

Relief from the pain of medical technology

Healthcare providers struggling with electronic health records can now get help from voice-enabled assistants.

In a trauma room, when seconds count and lives hang in the balance, physicians rarely have time to grab a tablet and access a patient's medical records. But even in less critical situations, many physicians say they do not have time to examine each patient's electronic health record (EHR) in detail much less thoroughly document the information discussed and the care provided.^[1] As a result, important information could slip through the cracks, and patient care could be compromised. However, with new technology, physicians are about to have their voices heard.

In early 2009, when President Obama signed the Health Information Technology for Economic and Clinical Health (HITECH) Act into law, it was on the promise that these information systems would enhance patient care. Now, with at least 96 percent of nonfederal acute care hospitals using EHRs, there are many who say the technology has yet to fulfill that promise.^[2] Instead of faster and better care, doctors feel that EHRs slow down service and make them less clinically effective. There is also significant data to suggest that EHR use is related to physician burnout.^[3]

Clinicians' primary complaints are that the systems:

- Are unintuitive and not user friendly
- Require too many clicks to accomplish even simple tasks
- Make clinical documentation too time consuming
- Are incapable of adjusting to users' needs

One adjustment that some doctors have requested is voice-enabled digital assistance, like that which is available from Apple's Siri and Amazon's Alexa, to help ease the documentation burden.^[4] While these handy tools were not designed for medical use, they have inspired several solutions that effectively interact with electronic charts to quickly search previous notes and record new ones.

Recently, EHR vendors have begun developing their own voice-activated solutions. This includes Epic, maker of the most widely used EHR in healthcare.^[5] Epic has dubbed its new voice assistant "Hey, Epic!" and is promising that the technology will eventually make its platform an easy-to-use time saver with hands-free access to examine medical charts, complete and confirm clinical orders, and document care.

For now, Hey Epic!'s capabilities, which are activated by saying "Hey Epic!" are currently being utilized in about 20 facilities, mostly to help clinicians navigate records, place simple orders and create reminders. But Epic is working on expanding the range of requests and commands and, hopefully, providing some relief to doctors, so they can get back to spending their time on patients rather than technology.

[1] Stanford Medicine (2019). How Doctors Feel About Electronic Health Records. National Physician Poll by The Harris Poll.

[2] Melnick, Edward R. et al. The Association Between Perceived Electronic Health Record Usability and Professional Burnout Among US Physicians. Mayo Clinic Proceedings, 95(3): 476 - 487.

[3] Melnick, Edward R. et al. The Association Between Perceived Electronic Health Record Usability and Professional Burnout Among US Physicians. Mayo Clinic Proceedings, 95(3): 476 - 487.

[4] Stanford Medicine (2019). How Doctors Feel About Electronic Health Records. National Physician Poll by The Harris Poll.

[5] Doctors rank their favorite EHRs (2016). Advisory Board. Retrieved from <https://www.advisory.com/daily-brief-ing/2016/08/30/favorite-ehrs>.