

Simpler logins, voice recognition ease click fatigue at Yale

MAY 22, 2018

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To improve physician well-being and prevent burnout, Yale School of Medicine started searching for ways to reduce clicks and increase time spent with patients.

“We looked at the kinds of issues we were dealing with and decided this required a systemwide approach,” said AMA member and Yale Medicine Chief Medical Officer Ronald Vender, MD. He is also the associate dean for clinical affairs and a professor of medicine in digestive diseases at Yale.

Those issues included EHR inefficiencies that had a significant impact on job satisfaction, physician engagement and the health and well-being of Yale faculty. Physicians were unhappy, working too many hours and bringing home work at night and on weekends.

After the initial phase of targeting EHR use and functionality, a series of discussions with IT leadership took place with Allen Hsiao, MD, the chief medical information officer at Yale, and Lisa Stump, the chief information officer, to better address physician burnout.

“One of the things we realized is that there is still a limitation to the keyboard-and-mouse user interface,” said Dr. Hsiao. “Anything we can do to tackle that can make a big difference and help take clicks away for physicians to complete their work.”

Yale Medicine linked together strategies to address physician burnout and improve the user experience with EHRs by adding new features such as voice recognition and easier login identification.

Eliminating a "daily annoyance"

The first initiative aimed at cutting clicks was to implement a solution that eliminates repetitive typing of the physician's username and password. It allows physicians to use their badges to tap in and out of the system throughout the day after a one-time login at the start of their shift.

"This was a daily annoyance for our doctors," said Dr. Vender. "It had a disproportionate effect above and beyond the time with just the annoyance factors. Addressing this psychologically, as well as time savings, has been a huge win." The move has saved physicians between six and 20 minutes daily. That's about 20 to 140 logins per physician each day.

Previously, physicians had to quickly remember and correctly enter their login passwords, which must be changed several times a year. The new system "is quite a satisfier to physicians to be able to save all those clicks," Dr. Hsiao said.

Of Yale's 300 ambulatory sites across six hospital campuses, 60 percent have implemented the new system.

Closing encounters in half the time

Due to the limitations of the keyboard-and-mouse user interface, Dr. Hsiao implemented speech recognition for physicians. Through voice-recognition software that connects directly to the EHR, physicians have experienced a 50 percent reduction in the time it takes to complete and close encounters.

"Physicians have been thrilled about it," he said. "Now we're trying to figure out how they can use it at home because they love it so much."

Between 30 and 40 percent of Yale physicians are using voice-recognition software, and about 100 new clinicians each week are signing up to use it.

"This has turned out to be a huge win. Even doctors who feel like they can do a very good job and didn't require voice recognition—once they begin to utilize it, they find that it is even better," Dr. Vender said.

And because the voice-recognition technology is three times faster than previous options and has improved quality for physicians, the average time to close an encounter is down by eight hours a week.

"I type very fast and I thought, 'I don't need voice recognition,'" said Dr. Hsiao. "I quickly found that I have better notes, higher quality, I put in things that I would have thought isn't worth the time and

effort to type, but I will now speak them. It is easier to speak them even for people who type well.”

Dr. Vender also recommends physicians use voice recognition while the patient is in the room. This real-time note taking allows the patient to understand what the physician is writing in their notes and provides instant feedback. This can be reassuring and a confidence builder for patients.

The third major initiative is a pilot using virtual scribes in which 50 physicians are participating. With voice recognition and the virtual scribes, physician time on the computer on nights and weekends has significantly lessened, Dr. Vender said.

Other Yale initiatives related to well-being include physician-patient communication training, a resiliency development course, support for meditation programs, mindfulness courses and workshops from the Yale Stress Center, and weekly drop-in meditation sessions through Being Well at Yale.

Physicians are also provided assistance with conversations related to the disclosure of unanticipated adverse events, and the academic health system is piloting a peer-support program for second victims.

This article displays one of the ways that Dr. Vender, an AMA member since 1977, is moving medicine. Find out more about how members move medicine.