

June 2005 Newsletter

Interoperability and Electronic Data Interchange

There is an interesting situation evolving within the medical standards area. Recently, meetings were held in Washington DC and Chicago to discuss Interoperability and other areas of electronic data interchange.

At the bottom of this newsletter is an overview of the two competing standards reviewed by The National Alliance for Health Information Technology. There is a misconception that health record vendors are against the CCR (Continuity Care Record) interoperability standard.

The EHRVA is not in opposition to the CCR. As an organization, we believe that much good work has been done on that model that can be used in the convergence of CCR and CDA (Clinical Document Architecture) towards the objectives of a single standard, extensibility and rapid adoption of EHRs. It was also the understanding of many of the vendors who initially supported the efforts around CCR, both financially and in other ways, that this effort would produce a standard that would be compatible with the HL7 CDA architecture. They still support that ultimate goal. What EHRVA members in general do not support is an outcome that leaves the industry with two technical standards that perform the same function.

The EHRVA has conducted outreach to several organizations that support the single standard goal, including one of the large clinical academies that represent 100,000 physicians. We are also working behind the scenes to get ASTM (American Society for Testing and Materials) and HL7 to cooperate.

EHRVA is not opposing collaboration between ASTM and HL7 at all. In fact, they are encouraging them to come back to the table and continue in the spirit of their memorandum of understanding. Unfortunately, in recent weeks, their discussions have been focused on legal issues. Until they come to agreement on those issues, no progress will be made toward convergence.

The word "harmonization" is being used by some to imply support for both CCR and CDA as two standards that can co-exist. The EHRVA membership in general has strengthened its recommendation to work towards "convergence" of two standards to one standard. Harmonization that leads to two independent standards will not meet the interoperability goals of physicians in this country. Call it what you will, harmonization needs to yield a single standard that we can all implement once and use to exchange records with any interested party.

The RIM (Reference Information Model) is a very comprehensive standard, so much so that at times it can be intimidating on its own. An assessment of completeness of the model would probably favor the RIM from most, if not all, viewpoints. The CDA uses only a small part of the RIM, although it offers the extensibility to deal with the whole range of information structures, from the most simple to the most complex.

The EHRVA understands that the CDA could represent all information defined in the CCR and without additional structural complexity. And, as they recognize that the patient handoff document is only the first document of many to come, the depth of the model will become very important for the future.

There have been reports indicating the CCR has more advantages (ease-timeliness of implementation, completeness?) People will tell someone what is easier to implement based on their individual experiences with a specific standard. There are few developers that have implemented both CCR and CDA/CRS, and a fewer still who are familiar with the technical aspects of both. The feedback from this small group is that there are no significant differences between implementation complexity and timeliness.

If independent, experts were consulted would the CCR not more likely to be judged as clinically relevant and on a faster track to bring value to the medical community? The EHRVA thinks the CCR represents good work, as does the new CRS document. Both are comparable and independent review would likely substantiate that. Independent experts will confirm that the CCR content represent the general purpose use cases associated with medical summary exchange in the ambulatory setting. More importantly though, **independent analysis would likely validate that the HL7 infrastructure is a stronger infrastructure for the future family of standards that are needed to support the exchange of many types of data to truly support healthcare interoperability in the future.**

It is clear that the government's upcoming policies for establishing information exchange are going to mandate that complete interoperability of patient information exchange across all care settings. Payers, including the government, make it quite clear that complete interoperability is required as they start to migrate to a pay-for-performance strategy in both the inpatient and outpatient settings. If we fail to agree on a single standard, it is a virtual certainty that the government will step in and mandate standards in this area.

As you have read in these two lengthy papers the issues are complex but the bottom line is the EHRVA is trying to make sure **one standard** (the robust and right standard) is **adopted** not mandated on the physicians and/or the vendors.

Overview of the Two Competing Standards as Reviewed by the
National Alliance for Health Information Technology

Standards and Interoperability: A Current Issue

Perfect interoperability - the seamless integration of healthcare information technology systems - may seem distant, but significant progress has been made towards establishing a key piece of its infrastructure. Enabling interoperability requires making data available for use between different clinical information systems.

Two different data standards that will enable some of this data availability are currently in development. Both are based on a paper discharge summary, but they reflect contrasting development philosophies and have each gained proponents and detractors. Although we are not currently recommending specific member action in the effort to align the competing standards, we believe that Alliance members should be aware of the issues underlying the discussion.

Starting Simply: The Continuity of Care Record

One emerging standard is called the Continuity of Care Record (CCR). It was initially developed by physicians affiliated with the Massachusetts Medical Society and now is undergoing approval as a standard by ASTM International, formerly known as the American Society for Testing and Materials.

The CCR began as an electronic version of the form required in Massachusetts when a physician transfers a patient to another physician. It was designed with family physicians in mind, and it specifically contemplated easy implementation by a range of medical practices from small to large. A CCR document is created using Extensible Markup Language or XML, a method of coding a document so that any web browser can open the document and format it to look like the original. Like the other emerging standard, the CCR is designed to allow the electronic transfer of essential patient information between providers. Examples include allergies, current medications and recent diagnoses.

Adding Complexity: HL7's Clinical Document Architecture and its version of the CCR, the Care Record Summary or CRS Health Level 7 (HL7), is an ANSI (American National Standards Institute)-accredited standards development organization that specializes in clinical and administrative data. Standards developed by HL7 typically address not only the content of the message being exchanged by systems, but also the instructions required for successful data exchange.

While the Care Record Summary has the same clinical information as the CCR, it is technically different. The XML used to express documents in the HL7 version embodies a more complex set of rules: the Clinical Document Architecture, or CDA. The CDA is not a document in and of itself; it is an architecture that offers

much greater data detail for use with sophisticated clinical databases. The CRS is just one document that can be created using the CDA.