Summary of discussion for
KAT: A Flexible XML-based Knowledge Authoring Environment
by Hulse, Rocha, Del Fiol, Bradshaw, Hanna, and Roemer
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This paper presents a knowledge authoring tool (KAT) developed at Intermountain Health Care in order to allow clinicians to share, enhance, and repeat best practices. The tool they developed is based on XML metadata with appropriate stylesheets applied for editing and viewing. There were three major purposes for the KAT system: 1) to allow clinicians to create knowledge content without continuous support from engineers; 2) to implement structured but readable content; and 3) to foster open collaboration across multiple facilities and services in the enterprise. To this end the KAT system was based on XML, allowing widely varying complexity of documents, from highly simplistic to much more involved clinical workflow documents. After denoting KAT's web-based interface, the article concludes with some analysis of usage since its inception in mid-2003, which is very much on the rise based solely on the number of documents created since that time.

We found that the KAT tool is indeed the flexible knowledge tool it claims to be, and a worthy addition to the world of clinical knowledge tools now being developed. Its XML foundation is its greatest strength, as it allows for extensibility both in enhanced document typing and in sharing the data with other clinicians. And, of course, because the data is XML based, it is structured enough to be used in computational activities to examine individual and enterprise-level performance.

Unfortunately, because this tool is internal to the IHC, we cannot get a hands-on idea of how the interface actually works, particularly how users are really using all these possible fields. Making a cursory examination of the user interface screenshots, one is left with the impression of a rather steep learning curve for truly effective use of the KAT system.

We also had unanswered questions about how many clinicians are actually using the tool, considering its origin at the IHC, a highly computer savvy institution. It seems that the tool may well be being used by just a few departments of techno-friendly clinicians, which would skew the impact of the given usage results. This observation also leads to the question of just how many clinicians are going to use the system to create entirely new document types (certainly a small percentage), and as a result we see the dichotomy in the results that either a clinician is using the tool for hours at a time or for just seconds—the investment of time is clearly divided into two camps.

The IHC's KAT is certainly a good step forward into clinical use of XML-based tools to create repeatable, quantifiable clinical practice documentation. We look forward to hearing more about the tool and its possible expansion to other institutions, so that the standards it is creating at the IHC can be utilized by more clinicians elsewhere.