NOTE	General	
28581-7	CHIROPRACTOR INITIAL ASSESSMENT	General	
28580-9	CHIROPRACTOR PROGRESS NOTE	General	
18762-5	CHIROPRACTOR VISIT NOTE	General	
28572-6	DENTIST INITIAL ASSESSMENT	General	
28583-3	DENTIST OPERATIVE NOTE	Specific	(similar to 3.3.2)
28577-5	DENTIST PROCEDURE NOTE	General	
28617-9	DENTIST PROGRESS NOTE	General	
28618-7	DENTIST VISIT NOTE	General	
28622-9	NURSE HOSPITAL DISCHARGE ASSESSMENT	General	

LOINC Code	Report Subject	Structure Type	Section 3 Specific Structure
29753-1	NURSE INITIAL ASSESSMENT	General	
28623-7	NURSE INTERVAL ASSESSMENT	General	
28651-8	NURSE TRANSFER NOTE	General	
28621-1	NURSE-PRACTITIONER INITIAL ASSESSMENT	General	
28575-9	NURSE-PRACTITIONER PROGRESS NOTE	General	
18764-1	NURSE-PRACTITIONER VISIT NOTE	General	
18734-4	OCCUPATIONAL THERAPY INITIAL ASSESSMENT	General	
11507-1	OCCUPATIONAL THERAPY PROGRESS NOTE	General	
28578-3	OCCUPATIONAL THERAPY VISIT NOTE	General	
18735-1	PHYSICAL THERAPY INITIAL ASSESSMENT	General	
11508-9	PHYSICAL THERAPY PROGRESS NOTE	General	
28579-1	PHYSICAL THERAPY VISIT NOTE	General	
28568-4	PHYSICIAN ED VISIT NOTE	General	
11490-0	PHYSICIAN HOSPITAL DISCHARGE SUMMARY	Specific	3.3.1
18736-9	PHYSICIAN INITIAL ASSESSMENT	General	
28626-0	PHYSICIAN HISTORY AND PHYSICAL	General	(similar to 3.3.3)
28573-4	PHYSICIAN OPERATIVE NOTE	Specific	(similar to 3.3.2)
11505-5	PHYSICIAN PROCEDURE NOTE	General	
28616-1	PHYSICIAN TRANSFER NOTE	General	
28569-2	PHYSICIAN-CONSULTING PROGRESS NOTE	General	
18763-3	PHYSICIAN-CONSULTING INITIAL ASSESSMENT	General	
18737-7	PODIATRY INITIAL ASSESSMENT	General	
28624-5	PODIATRY OPERATIVE NOTE	Specific	(similar to 3.3.2)
28625-2	PODIATRY PROCEDURE NOTE	General	
11509-7	PODIATRY PROGRESS NOTE	General	
11488-4	PROVIDER-UNSPECIFIED CONSULTING NOTE	General	
15507-7	PROVIDER-UNSPECIFIED ED VISIT NOTE	General	
11492-6	PROVIDER-UNSPECIFIED HISTORY AND PHYSICAL NOTE	Specific	3.3.3
28574-2	PROVIDER-UNSPECIFIED HOSPITAL DISCHARGE SUMMARY	General	(similar to 3.3.1)
28636-9	PROVIDER-UNSPECIFIED INITIAL ASSESSMENT	General	
11504-8	PROVIDER-UNSPECIFIED OPERATIVE NOTE	Specific	3.3.2
28570-0	PROVIDER-UNSPECIFIED PROCEDURE NOTE	General	
11506-3	PROVIDER-UNSPECIFIED PROGRESS NOTE	General	
18761-7	PROVIDER-UNSPECIFIED TRANSFER SUMMARY	General	
28635-1	PSYCHIATRY INITIAL ASSESSMENT	General	
28627-8	PSYCHIATRY PROGRESS NOTE	General	
11527-9	PSYCHIATRY REPORT	General	
28628-6	PSYCHIATRY VISIT NOTE	General	
18738-5	PSYCHOLOGY INITIAL ASSESSMENT	General	
11510-5	PSYCHOLOGY PROGRESS NOTE (NARRATIVE)	General	
18739-3	SOCIAL SERVICE INITIAL ASSESSMENT	General	
28653-4	SOCIAL SERVICE VISIT NOTE	General	
28656-7	SOCIAL SERVICE PROGRESS NOTE	General	
18740-1	SPEECH THERAPY INITIAL ASSESSMENT	General	
11512-1	SPEECH THERAPY PROGRESS NOTE	General	
28571-8	SPEECH THERAPY VISIT NOTE	General	
Code To Be Determined	TRIAGE NOTE	General	

LOINC Code	Report Subject	Structure Type	Section 3 Specific Structure
27899-4	DIAGNOSTIC STUDIES NON-LAB (SET)		
26441-6	CARDIOLOGY STUDIES (SET)		
11522-0	CARDIAC ECHO, STUDY	Specific	3.1.1
18745-0	CARDIAC CATHETERIZATION, STUDY	General	
11524-6	EKG HEART, STUDY	Specific	3.1.2
18750-0	ELECTROPHYSIOLOGY HEART, STUDY	General	
18752-6	EXERCISE STRESS TEST HEART, STUDY	General	
18754-2	HOLTER MONITOR HEART, STUDY	General	
27895-2	GASTROENTEROLOGY ENDOSCOPY STUDIES (SET)		
28028-9	ANOSCOPY STUDY	General	
18746-8	COLONOSCOPY LOWER GI TRACT STUDY	General	
28016-4	ENDOSCOPIC RETROGRADE CHOLANGIOPANCREATOGRAPHY STUDY	General	
18751-8	ENDOSCOPY UPPER GI TRACT STUDY	General	
28018-0	ENTEROSCOPY STUDY	General	
18753-4	FLEXIBLE SIGMOIDOSCOPY LOWER GI TRACT STUDY	General	
27897-8	NEUROMUSCULAR ELECTROPHYSIOLOGY STUDIES (SET)		
11523-8	ELECTROENCEPHALOGRAPHY STUDY	General	
18749-2	ELECTROMYOGRAPHY STUDY	General	
29755-6	NERVE CONDUCTION STUDY	General	
29754-9	NYSTAGMOGRAPHY STUDY	General	
26442-4	OBSTETRICAL STUDIES (SET)		
11525-3	OBSTETRICAL ULTRASOUND PELVIS+FETUS, STUDY	Specific	3.2.1
28619-5	OPHTHALMOLOGY/OPTOMETRY STUDIES (SET)		†
29268-0	CONTACT LENS MEASUREMENTS	Specific	
29269-8	EYE GLASSES MEASUREMENTS	Specific	
29271-4	EYE PHYSICAL EXAMINATION	Specific	
29272-2	EYE ULTRASOUND STUDY	Specific	
28632-8	HETEROPHORIA STUDY	Specific	
28629-4	PERIMETRY (VISUAL FIELD TESTING) STUDY	Specific	
29270-6	RETINAL TREATMENTS	Specific	
28630-2	TONOMETRY (GLAUCOMA TESTING) STUDY	Specific	
28631-0	VISUAL ACUITY (REFRACTION) STUDY	Specific	
27898-6	PATHOLOGY STUDY REPORTS (SET)		
18743-5	AUTOPSY REPORT	General	
11526-1	CYTOLOGY REPORT	General	
11529-5	SURGICAL PATHOLOGY REPORT	General	
27896-0	PULMONARY STUDIES (SET)		
18744-3	BRONCHOSCOPY STUDY	General	
28633-6	POLYSOMNOGRAPHY (SLEEP) STUDY	General	
18759-1	SPIROMETRY RESPIRATORY SYSTEM, STUDY	General	
18726-0	RADIOLOGY STUDY REPORTS (SET)		**
11528-7	RADIOLOGY UNSPECIFIED MODALITY AND SITE STUDY	Specific	
18782-3	X-RAY UNSPECIFIED SITE STUDY	Specific	
28564-3	X-RAY HEAD, STUDY	Specific	
28613-8	X-RAY SPINE UNSPECIFIED, STUDY	Specific	
24946-6	X-RAY SPINE CERVICAL, STUDY	Specific	3.4.1
24983-9	X-RAY SPINE THORACIC, STUDY	Specific	

LOINC Code	Report Subject	Structure Type	Section 3 Specific Structure
24972-2	X-RAY SPINE LUMBAR, STUDY	Specific	
24762-7	X-RAY HIP, STUDY	Specific	
28561-9	X-RAY PELVIS, STUDY	Specific	
24704-9	X-RAY FEMUR, STUDY	Specific	
28565-0	X-RAY KNEE, STUDY	Specific	
25011-8	X-RAY TIBIA AND FIBULA, STUDY	Specific	
24541-5	X-RAY ANKLE, STUDY	Specific	
24709-8	X-RAY FOOT, STUDY	Specific	
24909-4	X-RAY SHOULDER, STUDY	Specific	
28567-6	X-RAY HUMERUS, STUDY	Specific	
24891-4	X-RAY RADIUS AND ULNA, STUDY	Specific	
24676-9	X-RAY ELBOW, STUDY	Specific	
24619-9	X-RAY WRIST, STUDY	Specific	
28582-5	X-RAY HAND, STUDY	Specific	
18747-6	CT UNSPECIFIED SITE, STUDY	Specific	
11539-4	CT HEAD, STUDY	Specific	3.4.2
28566-8	CT SPINE, STUDY	Specific	
24932-6	CT SPINE CERVICAL, STUDY	Specific	
24978-9	CT SPINE THORACIC, STUDY	Specific	
24963-1	CT SPINE LUMBAR, STUDY	Specific	
11540-2	CT ABDOMEN, STUDY	Specific	
11538-6	CT CHEST, STUDY	Specific	
24866-6	CT PELVIS, STUDY	Specific	
24690-0	CT EXTREMITY, STUDY	Specific	3.4.3
24757-7	CT CORONARY ARTERIES, STUDY	Specific	
18755-9	MRI UNSPECIFIED SITE, STUDY	Specific	
11541-0	MRI HEAD, STUDY	Specific	3.4.4
18756-7	MRI SPINE, STUDY	Specific	
24935-9	MRI SPINE CERVICAL, STUDY	Specific	
24980-5	MRI SPINE THORACIC, STUDY	Specific	
24968-0	MRI SPINE LUMBAR, STUDY	Specific	
24629-8	MRI CHEST, STUDY	Specific	
24556-3	MRI ABDOMEN, STUDY	Specific	
24872-4	MRI PELVIS AND HIPS, STUDY	Specific	
24707-2	MRI FOOT, STUDY	Specific	
24710-6	MRI FOREARM, STUDY	Specific	
28576-7	MRI JOINT, STUDY	Specific	
24720-5	MRI HAND, STUDY	Specific	
24605-8	MAMMOGRAM DIAGNOSTIC VIEWS, STUDY	Specific	
24606-6	MAMMOGRAM SCREENING VIEWS, STUDY	Specific	3.4.5
18757-5	NUCLEAR MEDICINE UNSPECIFIED STUDY	Specific	
25031-6	NUCLEAR MEDICINE BONE SCAN, STUDY	Specific	3.4.6
24888-0	NUCLEAR MEDICINE PULMONARY VQ SCAN, STUDY	Specific	
17787-3	NUCLEAR MEDICINE THYROID SCAN, STUDY	Specific	
18758-3	PET SCAN UNSPECIFIED SITE, STUDY	Specific	
25043-1	CT GUIDANCE FOR ASPIRATION OF UNSPECIFIED SITE, STUDY	Specific	3.4.7
25044-9	CT GUIDANCE FOR BIOPSY OF UNSPECIFIED SITE, STUDY	Specific	
25069-6	FLUOROSCOPIC GUIDANCE FOR BIOPSY OF UNSPECIFIED SITE, STUDY	Specific	
25059-7	ULTRASOUND GUIDANCE FOR BIOPSY OF UNSPECIFIED SITE, STUDY	Specific	
18760-9	ULTRASOUND OF UNSPECIFIED SITE, STUDY	Specific	
24875-7	ULTRASOUND PERIPHERAL VESSEL, STUDY	Specific	
24731-2	ULTRASOUND HEAD, STUDY	Specific	
24842-7	ULTRASOUND NECK, STUDY	Specific	3.4.8

LOINC Code	Report Subject	Structure Type	Section 3 Specific Structure
24558-9	ULTRASOUND ABDOMEN, STUDY	Specific	
28614-6	ULTRASOUND LIVER, STUDY	Specific	
24601-7	ULTRASOUND BREAST, STUDY	Specific	
24869-0	ULTRASOUND PELVIS, STUDY	Specific	
28634-4	MISCELLANEOUS STUDIES (SET)		
18742-7	ARTHROSCOPY REPORT	General	
28615-3	AUDIOLOGY STUDY	General	
29756-4	PERITONEOSCOPY STUDY		
28620-3	UROLOGY STUDY	General	

The above represents only a sample of the relevant LOINC codes. See the HIPAA task in RELMA for the full set of possible LOINC request codes.

† Examples are not provided in this document. See the HIPAA task in RELMA for the specific.

** All Radiology Studies can be transmitted via this same specific report structure as given under Table 3.4.1, 3.4.2, etc.

2.6 Report Structures

This table describes the manner in which general or specific report structures are used to create human-decision or computer-decision variants.

Table 2.6 - Specific/General vs. Human/Computer-Decision Variant

Description in Table 2.5	Use for Human-Decision Variant?	Use for Computer-Decision Variant?
General	Yes	No
Specific	Yes, provider can create sections ad hoc. Provider may use some or all of the sections and associated LOINC codes from the table in Section 3.	Yes, provider must follow the table in Section 3 and structure data according to data type specifications.

2.6.1 General Report Structure

The general report structure applies to all clinical reports including all of those in Table 2.5, whether they are labeled “Specific” or “General.”

When using the general report structure, the sender shall send the Report Subject Identifier Code <code> element in the CDA header. The sender is not required to include section/code elements in the body of the CDA document. However, where pertinent LOINC codes exist for sections within the CDA the provider may send them in the section/code elements wherever they apply.

2.6.2 Specific Report Structure

Where an entry in table 2.5 indicates that a specific report structure is available it identifies a table in Section 3 that containing that structure. The provider may use the information in Section 3 to create a computer-decision variant attachment. The provider may also create a human-decision variant for reports that are identified as specific.

Human Decision Variant. To create a human-decision variant attachment for a report type that is listed in table 2.5 as “Specific”, the sender sends the Report Subject Identifier Code <code> element in the CDA header. The sender is not required to include section/code elements in the

body of the CDA document. However, where pertinent LOINC codes exist for sections or content elements within the CDA the provider may send them in the second/code elements wherever they apply. The sender may choose to use the LOINC codes and titles from the corresponding table in section 3, but this is not required.

Computer-Decision Variant. To create a report in the computer-decision variant the sender must follow the specifications from a table in Section 3 with respect to data type, cardinality and the use of coded responses.

If the data type code in the table is PQ (physical quantity), the transmitted value should be reported with appropriate units as specified for the physical quantity data type in *HL7 Additional Information Specification Implementation Guide*.

If the data type code in the table is CD or CS, the content of the corresponding element of the CDA document must include the textual interpretation of the code.

Note that the ability to use a Section 3 table to create a computer-decision variant does not guarantee that such an attachment is suitable for auto-adjudication. A payer would need to make a business decision to auto-adjudicate by examining the coded and numeric elements to see if they provide the necessary data for a decision. Some of the components in the tables in Section 3 are of type ED (text). A compliant, "computer-decision variant" attachment may not be suitable for auto-adjudication if a decision would rely on data in a component of type ED.

3 Value Tables for Specific Report Structures

If the report subject has a specific report structure, signified by the word “Specific” in the Structure column of Table 2.5, or by a substructure on the HIPAA task in RELMA for this report subject, the sender may elect to use section/code elements based with the LOINC codes contained in tables in this section. These section/code elements are permitted in the human-decision variant and required in the computer-decision variant.

Senders can choose to include the codes within the specific structure that make sense for their reports. Most structured reports would include only a small percent of the total number of observation codes listed in the specific structure for a given report.

The provider shall return all data components for which data is available.

Value Table Layout

LOINC Code

Description and Value – LOINC description and explanation.

For the computer decision variant (CDV), the xpath statement is shown.

With the CDV, some answers are placed in the CDA header of the document and are noted as such with the answer. When using the HDV method, those answers may optionally be placed in the CDA header, or they may be included in the CDA body.

Entry Type – CDA Release 2 type. This column describes the type of entry used in the CDA document to record the information.

Data Type – CDA Release 2 data type of the response value. For further information, see the Data Types section of the *HL7 Additional Information Specification Implementation Guide*.

Cardinality (Card)

HL7 uses the term Cardinality to refer to the specification of the number of times that a component may or must repeat. When the minimum number of repetitions is zero, the cardinality specification indicates optionality.

Cardinality is described as a pair of numbers, the first is the least number of repetitions that are required, 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 attachment component or attachment component answer part is required; only a single occurrence is permitted |
| 0,1 | The attachment component or attachment component answer part is optional; at most a single occurrence is permitted |
| 1,n | The attachment component or attachment component answer part is required; multiple occurrences are permitted |
| 0,n | The attachment component or attachment component answer part is optional; multiple occurrences are permitted |

The Card column describes repetition in the pattern of attachment components and attachment component answer parts. If such a value appears in a row containing a LOINC code for an attachment component, it describes whether the entire component (including one

or more answer parts) can repeat. If a repetition value appears in a row containing LOINC code for an attachment component answer part, it indicates that the answer part can repeat within a single occurrence of the complete attachment component.

Response Code/Numeric Units – References to code tables or numeric units. See section 5 for specifics.

Requestors can use any LOINC code that is contained in the hierarchy of clinical reports.non lab (LOINC 26443-2) as the report subject identifier in a 277 request message. These codes can be found in the LOINC database and viewed via the RELMA program. You can see all LOINC codes contained within clinical reports.non lab by choosing the HIPAA task in RELMA.

As non-laboratory diagnostic technology improves over time and new provider note titles are developed, the LOINC Committee will create new LOINC codes (and sets of codes) to represent them. These will then become valid subject codes for requests in the 277 under the clinical reports attachment.

Use of the component level LOINCs

- **Solicited Model** – The use of any of the component level LOINC codes (Report Subject Identifiers) in the 277 request in the STC segment represents an explicit request for the associated answer part(s) for that component or report subject identifier. The LOINC used in the 277 request must be echoed back in the 275 and the appropriate answer part(s) sent in the HL7 CDA document. The required answer part(s) for the specific component LOINC requested must be sent in accordance with cardinality.
- **Unsolicited Model** – The 275 Clinical Reports attachment must use the LOINC code for the complete attachment for a given report subject identifier, and its data set, including the required data elements in accordance with cardinality. The complete attachment LOINC code is the first one listed in bold in each table.

Note this specification does not cover laboratory results. The way to send laboratory results as an attachment is described in *Additional Information Specification 0005: Laboratory Results Attachment*.

Note this specification does not cover medications. The way to send medications is described in *Additional Information Specification 0006: Medications Attachment*.

3.1 Cardiac Diagnostic Studies

3.1.1 Cardiac Echo Study

Cardiac echoes can be sent in a general or specific report structure. The following table lists some of the codes that can be used to produce a specific structure. This table provides a rich sample of the cardiac echo observation codes available within LOINC, but it is only a sample. To see the full set of LOINC codes available for reporting the details of a cardiac echo look in the hierarchy beneath cardiac echo studies (11522-0) in the HIPAA task of RELMA.

Table 3.1.1 - Cardiac Echo Study

LOINC code	Description and Value	Entry Type	Data Type	Card	Response Code or Numeric Units
11522-0	CARDIAC ECHO STUDY	DOC		0,1	
18011-7	AORTA ARCH, DIAMETER (ECHO)	OBS	PQ	0,1	
18012-5	AORTA ASCENDING, DIAMETER (ECHO)	OBS	PQ	0,1	
18013-3	AORTA DESCENDING, DIAMETER (ECHO)	OBS	PQ	0,1	
18014-1	AORTA ISTHMUS, DIAMETER (ECHO)	OBS	PQ	0,1	
18015-8	AORTA ROOT, DIAMETER (ECHO)	OBS	PQ	0,1	
18010-9	AORTA, DIAMETER (ECHO)	OBS	PQ	0,1	
18016-6	AORTIC VALVE ORIFICE, DIAMETER (ECHO)	OBS	PQ	0,1	
17981-2	AORTIC VALVE, ACCELERATION (US DOPPLER)	OBS	PQ	0,1	
18835-9	AORTIC VALVE, AREA METHOD (NARRATIVE)	OBS	ED	0,1	
18061-2	AORTIC VALVE, GRADIENT SYSTOLE MAX PRESSURE (US DOPPLER DERIVED FULL BERNOULLI)	OBS	PQ	0,1	
18062-0	AORTIC VALVE, GRADIENT SYSTOLE MAX PRESSURE (US DOPPLER DERIVED SIMPLIFIED BERNOULLI)	OBS	PQ	0,1	
18063-8	AORTIC VALVE, GRADIENT SYSTOLE MEAN PRESSURE (US DOPPLER DERIVED SIMPLIFIED BERNOULLI)	OBS	PQ	0,1	
18066-1	AORTIC VALVE, GRADIENT SYSTOLE MEAN PRESSURE (US DOPPLER DERIVED FULL BERNOULLI)	OBS	PQ	0,1	
18068-7	AORTIC VALVE, INTERVAL FROM Q-WAVE TO AORTIC VALVE OPENS (EKG US)	OBS	PQ	0,1	
18089-3	AORTIC VALVE, ORIFICE AREA (ECHO)	OBS	PQ	0,1	
19006-6	CARDIAC ECHO IMAGING DEVICE, IMAGE QUALITY (NARRATIVE) (ECHO)	Section	ED	0,1	
18839-1	CARDIAC ECHO IMAGING DEVICE, ULTRASOUND CLASS (NARRATIVE)	Section	ED	0,1	
18106-5	CARDIAC ECHO STUDY, PROCEDURE	Section	ED	0,1	
18838-3	CARDIAC ECHO STUDY, TRANSDUCER SITE (NARRATIVE)	Section	ED	0,1	

LOINC code	Description and Value	Entry Type	Data Type	Card	Response Code or Numeric Units
18836-7	CARDIAC STRESS STUDY, PROCEDURE (NARRATIVE)	Section	ED	0,1	
18146-1	CARDIOVASCULAR CENTRAL, STUDY OBSERVATION OVERALL (NARRATIVE) (ECHO)	Section	ED	0,1	
18141-2	CARDIOVASCULAR CENTRAL, ECHO OBSERVATION (NARRATIVE)	Section	ED	0,1	
18143-8	ECHO HEART CHAMBERS, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
18144-6	HEART VALVES, ECHO OBSERVATION (NARRATIVE)	Section	ED	0,1	
18024-0	HEART ATRIUM LEFT, DIAMETER ANTERIOR-POSTERIOR SYSTOLE (US M-MODE)	OBS	PQ	0,1	
18070-3	HEART ATRIUM RIGHT, INTRACHAMBER MEAN PRESSURE (ECHO)	OBS	PQ	0,1	
18069-5	HEART ATRIUM RIGHT, INTRACHAMBER MEAN PRESSURE (ESTIMATED FROM JUGULAR VENOUS DISTENTION)	OBS	PQ	0,1	
18018-2	HEART VENTRICLE LEFT OUTFLOW-TRACT, DIAMETER (ECHO)	OBS	PQ	0,1	
18064-6	HEART VENTRICLE LEFT OUTFLOW-TRACT, GRADIENT SYSTOLE MAX PRESSURE (US DOPPLER)	OBS	PQ	0,1	
18043-0	HEART VENTRICLE LEFT, EJECTION FRACTION VFR (ECHO)	OBS	PQ	0,1	
18087-7	HEART VENTRICLE LEFT, MYOCARDIUM MASS (ECHO)	OBS	PQ	0,1	
18837-5	HEART VENTRICLE LEFT, SEGMENTAL WALL APPEARANCE FINDING (NARRATIVE) (ECHO)	Section	ED	0,1	
18118-0	HEART VENTRICLE LEFT, SEGMENTAL WALL MOTION FINDING (NARRATIVE) (ECHO)	Section	ED	0,1	
18840-9	HEART VENTRICLE LEFT, WALL MOTION INDEX (NARRATIVE) (ECHO)	Section	ED	0,1	
18078-6	HEART VENTRICLE RIGHT, MAJOR AXIS DIASTOLE MAX LENGTH (US 2D)	OBS	PQ	0,1	
18079-4	HEART VENTRICLE RIGHT, MAJOR AXIS SYSTOLE MIN LENGTH (US 2D)	OBS	PQ	0,1	
18054-7	HEART VENTRICLE SEPTUM, FRACTIONAL THICKNESS LENFR (US 2D)	OBS	PQ	0,1	
17985-3	HEART, AP DIMENSION LEFT ATRIUM/AP DIMENSION AORTA ROOT RATIO (ECHO)	OBS	PQ	0,1	
18025-7	HEART, DIAMETER ANTERIOR-POSTERIOR SYSTOLE/DIAMETER AORTA ROOT RATIO (ECHO)	OBS	PQ	0,1	

LOINC code	Description and Value	Entry Type	Data Type	Card	Response Code or Numeric Units
17979-6	MITRAL VALVE ANTERIOR LEAFLET, A-C DURATION (US M-MODE)	OBS	PQ	0,1	
17980-4	MITRAL VALVE ANTERIOR LEAFLET, A-C SLOPE (US M-MODE)	OBS	PQ	0,1	
18017-4	MITRAL VALVE ORIFICE, DIAMETER (ECHO)	OBS	PQ	0,1	
18057-0	MITRAL VALVE, GRADIENT MAX PRESSURE (US DOPPLER)	OBS	PQ	0,1	
18058-8	PULMONIC VALVE, GRADIENT MAX PRESSURE (US DOPPLER)	OBS	PQ	0,1	
18059-6	MITRAL VALVE, GRADIENT MEAN PRESSURE (US DOPPLER)	OBS	PQ	0,1	
18097-6	MITRAL VALVE, ORIFICE MIN AREA (US DOPPLER PRESSURE HALFTIME)	OBS	PQ	0,1	
18019-0	PULMONARY ARTERY LEFT, DIAMETER (ECHO)	OBS	PQ	0,1	
18020-8	PULMONARY ARTERY MAIN, DIAMETER (ECHO)	OBS	PQ	0,1	
18095-0	PULMONARY ARTERY MAIN, ORIFICE AREA (ECHO)	OBS	PQ	0,1	
18021-6	PULMONARY ARTERY RIGHT, DIAMETER (ECHO)	OBS	PQ	0,1	
18022-4	PULMONIC VALVE ORIFICE, DIAMETER (ECHO)	OBS	PQ	0,1	
17982-0	PULMONIC VALVE, ACCELERATION (US DOPPLER)	OBS	PQ	0,1	
18060-4	PULMONIC VALVE, GRADIENT MEAN PRESSURE (US DOPPLER)	OBS	PQ	0,1	
18096-8	PULMONIC VALVE, ORIFICE AREA (US CONTINUITY)	OBS	PQ	0,1	
18023-2	TRICUSPID VALVE ORIFICE, DIAMETER (ECHO)	OBS	PQ	0,1	
18065-3	TRICUSPID VALVE REGURGITANT JET, GRADIENT SYSTOLE MAX PRESSURE (US DOPPLER)	OBS	PQ	0,1	
17983-8	TRICUSPID VALVE, ACCELERATION (US DOPPLER)	OBS	PQ	0,1	

See the HIPAA task in RELMA for the full set of possible LOINC request codes.

3.1.2 EKG Study

EKGs can be sent in a general or specific report structure. The following table lists some of the more important codes available for a specific structure. This table provides a sample of the EKG codes available within LOINC but it is only a sample. To see the full set of LOINC codes available for reporting the details of a EKG in a structured form, look in the hierarchy beneath EKG Studies (11524-6) in the HIPAA task of RELMA.

Table 3.1.2 - EKG Study

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
11524-6	EKG STUDY	DOC		0,1	
9866-5	HEART, AXIS (NARRATIVE) (EKG)	Section	ED	0,1	
9867-3	HEART, CARDIAC PACEMAKER PROSTHETIC (NARRATIVE) (EKG)	Section	ED	0,1	
18843-3	HEART COMPARISON STUDY NARRATIVE (COMPOSITE)	OBS		0,1	
	Comparison information from a prior study to the current study includes both the comparison observation information and the date/time of the prior study.				
	HEART COMPARISON STUDY NARRATIVE /ClinicalDocument//section[code/@code="18843-3" and code/@codeSystem=\$LOINC]//observation[code/@code="18843-3" and code/@codeSystem=\$LOINC]/text		ED		
	HEART COMPARISON STUDY - DATE AND TIME (EKG) /ClinicalDocument//section[code/@code="18843-3" and code/@codeSystem=\$LOINC]//observation[code/@code="18843-3" and code/@codeSystem=\$LOINC]/effectiveTime		TS		
9868-1	HEART, CONDUCTION (NARRATIVE) (EKG)	Section	ED	0,1	
18844-1	HEART, EKG IMPRESSION (NARRATIVE) (EKG)	Section	ED	0,1	
9869-9	HEART, HYPERTROPHY (NARRATIVE) (EKG)	Section	ED	0,1	
9872-3	HEART, MYOCARDIAL ISCHEMIA (NARRATIVE) (EKG)	Section	ED	0,1	
8626-4	HEART, P WAVE AXIS ANGLE (EKG)	OBS	PQ	0,1	
18506-6	HEART, P WAVE AXIS HORIZONTAL PLANE ANGLE (EKG)	OBS	PQ	0,1	
8627-2	HEART, P WAVE DURATION (EKG)	OBS	PQ	0,1	
18504-1	HEART, PP INTERVAL (EKG)	OBS	PQ	0,1	
8625-6	HEART, PR INTERVAL (EKG)	OBS	PQ	0,1	
8631-4	HEART, Q WAVE DURATION (EKG)	OBS	PQ	0,1	
8632-2	HEART, QRS AXIS ANGLE (EKG)	OBS	PQ	0,1	
18507-4	HEART, QRS AXIS HORIZONTAL PLANE ANGLE (EKG)	OBS	PQ	0,1	
9873-1	HEART, QRS COMPLEX (NARRATIVE) (EKG)	Section	ED	0,1	

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
8633-0	HEART, QRS DURATION (EKG)	OBS	PQ	0,1	
8634-8	HEART, QT INTERVAL (EKG)	OBS	PQ	0,1	
9874-9	HEART, RHYTHM SEGMENT (NARRATIVE) (EKG)	Section	ED	0,1	
18505-8	HEART, RR INTERVAL (EKG)	OBS	PQ	0,1	
18510-8	HEART, ST SEGMENT AXIS HORIZONTAL PLANE ANGLE (EKG)	OBS	PQ	0,1	
9875-6	HEART, ST-T SEGMENT (NARRATIVE) (EKG)	Section	ED	0,1	
18810-2	HEART, STUDY OBSERVATION OVERALL FINDING (NARRATIVE) (EKG)	Section	ED	0,1	
8638-9	HEART, T WAVE AXIS ANGLE (EKG)	OBS	PQ	0,1	
8621-5	HEART, VENTRICULAR ECTOPICS RATE (EKG)	OBS	PQ	0,1	
18845-8	REFERENCE BEAT TYPE (NARRATIVE) (EKG)	Section	ED	0,1	
18516-5	REFERENCE BEAT, P WAVE AXIS FRONTAL PLANE ANGLE (EKG)	OBS	PQ	0,1	
18512-4	REFERENCE BEAT, P WAVE OFFSET TIME (EKG)	OBS	PQ	0,1	
18511-6	REFERENCE BEAT, P WAVE ONSET TIME (EKG)	OBS	PQ	0,1	
18517-3	REFERENCE BEAT, QRS AXIS FRONTAL PLANE ANGLE (EKG)	OBS	PQ	0,1	
18514-0	REFERENCE BEAT, QRS OFFSET TIME (EKG)	OBS	PQ	0,1	
18513-2	REFERENCE BEAT, QRS ONSET TIME (EKG)	OBS	PQ	0,1	
18518-1	REFERENCE BEAT, T WAVE AXIS FRONTAL PLANE ANGLE (EKG)	OBS	PQ	0,1	
18515-7	REFERENCE BEAT, T WAVE OFFSET TIME (EKG)	OBS	PQ	0,1	
9876-4	VENTRICULAR MORPHOLOGY (NARRATIVE) (EKG)	Section	ED	0,1	

See the HIPAA task in RELMA for the full set of possible LOINC request codes.

3.2 Obstetrical Studies

3.2.1 OB Ultrasound Study

OB Ultrasounds can be sent in a general or specific report structure. The rules for sending general and specific structures are the same as for the preceding tables. The following table lists some of the codes that can be used to produce a specific structure for obstetrical ultrasounds. This table is provided as a sample of the OB Ultrasounds codes available within LOINC, but it is just a sample. To see the full set of LOINC codes available for reporting the OB Ultrasound content in a structured format look in the hierarchy beneath OB Ultrasound Study (11525-3) in the HIPAA task of RELMA.

Table 3.2.1 - OB Ultrasound Study

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
11525-3	OBSTETRICAL ULTRASOUND STUDY	DOC			
11727-5	FETUS, BODY WEIGHT (ULTRASOUND ESTIMATED)	OBS	PQ	0,1	
11636-8	BIRTHS LIVE (REPORTED)	OBS	PQ	0,1	
11637-6	BIRTHS PRETERM (REPORTED)	OBS	PQ	0,1	
11638-4	BIRTHS STILL LIVING (REPORTED)	OBS	PQ	0,1	
11639-2	BIRTHS TERM (REPORTED)	OBS	PQ	0,1	
11640-0	BIRTHS TOTAL (REPORTED)	OBS	PQ	0,1	
11867-9	CERVIX, EFFACEMENT PERCENTILE (PALPATION)	OBS	PQ	0,1	
11778-8	DELIVERY DATE (CLINICAL ESTIMATE)	OBS	TS	0,1	Precise to the day
11779-6	DELIVERY DATE (ESTIMATED FROM LAST MENSTRUAL PERIOD)	OBS	TS	0,1	Precise to the day
11780-4	DELIVERY DATE (ESTIMATED FROM OVULATION DATE)	OBS	TS	0,1	Precise to the day
11781-2	DELIVERY DATE (ULTRASOUND COMPOSITE ESTIMATED)	OBS	TS	0,1	Precise to the day
12145-9	ENDOMETRIUM, THICKNESS (ULTRASOUND MEASURED)	OBS	PQ	0,1	
18846-6	EXAMINATION LEVEL ULTRASOUND (NARRATIVE)	OBS	PQ	0,1	
11627-7	FETUS AMNIOTIC FLUID, INDEX SUM LENGTH (ULTRASOUND DERIVED)	OBS	PQ	0,1	
12167-3	FETUS AMNIOTIC FLUID, VOLUME AMNIOTIC FLUID (ULTRASOUND)	OBS	ST	0,1	
12171-5	FETUS HEAD LATERAL CEREBRAL VENTRICLES, WIDTH TRANSVERSE (ULTRASOUND MEASURED)	OBS	PQ	0,1	
12170-7	FETUS HEAD, WIDTH HEMISPHERE (ULTRASOUND MEASURED)	OBS	PQ	0,1	
11616-0	FETUS HEART, ACTIVITY FINDING (NARRATIVE) (ULTRASOUND)	Section	ED	0,1	
11618-6	FETUS LIMBS, ACTIVITY FINDING (NARRATIVE) (ULTRASOUND)	Section	ED	0,1	
12146-7	FETUS NUCHAL FOLD, THICKNESS (ULTRASOUND MEASURED)	OBS	PQ	0,1	
18851-6	FETUS PLACENTA, GRADE (NARRATIVE) (ULTRASOUND)	OBS	ST	0,1	

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
12147-5	FETUS PLACENTA, THICKNESS (ULTRASOUND MEASURED)	OBS	PQ	0,1	
11620-2	FETUS RESPIRATORY SYSTEM, ACTIVITY FINDING (NARRATIVE) (ULTRASOUND)	Section	ED	0,1	
11952-9	FETUS UMBILICAL CORD PLACENTA, INSERTION SITE FINDING (NARRATIVE) (ULTRASOUND)	Section	ED	0,1	
11766-3	FETUS, BODY WEIGHT PERCENTILE (COMP OF EST FETAL WGT W STD POP DIST AT SAME ESTGA)	OBS	PQ	0,1	
11768-9	FETUS, BODY WEIGHT PERCENTILE RANGE PERCENTILE (CATEGORIZATION BY COMPARISON WITH STANDARDS)	OBS	PQ	0,1	
11883-6	FETUS, GENDER FINDING (NARRATIVE) (ULTRASOUND)	OBS	CD	0,1	Use HL7 Administrative Gender
11884-4	FETUS, GESTATIONAL AGE (CLINICAL ESTIMATE)	OBS	PQ	0,1	
11885-1	FETUS, GESTATIONAL AGE (ESTIMATED FROM LAST MENSTRUAL PERIOD)	OBS	PQ	0,1	
11886-9	FETUS, GESTATIONAL AGE (ESTIMATED FROM OVULATION DATE)	OBS	PQ	0,1	
11887-7	FETUS, GESTATIONAL AGE (ESTIMATED FROM SELECTED DELIVERY DATE)	OBS	PQ	0,1	
11947-9	FETUS, HEAD CIRCUMFERENCE/ABDOMINAL CIRCUMFERENCE RATIO (ULTRASOUND DERIVED)	OBS	PQ	0,1	
11948-7	FETUS, HEART RATE (ULTRASOUND MEASURED)	OBS	PQ	0,1	
11950-3	FETUS, IDENTIFICATION CRITERIA FINDING (NARRATIVE) (ULTRASOUND)	Section	ED	0,1	
11949-5	FETUS, IDENTIFICATION CRITERIA FINDING (ULTRASOUND)	OBS	ST	0,1	
11951-1	FETUS, IDENTIFIER	OBS	ST	0,1	
11957-8	FETUS, LENGTH CROWN RUMP (ULTRASOUND MEASURED)	OBS	PQ	0,1	
12130-1	FETUS, STUDY OBSERVATION GENERAL (NARRATIVE) (ULTRASOUND)	Section	ED	0,1	
11878-6	FETUSES (ULTRASOUND)	OBS	PQ	0,1	
11955-2	LAST MENSTRUAL PERIOD DATE AND TIME (REPORTED)	OBS	TS	0,1	Precise to day
11767-1	MOTHER BODY WEIGHT PERCENTILE (COMP OF EST FETAL WGT W STD POP DIST AT SAME ESTGA)	OBS	PQ	0,1	
11769-7	MOTHER BODY WEIGHT PERCENTILE RANGE PERCENTILE (CATEGORIZATION BY COMPARISON WITH STANDARDS)	OBS	PQ	0,1	
11879-4	OVARY LEFT, FOLLICLES (ULTRASOUND)	OBS	PQ	0,1	

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
11880-2	OVARY RIGHT, FOLLICLES (ULTRASOUND)	OBS	PQ	0,1	
11976-8	OVULATION DATE (REPORTED)	OBS	TS	0,1	Precise to day
19021-5	PALPATION CERVIX, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
11977-6	PARITY (REPORTED)	OBS	PQ	0,1	
18847-4	PELVIS, FETAL POSITION (NARRATIVE) (PALPATION)	Section	ED	0,1	
18848-2	PELVIS, FETAL POSITION (NARRATIVE) (ULTRASOUND)	Section	ED	0,1	
18849-0	PELVIS, FETAL PRESENTATION (NARRATIVE) (PALPATION)	Section	ED	0,1	
18850-8	PELVIS, FETAL PRESENTATION (NARRATIVE) (ULTRASOUND)	Section	ED	0,1	
12132-7	STUDY OBSERVATION GENERAL (NARRATIVE) (ULTRASOUND)	Section	ED	0,1	
19008-2	TRANSDUCER SITE (NARRATIVE)	Section	ED	0,1	
12157-4	ULTRASONOGRAPHER GRAVIDITY NUMBER	OBS	PQ	0,1	
12029-5	ULTRASOUND FETUS ABDOMEN, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12030-3	ULTRASOUND FETUS ABDOMINAL WALL, STUDY OBSERVATION	OBS	ST	0,1	
12031-1	ULTRASOUND FETUS ABDOMINAL WALL, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12032-9	ULTRASOUND FETUS AORTA ASCENDING, STUDY OBSERVATION	OBS	ST	0,1	
12033-7	ULTRASOUND FETUS AORTA ASCENDING, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12034-5	ULTRASOUND FETUS AORTA DESCENDING, STUDY OBSERVATION	OBS	ST	0,1	
12035-2	ULTRASOUND FETUS AORTA DESCENDING, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12037-8	ULTRASOUND FETUS AORTA, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12039-4	ULTRASOUND FETUS AORTIC ARCH, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12041-0	ULTRASOUND FETUS CEREBELLUM, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12043-6	ULTRASOUND FETUS CEREBRUM, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12048-5	ULTRASOUND FETUS COLON, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12050-1	ULTRASOUND FETUS CRANIUM, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12052-7	ULTRASOUND FETUS DIAPHRAGM, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12054-3	ULTRASOUND FETUS DUCTAL ARCH, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12056-8	ULTRASOUND FETUS FACE, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
12058-4	ULTRASOUND FETUS HEAD CHOROID PLEXUS, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12059-2	ULTRASOUND FETUS HEAD FOURTH VENTRICLE, STUDY OBSERVATION	OBS	PQ	0,1	
12060-0	ULTRASOUND FETUS HEAD FOURTH VENTRICLE, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12062-6	ULTRASOUND FETUS HEAD INTRACRANIAL ANATOMY, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12064-2	ULTRASOUND FETUS HEAD LATERAL CEREBRAL VENTRICLES, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12070-9	ULTRASOUND FETUS HEAD, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12072-5	ULTRASOUND FETUS HEART AORTIC VALVE, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12073-3	ULTRASOUND FETUS HEART ATRIA, STUDY OBSERVATION	OBS	CD	0,1	
12074-1	ULTRASOUND FETUS HEART ATRIA, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12076-6	ULTRASOUND FETUS HEART CHAMBERS, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12078-2	ULTRASOUND FETUS HEART GREAT VESSELS, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12081-6	ULTRASOUND FETUS HEART MITRAL VALVE, STUDY OBSERVATION	OBS	PQ	0,1	
12082-4	ULTRASOUND FETUS HEART MITRAL VALVE, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12083-2	ULTRASOUND FETUS HEART PULMONARY VALVE, STUDY OBSERVATION	OBS	PQ	0,1	
12084-0	ULTRASOUND FETUS HEART TRICUSPID VALVE, STUDY OBSERVATION	OBS	PQ	0,1	
12087-3	ULTRASOUND FETUS HEART VALVES, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12088-1	ULTRASOUND FETUS HEART VENTRICULAR OUTFLOW TRACT LEFT, STUDY OBSERVATION	OBS	PQ	0,1	
12089-9	ULTRASOUND FETUS HEART VENTRICULAR OUTFLOW TRACT LEFT, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12090-7	ULTRASOUND FETUS HEART VENTRICULAR OUTFLOW TRACT RIGHT, STUDY OBSERVATION	OBS	PQ	0,1	
12091-5	ULTRASOUND FETUS HEART VENTRICULAR OUTFLOW TRACT RIGHT, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
12093-1	ULTRASOUND FETUS INTESTINE, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12095-6	ULTRASOUND FETUS KIDNEY LEFT, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12097-2	ULTRASOUND FETUS KIDNEY RIGHT, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12099-8	ULTRASOUND FETUS KIDNEY, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12101-2	ULTRASOUND FETUS LIMBS, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12103-8	ULTRASOUND FETUS NUCHAL FOLD, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12105-3	ULTRASOUND FETUS PULMONARY ARTERY, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12107-9	ULTRASOUND FETUS PULMONARY VEIN, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12109-5	ULTRASOUND FETUS SMALL BOWEL, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12111-1	ULTRASOUND FETUS SPINE, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12113-7	ULTRASOUND FETUS STOMACH, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12115-2	ULTRASOUND FETUS THORAX, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12117-8	ULTRASOUND FETUS UMBILICAL CORD, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12119-4	ULTRASOUND FETUS URINARY BLADDER, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12121-0	ULTRASOUND FETUS VENA CAVA INFERIOR, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12123-6	ULTRASOUND FETUS VENA CAVA SUPERIOR, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12125-1	ULTRASOUND FETUS VENA CAVA, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12128-5	ULTRASOUND FETUS YOLK SAC, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12066-7	ULTRASOUND MEASURED FETUS HEAD POSTERIOR FOSSA, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
12067-5	ULTRASOUND MEASURED FETUS HEAD THIRD VENTRICLE, STUDY OBSERVATION	OBS	PQ	0,1	
12068-3	ULTRASOUND MEASURED FETUS HEAD THIRD VENTRICLE, STUDY OBSERVATION (NARRATIVE)	Section	ED	0,1	
11881-0	UTERUS, FUNDAL HEIGHT (TAPE MEASURE)	OBS	PQ	0,1	

See the HIPAA task in RELMA for the full set of possible LOINC request codes.

3.3 Clinical Notes/Reports

3.3.1 Physician Hospital Discharge Summary (HOSP DISCH)

The rules for sending general and specific structures are the same as for the preceding tables.

Table 3.3.1 - Physician Hospital Discharge Summary

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
11490-0	PHYSICIAN HOSPITAL DISCHARGE SUMMARY	DOC		0,1	
8656-1	HOSPITAL ADMISSION DATE The <encompassingEncounter> element in the CDA Header records information about the encounter (e.g. the admission). /ClinicalDocument/componentOf/encompassingEncounter/effectiveTime/low/@value	ENC	TS	0,1	
8646-2	HOSPITAL ADMISSION DX /ClinicalDocument//section[@code='HOSPITAL ADMISSION DX NAR CODE' and @codeSystem = \$LOINC]/entry/observation[@code='8646-2' and @codeSystem = \$LOINC]/value/@code	OBS	CD	0,1	I9C
18841-7	HOSPITAL CONSULTATIONS (NARRATIVE)	Section	ED	0,1	
8648-8	HOSPITAL COURSE (NARRATIVE)	Section	ED	0,1	
8649-6	HOSPITAL DISCHARGE DATE /ClinicalDocument/componentOf/encompassingEncounter/effectiveTime/high/@value	ENC	TS	0,1	
8650-4	HOSPITAL DISCHARGE DISPOSITION (NARRATIVE)	Section	ED	0,1	
11535-2	HOSPITAL DISCHARGE DX (NARRATIVE)	Section	ED	0,1	
8651-2	HOSPITAL DISCHARGE DX /ClinicalDocument//section[@code='11535-2' and @codeSystem=\$LOINC]/entry//observation[@code='8651-2' and @codeSystem=\$LOINC]/@code	OBS	CD	0,n	I9C
11544-4	HOSPITAL DISCHARGE FOLLOWUP (NARRATIVE)	Section	ED	0,1	
18842-5	HOSPITAL DISCHARGE HISTORY (NARRATIVE)	Section	ED	0,1	
8653-8	HOSPITAL DISCHARGE INSTRUCTIONS TEXT (NARRATIVE)	Section	ED	0,1	
10183-2	HOSPITAL DISCHARGE MEDICATIONS (NARRATIVE)	Section	ED	0,1	
10184-0	HOSPITAL DISCHARGE PHYSICAL (NARRATIVE)	Section	ED	0,1	
10185-7	HOSPITAL DISCHARGE PROCEDURES (NARRATIVE)	Section	ED	0,1	
8655-3	HOSPITAL DISCHARGE PROCEDURES /ClinicalDocument//section[@code='10185-7' and @codeSystem=\$LOINC]/entry//observation[@code='8655-3' and @codeSystem=\$LOINC]/@code	OBS	CD	0,1	C4

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
11493-4	HOSPITAL DISCHARGE STUDIES SUMMARY (NARRATIVE)	Section	ED	0,1	
18776-5	TREATMENT PLAN, PLAN OF TREATMENT (NARRATIVE)	Section	ED	0,1	
11513-9	PROVIDER SIGNING - IDENTIFIER The <legalAuthenticator> element in the CDA Header records information about the signing of the document by the legally responsible party for the content. See section 3.7.4 Instance Identifier Data Type (II) in the <i>HL7 Additional Information Specification Implementation Guide</i> for more information. This element can be found using the following XPath expression: <code>/ClinicalDocument/legalAuthenticator/assignedEntity/id</code>	PART	II	0,1	NPI UPIN or other provider identifier
18771-6	PROVIDER SIGNING - NAME <code>/ClinicalDocument/legalAuthenticator/assignedEntity/assignedPerson/name</code>	PART	PN	0,1	
18775-7	PROVIDER, STAFF PRACTITIONER IDENTIFIER Repeat identifier and name as a pair when multiple staff practitioners are associated with the report. <code>/ClinicalDocument/author/assignedAuthor/id</code>	PART	II	0,1	NPI UPIN or other provider identifier
18774-0	PROVIDER, STAFF PRACTITIONER NAME <code>/ClinicalDocument/author/assignedAuthor/assignedPerson/name</code>	PART	PN	0,1	

See the HIPAA task in RELMA for the full set of possible LOINC request codes.

3.3.2 Operative Note (OP NOTE)

The rules for sending general and specific structures are the same as for the preceding tables.

Table 3.3.2 - Operative Note

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
11504-8	PROVIDER UNSPECIFIED OPERATIVE NOTE	DOC			
8723-9	DATE SURGERY The <serviceEvent> element in the clinical document header provides information about the service provided (the surgery). /ClinicalDocument/documentat ionOf/servi ceEven t/effecti veTime	ACT	IVL_TS	0,1	
8729-6	OPERATIVE NOTE - SURGICAL PROCEDURE The <serviceEvent> element in the clinical document header provides information about the service provided (the surgery). /ClinicalDocument/documentat ionOf/servi ceEven t/code/@code	OBS	CD	0,1	C4
10219-4	OPERATIVE NOTE - PREOPERATIVE DX (NARRATIVE)	Section	ED	0,n	
8720-5	OPERATIVE NOTE - PREOPERATIVE DX	OBS	CD	0,n	I9C
10218-6	OPERATIVE NOTE - POSTOPERATIVE DX (NARRATIVE)	Section	ED	0,n	
8719-7	OPERATIVE NOTE - POSTOPERATIVE DX	OBS	CD	0,n	I9C
10223-6	OPERATIVE NOTE - SURGICAL PROCEDURE (NARRATIVE)	Section	ED	0,1	
10213-7	OPERATIVE NOTE - ANESTHESIA (NARRATIVE)	Section	ED	0,1	
8722-1	OPERATIVE NOTE - ANESTHESIA	OBS	CD	0,1	C4
10214-5	OPERATIVE NOTE - ANESTHESIA DURATION	OBS	PQ	0,1	
10216-0	OPERATIVE NOTE - FLUIDS	Section	ED	0,1	
8717-1	OPERATIVE NOTE - ESTIMATED BLOOD LOSS VOL	OBS	PQ	0,1	
11537-8	OPERATIVE NOTE - SURGICAL DRAINS (NARRATIVE)	Section	ED	0,1	
10221-0	OPERATIVE NOTE - SPECIMENS TAKEN (NARRATIVE)	Section	ED	0,1	
10830-8	OPERATIVE NOTE - COMPLICATIONS	Section	ED	0,n	
10217-8	OPERATIVE NOTE - INDICATIONS	Section	ED	0,n	
10215-2	OPERATIVE NOTE - FINDINGS	Section	ED	0,1	
8724-7	OPERATIVE NOTE - SURGERY DESCRIPTION	Section	ED	0,1	
10220-2	OPERATIVE NOTE - PREP TIME DURATION	OBS	PQ	0,1	
8725-4	OPERATIVE NOTE - OPEN CLOSING DURATION	OBS	PQ	0,1	

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
11513-9	PROVIDER SIGNING - IDENTIFIER The <legalAuthenticator> element in the CDA Header records information about the signing of the document by the legally responsible party for the content. This element can be found using the following XPath expression: <code>/ClinicalDocument/legalAuthenticator/assignedEntity/id</code>	PART	II	0,1	NPI UPIN or other provider identifier
18771-6	PROVIDER SIGNING - NAME <code>/ClinicalDocument/legalAuthenticator/assignedEntity/assignedPerson/name</code>	PART	PN	0,1	
11531-1	SURGEON RESIDENT - IDENTIFIER <code>/ClinicalDocument/serviceEvent/performer[functionCode/@code = '']/assignedEntity/id</code>	PART	II	0,1	NPI UPIN or other provider identifier
18772-4	SURGEON RESIDENT - NAME <code>/ClinicalDocument/serviceEvent/performer[functionCode/@code = '']/assignedEntity/assignedPerson/name</code>	PART	PN	0,1	
11532-9	SURGEON STAFF - IDENTIFIER <code>/ClinicalDocument/serviceEvent/performer[@functionCode = '']/assignedEntity/id</code>	PART	II	0,1	NPI UPIN or other provider identifier
18773-2	SURGEON STAFF - NAME <code>/ClinicalDocument/serviceEvent/performer[@functionCode = '']/assignedEntity/id</code>	PART	PN	0,1	
11489-2	PROVIDER, DICTATING PRACTITIONER - IDENTIFIER <code>/ClinicalDocument/author/assignedAuthor/id</code>	PART	II	0,1	NPI UPIN or other provider identifier
18770-8	PROVIDER, DICTATING PRACTITIONER – NAME <code>/ClinicalDocument/author/assignedAuthor/assignedPerson/name</code>	PART	PN	0,1	

See the HIPAA task in RELMA for the full set of possible LOINC request codes.

3.3.3 Provider Unspecified History and Physical Note

The rules for sending general and specific structures are the same as for the preceding tables.

Table 3.3.3 - Provider Unspecified History & Physical Note

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
11492-6	PROVIDER UNSPECIFIED HISTORY AND PHYSICAL NOTE	DOC			
10154-3	CHIEF COMPLAINT	Section	ED	0,1	
8674-4	HISTORY SOURCE /Clinical Document/informant/relatedEntity/code/@code	PART	II	0,1	
8675-1	HISTORY TAKER /Clinical Document/author/assignedAuthor/id	PART	II	0,1	
10164-2	HISTORY OF PRESENT ILLNESS	Section	ED	0,1	
11322-5	HISTORY OF GENERAL HEALTH	Section	ED	0,1	
11320-9	FEEDING AND DIETARY STATUS	Section	ED	0,1	
11330-8	HISTORY OF ALCOHOL USE	Section	ED	0,1	
11287-0	ALCOHOLIC DRINKS PER DRINKING DAY	OBS	PQ	0,1	
11286-2	ALCOHOL BINGE EPISODES	OBS	PQ	0,1	
8658-7	HISTORY OF ALLERGIES	OBS	CD	0,1	
11382-9	MEDICATION ALLERGY	OBS	CD	0,1	
10156-8	HISTORY OF CHILDHOOD DISEASES	Section	ED	0,1	
11332-4	HISTORY OF COGNITIVE FUNCTION	Section	ED	0,1	
10157-6	HISTORY OF FAMILY MEMBER DISEASES	Section	ED	0,1	
10158-4	HISTORY OF FUNCTIONAL STATUS	Section	ED	0,1	
11334-0	HISTORY OF GROWTH AND DEVELOPMENT	Section	ED	0,1	
11336-5	HISTORY OF HOSPITALIZATIONS	Section	ED	0,1	
11369-6	HISTORY OF IMMUNIZATION	Section	ED	0,1	
10159-2	HISTORY OF INDUSTRIAL EXPOSURE	Section	ED	0,1	
11338-1	HISTORY OF MAJOR ILLNESSES AND INJURIES	Section	ED	0,1	
10160-0	HISTORY OF MEDICATION USE	Section	ED	0,1	
11340-7	HISTORY OF OCCUPATIONS	Section	ED	0,1	
10161-8	HISTORY OF OCCUPATIONAL EXPOSURE	Section	ED	0,1	
11342-3	HISTORY OF NONMEDICAL DRUG USE	Section	ED	0,1	
11344-9	HISTORY OF OTHER SOCIAL FACTORS	Section	ED	0,1	
11346-4	HISTORY OF OUTPATIENT VISITS	Section	ED	0,1	
11348-0	HISTORY OF PAST ILLNESS	Section	ED	0,1	
10162-6	HISTORY OF PREGNANCIES	Section	ED	0,1	
11449-6	PREGNANCY STATUS	OBS	CD	0,n	
8678-5	MENSTRUAL STATUS	OBS	CD	0,1	
8665-2	DATE LAST MENSTRUAL PERIOD	OBS	TS	0,1	
11350-6	HISTORY OF SEXUAL BEHAVIOR	Section	ED	0,1	
29762-2	SOCIAL HISTORY	Section	ED	0,1	
10166-7	HISTORY OF SOCIAL FUNCTION	Section	ED	0,1	
8659-5	BIRTH CONTROL METHOD	OBS	CD	0,1	
11294-6	CURRENT EMPLOYMENT	Section	ED	0,1	
11379-5	LEVEL OF EDUCATION	OBS	PQ	0,1	
11380-3	MARITAL STATUS AND LIVING ARRANGEMENTS	Section	ED	0,1	
10167-5	HISTORY OF SURGICAL PROCEDURES	Section	ED	0,1	
11366-2	HISTORY OF TOBACCO USE	Section	ED	0,1	
8663-7	CIGARETTES SMOKED, CURRENT (PACK/DAY)	OBS	PQ	0,1	
8664-5	CIGARETTES SMOKED, TOTAL (PACK/YR)	OBS	PQ	0,1	

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
10182-4	HISTORY OF TRAVEL	Section	ED	0,1	
10187-3	REVIEW OF SYSTEMS	Section	ED	0,1	
10188-1	REVIEW OF SYSTEMS OVERVIEW	Section	ED	0,1	
10171-7	EYES, HISTORY OF SYMPTOMS & DISEASES	Section	ED	0,1	
10169-1	EARS, HISTORY OF SYMPTOMS & DISEASES	Section	ED	0,1	
10174-1	NOSE, HISTORY OF SYMPTOMS & DISEASES	Section	ED	0,1	
10179-0	THROAT & NECK, HISTORY OF SYMPTOMS & DISEASES	Section	ED	0,1	
11354-8	EARS & NOSE & SINUSES & MOUTH & THROAT, HISTORY OF SYMPTOMS & DISEASES	Section	ED	0,1	
10175-8	ORAL CAVITY, HISTORY OF SYMPTOMS & DISEASES	Section	ED	0,1	
11353-0	BREASTS, HISTORY OF SYMPTOMS & DISEASES	Section	ED	0,1	
10181-6	URINARY TRACT, HISTORY OF SYMPTOMS & DISEASES	Section	ED	0,1	
10178-2	SKIN, HISTORY OF SYMPTOMS & DISEASES	Section	ED	0,1	
11352-2	ALLERGIC & IMMUNOLOGIC, HISTORY OF SYMPTOMS & DISEASES	Section	ED	0,1	
10165-9	HISTORY OF PSYCHIATRIC SYMPTOMS & DISEASES	Section	ED	0,1	
10177-4	CARDIOVASCULAR SYSTEM, HISTORY OF SYMPTOMS & DISEASES	Section	ED	0,1	
10168-3	RESPIRATORY SYSTEM, HISTORY OF SYMPTOMS & DISEASES	Section	ED	0,1	
10170-9	ENDOCRINE SYSTEM, HISTORY OF SYMPTOMS & DISEASES	Section	ED	0,1	
11355-5	GASTROINTESTINAL SYSTEM, HISTORY OF SYMPTOMS & DISEASES	Section	ED	0,1	
11356-3	GENITOURINARY SYSTEMS, HISTORY OF SYMPTOMS & DISEASES	Section	ED	0,1	
10176-6	REPRODUCTIVE SYSTEM, HISTORY OF SYMPTOMS & DISEASES	Section	ED	0,1	
11357-1	INTEGUMENTARY SYSTEM, HISTORY OF SYMPTOMS & DISEASES	Section	ED	0,1	
10172-5	HEMATOLOGIC SYSTEM, HISTORY OF SYMPTOMS & DISEASES	Section	ED	0,1	
10173-3	MUSCULOSKELETAL SYSTEM, HISTORY OF SYMPTOMS & DISEASES	Section	ED	0,1	
8672-8	NEUROLOGIC SYSTEM, HISTORY OF SYMPTOMS & DISEASES	Section	ED	0,1	
10210-3	GENERAL STATUS PHYSICAL FINDINGS	Section	ED	0,1	
8716-3	VITAL SIGNS, PHYSICAL FINDINGS	Section	ED	0,1	
10190-7	MENTAL STATUS	Section	ED	0,1	
11451-2	PSYCHIATRIC FINDINGS	Section	ED	0,1	
10199-8	HEAD, PHYSICAL FINDINGS	Section	ED	0,1	
10197-2	EYE, PHYSICAL FINDINGS	Section	ED	0,1	
10195-6	EAR, PHYSICAL FINDINGS	Section	ED	0,1	
10203-8	NOSE, PHYSICAL FINDINGS	Section	ED	0,1	
11393-6	EARS & NOSE & MOUTH & THROAT, PHYSICAL FINDINGS	Section	ED	0,1	
10201-2	MOUTH & THROAT & TEETH, PHYSICAL FINDINGS	Section	ED	0,1	
11411-6	NECK, PHYSICAL FINDINGS	Section	ED	0,1	

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
10207-9	THORAX & LUNGS, PHYSICAL FINDINGS	Section	ED	0,1	
11391-0	CHEST, PHYSICAL FINDINGS	Section	ED	0,1	
11392-8	CHEST WALL, PHYSICAL FINDINGS	Section	ED	0,1	
10200-4	HEART, PHYSICAL FINDINGS	Section	ED	0,1	
10193-1	BREASTS, PHYSICAL FINDINGS	Section	ED	0,1	
10192-3	BACK, PHYSICAL FINDINGS	Section	ED	0,1	
10191-5	ABDOMEN, PHYSICAL FINDINGS	Section	ED	0,1	
10204-6	PELVIS, PHYSICAL FINDINGS	Section	ED	0,1	
11403-3	GROIN, PHYSICAL FINDINGS	Section	ED	0,1	
10198-0	GENITOURINARY TRACT, PHYSICAL FINDINGS	Section	ED	0,1	
11400-9	GENITALIA, PHYSICAL FINDINGS	Section	ED	0,1	
11401-7	GENITALIA FEMALE, PHYSICAL FINDINGS	Section	ED	0,1	
11402-5	GENITALIA MALE, PHYSICAL FINDINGS	Section	ED	0,1	
11388-6	BUTTOCKS, PHYSICAL FINDINGS	Section	ED	0,1	
10205-3	RECTUM, PHYSICAL FINDINGS	Section	ED	0,1	
10196-4	EXTREMITIES, PHYSICAL FINDINGS	Section	ED	0,1	
11413-2	SHOULDER, PHYSICAL FINDINGS	Section	ED	0,1	
11387-8	AXILLA, PHYSICAL FINDINGS	Section	ED	0,1	
11386-0	UPPER ARM, PHYSICAL FINDINGS	Section	ED	0,1	
11394-4	ELBOW, PHYSICAL FINDINGS	Section	ED	0,1	
11398-5	FOREARM, PHYSICAL FINDINGS	Section	ED	0,1	
11415-7	WRIST, PHYSICAL FINDINGS	Section	ED	0,1	
11404-1	HAND, PHYSICAL FINDINGS	Section	ED	0,1	
11406-6	HIP, PHYSICAL FINDINGS	Section	ED	0,1	
11414-0	THIGH, PHYSICAL FINDINGS	Section	ED	0,1	
11407-4	KNEE, PHYSICAL FINDINGS	Section	ED	0,1	
11389-4	CALF, PHYSICAL FINDINGS	Section	ED	0,1	
11385-2	ANKLE, PHYSICAL FINDINGS	Section	ED	0,1	
11397-7	FOOT, PHYSICAL FINDINGS	Section	ED	0,1	
10209-5	BALANCE+COORDINATION, PHYSICAL FINDINGS	Section	ED	0,1	
10212-9	STRENGTH PHYSICAL FINDINGS	Section	ED	0,1	
10211-1	SENSATION, PHYSICAL FINDINGS	Section	ED	0,1	
10206-1	SKIN, PHYSICAL FINDINGS	Section	ED	0,1	
10194-9	DEEP TENDON REFLEXES, PHYSICAL FINDINGS	Section	ED	0,1	
10208-7	VESSELS, PHYSICAL FINDINGS	Section	ED	0,1	
11384-5	PHYSICAL EXAMINATION BY ORGAN SYSTEMS	Section	ED	0,1	
11447-0	HEMATOLOGIC+LYMPHATIC+IMMUNOLOGIC PHYSICAL FINDINGS	Section	ED	0,1	
11390-2	CARDIOVASCULAR SYSTEM, PHYSICAL FINDINGS	Section	ED	0,1	
11399-3	GASTROINTESTINAL SYSTEM, PHYSICAL FINDINGS	Section	ED	0,1	
10202-0	NEUROLOGIC SYSTEM, PHYSICAL FINDINGS	Section	ED	0,1	
11410-8	MUSCULOSKELETAL SYSTEM, PHYSICAL FINDINGS	Section	ED	0,1	
10186-5	IDENTIFYING INFORMATION	Section	ED	0,1	
11383-7	PATIENT PROBLEM OUTCOME	Section	ED	0,1	
11450-4	PROBLEM LIST	OBS	CD	0,1	
18630-4	PRIMARY DIAGNOSIS	OBS	CD	0,n	I9C

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
18776-5	TREATMENT PLAN, PLAN OF TREATMENT (NARRATIVE)	Section	ED	0,1	
11513-9	PROVIDER SIGNING - IDENTIFIER The <legalAuthenticator> element in the CDA Header records information about the signing of the document by the legally responsible party for the content. This element can be found using the following XPath expression: <code>/ClinicalDocument/legalAuthenticator/assignedEntity/id</code>	PART	II	0,1	NPI UPIN or other provider identifier
18771-6	PROVIDER SIGNING - NAME <code>/ClinicalDocument/legalAuthenticator/assignedEntity/assignedPerson/name</code>	PART	PN	0,1	
18775-7	PROVIDER, STAFF PRACTITIONER IDENTIFIER Repeat identifier and name as a pair when multiple staff practitioners are associated with the report. <code>/ClinicalDocument/componentOf/encounteringEncounter/responsibleParty/assignedEntity/id</code>	PART	II	0,1	NPI UPIN or other provider identifier
18774-0	PROVIDER, STAFF PRACTITIONER NAME <code>/ClinicalDocument/componentOf/encounteringEncounter/responsibleParty/assignedEntity/assignedPerson/name</code>	PART	PN	0,1	
11489-2	PROVIDER, DICTATING PRACTITIONER - IDENTIFIER <code>/ClinicalDocument/author/assignedAuthor/id</code>	PART	II	0,1	NPI UPIN or other provider identifier
18770-8	PROVIDER, DICTATING PRACTITIONER – NAME <code>/ClinicalDocument/author/assignedAuthor/assignedPerson/name</code>	PART	PN	0,1	

See the HIPAA task in RELMA for the full set of possible LOINC request codes.

3.4 Radiology Studies

All radiology studies can be sent as a general or as a specific structure and they all use the same specific structure. You can see these defined in the HIPAA task in RELMA. The following shows the specific structure for a small sample of Radiology studies. Note that the structure is identical for all of these radiology reports. This radiology specific structure is present under every radiology report code in RELMA.

3.4.1 Cervical Spine X-Ray

The rules for sending general and specific structures are the same as for the preceding tables.

Table 3.4.1 – Cervical Spine X-Ray

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
24946-6	X-RAY CERVICAL SPINE STUDY	DOC			
18781-5	PROVIDER, ORDERING PRACTITIONER NAME /ClinicalDocument/participant[@typeCode='REF']/associatedEntity/associatedPerson/name	PART	PN	0,1	
18780-7	PROVIDER, ORDERING PRACTITIONER IDENTIFIER /ClinicalDocument/participant[@typeCode='REF']/associatedEntity/id	PART	II	0,1	NPI UPIN or other provider identifier
18785-6	RADIOLOGY REASON FOR STUDY	Section	ED	0,1	
18834-2	RADIOLOGY COMPARISON STUDY OBSERVATION (COMPOSITE) Comparison information from a prior study to the current study includes both the comparison observation information and the date/time of the prior study.	OBS		0,1	
	RADIOLOGY COMPARISON STUDY OBSERVATION /ClinicalDocument//section[code/@code="18834-2" and code/@codeSystem=\$LOINC]//observation[code/@code="18834-2" and code/@codeSystem=\$LOINC]/text		ED		
	RADIOLOGY COMPARISON STUDY - DATE AND TIME /ClinicalDocument//section[code/@code="18834-2" and code/@codeSystem=\$LOINC]//observation[code/@code="18834-2" and code/@codeSystem=\$LOINC]/effectiveTime		TS		
18782-3	RADIOLOGY - STUDY OBSERVATION	Section	ED	0,1	
19005-8	RADIOLOGY - IMPRESSION	Section	ED	0,1	
18783-1	RADIOLOGY STUDY - RECOMMENDATION	Section	ED	0,1	

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
11513-9	PROVIDER SIGNING - IDENTIFIER The <legalAuthenticator> element in the CDA Header records information about the signing of the document by the legally responsible party for the content. This element can be found using the following XPath expression: /ClinicalDocument/legalAuthenticator/assignedEntity/id	PART	II	0,1	NPI UPIN or other provider identifier
18771-6	PROVIDER SIGNING - NAME /ClinicalDocument/legalAuthenticator/assignedEntity/assignedPerson/name	PART	PN	0,1	
11489-2	PROVIDER, DICTATING PRACTITIONER - IDENTIFIER /ClinicalDocument/author/assignedAuthor/id	PART	II	0,1	NPI UPIN or other provider identifier
18770-8	PROVIDER, DICTATING PRACTITIONER – NAME /ClinicalDocument/author/assignedAuthor/assignedPerson/name	PART	PN	0,1	

3.4.2 CT Study Head

The rules for sending general and specific structures are the same as for the preceding tables.

Table 3.4.2 – CT Study Head

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
11539-4	CT HEAD STUDY	DOC			
18781-5	PROVIDER, ORDERING PRACTITIONER NAME /ClinicalDocument/participant[@typeCode='REF']/associatedEntity/associatedPerson/name	PART	PN	0,1	
18780-7	PROVIDER, ORDERING PRACTITIONER IDENTIFIER /ClinicalDocument/participant[@typeCode='REF']/associatedEntity/id	PART	II	0,1	NPI UPIN or other provider identifier
18785-6	RADIOLOGY REASON FOR STUDY -	Section	ED	0,1	
18834-2	RADIOLOGY COMPARISON STUDY OBSERVATION (COMPOSITE) Comparison information from a prior study to the current study includes both the comparison observation information and the date/time of the prior study. RADIOLOGY COMPARISON STUDY OBSERVATION /ClinicalDocument//section[code/@code="18834-2" and code/@codeSystem=\$LOINC]//observation[code/@code="18834-2" and code/@codeSystem=\$LOINC]/text	OBS	ED	0,1	
	RADIOLOGY COMPARISON STUDY - DATE AND TIME /ClinicalDocument//section[code/@code="18834-2" and code/@codeSystem=\$LOINC]//observation[code/@code="18834-2" and code/@codeSystem=\$LOINC]/effectiveTime		TS		
18782-3	RADIOLOGY - STUDY OBSERVATION	Section	ED	0,1	
19005-8	RADIOLOGY - IMPRESSION	Section	ED	0,1	
18783-1	RADIOLOGY STUDY - RECOMMENDATION	Section	ED	0,1	
11513-9	PROVIDER SIGNING - IDENTIFIER The <legalAuthenticator> element in the CDA Header records information about the signing of the document by the legally responsible party for the content. This element can be found using the following XPath expression: /ClinicalDocument/legalAuthenticator/assignedEntity/id	PART	II	0,1	NPI UPIN or other provider identifier
18771-6	PROVIDER SIGNING - NAME /ClinicalDocument/legalAuthenticator/assignedEntity/assignedPerson/name	PART	PN	0,1	

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
11489-2	PROVIDER, DICTATING PRACTITIONER - IDENTIFIER /Clinical Document/author/assignedAuthor/id	PART	II	0,1	NPI UPIN or other provider identifier
18770-8	PROVIDER, DICTATING PRACTITIONER – NAME /Clinical Document/author/assignedAuthor/assignedPerson/name	PART	PN	0,1	

3.4.3 CT Study Extremity

The rules for sending general and specific structures are the same as for the preceding tables.

Table 3.4.3 - CT Study Extremity

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
24690-0	CT EXTREMITY STUDY	DOC			
18781-5	PROVIDER, ORDERING PRACTITIONER NAME /ClinicalDocument/participant[@typeCode='REF']/associatedEntity/associatedPerson/name	PART	PN	0,1	
18780-7	PROVIDER, ORDERING PRACTITIONER IDENTIFIER /ClinicalDocument/participant[@typeCode='REF']/associatedEntity/id	PART	II	0,1	NPI UPIN or other provider identifier
18785-6	RADIOLOGY REASON FOR STUDY -	Section	ED	0,1	
18834-2	RADIOLOGY COMPARISON STUDY OBSERVATION (COMPOSITE) Comparison information from a prior study to the current study includes both the comparison observation information and the date/time of the prior study.	OBS		0,1	
	RADIOLOGY COMPARISON STUDY OBSERVATION /ClinicalDocument//section[code/@code="18834-2" and code/@codeSystem=\$LOINC]//observation[code/@code="18834-2" and code/@codeSystem=\$LOINC]/text		ED		
	RADIOLOGY COMPARISON STUDY - DATE AND TIME /ClinicalDocument//section[code/@code="18834-2" and code/@codeSystem=\$LOINC]//observation[code/@code="18834-2" and code/@codeSystem=\$LOINC]/effectiveTime		TS		
18782-3	RADIOLOGY - STUDY OBSERVATION	Section	ED	0,1	
19005-8	RADIOLOGY - IMPRESSION	Section	ED	0,1	
18783-1	RADIOLOGY STUDY - RECOMMENDATION	Section	ED	0,1	
11513-9	PROVIDER SIGNING - IDENTIFIER The <legalAuthenticator> element in the CDA Header records information about the signing of the document by the legally responsible party for the content. This element can be found using the following XPath expression: /ClinicalDocument/legalAuthenticator/assignedEntity/id	PART	II	0,1	NPI UPIN or other provider identifier
18771-6	PROVIDER SIGNING - NAME /ClinicalDocument/legalAuthenticator/assignedEntity/assignedPerson/name	PART	PN	0,1	

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
11489-2	PROVIDER, DICTATING PRACTITIONER - IDENTIFIER /Clinical Document/author/assignedAuthor/id	PART	II	0,1	NPI UPIN or other provider identifier
18770-8	PROVIDER, DICTATING PRACTITIONER – NAME /Clinical Document/author/assignedAuthor/assignedPerson/name	PART	PN	0,1	

3.4.4 MRI Study Head

The rules for sending general and specific structures are the same as for the preceding tables.

Table 3.4.4- MRI Study Head

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
11541-0	MRI HEAD STUDY	DOC			
18781-5	PROVIDER, ORDERING PRACTITIONER NAME /ClinicalDocument/participant[@typeCode='REF']/associatedEntity/associatedPerson/name	PART	PN	0,1	
18780-7	PROVIDER, ORDERING PRACTITIONER IDENTIFIER /ClinicalDocument/participant[@typeCode='REF']/associatedEntity/id	PART	II	0,1	NPI UPIN or other provider identifier
18785-6	RADIOLOGY REASON FOR STUDY	Section	ED	0,1	
18834-2	RADIOLOGY COMPARISON STUDY OBSERVATION (COMPOSITE) Comparison information from a prior study to the current study includes both the comparison observation information and the date/time of the prior study.	OBS		0,1	
	RADIOLOGY COMPARISON STUDY OBSERVATION /ClinicalDocument//section[code/@code="18834-2" and code/@codeSystem=\$LOINC]//observation[code/@code="18834-2" and code/@codeSystem=\$LOINC]/text		ED		
	RADIOLOGY COMPARISON STUDY - DATE AND TIME /ClinicalDocument//section[code/@code="18834-2" and code/@codeSystem=\$LOINC]//observation[code/@code="18834-2" and code/@codeSystem=\$LOINC]/effectiveTime		TS		
18782-3	RADIOLOGY - STUDY OBSERVATION	Section	ED	0,1	
19005-8	RADIOLOGY - IMPRESSION	Section	ED	0,1	
18783-1	RADIOLOGY STUDY - RECOMMENDATION	Section	ED	0,1	
11513-9	PROVIDER SIGNING - IDENTIFIER The <legalAuthenticator> element in the CDA Header records information about the signing of the document by the legally responsible party for the content. This element can be found using the following XPath expression: /ClinicalDocument/legalAuthenticator/assignedEntity/id	PART	II	0,1	NPI UPIN or other provider identifier
18771-6	PROVIDER SIGNING - NAME /ClinicalDocument/legalAuthenticator/assignedEntity/assignedPerson/name	PART	PN	0,1	

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
11489-2	PROVIDER, DICTATING PRACTITIONER - IDENTIFIER /Clinical Document/author/assignedAuthor/id	PART	II	0,1	NPI UPIN or other provider identifier
18770-8	PROVIDER, DICTATING PRACTITIONER – NAME /Clinical Document/author/assignedAuthor/assignedPerson/name	PART	PN	0,1	

3.4.5 Mammogram Screening Study

The rules for sending general and specific structures are the same as for the preceding tables.

Table 3.4.5- Mammogram Screening Study

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
24606-6	MAMMOGRAM SCREENING STUDY	DOC			
18781-5	PROVIDER, ORDERING PRACTITIONER NAME /ClinicalDocument/participant[@typeCode='REF']/associatedEntity/associatedPerson/name	PART	PN	0,1	
18780-7	PROVIDER, ORDERING PRACTITIONER IDENTIFIER /ClinicalDocument/participant[@typeCode='REF']/associatedEntity/id	PART	II	0,1	NPI UPIN or other provider identifier
18785-6	RADIOLOGY REASON FOR STUDY	Section	ED	0,1	
18834-2	RADIOLOGY COMPARISON STUDY OBSERVATION (COMPOSITE) Comparison information from a prior study to the current study includes both the comparison observation information and the date/time of the prior study.	OBS		0,1	
	RADIOLOGY COMPARISON STUDY OBSERVATION /ClinicalDocument//section[code/@code="18834-2" and code/@codeSystem=\$LOINC]//observation[code/@code="18834-2" and code/@codeSystem=\$LOINC]/text		ED		
	RADIOLOGY COMPARISON STUDY - DATE AND TIME /ClinicalDocument//section[code/@code="18834-2" and code/@codeSystem=\$LOINC]//observation[code/@code="18834-2" and code/@codeSystem=\$LOINC]/effectiveTime		TS		
18782-3	RADIOLOGY - STUDY OBSERVATION	Section	ED	0,1	
19005-8	RADIOLOGY - IMPRESSION	Section	ED	0,1	
18783-1	RADIOLOGY STUDY - RECOMMENDATION	Section	ED	0,1	
11513-9	PROVIDER SIGNING - IDENTIFIER The <legalAuthenticator> element in the CDA Header records information about the signing of the document by the legally responsible party for the content. This element can be found using the following XPath expression: /ClinicalDocument/legalAuthenticator/assignedEntity/id	PART	II	0,1	NPI UPIN or other provider identifier
18771-6	PROVIDER SIGNING - NAME /ClinicalDocument/legalAuthenticator/assignedEntity/assignedPerson/name	PART	PN	0,1	

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
11489-2	PROVIDER, DICTATING PRACTITIONER - IDENTIFIER /Clinical Document/author/assignedAuthor/id	PART	II	0,1	NPI UPIN or other provider identifier
18770-8	PROVIDER, DICTATING PRACTITIONER – NAME /Clinical Document/author/assignedAuthor/assignedPerson/name	PART	PN	0,1	

3.4.6 Nuclear Medicine Bone Scan Study

The rules for sending general and specific structures are the same as for the preceding tables.

Table 3.4.6- Nuclear Medicine Bone Scan Study

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
25031-6 18781-5	NUCLEAR MEDICINE BONE SCAN STUDY PROVIDER, ORDERING PRACTITIONER NAME /ClinicalDocument/participant[@typeCode='REF']/associatedEntity/associatedPerson/name	DOC PART	PN	0,1	
18780-7	PROVIDER, ORDERING PRACTITIONER IDENTIFIER /ClinicalDocument/participant[@typeCode='REF']/associatedEntity/id	PART	II	0,1	NPI UPIN or other provider identifier
18785-6 18834-2	RADIOLOGY REASON FOR STUDY RADIOLOGY COMPARISON STUDY OBSERVATION (COMPOSITE) Comparison information from a prior study to the current study includes both the comparison observation information and the date/time of the prior study.	Section OBS	ED	0,1 0,1	
	RADIOLOGY COMPARISON STUDY OBSERVATION /ClinicalDocument//section[code/@code="18834-2" and code/@codeSystem=\$LOINC]//observation[code/@code="18834-2" and code/@codeSystem=\$LOINC]/text		ED		
	RADIOLOGY COMPARISON STUDY - DATE AND TIME /ClinicalDocument//section[code/@code="18834-2" and code/@codeSystem=\$LOINC]//observation[code/@code="18834-2" and code/@codeSystem=\$LOINC]/effectiveTime		TS		
18782-3	RADIOLOGY - STUDY OBSERVATION	Section	ED	0,1	
19005-8	RADIOLOGY - IMPRESSION	Section	ED	0,1	
18783-1	RADIOLOGY STUDY - RECOMMENDATION	Section	ED	0,1	
11513-9	PROVIDER SIGNING - IDENTIFIER The <legalAuthenticator> element in the CDA Header records information about the signing of the document by the legally responsible party for the content. This element can be found using the following XPath expression: /ClinicalDocument/legalAuthenticator/assignedEntity/id	PART	II	0,1	NPI UPIN or other provider identifier
18771-6	PROVIDER SIGNING - NAME /ClinicalDocument/legalAuthenticator/assignedEntity/assignedPerson/name	PART	PN	0,1	

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
11489-2	PROVIDER, DICTATING PRACTITIONER - IDENTIFIER /Clinical Document/author/assignedAuthor/id	PART	II	0,1	NPI UPIN or other provider identifier
18770-8	PROVIDER, DICTATING PRACTITIONER – NAME /Clinical Document/author/assignedAuthor/assignedPerson/name	PART	PN	0,1	

3.4.7 CT Guidance for Aspiration Study, Unspecified Site

The rules for sending general and specific structures are the same as for the preceding tables.

Table 3.4.7 - CT Guidance for Aspiration Study, Unspecified Site

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
25043-1	CT GUIDANCE FOR ASPIRATION OF UNSPECIFIED SITE STUDY	DOC			
18781-5	PROVIDER, ORDERING PRACTITIONER NAME /ClinicalDocument/participant[@typeCode='REF']/associatedEntity/associatedPerson/name	PART	PN	0,1	
18780-7	PROVIDER, ORDERING PRACTITIONER IDENTIFIER /ClinicalDocument/participant[@typeCode='REF']/associatedEntity/id	PART	II	0,1	NPI UPIN or other provider identifier
18785-6	RADIOLOGY REASON FOR STUDY	Section	ED	0,1	
18834-2	RADIOLOGY COMPARISON STUDY OBSERVATION (COMPOSITE) Comparison information from a prior study to the current study includes both the comparison observation information and the date/time of the prior study.	OBS		0,1	
	RADIOLOGY COMPARISON STUDY OBSERVATION /ClinicalDocument//section[code/@code="18834-2" and code/@codeSystem=SL0INC]//observation[code/@code="18834-2" and code/@codeSystem=SL0INC]/text		ED		
	RADIOLOGY COMPARISON STUDY - DATE AND TIME /ClinicalDocument//section[code/@code="18834-2" and code/@codeSystem=SL0INC]//observation[code/@code="18834-2" and code/@codeSystem=SL0INC]/effectiveTime		TS		
18782-3	RADIOLOGY - STUDY OBSERVATION	Section	ED	0,1	
19005-8	RADIOLOGY - IMPRESSION	Section	ED	0,1	
18783-1	RADIOLOGY STUDY - RECOMMENDATION	Section	ED	0,1	
11513-9	PROVIDER SIGNING - IDENTIFIER The <legalAuthenticator> element in the CDA Header records information about the signing of the document by the legally responsible party for the content. This element can be found using the following XPath expression: /ClinicalDocument/legalAuthenticator/assignedEntity/id	PART	II	0,1	NPI UPIN or other provider identifier
18771-6	PROVIDER SIGNING - NAME /ClinicalDocument/legalAuthenticator/assignedEntity/assignedPerson/name	PART	PN	0,1	

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
11489-2	PROVIDER, DICTATING PRACTITIONER - IDENTIFIER /Clinical Document/author/assignedAuthor/id	PART	II	0,1	NPI UPIN or other provider identifier
18770-8	PROVIDER, DICTATING PRACTITIONER – NAME /Clinical Document/author/assignedAuthor/assignedPerson/name	PART	PN	0,1	

3.4.8 Ultrasound Study of Neck

The rules for sending general and specific structures are the same as for the preceding tables.

Table 3.4.8- Ultrasound Study of Neck

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
24842-7	ULTRASOUND NECK STUDY	DOC			
18781-5	PROVIDER, ORDERING PRACTITIONER NAME /ClinicalDocument/participant[@typeCode='REF']/associatedEntity/associatedPerson/name	PART	PN	0,1	
18780-7	PROVIDER, ORDERING PRACTITIONER IDENTIFIER /ClinicalDocument/participant[@typeCode='REF']/associatedEntity/id	PART	II	0,1	NPI UPIN or other provider identifier
18785-6	RADIOLOGY REASON FOR STUDY	Section	ED	0,1	
18834-2	RADIOLOGY COMPARISON STUDY OBSERVATION (COMPOSITE) Comparison information from a prior study to the current study includes both the comparison observation information and the date/time of the prior study.	OBS		0,1	
	RADIOLOGY COMPARISON STUDY OBSERVATION /ClinicalDocument//section[code/@code="18834-2" and code/@codeSystem=\$LOINC]//observation[code/@code="18834-2" and code/@codeSystem=\$LOINC]/text		ED		
	RADIOLOGY COMPARISON STUDY - DATE AND TIME /ClinicalDocument//section[code/@code="18834-2" and code/@codeSystem=\$LOINC]//observation[code/@code="18834-2" and code/@codeSystem=\$LOINC]/effectiveTime		TS		
18782-3	RADIOLOGY - STUDY OBSERVATION	Section	ED	0,1	
19005-8	RADIOLOGY - IMPRESSION	Section	ED	0,1	
18783-1	RADIOLOGY STUDY - RECOMMENDATION	Section	ED	0,1	
11513-9	PROVIDER SIGNING - IDENTIFIER The <legalAuthenticator> element in the CDA Header records information about the signing of the document by the legally responsible party for the content. This element can be found using the following XPath expression: /ClinicalDocument/legalAuthenticator/assignedEntity/id	PART	II	0,1	NPI UPIN or other provider identifier
18771-6	PROVIDER SIGNING - NAME /ClinicalDocument/legalAuthenticator/assignedEntity/assignedPerson/name	PART	PN	0,1	

LOINC code	Short Name	Entry Type	Data Type	Card	Response Code or Numeric Units
11489-2	PROVIDER, DICTATING PRACTITIONER - IDENTIFIER /Clinical Document/author/assignedAuthor/id	PART	II	0,1	NPI UPIN or other provider identifier
18770-8	PROVIDER, DICTATING PRACTITIONER – NAME /Clinical Document/author/assignedAuthor/assignedPerson/name	PART	PN	0,1	

4 Coding Examples

4.1 Scenario

A message was created on August 14, 2006 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 provider is Ken Cure, MD, who is identified as ID number A522 by the hospital. Dr. Cure signed the note on 30 October 2006 at 12:53 PM.

The document contains a discharge note identified by LOINC code 11490-0.

The claim associated with this CDA document is identified by the value XA728302 in data element TRN02-Attachment Control Number of Loop 2000A-Payer/Provider Control Number.

4.1.1 *General report format (Human-Decision Variant)*

The HDV XML example file of a CDA document that will be included within the 275 response can be found in the **clinrpthdv.xml** file included with the supplemental files available with these documents. The file includes comments that explain the various sections of the CDA structure and contents.

Figure 1 below contains a screen shot of this CDA document as rendered in a commonly used Web browser using the current HL7-supplied XSL style sheet.

4.1.2 *General report format (Computer-Decision Variant)*

The CDV XML example file of a CDA document that will be included within the 275 response can be found in the **clinrptcdv.xml** file included with the supplemental files available with these documents. The file includes comments that explain the various sections of the CDA structure and contents.

Figure 1 contains a screen shot of this CDA document as rendered in a commonly used Web browser using the current HL7-supplied XSL style sheet.

Figure 1. Hospital discharge summary.

Discharge Summary	
Patient: Patient Sample	MRN: 184569
	Sex: Female
Consultant: Ken Cure , MD	Created On: August 14, 2006
HOSPITAL DISCHARGE DX	
<ul style="list-style-type: none">• Metastatic breast cancer• Malignant pleural effusion	
HOSPITAL DISCHARGE PROCEDURES	
<ol style="list-style-type: none">1. Thoracoscopy with chest tube placement and pleurodesis.	
HISTORY OF PRESENT ILLNESS	
<p>The patient is a very pleasant, 70-year-old female with a history of breast cancer that was originally diagnosed in the early 80's. At that time she had a radical mastectomy with postoperative radiotherapy. In the mid 80's she developed a chest wall recurrence and was treated with further radiation therapy. She then went without evidence of disease for many years until the late 90's 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 the mid-2000's and was recently found to be 600.</p>	
HOSPITAL DISCHARGE PHYSICAL FINDINGS	
<p>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 not peripheral clubbing, cyanosis or edema.</p>	
HOSPITAL DISCHARGE STUDIES SUMMARY	
<p>A chest x-ray showed a large pleural effusion on the right.</p>	
HOSPITAL COURSE	
<p>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, wafter which a TALC slurry was infused ant the cheest 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.</p> <p>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</p>	
HOSPITAL DISCHARGE FOLLOWUP	
<p>The patient is being transferred to an extended-care facility near her 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 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.</p> <p>She is being discharged on Tylenol with Codeine as needed for pain, Megace, and a Multivitamin. Shit will have a follow-up appointment with Dr. Follow in three weeks with a chest X-ray. The have been instructed to call us in the interim should there be any problems.</p> <p>Signed by: Ken Cure , MD on October 30, 2006</p>	

5 Response Code Sets

This section describes response codes that may be used in the computer-decision variant when the value table indicates a coded with exception (CE) data type or to represent units when the attachment component is of the numeric (NM) data type. The entry in the value table that refers to these code sets is used in the subsection titles.

The values for some code sets appear directly in this document. In other cases, the section cites another document as the source.

5.1 Placeholder OIDs Used in Examples

Some of the OIDs used in the narrative and examples of this specification are placeholder or demonstration ones. They will need to be changed upon site-specific implementation. The “HL7 Example” OID root is used for this purpose. The placeholder OIDs in this specification are:

Site-specific OIDs – these must change during implementation of the specification:

- 2.16.840.1.113883.19.2744.1.1 - representing the assigner of the CDA document instance ID
- 2.16.840.1.113883.19.2744.1.2 - representing the assigner of the patient identifier (may be appended with .1, .2, .3, etc. if an example shows multiple patient identifiers assigned by different assigners)
- 2.16.840.1.113883.19.2744.1.3 - representing the assigner of the doctor/provider identifier (may be appended with .1, .2, .3, etc. if an example shows multiple provider identifiers assigned by different assigners)
- 2.16.840.1.113883.19.2744.1.4 - representing the assigner of the visit/encounter
- 2.16.840.1.113883.19.2744.1.5 - representing the assigner of the attachment control number

5.2 C4: HCPCS

Healthcare Common Procedure Coding System.

HCPCS is Centers for Medicare & Medicaid Service's (CMS) coding scheme to group procedures and services performed for payment to providers. Centers for Medicare & Medicaid Services, 7500 Security Boulevard, Baltimore, MD 21244

The OID for this table is 2.16.840.1.113883.6.14.

5.3 I9C: ICD-9-CM

International Classification of Diseases, Clinical Modification.

The OID for this table is 2.16.840.1.113883.6.103.

The International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM), Volumes I, II (diagnoses) describes the classification of morbidity and mortality information for statistical purposes and for the indexing of healthcare records by diseases.

5.4 I10C: ICD-10-CM

International Classification of Diseases, Clinical Modification.

The OID for this table is ICD-10-CM - 2.16.840.1.113883.6.90.

The International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM), describes the classification of morbidity and mortality information for statistical purposes and for the indexing of healthcare records by diseases.

5.5 UCUM: Unified Code for Units of Measure

The Unified Code for Units of Measure is a code system intended to include all units of measures being contemporarily used in international science, engineering, and business. The purpose is to facilitate unambiguous electronic communication of quantities together with their units. The focus is on electronic communication, as opposed to communication between humans. A typical application of The Unified Code for Units of Measure is electronic data interchange (EDI) protocols, but there is nothing that prevents it from being used in other types of machine communication.

Due to its length the table is included in the *HL7 Additional Information Specification Implementation Guide* rather than in this *Additional Information Specification*.

Any use of UCUM is fixed by HL7 data types; therefore, an OID is not needed.

5.6 NPI: National Provider ID

On January 23, 2004, the Secretary of HHS published a final rule (Federal Register volume 69, page 3434) which establishes the standard for a unique health identifier for health care providers for use in the health care system, and announces the adoption of the National Provider Identifier (NPI) as that standard. It also establishes the implementation specifications for obtaining and using the standard unique health identifier for health care providers.

For more information contact the US Department of Health and Human Services, Centers for Medicare and Medicaid Services (CMS), 7500 Security Blvd., Baltimore, MD 21244.

The HHS Administration web site address is <http://aspe.hhs.gov/admnsimp/>.

The OID for this table is 2.16.840.1.113883.4.6.

5.7 UPIN: Unique Physician Identification Number

A unique physician identification number, or UPIN, is used by Medicare to identify doctors across the United States. UPINs are six-place alpha numeric identifiers assigned to all physicians.

The United States Congress authorized the creation of UPIN IDs through Section 9202 of the Consolidated Omnibus Budget Reconciliation Act of 1985. The Centers for Medicare and Medicaid Services (CMS) is responsible for creation of the UPIN IDs for each doctor accepting Medicare insurance.

UPINs will be discontinued in the second quarter of 2007 and will be replaced by National Provider Identifier, or NPI numbers.

The OID for this data component is 2.16.840.1.113883.4.8.

5.8 State Provider License Number

The unique license number assigned to a physician or health care provider may be used as an identification number. HL7 has assigned an OID for each US state and territory that assigns the license number to the provider for that state or territory.

These OIDs may be obtained from the HL7 OID database at <http://www.hl7.org/oid/index.cfm>

5.9 Other Provider Identifiers

Other provider identifiers, such as those assigned by health care organizations may be used. See section 3.7.4 Instance Identifier Data Type (II) in the *HL7 Additional Information Specification Implementation Guide* for more information.

--End of document--