How EHR Nudges Improve Clinician Burden and Increase Screening Orders

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Researchers believe future interventions may need to target patient-centered nudges to complete their cancer screenings.

With doctors' busy schedules and the ongoing issue of clinician burden, an EHR "nudge" may be effective to prompt medical assistants to set up and order cancer screenings for doctors to sign once they see the patient.

Clinician burden is high, reports confirm, and with other conflicting issues like limited patient engagement and EHR use challenges, key elements of care can slip through the cracks. Preventive screenings, like cancer screenings, may not happen as regularly as they should.

But new data, published in *JAMA Network Open* suggests an EHR nudge could address many of those problems. According to study authors Mitesh Patel, MD, and Esther Hsiang, MD, pushing EHR nudges out to medical assistance – not physicians themselves – could help address gaps in care that pervade the patient experience and drive cancer screening rates.

The EHR was a natural place to start, the researchers said. More than 90 percent of clinicians and health systems now use EHRs, making them accessible for study participants.

"This was a project that was initiated actually by the primary care practices," said Patel. "We had done a pilot a few years ago showing that a slightly different version of the nudge could potentially work. So, we worked with them to improve the design and then this was rolled out at three other practices and compared to the control groups here."

Instead, researchers targeted medical assistants specifically to account for physician burnout challenges and EHR complexity that often bogs down physicians.

"Providers, especially primary care providers in the outpatient primary care setting, are expected to do so many different things in terms of addressing patient problems and remembering health maintenance screening, including cancer screenings and often increasingly shorter and shorter visits," Hsiang said in an interview with *EHRIntelligence.com*.

Pushing the nudges out to medical assistants was a key strategy for addressing that burden, she continued.

"Just to try to relieve some of that burden, one way to think about it is to what degree can the use of emerging technologies or increased implementation of technologies help to flag some of those things more automatically to help address the issues of health maintenance themselves," explained Hsiang.

And, ultimately, this approach had positive results.

The researchers, who hailed from the Perelman School of Medicine at the University of Pennsylvania, found a 22 percent increase in screening orders for breast cancer and a 14 percent increase for those treating colorectal cancer. Overall, 88 percent of the breast cancer patients and 82 percent of colorectal patients included in the study had a cancer screening ordered due to the nudges.

But there is room for improvement – and further research – going forward. For one, there are questions about whether these nudges could be sent to other types of providers.

Patel said the standard is to deploy it on the physicians. However, the novelty of this study was to target the assistants to save the physician's time.

"So instead of physicians responding to alerts, physicians could have conversations with patients about cancer screening," explained Patel. "It was less time dealing with alerts and more time talking to patients. But, like I said, the standard approach is to alert doctors."

There's also the question of patients actually receiving preventive screenings.

Although the percentage of cancer screenings increased, there were minimal changes in the rates of patients who followed through within one year and completed their screenings.

Both authors believe patient-centered nudges should be next, suggesting a path forward for future research. Although there was a major increase in the percent of doctors that order the tests, there was little change from the patient, Patel noted. Hsiang believes that patient-centered nudges can be implemented into mobile technology via a smartphone or tablet.

But delivering nudges to patients, potentially through a smartphone or tablet, could help address the patient engagement barriers keeping preventive care access low.

"In this study we found that physicians were ordering these tests appropriately, more so after the nudges were implemented, but the patient completion rates did not increase," concluded Hsiang. "And I think we have several different hypotheses for what's driving that, but better analyzing it, understanding the different factors that are causing the patients not to get the cancer screenings done is particularly important."