

## You say tomatoes, I say tomaahtoes: EHRs need common standards



There is a lot of variability in the way electronic health records are actually used by physicians, which highlights the need for basic standards in EHR design and implementation, according to a new study published in the Journal of the American Medical Informatics Association.

Researchers from the American Medical Association and MedStar Health examined clinical workflows at four health systems – two that use Cerner's EHRs and two that use Epic's EHRs. For this study, a dozen or so emergency medicine physicians at each location completed six specific scenarios – two each for diagnostic imaging, laboratory and medication – in their Cerner and Epic EHR systems. The researchers tracked the participants by collecting keystroke, mouse click and video data.

Analyses of data revealed wide variability in task completion time, clicks and error rates. For certain tasks, there were an average of a nine-fold difference in time and eight-fold difference in clicks. Other notable findings include:

- Completion of an imaging order in one location took just 25 seconds at one health system, but more than a minute at another.
- One location had no errors when ordering medication in the EHR, while another had a 30 percent error rate.

These findings point to the need for system optimisation, researchers concluded, noting that smart EHR implementation, combined with good design and development on the vendor side, is "critical to usable and safe products."

Raj Ratwani, director of the MedStar Human Factors Center, and the study's lead author said: "While there are many benefits to using EHRs, there are also usability and safety challenges that can lead to patient harm."

The report suggests that basic performance standards in EHR design and implementation could go a long way towards addressing this wide variation of usability and efficiency. Vendors and providers should work together for the strict implementation of these standards to ensure optimal usability and safety.

The study findings also reaffirm the importance of considering patient care and physician input in the development and implementation of EHRs, according to AMA's chief medical information officer, Michael Hodgkins, MD, one of the study's co-authors.

"There are multiple variables impacting the end user experience that contribute to physician burnout, a diminished patient-physician relationship, and unrealised cost savings. While design can be an important factor, so too can implementation choices made onsite," Dr. Hodgkins explained.

Source: <u>Healthcare IT News</u> Image Credit: <u>Pixnio.com</u>

Published on: Wed, 25 Jul 2018