Standardized Data: the Difference for EHR Solutions

by Linda Kloss, RHIA, CAE, executive vice president/CEO

This month, Dallas will be the center of the health IT world as HIMSS hosts its 2005 trade show, of which AHIMA again will be a sponsor. We look forward to learning how electronic health record (EHR) solutions are maturing and how provider organizations are succeeding in improving patient care and operations with IT.

Each year the HIMSS show makes me realize that while progress is being made, we still have far to go before EHR systems are built on well-understood industry standards and features and functions have quantifiable value. The EHR is seen as essential for safe, effective care and a building block to wire the healthcare system. Now we need to better understand the prerequisites for interoperability so technology investments deliver on their promises. It is not sufficient to automate health records within organizations; there must be interconnectivity among providers and between providers and patients.

Our Goal: Standardized Data Content

In a June 2004 presentation at the Connecting Communities for Better Health conference, Blackford Middleton, MD, MPH, MSc, and his colleagues from the Center for Information Technology Leadership (CITL) offered a useful taxonomy that describes four levels of information exchange capability. Level one is information exchange without IT, the kind of exchange that goes on today as we mail copies of health records in response to requests for information. Level two is machine-transportable data using fax or e-mail, where documents, not data, are exchanged. Level three is machine-organizable data using structured messages, with nonstandard content and data. In this level, data might be transferred in an HL7 format, but the data content is nonstandard. Except for lab data and a few applications, this is where most of our EHRs are today. In level four we achieve machine-interpretable data with structured messages and standardized content and data. CITL's research finds the real payback for healthcare comes with level-four solutions.[1] Such an application is illustrated in the feature "Patient Data to Go: Germany's National Smart Card Project" by Bernd Blobel, PhD, and Peter Pharow.

Leading Data Standardization

HIM professionals are domain experts in health record data content. Using new natural language processing, terminology, and classification tools, HIM professionals will be important contributors in reaching level four. Using the paper record as a template for what data are needed is not the best way to get to level four, says David Bates, MD, MSc, in "The Prompt, the Alert, and the Legal Record: Documenting Clinical Decision Support Systems," as it overlooks possible valuable new sources.

Debra Hall, RHIA, CCS, and Barbara Siegel, MS, RHIT, underscore the challenges of reporting non-standard data for quality monitoring in "Taking the Measure of Measures." This is just one example of a healthcare data exchange that is so difficult today and could be enabled with standardized content and new data and language tools.

Modernizing classification systems will contribute to getting to level four. ICD-10-CM and ICD-10-PCS will produce more useful data of higher integrity. Electronic mappings can be built to vocabulary tools to aid computer-assisted coding. We learn from Canada's and Australia's experiences in adopting ICD-10 in "What's Your ICD-10 Plan?" contributed by Caroline Piselli.

Note

1. Middleton, Blackford. "The Value of EHR and Healthcare Information Exchange." Paper presented at Connecting Communities for Better Health Conference, June 24–25, 2004, Washington, DC.

Article citation:
Kloss, Linda. "Standardized Data: the Difference for EHR Solutions." *Journal of AHIMA* 76,

no.2 (February 2005): 23.