HOW DOES THE ELECTRONIC MEDICAL RECORD AFFECT PHYSICIAN EDUCATION?

Study examines pros and cons for doctors training to become kidney specialists

Highlight

- Physicians who are training to become kidney specialists reported that the electronic medical record enhances their education, but the time demands of data and order entry can be a downside.

Washington, DC (June 23, 2020) — Results from a new study provide insights on the positive and negative effects of the electronic medical record (EMR) on the education of physicians training to become kidney specialists. The findings appear in an upcoming issue of CJASN.

The electronic medical record (EMR) has become an integral part of the US healthcare system over the last decade, and although it has numerous benefits, it may also have unintended, negative consequences. Christina M. Yuan, MD and her colleagues looked at the burdens and benefits of EMR use on one aspect of medicine: the education of US nephrology fellows, or physicians who have completed their residencies and are training to become kidney specialists. “It is important to ask faculty and trainee physicians how they perceive the effects of the EMR on physician education, and to determine what they think is deleterious and what is value-added,” said Dr. Yuan.

The team sent an anonymous on-line opinion survey of all 148 US Nephrology program directors to forward to their faculty and fellows. A total of 97 faculty and 72 fellows responded.

Just over half of fellows agreed that the EMR contributed positively to their education—primarily because of ease of access to laboratory and radiology results and ability to access software from home and on personal devices. For more than 40% of respondents, however, EMR function was reported to be slow or disrupted, and these respondents were less likely to agree that the EMR contributed positively to their education. More than 50% of fellows reported that EMR data entry time demands contributed to their reluctance to do procedures, participate in conferences, and prolong patient interactions. Also, 65% of fellows reported that they often or sometimes exceeded work-hour restrictions due to EMR entry time demands.
“Nephrology fellows and faculty who responded to our survey reported that the EMR enhances education and patient care by providing efficient and flexible access to patient lab and x-ray results, but the time demands of data and order entry reduces engagement in educational activities, contributes to work-hour violations, and stifles direct patient interaction,” said Dr. Yuan.

An accompanying editorial notes that the electronic health record “is a powerful tool to access health information from any site and improve the efficiency, appropriateness and safety of health care. Despite these potential benefits, usability issues remain a major barrier, contributing to frustration and burnout.”

Study co-authors include Dustin J. Little, MD, Eric S. Marks, MD, Maura A. Watson, DO, Rajeev Raghavan, MD, and Robert Nee, MD.

Disclosures: Dr. Little is employed as a research physician at AstraZeneca. The authors reported no other financial disclosures.


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