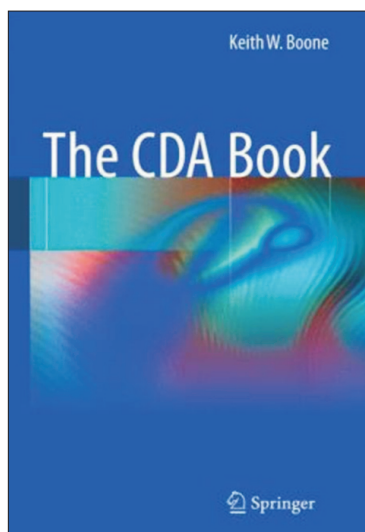# HIR
Healthcare Informatics Research

The CDA Book

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Keith W. Boone

The CDA Book

Springer

Author: Keith W. Boone
Year: 2011
Name and location of publisher: Springer London, UK
Number of pages: 307
Language: English
ISBN: 978-0-85729-335-0

Medical providers can make better clinical decisions when they have additional information on their patients' health and clinical statuses. The information could be acquired directly from patients or electronically from other providers through healthcare information exchanges (HIE). In the latter case, a common language or standard is necessary for sending and receiving digital forms of clinical data among healthcare organizations.

On February 12, 2007, the Continuity of Care Document (CCD) was borne through a joint collaborative effort of two well-known standard developing organizations (SDOs), the Health Level Seven (HL7) and the American Society for Testing and Materials (ASTM) International [1]. Prior to that date, the Continuity of Care Record (CCR) by ASTM and Clinical Document Architecture (CDA) by HL7 each had dominant roles in determining the healthcare information technology standards and data formats regarding HIE and related fields. However, there were both dissimilarities and overlaps between the two organizations' standards [2]. With this new CCD standard, developers of healthcare information systems could eliminate duplication of programming and, therefore, could save much time and reduce financial costs incurred due to different rules and regulations.

Although the CCD replaced the CCR and CDA, the CDA still has an important role because the US government has adopted it as a common standard and rule regarding HIE, which affects most healthcare organizations [3]. For this reason, we need to specifically look at the CDA to understand why it still has a dominant role regarding HIE. A few books have explored this subject, and the purpose of this article is to introduce the CDA by reviewing a book specifically about CDA.

Keith W. Boone, the author of "The CDA Books" has expertise in various healthcare standards, and he has participated

in the development of HL7 CDA since 2004. He was co-chair of the Patient Care Coordination Planning Committee of a non-profit organization, the Integrating the Healthcare Enterprise (IHE), and the Care Management and Health Records Domain Technical Committee, the American National Standards Institute (ANSI)/Healthcare Information Technology Standards Panel (HITSP).

The book's four sections introduce CDA, the types of data used, CDA modeling, and CDA implementation. Part I (Chapters 1–4) gives a brief introduction of the book and overviews clinical documentation techniques, HL7 clinical document architecture, and extensible markup language (XML). Part II (Chapters 5–11) introduces various data types that are used in CDA: basic data types, text and multimedia, demographic data, codes and vocabularies, concepts of codes, dates and times, and abstract types, known as 'collections' in HL7. Part III (Chapters 12–16) explains CDA modeling: HL7 version modeling, clinical document infrastructure, CDA header, CDA body, and clinical statements in the CDA. Part IV (Chapters 17–21) describes how CDA is implemented: HL7 version 2 to CDA release 2, extracting data from a CDA document, templates used in CDA implementation guides, validating the content of a CDA document, and CDA implantation guides.

This book contains various concepts and technical terminologies, which may be challenging at first. However, I suggest reading the book to understand the overall technical structure of CDA. Healthcare information exchange is becoming more and more important for better clinical decision-making in healthcare facilities. As healthcare pro-viders, health service researchers, and health informaticians, we have to understand what current standards are available to make HIE possible in the empirical fields of health and medical informatics fields.

References

1. Health Level Seven Inc.; American Society for Testing and Material International. HL7 Continuity of Care Document, a healthcare IT interoperability standard, is approved by balloting process and endorsed by health-care IT standards panel [Internet]. Ann Arbor (MI): Health Level Seven Inc.; 2007 [cited at 2015 Nov 2]. Available from: http://www.hl7.org/documentcenter/public_temp_AB76094A-1C23-BA17-0C8C6AF-BE107B05D/pressreleases/20070212.pdf.

2. Ferranti JM, Musser RC, Kawamoto K, Hammond WE. The clinical document architecture and the continuity of care record: a critical analysis. J Am Med Inform Assoc 2006;13(3):245-52.

3. Code of Federal Regulations. Title 45: Public welfare. Part 170: health information technology standards, implementation specifications, and certification criteria and certification programs for health information technology [Internet]. Washington (DC): Code of Federal Regulations; c2015 [cited at 2015 Nov 2]. Available from: http://www.ecfr.gov/cgi-bin/text-idx?SID=7033c9977380cc335207826059e9e527&mc=true&node=pt45.1.170&rgn=div5.