

Still Babbling about Interoperability

By Barry P. Chaiken, MD, FHIMSS

Last July, Phil Gingrey, a member of the U.S. House of Representatives from Georgia and a physician, expressed frustration over our lack of interoperability in our clinical systems:

Congress has spent, as we all know, something like \$24 billion over the past six years buying products to facilitate interoperability, only to have... closed platforms. Do you believe the federal government and the taxpayers are getting their money's worth subsidizing products that are supposed to be interoperable, but they're not? (Gregg, 2014)

Gingrey referenced a RAND report (Garber et al., 2014) that cites a lack of interoperability as one reason why EHRs have not yet reached their full potential. He went on to say,

If the June 2014 RAND report is true, we have been subsidizing systems that block information instead of allowing for information transfers, which was never the intent of [the HITECH Act]. ... It may be time this committee takes a closer look at the practices of vendor companies in this space, given the possibility that fraud may be perpetrated on the American taxpayer. (Gregg, 2014)

Although Gingrey focused most of his anger on a single EHR vendor, all participants in the EHR space deserve some scolding for their lack of focus on interoperability.

The problem of poor interoperabil-

All participants in the EHR space deserve some scolding for their lack of focus on interoperability.

ity did not suddenly appear in the hot Washington summer of 2014. It has existed for several years; I called it out in an article published in this journal at the end of 2013:

The lack of interoperability among HIT systems represents a substantial barrier to utilizing innovative information technology tools. If we spoke the same HIT language we could accomplish great things. (Chaiken 2013)

The RAND report (Garber et al., 2014) referred to by Gingrey, also referenced the impact of interoperability on the effectiveness of EHRs:

Rapid adoption of EHRs has been hindered by a variety of factors, including a fragmented marketplace, changing federal incentives, provider uncertainty about the regulatory landscape, and the striking lack of interoperability between systems.

One feature that many current systems lack is interoperability. HITECH's language clearly indicated that Congress wanted HIT systems to

be interconnected and interoperable so that they can readily share data between providers.

According to Garber et al., the rules for meaningful use payments watered down the requirement for interoperability and connectivity: "The practical effect was to promote adoption of existing platforms, rather than encourage the development of interconnected systems."

Wasted Billions?

Although 20:20 hindsight may seem unfair, the impact of a Meaningful Use strategy that failed to foster true interoperability saddled our health IT infrastructure with high-priced systems that will prove both difficult and expensive to update to full interoperability.

While the opportunity existed to drive innovation and the potential benefits of shared medical information, provider organizations focused on implementing systems to secure incentive payments funded by HITECH. The government committees that promoted the Meaningful Use



rules put in place by the Office of the National Coordinator focused on the current state of technology rather than encouraging the development of new capabilities.

Systems designed before HITECH never valued interoperability as a product feature. In fact, the lack of interoperability significantly raised switching costs, something that served the interest of EHR vendors.

In addition, the rush to deploy EHRs after did not allow these systems to include the health information exchange features that facilitate efficient and complete interoperability. Instead, health information exchange and interoperability became future functionality while systems lacking these capabilities became embedded in provider organizations. The difficulty and expense associated with large system upgrades doomed these provider organizations to many years of crippled clinical systems.

The rush to deploy also offered disincentives to organizations interested in performing clinical process redesign. Few organizations reworked their clinical workflows away from paper-based processes to those that could take advantage of information technology, fearing that such an effort would delay Meaningful Use incentive payments. Therefore, it is not surprising to see the mixed results coming from studies examining the clinical and financial impact of EHRs.

Next Steps

The investment in EHRs cannot be wasted due to initial missteps in the Meaningful Use program driven by the HITECH Act. Interoperability remains a key to achieving clinical and financial benefits from EHRs and healthcare

Interoperability remains a key to achieving clinical and financial benefits from EHRs and healthcare information technology.

information technology. Therefore, the Federal Health IT Policy Committee and its various subcommittees should work to influence the Office of the National Coordinator to strongly focus on interoperability in any new Meaningful Use rules.

As many committee members represent numerous HIT vendors, a number of important stakeholders already sit at the table to hammer out differences and embrace interoperable standards. Specifically, a new subcommittee workgroup of the Policy Committee, or the existing subcommittee on Interoperability and Health Information Exchange, should be tasked to complete within a specific timeframe the research and development of a single set of interoperability standards. If the workgroup fails to come to an agreement on standards, the Office of the National Coordinator should impose its own set of standards unilaterally. Without this threat, vendors and other stakeholders may deadlock on setting standards and perpetuate the unacceptable current state.

The Book of Genesis tells the story of the Tower of Babel, where people speaking the same language begin building a city and tower with its top in the sky. In the story, God says,

As one people with one language, nothing that they sought would be out of their reach.

Until we stop our health IT babbling and choose to speak the same language, we may never extract real value from EHRs and other healthcare information technologies. ■

Barry Chaiken is the chief medical information officer of Infor. With more than 20 years of experience in medical research, epidemiology, clinical information technology, and patient safety, Chaiken is board certified in general preventive medicine and public health and is a Fellow and former Board member and Chair of HIMSS. As founder of DocsNetwork, Ltd., he worked on quality improvement studies, health IT clinical transformation projects, and clinical investigations for the National Institutes of Health, UK National Health Service, and Boston University Medical School. He is currently an adjunct professor of informatics at Boston University's School of Management. Chaiken may be contacted at barry.chaiken@infor.com.

REFERENCES

- Chaiken, B. (2013). Our tower of babel. [Health IT & Quality.] *Patient Safety and Quality Healthcare*. 10(6), 12, 14.
- Garber, S., Gates, S. M., Keeler, E. B., Vaiana, M. E., Mulcahy, A. W., Lau, C., & Kellermann, A. L. (2014). Redirecting innovation in U.S. health care: Options to decrease spending and increase value. Case studies. RAND Corporation. Retrieved from http://www.rand.org/content/dam/rand/pubs/research_reports/RR300/RR308/RAND_RR308.casestudies.pdf
- Gregg, H. (2014, July 21). Congressman blasts Epic over lack of interoperability. *Becker's HealthIT & CIO Review*. Retrieved from <http://www.beckershospitalreview.com/healthcare-information-technology/congressman-blasts-epic-over-lack-of-interoperability.html>
- Tower of Babel. (2015, January 18). In *Wikipedia, The Free Encyclopedia*. Retrieved January 21, 2015, from http://en.wikipedia.org/w/index.php?title=Tower_of_Babel&oldid=643105076

