

Psychological, organizational and technological predictors of Smart EHR Use in hospitals: A scoping review



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01. Smart EHR Use

The use of Electronic Health Records (EHRs) has the potential to improve efficiency and quality of care¹. However, problems regarding acceptance and use of EHRs are frequently reported. For instance, EHR use is associated with burnout in healthcare professionals². However, little is known about predictors of EHR use in the phase following implementation and adoption. The authors propose the term Smart EHR Use: “(1) fully using those EHR functions that help reach individual and organizational goals in a particular situation/setting, (2) optimizing EHR use (adapting both EHR settings and user behavior on the basis of acquired experience), and (3) EHR innovation (using the EHR in novel ways). Within this definition, EHR adoption is a prerequisite for Smart EHR Use.” A better understanding of Smart EHR Use from a multidisciplinary perspective is required to gain the full potential of EHRs.

02. Aim

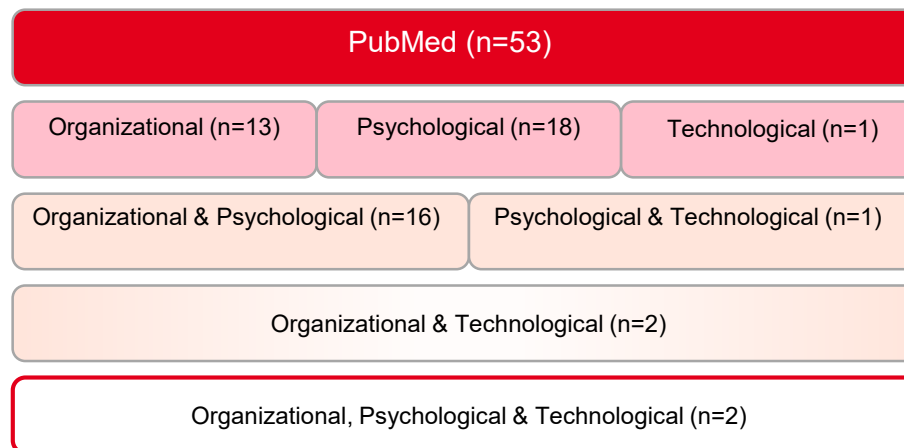
To gain a multi-disciplinary oversight of psychological, organizational (incl. HR factors), and technological predictors of Smart EHR Use in hospitals.

¹ Cebul RDL, T.E., Jain AK, Hebert CJ. Electronic Health Records and Quality of Diabetes Care. The New England Journal of Medicine. 2011;365(9):825-33.
² Melnick, E.R., Dyrbye, L.N., Sinsky, C.A., Trockel, M., West, C.P., Nedelec, L., Tutty, M.A., Shanafelt, T., 2020. The Association Between Perceived Electronic Health Record Usability and Professional Burnout Among US Physicians. Mayo Clinic Proceedings 95, 476–487.. doi:10.1016/j.mayocp.2019.09.024

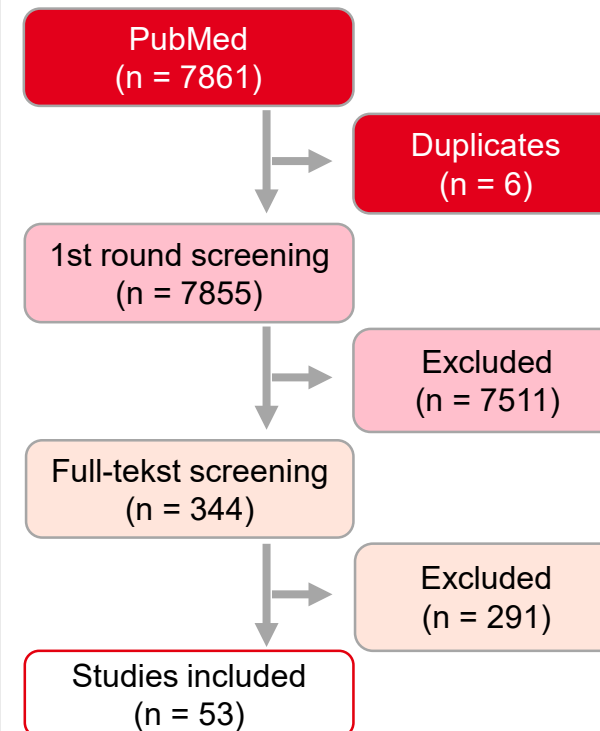
03. Scoping review

- ❖ Scoping review according to the PRISMA-ScR guidelines
- ❖ Preregistration on Open Science Framework
- ❖ Search strategy optimized per database
 - ❖ ((use/ adoption/ innovation/ optimization) & (hospital)) & (EHR) & (predictor)
- ❖ Searched five databases for a multidisciplinary view
 - ❖ PubMed, Embase*, Web of Science core collection*, AIS Journals*, Business Source Complete*
- ❖ Inclusion criteria
 - ❖ English/Dutch, Focused on Use of EHR, Conducted in hospital, empirical data, psychological/ organizational/ technologicaal predictor(s), not focused on patients, not focused on implementation proces.

05. Preliminary results



04. PRISMA flowchart



06. Preliminary conclusion

Little is known about Smart EHR Use in hospitals. Many predictors of adoption, the prerequisite, of Smart EHR Use are known. However, more research on (multidisciplinary predictors) of Smart EHR Use is needed.