"Real-Time" Clinical Reasoning via the EHR? The EHR and Its Role in Clinical Supervision

We read with interest the article, "Developing Teaching Strategies in the EHR Era: A Survey of GME Experts."[1] We applaud the authors for this work, but were struck by the implication that the electronic health record (EHR) may serve as an assessment modality for "real-time" clinical reasoning skills. Expert faculty were reported to agree that the EHR should be used for "providing the opportunity for trainees to demonstrate clinical reasoning in real time."[1] Interestingly, although this is 1 of the few items in the survey that reached consensus, this construct was neither explicitly defined nor further explored. Trainee documentation may not accurately reflect point-of-care changes in thinking and approach, nor attending physician attention to that skill. In examining time stamps on electronic notes, there often are significant delays between initiation of resident notes and attending attestations, and much of the rich process of clinical reasoning may be occurring amid these highly disparate time stamps.[2]

We would argue that documentation in the EHR is not the appropriate mechanism to assess "real-time" clinical reasoning. Direct observation is the "gold standard" in assessing this particular skill in trainees, but electronic notes may be a highly variable and potentially flawed mechanism to do so. The more important construct that may be underlying the high degree of participant consensus for the statement is the potential to use the EHR to provide clinical supervision and ensure patient safety in a dynamic and rapidly changing clinical environment.

The EHR provides the unprecedented ability for supervising physicians to obtain clinical data nearly instantaneously; no longer is it necessary to be physically present on the wards to obtain the results of laboratory data, imaging studies, or expert opinions from consultants. This information is available as soon as it enters the EHR, and supervising attending physicians may access it from their offices, clinics, laboratories, or even homes. It is very likely that this capability has changed the way in which supervising attendings approach assessing clinical reasoning decisions in residents.[3] If a surprising result or a piece of information that requires urgent action pops up in the EHR, the attendings may know before trainees have the opportunity to inform them or present it in a traditional rounds setting. This functionality affords attendings the ability to electronically "watch closely at a distance," using the EHR as new clinical information flows in.[3,4] This likely has a significant impact on clinical supervision and patient safety, important domains that were neglected in the current article.[2] It is possible that this capability could even be harnessed to provide a means of "electronic" direct observation when the "gold standard" may not be feasible.[3]

Much of the focus on the EHR's ability as an educational tool has centered around documentation, role modeling, and teaching a patient-centered approach to its use, all of which were highlighted in the article. These are important, but we believe there is a significant gap in knowledge and understanding about the EHR's educational impact on clinical supervision in residency training, with important downstream effects on patient safety.

Shannon K. Martin, MD, MS
Assistant Professor of Medicine and Associate Program Director, Internal Medicine Residency Program, University of Chicago Pritzker School of Medicine

Jeanne M. Farnan, MD, MHPE
Associate Professor of Medicine and Assistant Dean, Curricular Development and Evaluation, University of Chicago Pritzker School of Medicine

References

1. Atwater AR, Rudd M, Brown A, et al. Developing teaching strategies in the EHR era: a survey of GME experts. *J Grad Med Educ*. 2016;8(4):581–586.
2. Tulla K, Martin SK, Meltzer D, et al. Home work: quality and timing of attending attestation in the electronic health record. Oral abstract presented at: Midwest Society of General Internal Medicine Regional Conference; Chicago, IL; September 13, 2013.
3. Martin SK, Tulla K, Meltzer D, et al. Attending use of the electronic health record and implications for housestaff supervision: preliminary results from a mixed methods study: abstracts from the 36th Annual Meeting of the Society of General Internal Medicine. *J Gen Intern Med*. 2013;28(suppl 1):30–31.
4. Babbott S. Commentary: watching closely at a distance: key tensions in supervising resident physicians. *Acad Med*. 2010;85(9):1399–1400.

DOI: http://dx.doi.org/10.4300/JGME-D-16-00530.1

Downloaded from http://meridian.allenpress.com/jgme/article-pdf/9/1/137/2220968/jgme-d-16-00530_1.pdf by guest on 17 September 2024