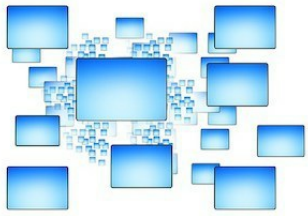
ICU
MANAGEMENT & PRACTICE

Safety Issues May Be Missed in EHR Reviews



Variable use of electronic health records between and within professions could mean that as much as half of patient safety issues could be missed, according to a simulation study.

The study, by Knewton K. Sakata, MD, Division of Pulmonary and Critical Care Medicine, Department of Medicine, Oregon Health & Science University, Portland, Oregon, USA, and colleagues, which is published in the *Journal of Interprofessional Care*, analysed how use of electronic health records (EHR) to prepare for ICU rounds varied between different professionals and between individuals from the same profession. The research also assessed ability to discover patient safety issues from the EHR, and found poor recognition of safety issues amongst all the professions.

The study's 74 participants comprised 25 doctors (10 interns, 11 residents and 4 fellow), 29 nurses and 20 pharmacists, who reviewed a simulated medical chart that contained 14 patient safety items, relating to dangerous trends in the patient's condition, medication error and failure to adhere to critical care best practices.

The participants then presented the patient to one of the study team and the researchers recorded the number of safety items identified.

Results

No safety item was recognised by all participants. Fifteen of the 74 participants recognised the clinical diagnosis of recurrent sepsis. The doctors were more likely to report issues relating to clinical changes, pharmacists were more likely to report issues related to medications and nurses more likely to report issues related to critical care best practices.

Physicians recognised about 40% of the issues, nurses 30% and pharmacists 26%. Not only were there differences between the professions in recognition of the safety items, but they also differed in EHR use. Only 3 out of 152 EHR screens were used by all three groups, namely the results review, review of progress notes and the input/output screen, and most screens were used exclusively only by one group.

See Also: EHR Leading to Burnout

The researchers conclude that variation of both intra and interprofessional recognition implies that an average interprofessional team from the cohort they studied could miss as much as 50% of safety issues supporting the persistence of patient safety issues during the theoretical safety net of interprofessional rounds. They suggest that preferential identification of safety issues by certain professional groups could be due to differences in EHR use.

The limitations of the study are that it was carried out in a single centre, and the simulations were carried out after morning rounds. The professionals presented to a researcher and not to a full multidisciplinary team, which might have improved recognition of safety issues, acknowledge the authors.

Next Steps

Sakata et al. conclude that these results "argue for a unit-specific, patient-centric interprofessional approach to EHR customisation to minimise any potential gaps in data visualisation between groups… it is likely the siloed approach to customisation has resulted in a slow evolutionary divergence in EHR usability between the groups."

The researchers recommend that future research is performed on whether shared decision-making during rounds can improve recognition of safety issues. They also recommend that objective/quantitative measures of EHR usability are created and validated for each professional group individually.

Image credit: Pixabay

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