Educational interventions to improve the meaningful use of Electronic Health Records: a review of the literature: BEME Guide No. 29.


Abstract

BACKGROUND:
Electronic health records (EHRs) are increasingly available and this was expected to reduce healthcare costs and medical errors. This promise has not been realized because healthcare professionals are unable to use EHRs in a manner that contributes to significant improvements in care, i.e. meaningful. Policymakers now acknowledge that training healthcare professionals in meaningful use is essential for successful EHR implementation. To help educators and policymakers design evidence based educational interventions (i.e. interventions that involve educational activities but no practical lessons) and training (i.e. interventions that involve practical components), we summarized all evidence regarding the efficacy of different educational interventions to improve meaningful use of EHRs.

METHODS:
We used a predefined search filter to search eight databases for studies that considered an educational intervention to promote meaningful use of EHRs by healthcare professionals.

RESULTS:
Seven of the 4507 reviewed articles met the in- and exclusion criteria.

CONCLUSIONS:
These studies suggest that a combination of classroom training, computer-based training and feedback is most effective to improve meaningful use. In addition, the training should be tailored to the needs of the trainees and they should be able to practice in their own time. However, the evidence is very limited and we recommend that governments, hospitals and other policymakers invest more in the development of evidence based educational interventions to improve meaningful use of EHRs.