Electronic health records may compromise safety for chemotherapy patients

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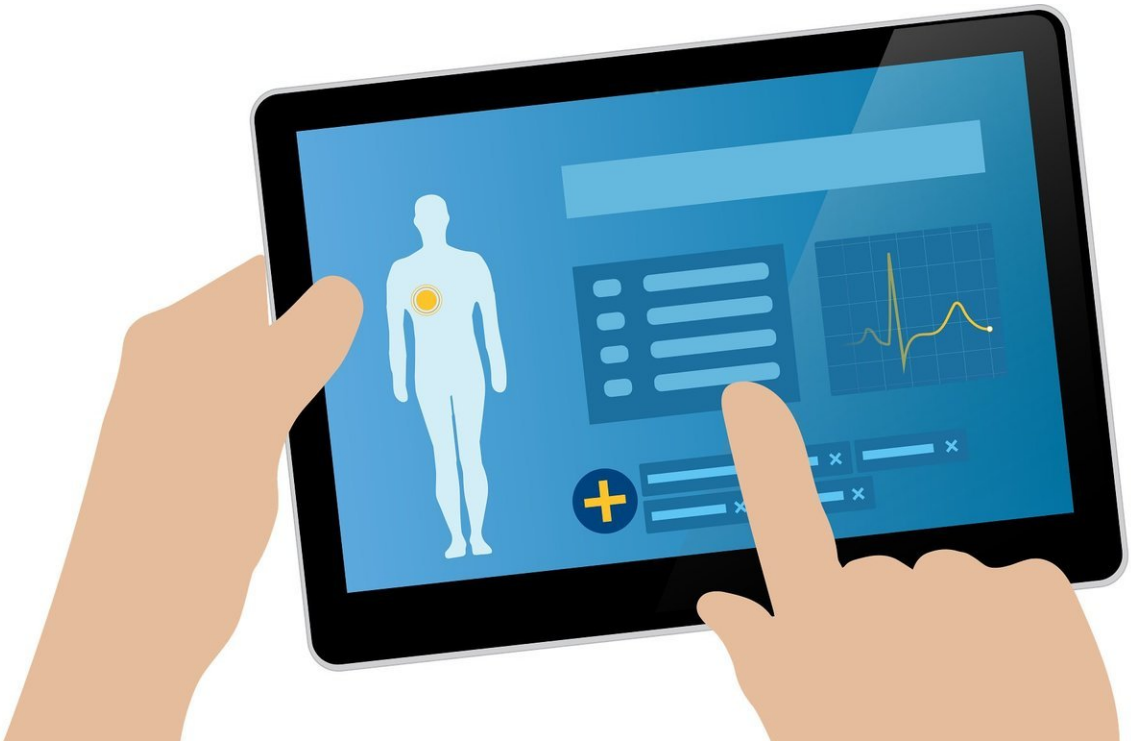

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Electronic health records were supposed to streamline patient information, but in the decade since inception, health workers claim they have compromised patient care and complicated their jobs.

Expanded use of EHRs—the digitization of paper health records—was

promoted under the American Recovery and Reinvestment Act of 2009. A recent University of Michigan study confirms earlier research about EHRs' shortcomings—this time in the highly complex outpatient chemotherapy setting.

It's the first known examination of EHRs and safety in the oncology setting, said Christopher Friese, the Elizabeth Tone Hosmer Professor of Nursing and principal investigator on the project.

"Chemo is a high-volume, high-risk endeavor and most patients receive these treatments in centers like the ones we studied," said Friese, who also has an appointment at U-M's Rogel Cancer Center. "Unlike some other treatments, there's no reversal, there's no antidote, we have to get it right the first time. This study tells us that in this complicated space, oncology clinicians tell us that the EHR is posing challenges."

Friese and colleagues measured safety culture and satisfaction with clinic technology and clinician communication among 297 oncology nurses, physicians and advanced practice providers across 29 oncology practices that participate in the Michigan Oncology Quality Consortium, a statewide collaborative.

They found that clinicians reported lower safety scores in settings with the most sophisticated EHRs. As expected, higher satisfaction with technology and better clinician communication was associated with higher safety scores.

What does this mean for patients?

"You can't assume a provider in the same clinic or system has the same information. It's important for patients and loved ones to keep their own careful notes," said Friese, who suggests bringing a loved one to appointments to take notes, get copies of test results and ask questions if

anything is unclear or messages aren't consistent.

EHR shortcomings posed safety and communication issues for chemotherapy patients and clinicians, said study lead author Minal Patel, the John G. Searle Assistant Professor of Health Behavior and Health Education.

"The impact that greater use of electronic systems in practices has on patient safety underscores the importance of devoting more attention to strengthening communication between members of the care team," she said.

Some common EHR problems include:

- Doctors, nurses and pharmacists receiving different patient information.
- Doctors not completing notes in real-time, leaving nurses without up-to-date information on patients scheduled for chemotherapy.
- Outdated information copied and pasted into patient records.
- EHRs hardwired to limit certain functions to select providers. If that provider isn't available, it poses problems—especially in smaller clinics.

These EHR issues often result in chemotherapy treatment delays—a big problem in many centers where patients sometimes drive hours only to wait—or worse, reschedule appointments.

"But, it's not all doom and gloom," Friese said.

To his surprise, some sites with sophisticated EHRs reported high safety scores. The research team is studying sites with the most and least problems to glean best practices, he said.

The researchers already know that improved support to help clinicians integrate technology and facilitate communication would help, Friese said. Also, it's important that EHR trainers understand the unique aspects of cancer care.

More information: Minal R. Patel et al. Clinician Perspectives on Electronic Health Records, Communication, and Patient Safety Across Diverse Medical Oncology Practices, *Journal of Oncology Practice* (2019). DOI: 10.1200/JOP.18.00507