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**Written Testimony to the Adoption/Certification Workgroup of the HIT Policy Committee**  
**Panel 5: Options around Usability**  
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**Introduction**

KLAS Enterprises is a market intelligence research firm that focuses exclusively on the healthcare provider market and monitors and reports on the performance of HIT software vendors, consulting firms, and medical equipment vendors. Our mission is “to improve Healthcare Technology delivery by honestly, accurately, and impartially measuring vendor performance for our *provider partners*.” We currently interview over 20,000 individuals from provider organizations annually to understand their successes, challenges, and needs.

A major portion of our research is focused on clinical systems such as EMRs, ED and pharmacy systems, barcode scanning systems, and so forth. We are also measuring clinical portals, patient portals, and HIEs. For the past several years we have been publishing in-depth research on clinical market share, CPOE adoption, Community and ambulatory EMR performance, and readiness for Meaningful Use.

***Can transparent reporting improve usability?  
Will this promote or hamper innovation?***

I think that reporting on usability, if done the right way, can be a good thing for the industry. That said, it will improve usability only if the vendors feel pressure to improve and if the vendors have flexibility on how they achieve better usability. Most provider organizations buy an EMR system once and then have to live with that choice for a long time. Taking a scientific approach to measuring the usability of a product through measuring the number of clicks, time to perform a task and so forth in a lab environment, only tells part of the story. Understanding how an EMR product performs in a live, fully functional environment based on performance, usage, satisfaction, and other factors can provide a realistic view of the usability of a system. For example, the CPOE research KLAS publishes has helped providers identify EMR vendors that are having success getting their client base to adopt, use, and have a positive experience with CPOE by reporting on the percent of hospitals doing CPOE, the percent of physicians at those hospitals doing CPOE, the percent of orders being done electronically by physicians, and the physician satisfaction with the system. Does this tell us exactly how usable the systems are? Not completely, but I believe that the level of adoption of the system combined with how deeply the system is being used, the level of physician satisfaction, and the sustainability of the system can all help pinpoint how successful other providers would be at getting physicians to use the system in a meaningful way. Because of the public nature of our CPOE research and its potential impact on future business for vendors, the research seems to be helping drive innovation and giving vendors a lot more focus around not only selling their “certified” products, but also ensuring that their products are successfully implemented adopted and used by their clients.

***What other actions/programs can improve usability?***

There are a lot of other actions that can improve usability, some of which fall on the shoulders of the provider organizations and some of which fall on vendors. Providers should be placing greater focus on what they are trying to accomplish with technology as opposed to how they are going to deploy

technology. Last week I spoke with a CIO who said, “I do believe we will make more progress when we realize that the hard part of information technology is typically not the technology, it is the standardization across our various clinics or our ways of identifying when things are not standard or out of the expected and focusing attention on these exceptions.” A CMIO from an academic medical center indicated that “the reason we were so successful (with an ED deployment) is we understood all of the processes and created the system to improve the care delivery. . . . It’s not actually about the electronic record itself. It’s about the care process and how the usability, the data visualization, the contextualization of the data improve the processes of care.” Ensuring that an EMR works effectively and efficiently within the clinician’s workflow across the various departments and settings appears to be key to usability. Vendors can help by sharing, and perhaps helping implement, best practices around workflow.

Programs around training and education, sharing of best practices, designing systems with high availability and performance, and ongoing optimization projects all improve usability. Also, providing actionable data for physicians and others through analytics could help enhance the physicians’ ability to care for patients and an organization’s ability to make changes that could lead to other improvements that could enable more effective practices.

#### ***How can the end user better appreciate the challenge of usability at the time of purchase?***

I think it is important that providers first get the right people evaluating the product. This should include strong representation from those groups such as nurses and physicians across departments that will be using the system. Additionally, providers should get the people in their department understanding and assessing the vendor in their current workflow. They should have the vendors take them through scenario-based demonstrations. A provider in the Midwest that just selected an EMR vendor indicated that they authored their own scenarios so that the vendor wouldn’t just show them scenarios they knew how to perform. Another provider that is a show site for a major EMR vendor suggested identifying some unhappy customers to drill through the details of why they are unhappy, whether it is because of too many clicks, dislike of the screens, the fact that their brother works for another vendor, etc.

KLAS believes that a strong combination of opinion based satisfaction research from key stakeholders combined with measurements of market adoption paint a strong picture of usability today.

#### ***What voluntary steps can the industry take to create a market around usability?***

First, providers need to have a higher bar for what technology can bring to the table and drive vendors toward usability. Providers need to drive EMR vendors toward making the information intelligently usable so that they can use data to drive behavior and improve patient outcomes because of that behavior. That said, providers could perhaps come together to discuss and agree on what the higher bar should be for what technology brings to the table and then use their collective voice to drive change. Ultimately, these providers will vote with their wallets.

Second, in many cases vendors need to take a more active role in ensuring that their clients are successful implementing, adopting, and effectively and efficiently using their product. This includes actively sharing best practices, providing appropriate training, helping ensure the product works in the client’s workflow, and other measures.

Independent research firms could play a role in helping improve usability by independently performing research on vendors in areas that impact clinician efficiency, effectiveness, and satisfaction, and making the findings publicly available so that providers can see how vendors compare and vendors can identify areas they need to focus on to improve the usability of their system.

***What uniform information can be provided across all vendor products?***

This is a moving target. As the market matures and the needs of hospitals change, the measurements to pinpoint usability will also evolve and change. That said, some of the areas KLAS measures include ease of use, system responsiveness, product functionality, physician satisfaction, and future plans. We have also asked questions regarding adoption, usage, impact to workflow, reasons for physician resistance, gains in efficiency, and challenges. These are areas that are measurable and comparable. Although they are not perfect, they give a good overall view of usability.

Other suggestions received from providers around usability include:

- Does the technology add to or take away from your ability to provide the care you need to provide?
- If you had the choice to use technology as you are right now or abandon it altogether, what would you choose?
- What percent of the time are actions changed or different actions taken as a result of clinical decision support?
- Are you getting value or improvement of care or safety that is commensurate with the additional time you are putting in?