



A Deep Dive in the Use of LOINC Codes

C-CDA and LOINC

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- Chief Innovation Officer, Lantana Consulting Group
- Member of HL7 CDA Management Group
- Active member of several HL7 Work Groups:
 - FHIR Infrastructure
 - Attachments
 - Structured Documents
- Co-editor of C-CDA and many other specifications
- Lead on the C-CDA on FHIR project

wedi[™] Agenda

- LOINC in CDA/C-CDA Documents
- HL7 Attachments Implementation Guide
- C-CDA/RELMA Discrepancies
- Questions



LOINC in CDA/C-CDA Documents

- CDA uses LOINC for
 - Document type codes
 - Section codes
 - Various observations (lab results, vital signs, etc.)
- Document type codes are most relevant for attachments
- The document type code in CDA specifies the particular kind of document (e.g. History and Physical, Discharge Summary, Progress Note)



LOINC in Consolidated CDA (C-CDA)

- The C-CDA US Realm Header is required for all valid attachments
- Requires the use of LOINC codes where SCALE = DOC
- Structured documents
 - Require specific LOINC codes or value sets cited in the C-CDA spec.
 - Found in the “Documents with Implementation Guide” tab in RELMA.
- Unstructured Documents
 - Found in the “Documents without Implementation Guide” tab in RELMA



Attachments Implementation Guide (IG)

HL7 CDA Attachment Implementation Guide (IG):

- Exchange of C-CDA Based Documents, Release 1
- Standard for Trial Use (STU)
- **Released August 2017**

The IG Documents:

- Approach
- Background
 - Structured/unstructured
 - ISO Object Identifiers (OIDs)
 - Base64 Encoding
 - Document Succession
- **Classification using LOINC**
- Business requirements
- Rules (conformance requirements)

CDAR2_AIG_CCDA_EXCHANGE_R1_STU_2017AUG



HL7 CDA® R2 Attachment Implementation Guide:
Exchange of C-CDA Based Documents, Release 1

Release 1 (Universal Realm)

Standard for Trial Use

August 2017

Publication of this standard for trial use and comment has been approved by Health Level Seven International (HL7). This standard is not an accredited American National Standard. The comment period for trial use of this standard shall end 24 months from the date of publication. Suggestions for revision should be submitted at <http://www.hl7.org/dstucomments/index.cfm>.

Following this 24 month evaluation period, this standard, revised as necessary, will be submitted to a normative ballot in preparation for approval by ANSI as an American National Standard. Implementations of this trial use standard shall be viable throughout the normative ballot process and for up to six months after publication of the relevant normative standard.

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HL7 Attachments IG – Classification using LOINC

- Overview of LOINC
- Use of LOINC in Identifying Documents
 - LOINC Attachment Code Sets
 - Use of LOINC in CDA Documents
 - Requesting an Attachment
 - Submitting an Attachment
- Navigating LOINC to Identify Valid Attachment Types
- Updating LOINC and the Attachment Document Type Codes



CDA/RELMA Discrepancies

- Sometimes LOINC codes are deprecated after they are cited in C-CDA
- Deprecated LOINC codes do not appear in the HIPAA tab in RELMA
- Better coordination between Regenstrief and HL7 needed to address this issue

Attachment Name	LOINC
Continuity of Care Document	
Care plan	
Plan of care note	18776-5
Addiction medicine Plan of care note	87253-1
Allergy and immunology Plan of care note	77443-0
Audiology Plan of care note	77444-8
Brain injury Plan of care note	87629-2
Cardiac surgery Plan of care note	80789-1
Cardiology Plan of care note	77442-2
Cardiothoracic surgery Plan of care note	80749-5
Case manager Plan of care note	85228-5
Child and adolescent psychiatry Plan of care note	77446-3
Clinical genetics Plan of care note	80748-7
Colon and rectal surgery Plan of care note	80744-6
Critical care medicine Plan of care note	77445-5
Custodial care facility Plan of care note	85182-4
Dentistry Plan of care note	80743-8

52521-2 not shown in RELMA

Table 25: Care Plan Document Type

Value Set: Care Plan Document Type urn:oid:2.16.840.1.113762.1.4.1099.10			
Terms used to identify documents that represent a Care Plan			
Value Set Source: https://vsac.nlm.nih.gov/valueset/2.16.840.1.113762.1.4.1099.10			
Code	Code System	Code System OID	Print Name
52521-2	LOINC	urn:oid:2.16.840.1.11388 3.6.1	Overall Plan of Care
...			



Questions?