RELATIVE EFFECTIVENESS OF ELECTRONIC MEDICAL RECORD COMPARED TO PHYSICAL MEDICAL RECORD: A SYSTEMATIC REVIEW

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ABSTRACT

Background: Medical data recording is one of the basic clinical tools. Electronic Medical Record (EMR) is important for data processing, communication, and effectiveness of patients' information access, confidentiality, ethical and/or legal issues. The quality of medical record reflects of the quality of care of patient. This study aimed to review systematically realative effectiveness of EMR compared to physical medical record.

Subjects and Methods: This was a systematic review conducted by searching articles from the following databases: Proquest, Oxford, and PubMed published from January 2014 to 2019. Systematic review was conducted through six steps: (1) Framing a question (based on a theory); (2) Running a search (on Proquest, Oxford, and PubMed); (3) Reading the abstract and title of the individual papers; (4) Abstract information from the selected set of final articles; (5) Determining the quality of the information in these articles. This was done using judgment of the internal validity and the GRADE criteria; (6) Determining the extent to which these articles were heterogeneous. After review process, 9 articles were including in this review.

Results: EMR is more effective in terms of communication, completeness, number of medical errors, and continuity of surveillance compared to physical medical records.

Conclusion: EMR is more effective than physical medical records to reduce medical error.

Keywords: electronic medical record, physical medical record.

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