



Next-Generation EHRs:

From Meaningful Use to Meaningful Usability

A HIMSS study shows EHRs have come a long way; however, feedback from healthcare practitioners suggests they haven't come far enough.

With near universal U.S. adoption of electronic health records (EHRs) now, physicians and other clinicians should be realizing the rewards of working with digital documents. That includes improved workflows that leave more time to develop treatments and provide direct patient care.

Too often, however, just the opposite occurs. Physicians often complain they get bogged down retrieving or adding medical records within their EHR system – leaving less time for clinical care or longer days inputting data after hours. This isn't a new

grievance, but despite recent vendor efforts to optimize EHR software, it's still a consistent one.

“Cynicism and high levels of exhaustion are linked to extensive EHR use, which speaks to our current problem: Clinicians are forced to serve their EHRs when it should be the other way around,” said Mark Byers, CEO of DSS, Inc., a health information software development and systems integration provider.



“Implementing an EHR never stops; it’s a continuous journey and ...nurses, physicians, administrators and allied health professionals must be part of that journey from the start.”

Dee Cantrell | CIO

9 IN 10 REPORT THAT THE EHR IS PLAYING A CONTRIBUTING ROLE IN PHYSICIAN BURNOUT

To what extent is your EHR contributing to physician burnout?



Figure 1. The vast majority of HIMSS survey participants believe their EHR contributes to physician burnout.

A recent HIMSS study conducted in February 2020 supports Byers’ statement. Among 200 healthcare stakeholders who participated in an online survey, nine out of ten said their EHR implementation is contributing to physician burnout. Ten percent ranked it as a primary factor (Figure 1).

The HIMSS study found both positives and plenty of room for improvement with participants’ current EHR. Respondents represented U.S. hospitals and health systems in acute care settings with 500 or fewer beds.

A significant majority found their EHRs fulfilled key elements, particularly meeting Meaningful Use and other regulations and improving patient safety by reducing human mistakes. EHRs also generally received high marks for their ability to support finance, revenue and back-office initiatives, as well as facilitate integration and care coordination (Figure 2).

However, just 57% found their current, overall EHR implementation effective – with only 6% rating it extremely so. Most said they wished their EHR was easier to integrate and intuitively navigate.

“Magically create an interface that is straightforward, easy to use, logical, thorough,” suggested one user. Another user wanted a “simplified path to get information. Reviewing lab results, for example, takes about seven clicks for providers.” That was echoed by a user who wished the platform would “streamline workflows for providers, nursing and other areas more effortlessly.”

When physicians and EHRs just don’t click

The EHR usability factor is a major frustration for many health systems, according to Atlanta-based CIO Dee Cantrell, who provides healthcare IT consulting for hospitals and physician groups. “The number of clicks and number of screens you have to go through just to get something documented is still one of the greatest frustrations that I hear about,” she said.

Current EHRs’ navigation and portability in particular scored lowest in effectiveness in the HIMSS survey.

“There is plenty of demand for improvements for EHR usability. The time clinicians spend sifting through patient data and navigating EHR interfaces is frustrating and unproductive,” said Byers, whose company makes the cloud-based Juno EHR



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Mark Byers | CEO | DSS, Inc.

CURRENT EHR IMPLEMENTATIONS ARE MOST SUCCESSFUL AT ADHERING TO REGULATIONS AND PROMOTING SAFETY

How well does your current EHR deliver on each of the following elements?

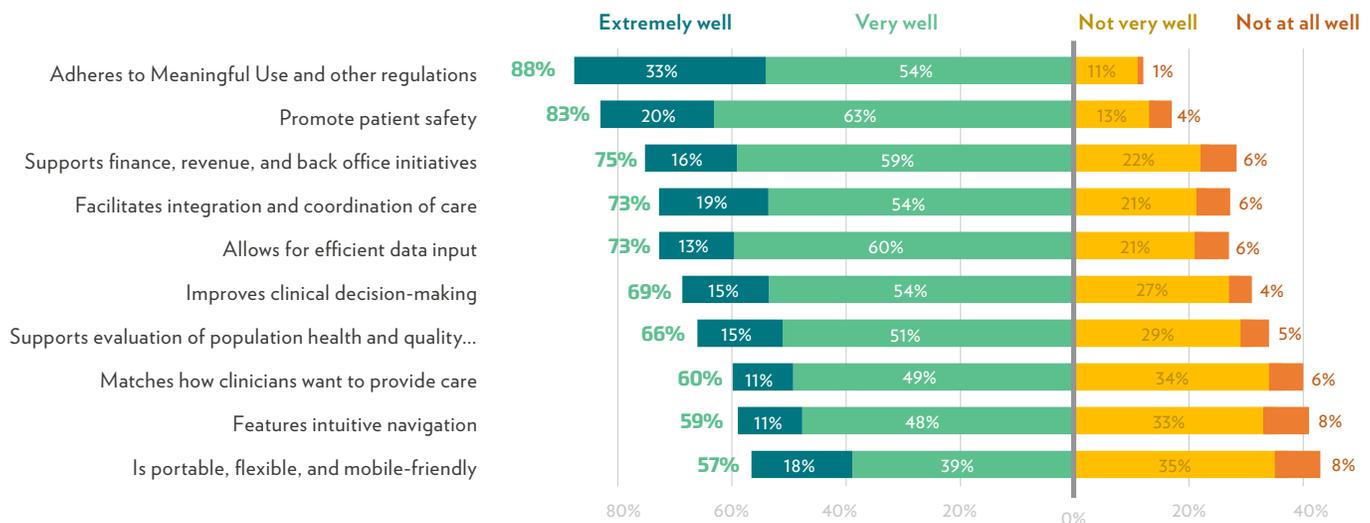


Figure 2. Respondents believe EHRs most often deliver on regulations, patient safety and back-office support.

platform. Juno EHR was designed by clinicians for clinicians to address issues that remain with most conventional EHRs. It’s built on an economically scalable, open platform to capitalize on future enhancements as they come to market.

“Healthcare is ultimately about people,” Byers explained. “For clinicians, the clinician-patient relationship is essential to career satisfaction. Today’s EHRs have driven a wedge into this relationship.”

Indeed, a joint research study involving the American Medical Association¹ last fall noted that nearly half of all U.S. doctors showed at least one symptom of physician burnout. If not addressed, the condition could cause providers to voluntarily cut back or leave entirely – creating serious setbacks at health systems already struggling with physician shortages. That

same study published in Mayo Clinic Proceedings found every point increase in EHR usability corresponded with a 3% decrease in physician burnout. “This should speak to EHR vendors out there and also health organizations as they make decisions whether to move to a new EHR or not because we have got to have that user interface, that usability and that easier navigation front and center,” Cantrell said.

Findings in the more recent HIMSS study reflect that frustration, as well. Reducing the number of required clicks or actions to perform routine tasks handily ranked first (56%) among EHR-related challenges compared to general dissatisfaction and time spent maintaining patient records (34%-35%) and difficulty finding the right data when needed (33%) (Figure 3).

ADDRESSING THE HIGH NUMBER OF ACTIONS REQUIRED FOR ROUTINE TASKS IS A CLEAR AREA OF IMPROVEMENT FOR THE EHR

Which EHR-related challenges present the most urgent need for improvement?

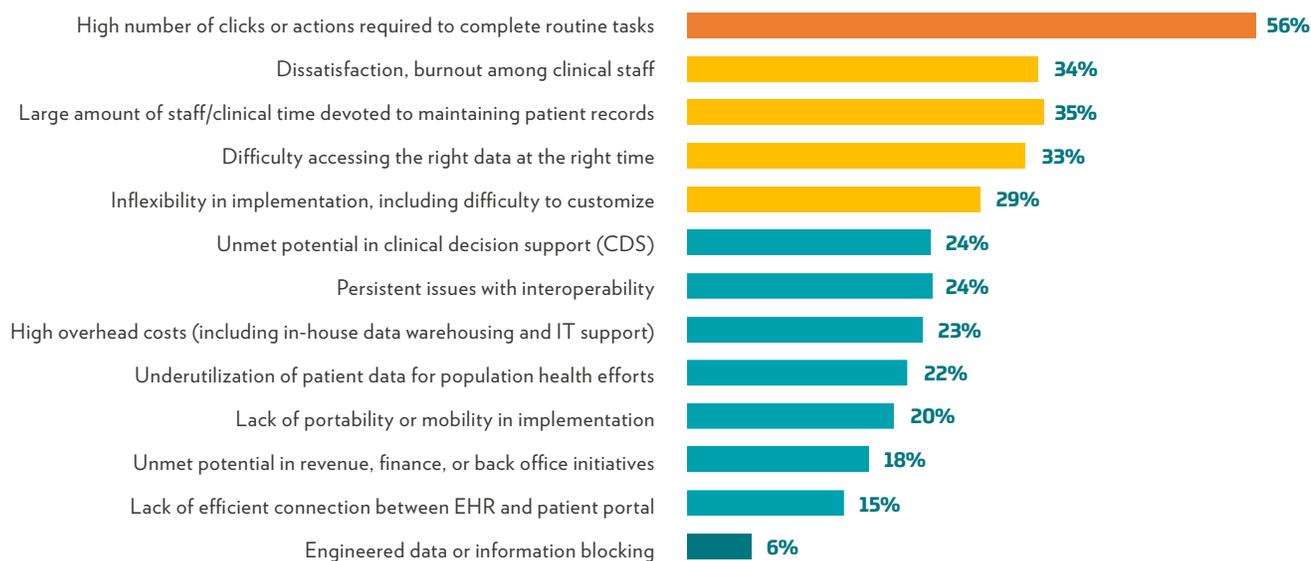


Figure 3. HIMSS survey respondents believe EHR vendors must reduce the high number of clicks it now takes to perform typical tasks.

Modernizing e-health record systems

The challenges that exist in today’s EHR space also provide an opportunity for the next generation of EHRs. These new platforms will be more mobile friendly and leverage emerging technologies like artificial intelligence, smart voice assistants, and both virtual and augmented reality. They’ll also incorporate interoperability standards like FHIR to facilitate easier data exchanges and offer the latest visual aids and/or smart apps to assist in the growing use of telehealth and telemedicine.

“The next generation of EHRs must dramatically reduce the demand for clinician interaction,” Byers said. “Calculations should be automated. Data searches should be far more intuitive. These systems should offer clinical recommendations based on peer-reviewed analysis. The value here is twofold. One, it reduces cognitive load to improve clinician effectiveness. Two, it increases patient safety by reducing human error.”

Cantrell noted the importance of improved interoperability to better integrate various data sources – including those tied to social determinants of health – to expand and refine an organization’s population health and management systems. Additionally, she said, too often EHR contracts forbid data sharing beyond an organization’s walls to protect patient privacy.

“It’s like the Tower of Babel today, where we have all these EHR systems and they all speak different languages,” she explained. “And even though we’ve made some progress on that front in the last five or six years, we still have a long way to go.”

The CIO believes the following will help define the next generation of EHRs, particularly during public health emergencies such as the ongoing COVID-19 pandemic.

- An ability to leverage electronic records to better manage emergency responses, track trends and measure key performance indicators to better manage internal resources like bed occupancies
- Population health dashboards tied to disease screenings and search planning to help manage outbreaks
- Integrated or embedded telehealth technology to provide remote patient care
- Greater interoperability and secured information exchanges that promote transparency into what is collected and how health data is used
- An emphasis on ease of use, navigation, voice-enabled tech and smart apps that consumers expect to be available in healthcare as they are for other industries

OPTIMIZED WORKFLOW AND INTUITIVE USER DESIGN ARE CRUCIAL ELEMENTS FOR NEXT-GENERATION EHR

For a next-generation EHR, how important are the following pieces of modern technology?

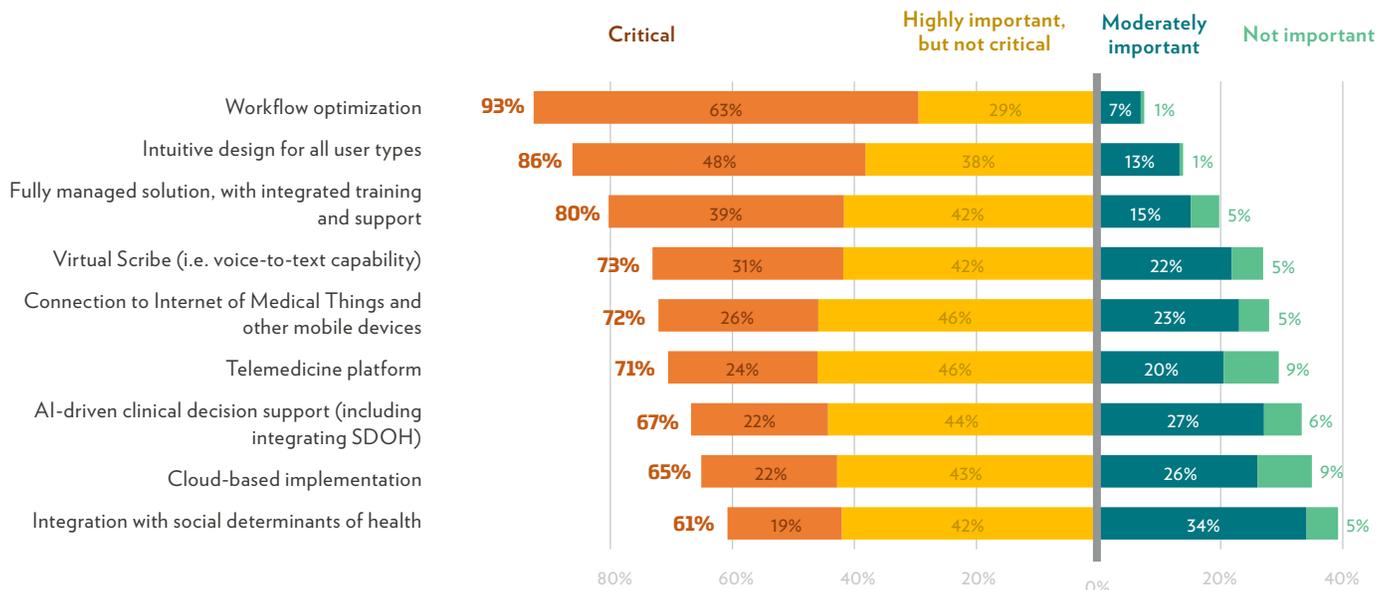


Figure 4. Most healthcare providers seek workflow optimization and intuitive design in a next-generation EHR.

The HIMSS survey supports these features, with workflow optimization (93%) and intuitive user design (86%) leading a list of must-haves for the next generation of EHRs (Figure 4).

Both Cantrell and Byers recognize many healthcare organizations won't switch EHRs despite current dissatisfactions. It's just a bridge too far to cross at the moment. Only about one in five HIMSS survey participants said they were most likely to switch to a new primary EHR in the near future, and those leaning in that direction hoped a different system would lead to lower cost of ownership (52%) and improved clinical workflows and interfaces (46%).

"When I work with clients who decide to go to a different EHR, I always try to make sure people understand why we're making that change and make sure key stakeholders are part of the decision to make that change," Cantrell said. "They need all key stakeholders to be part of those decisions and actively engaged from decision-making to implementation to

post-implementation. Implementing an EHR never stops; it's a continuous journey and...nurses, physicians, administrators and allied health professionals must be part of that journey from the start."

She noted that for smaller organizations, using a cloud-based software-as-a-service (SaaS) provider may lower monthly costs and comes with tech support. A local consultant with a strong healthcare IT background can guide a smaller hospital from the decision process through implementation. This helps ensure strong clinical support – and usage – from the start.

Added Byers: "There will always be inherent challenges to using technology in a clinical setting. We should continually strive to innovate with a focus on how these innovations serve clinicians. We know the clinician-patient relationship is essential. I believe the EHR-clinician relationship is just as essential."

¹ O'Reilly KB. Nov. 14, 2019. "New research links hard-to-use EHRs and physician burnout." American Medical Association. Practice Management. <https://www.ama-assn.org/practice-management/digital/new-research-links-hard-use-ehrs-and-physician-burnout>



About DSS

With over 25 years of experience, DSS is a healthcare technology company that empowers providers to perform at their best and give patients the level of care they deserve. Juno EHR is thoughtfully designed by experienced healthcare professionals to deliver on the promise of modern EHR technology.