A multitude of projects are under way that support the transition to electronic health records, which enable the exchange of health information among healthcare-related parties while maintaining patient privacy and offering security protections.

The US Patient Protection and Affordable Care Act of 2010 embraces the notion that electronic health information is the bedrock of modern healthcare. To this end, a multitude of projects are under way that support the transition to electronic health records (EHRs), which enable the exchange of information among various healthcare-related parties while maintaining patient privacy and offering security protections.

This ambitious endeavor with an aggressive timeline of milestones poses new and interesting problems pertaining to the sharing of private information among physicians, institutions, and individuals. Both the US Department of Health and Human Services and the National Institute of Standards and Technology have been actively supporting health IT projects and the creation of standards and certification.

Other countries have a head start on the US in this regard, as they began adopting related strategies years ago. Thus, some of the contributions to this special issue come from outside the US.
aspects so that healthcare providers and system vendors can focus on the business aspects of ECRs, thus providing an off-the-shelf approach that dramatically reduces entry barriers for healthcare providers and makes it easier to set up and participate in regional healthcare networks.

“Fusion: Managing Healthcare Records at Cloud Scale” by researchers from HP Labs proposes a cloud-based platform for low-cost delivery of healthcare applications that enables broader use of patient-centric management of EHRs while supporting the strict guidelines and technical safeguards required to protect information as outlined in the Health Insurance Portability and Accountability Act of 1996 (HIPAA) Privacy and Security Rules.

“Testing the Nation’s Healthcare Information Infrastructure: NIST Perspective” by Kevin Brady and his colleagues from the National Institute of Standards and Technology describes NIST’s involvement in healthcare automation activities focused on developing associated test methods, protocols, and specifications for interoperability in the use of EHRs.

In 2010, the initial goal of having 80 percent of physicians using EHRs by 2014 seemed optimistic given that less than 20 percent were using the technology at that time. However, according to a September 2012 survey of 21,000 physicians, 82 percent of respondents indicated that they are currently using an EHR or plan to do so (www.healthcare-informatics.com/news-item/majority-physicians-currently-use-or-will-implement-ehrs-survey-finds). Fine-tuning certification criteria and establishing best practices appear to be keys to this initiative’s continued overall success.

Ann E.K. Sobel is an associate professor in the Department of Computer Science and Software Engineering, Miami University. Contact her at sobelae@muohio.edu.

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