Does Clinician Computer Use Hinder Patient Satisfaction? CME/CE

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CONTEXT

Safety-net clinics serve populations with limited English language proficiency and health literacy. Communication barriers in these clinics may aggravate disparities in care and health.

Use of electronic health records in safety-net clinics may affect communication between patients and their healthcare providers. The goal of this study by Ratanawongsa and colleagues was to examine relationships between clinician computer use in safety-net clinics and communication with patients having a variety of chronic diseases.

STUDY SYNOPSIS AND PERSPECTIVE
Patients want their clinicians to look at them -- not their computer screens -- while in the examination room, a study has shown.

Clinicians in safety net hospitals who were assessed as high computer users during clinical encounters fared significantly worse than their low-computer-use counterparts in measures of patient experience, Neda Ratanawongsa, MD, MPH, from the Division of General Internal Medicine, University of California, San Francisco, and colleagues report in a research letter published online November 30 in JAMA Internal Medicine.[1]

In an observational study designed to assess associations between clinician computer use and communication with patients with diverse chronic diseases in safety net clinics, the researchers videotaped 71 encounters between 47 patients and 39 clinicians that took place from November 1, 2011, to November 30, 2013. Patients were interviewed by telephone before the videotaped visit, and again after the visit, and were asked to rate the quality of the care they received in the previous 6 months.

The researchers reviewed the videotaped encounters and assessed clinician communication behavior using the Roter Interaction Analysis System, and they categorized computer use as low, moderate, or high. Using multivariate analyses adjusted for length of visit, patient educational level, patient quality of life, and clinician demographics, they identified associations among computer use, communication variables, and patient experience ratings.

Fewer than half (48%) of the patients of clinicians with heavy computer use during clinical encounters rated the care they received as excellent on patient experience surveys, whereas the majority (83%) of patients whose clinicians were less engaged with their computers during the encounter felt that the care they received was excellent.

High computer use was also associated with observable communication differences, the authors report. Patients in appointments with high computer use engaged in more social rapport building ("chit chat"), whereas those in appointments with moderate computer use engaged in somewhat less rapport building but had a more positive demeanor. In contrast, clinicians with high computer use engaged in more negative rapport building, which involved statements that express disagreement or criticism.

"Although social rapport building can build trust and satisfaction, concurrent computer use may inhibit authentic engagement, and multitasking clinicians may miss openings for deeper connection with their patients," the authors write. Negative rapport building may be an unintentional

consequence of the electronic health record, they explain, noting that completing it during the visit "may trigger disagreement by clinicians as they detect and clarify patient misunderstandings."

Because the implementation of electronic health records appears to influence communication between healthcare providers and patients, particularly those in safety net clinics serving populations with limited health literacy, educational and cultural improvement efforts should be undertaken to "support clinicians' use of the electronic health record in ways that enhance their capacity to communicate with and care for diverse patients," the authors write.

In an accompanying editorial,[2] Richard M. Frankel, PhD, from the Regenstrief Institute, Indiana University School of Medicine, and the Center for Healthcare Information and Communication at the Richard L. Roudebush VA Medical Center in Indianapolis, writes, "Our challenge is to find the best ways to incorporate computers in the examination room without losing the heart and soul of medicine: the physician-patient relationship."

To this end, Dr Frankel suggests a framework for developing and reinforcing good computer use habits. He describes the POISED mnemonic (prepare, orient, information gathering, share, educate, debrief), which he developed from a review of the available literature and his own research.

For example, clinicians can preserve face-to-face time with patients by revisiting "the time-honored habit of reviewing the patient's medical record before entering the examination room," Dr Frankel suggests. He also recommends spending the first couple of minutes of the visit engaged in dialogue with the patient without the computer.

"Using the computer during information-gathering segments of the visit is both appropriate and expected by patients," Dr Frankel explains. Routinely turning the screen to the patient so he or she can see what is being typed helps patients feel like partners in the care process, and it can also help with patient education, serve as a launching pad for discussions about health habits, and reinforce postvisit instructions.

"Being POISED for examination room computer use need not cost additional visit time. Used well, just the opposite is true," Dr Frankel concludes.

The authors and Dr Frankel have disclosed no relevant financial relationships.

STUDY HIGHLIGHTS

From November 1, 2011, to November 30, 2013, researchers videotaped 71 encounters between 47 patients and 39 clinicians at an academically affiliated public hospital with basic electronic health records.
Using the Roter Interaction Analysis System, researchers evaluated clinician communication behavior and computer use in the videotaped visits.
Telephone interviews before and after the videotaped visit determined patient ratings of how they perceived their quality of care in the previous 6 months.
Multivariate analyses allowed adjustment of associations among computer use, communication variables, and patient experience ratings for duration of visit, patient educational level, patient quality of life, and clinician demographics.
Clinicians with low or moderate computer use during visits were more likely than those with heavy computer use to have patients who rated their care as excellent (83% vs 48%; P =.04).
Compared with patients in clinical encounters with low computer use, those in encounters with high computer use used more social rapport-building statements (P =.04).
Patients in clinical encounters with moderate computer use used less positive rapport building (P <.01) but had more positive affect tone (P =.02).

Clinicians with high computer use engaged in more negative rapport building (expressing disagreement or criticism; P <.01), more social rapport building (P <.01), and less positive affect (P <.01).

On the basis of their findings, the investigators concluded that social rapport building may foster trust and satisfaction.

However, computer use during the visit may hinder authentic engagement, and multitasking clinicians may miss opportunities for deeper connection with their patients.

Information in the electronic health record may identify patient misunderstandings, but this may trigger disagreement.

The study authors recommend literacy, educational, and cultural improvement efforts to support clinicians' use of the electronic health record in ways that improve patient communication and care.

Study limitations include possible volunteer or recall bias, confounding variables, and inconsistency of some associations.

An accompanying editorial suggests a strategy to develop and maintain good computer use habits using the POISED mnemonic (prepare, orient, information gathering, share, educate, debrief).

Specific recommendations include reviewing the medical record before entering the examination room; spending the first few minutes of the visit speaking with the patient without using the computer; and turning the screen so that the patient can view data entry, to facilitate patient education and a sense of partnership.m

CLINICAL IMPLICATIONS

High computer use by clinicians during patient encounters in safety-net clinics using electronic health records is associated with less patient satisfaction with their care, based on an observational study.

The researchers recommend literacy, along with educational and cultural improvement efforts to support clinicians' use of the electronic health record in ways that improve patient communication and care.

Implications for the Healthcare Team: Members of the healthcare team should be aware that clinician computer use during a visit in the examination room may hinder authentic engagement, and multitasking clinicians may miss opportunities for deeper connection with their patients.