Comparison of CCR/CCD and CDA Documents

CDA CCD and C32 Descriptions

Clinical Document Architecture (CDA) is an HL7 document markup standard that specifies the structure and semantics of "clinical documents" for the purpose of exchange. CDA documents derive their machine processable meaning from the HL7 Reference Information Model (RIM) and use the HL7 Version 3 Data Types. CDA is a flexible XML-based clinical document **architecture.** CDA itself is not a specific document, but can be used to express many types of documents.

A CDA document can contain many data sections, all of which contain narrative text, and some of which contain structured data elements, some of which are coded.

There are many types of CDA documents, including CCD, XDS-MS Discharge Summary (HITSP C48), History and Physical (HITSP C84), Lab Report (HITSP C37), etc.

Continuity of Care Document (CCD) describes constraints on the HL7 Clinical Document Architecture, Release 2 (CDA) specification in accordance with requirements set forward in ASTM E2369-05 Standard Specification for Continuity of Care Record (CCR). It is intended as an alternate implementation to the one specified in ASTM ADJE2369 for those institutions or organizations committed to implementation of the HL7 Clinical Document Architecture. The Continuity of Care Record (CCR) is a core data set of the most relevant administrative, demographic, and clinical information facts about a patient's healthcare, covering one or more healthcare encounters.2 It provides a means for one healthcare practitioner, system, or setting to aggregate all of the pertinent data about a patient and forward it to another practitioner, system, or setting to support the continuity of care.

CCD is just one type of CDA document. Other types of CDA documents can contain some of the same CCD sections, but different sections as well.

HITSP CDA Content Modules (C83) describes a library of sections that can be combined into various CDA document types. In addition, a document type can include additional sections, even those not a part of it. So for example a CCD could add a Reason for Referral section added and still be a valid CCD. In addition, the sections in C83 can contain structured data, described as "Entry Content Modules" that are being assembled into a "HITSP Data Dictionary" that describes the data elements and the constrains (optionality, repeatability, and value sets) for each data element

HITSP C32, The HITSP Summary Document Using HL7 Continuity of Care Document (CCD) Component describes the document content summarizing a consumer's medical status for the purpose of information exchange. The content may include administrative (e.g., registration, demographics, insurance, etc.) and clinical (problem list, medication list, allergies, test results, etc) information. Any specific use of this Component by another HITSP specification may constrain the content further based upon the requirements and context of the document exchange. This specification defines content in order to promote interoperability between participating systems. Any given system creating or consuming the document may contain much more information than conveyed by this specification. Such systems may include Personal Health Records (PHRs), EHRs (Electronic Health Records), Practice Management Applications and other persons and systems as identified and permitted.

This spreadsheet illustrates a range of content that may be in CDA documents. Many more CDA document types could be listed, e.g., Care Record Summary, Healthcare Associated Infection Reports, Personal Healthcare Monitoring Report, Operative Note, Antepartum Summary, Emergency Department Referral, Nursing Triage Note, and Immunization Summary. These are specified by HL7 or IHE and follow the same patterns. Many CDA document types are in recommendations from the HIT Standards Committee.

CDA Section (from HITSP C83)	HITSP C83 section #	CCD and CCR (HITSP C32)	HIT Standards Committee Clinical Summary CCD for MU	Referral Summary (HITSP C48)	Discharge Summary (HITSP C48)	QRDA Pt-Level Quality Document (HITSP C105)	Consult Note (HITSP C84)	History & Physical (HITSP C84)	ED Physician Note (HITSP C28)	Data Dictionary (HITSP C154) Module Name	Comments
Allergies and Other Adverse Reactions	2.2.1.2	O	R	R	R	C	R	R	R	Allergy/Drug Sensitivity	Called "Allergy/Drug Sensitivity" in C32; called "Alerts" in CCD
Medications (incl. Current Meds)	**2.2.1.12**	O	R	R		C	R	R	R	Medication	All medications-related sections contain entries from Medications module
Admissions Medication History	2.2.1.13				R2						
Hospital Discharge Medications	2.2.1.14				R				R2		
IV Fluids Administered									R2		IHE Template ID 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.6
Medications Administered	2.2.1.15				R2				R2		
Problem List	**2.2.1.3**	O	R			C		R		Condition	Called "Condition" in C32
Active Problems				R	R		R		R2		In C48 but not C83; not sure why it's not in C83
History of Past Illness	2.2.1.4			R2	R		R2	R	R2		Called "Resolved Problems" in C48, "Past Medical History" in ED Physician Note
Hospital Admission Diagnosis	2.2.1.10				R						
ED Diagnoses									R		IHE Template ID 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.9
Discharge Diagnosis	2.2.1.11				R						
Chief Complaint	**2.2.1.5**							R	R	May contain Condition	
Reason for Visit									R		IHE Template ID 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.1.1 Assume this is a specialization of Chief Complaint?
Reason for Referral	2.2.1.6			R						May contain Condition or Result	
History of Present Illness	2.2.1.7			R	R2		R	R	R		
List of Surgeries (aka Procedure)	2.2.1.8	O	R	R2		C	R2	O	R	Procedure	Called "Procedure" in C32
Procedures Performed									R		IHE template ID 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.11
Functional Status	2.2.1.9			R2	O		R2				
Discharge Diet					O						In C48 but not C83. IHE template ID 1.3.6.1.4.1.19376.1.5.3.1.3.33
Advance Directives	2.2.1.16	O		R			R		R	Advance Directive	
Immunizations	2.2.1.17	O		R2			R2	O	R	Immunization	
Physical Exam	2.2.1.18			R2	O		R2	R	R		
Vital Signs	2.2.1.19	O		R2	R2	C	R2	R	R	Vital Sign	
Review of Systems	2.2.1.20			O	O		O	R	R2		
Hospital Course	2.2.1.21		O		R						
Diagnostic Results	2.2.1.22	O	R	R2	O	C	R2	R	R	Procedure and Result	Called "Discharge Procedures, Tests, Reports" in C48; EDPN has different template ID 1.3.6.1.4.1.19376.1.5.3.1.3.27
Assessments									C		
Assessment and Plan	2.2.1.23							R	C	May contain Medication, Immunization, Encounter, Procedure	Not intended for Nursing assessments
Plan of Care (may include Procedure Orders)	2.2.1.24	O		R	R	C	R		C	May contain Medication, Immunization, Encounter, Procedure	Not in C32 but in CCD; differs from Assessment and Plan in that it doesn't include Physician Assessment
Family History	2.2.1.25	O		R2			R2	R	R	Family History	Not in C32 but in CCD
Social History	2.2.1.26	O		R2			R2	R	R	Social History	Not in C32 but in CCD
Encounters	2.2.1.27	O				R				Encounter	
Medical Equipment	2.2.1.28	O		R2	R2						
Referral Source									R		IHE Template ID 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.3
Mode of Arrival									R		IHE Template ID 1.3.6.1.4.1.19376.1.5.3.1.1.10.3.2
Consultations									R		IHE Template ID 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.8
Progress Note									R		IHE Template ID 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.7
ED Disposition									R		Mode of transport (how patient departed). IHE Template ID 1.3.6.1.4.1.19376.1.5.3.1.1.13.2.10
Payers	2.2.1.1	O		R2		C	R2				
Personal Information (entry content module)	2.2.2.1	R	R	R	R	R	R	R	R	Person Information	
Information Source	2.2.2.10	R	R	R	R	R	R	R	R	Information Source	
Language Spoken	2.2.2.2	R2	O	O	O	O	O	O	O	Language Spoken	
Support	2.2.2.3	R2	O	O	O	O	O	O	O	Support	
Healthcare Provider	2.2.2.4	O	O	O	O	O	O	O	O	Healthcare Provider	
Pregnancy	2.2.2.9	O	O	O	O	O	O	O	R2	Pregnancy	
Comment	2.2.2.11	O	O	O	O	O	O	O	O	Comment	
Purpose	2.2.2.11	O									

R = Required	R2 = Required if Known	C = Conditionally required	O = Optional	Blank = Not included

LEGEND

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