**Electronic Health Records**

Students Name

Institutional Affiliation

Course

Date

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**Introduction**

EHRs have transformed health systems worldwide. It is a web-based service that provides a centralized patient record repository, replacing paper-based systems with accurate and accessible solutions. By ensuring seamless access to patient records, EHR systems facilitate communication among healthcare professionals, enabling evidence-based decision-making. Being the major end-users of EHR, nurses enjoy better workflow, which in turn improves patient outcomes. Besides, EHR facilitates interdisciplinary care by availing patient information to different categories of providers in a parallel manner. This ensures continuity of care.

However, its implementation faces many challenges in the forms of high costs, poor usability problems, and resistances by some physicians. The fully tapped potentials to bring an improved impact on patient safety, care quality, and organizational efficiency in the aspect of EHR demand for overcoming such obstacles. Based on this is a bibliographical review from four peer-reviewed articles on how EHR affects the quality of healthcare service delivery. Each article brings unique insights into the benefits, challenges, and best practices in using EHR to advance patient care and interdisciplinary teamwork.

An analysis of such scholarly publications helps the current paper delineate what role EHRs have to play in today's health setting. A study on the effect with regard to patient safety, quality of care, and teamwork forms one basis of the strengths and areas of improvement needed in the use of the technology, hence the discussion based on an annotated bibliography here. The results strongly indicate the need for optimized EHR usability, proper interprofessional collaboration, and extensive healthcare professional training necessary for appropriate implementation with maximum benefit.

**Annotated Bibliography**

Zhang, Z., Tan, Y., & Liu, J. (2024). The effects of electronic health records on patient safety: A systematic review. *BMC Nursing*, *23*(1), 34. <https://doi.org/10.1186/s12912-024-02591-8>

Zhang, Tan, and Liu (2024) have done a systematic review of EHR systems, their impact on patient safety, and healthcare quality. The study showcased the potential of EHR to reduce medical errors, enhance communications among healthcare providers, and streamline documentation. This study has found that EHR improves patient safety significantly by eliminating the errors that occur due to handwritten records and allowing real-time access to correct information about the patients. This will ensure better decision-making and continuity of care, especially in complex healthcare settings.

Also, the authors challenges EHR implementation due to initial high costs and usability. Unless appropriately addressed through training and adjustment of the system, the challenges could also lessen the impact of the system. In fact, according to this paper, EHR potential can be achieved in a situation when health care providers are well-trained and technology fits providers' workflow needs.

This is highly valuable to the nurses, who are often major end-users of the EHR system, in terms of tracking medical history, coordination of care, and accuracy of documentation. The study identifies that EHR is critical to enhancing interdisciplinary collaboration since it allows access and updating of patient information by healthcare teams with ease. This creates better communication and alignment among providers for improved patient outcomes.

The study by Zhang et al. (2024) is an important source for investigating the dual effects of EHR on patient safety and quality of care. An article of this nature would be highly valued by healthcare professionals seeking to improve their use of EHR in practice through a thorough assessment of the benefits and challenges of the technology.

Vaismoradi, M., Rae, J., Turunen, H., & Logan, P. A. (2024). Specialized nurses’ role in ensuring patient safety within the context of telehealth in home care: A scoping review. *Digital Health*, *10*, 20552076241287272. Retrieved from <https://journals.sagepub.com/doi/full/10.1177/20552076241287272>

In their review, Vaismoradi, Rae, Turunen, and Logan (2024) examine the role of specialized nurses in ensuring patient safety within the context of telehealth and home care, with a focus on EHR systems. The authors highlight the integration of EHR with telehealth as a critical tool for remote patient monitoring and data management. By enabling real-time access to patient records, EHR enhances the safety and quality of care provided in non-traditional healthcare settings, such as home care.

The study identifies that EHR is critical in ensuring timely interventions by the nurses through accurate and updated information about the patients. This is particularly important in telehealth, where direct physical contact with the patients is limited. Nurses use EHR to monitor vital signs, track progress, and communicate effectively with the patients and other professionals involved in their care. According to the authors, EHR not only enhances patient safety but also expands the roles of nurses in managing remote care.

On the other hand, it also indicates some challenges, which include that EHR interfaces are user-friendly and comprehensive training programs for health professionals. These are some of the barriers to be addressed if the full potential of EHR is to be realized in telehealth and home care. The findings emphasize the importance of interdisciplinary collaboration since EHR allows easy communication among members of a team for consistency and continuity of care.

This article is particularly valuable in understanding the intersection of EHR and telehealth, underlining the adaptability of the technology and its critical role in improving patient outcomes. It provides actionable recommendations for healthcare organizations seeking to optimize EHR use in remote care settings.

Upadhyay, S., & Hu, H. F. (2022). A qualitative analysis of the impact of electronic health records (EHR) on healthcare quality and safety: Clinicians’ lived experiences. *Health Services Insights*, *15*, 11786329211070722. Retrieved from <https://journals.sagepub.com/doi/pdf/10.1177/11786329211070722>

Upadhyay and Hu (2022) conducted a qualitative investigation into the experiences of clinicians regarding EHR. The implications were therefore gathered from health professionals through in-depth interviews and have provided realistic insights into various benefits and challenges that come with this EHR system. Generally, the findings indicated that EHR significantly enhances coordinated care, reduces medication errors, and promotes evidence-based decision-making.

However, the clinicians did report that EHRs improved patient safety by increasing their ability to access, in a timely way, critical information related to allergies and medication history. The study again points out certain usability issues regarding complex interfaces and disruptions in traditional workflows-things that would lead to frustration among users. These challenges delineate the need for better-designed systems that align well with clinicians' needs and preferences.

It supports nurses through efficient documentation, thereby ensuring that accurate communication takes place between multidisciplinary teams. This paper highlighted that at the time of design and implementation of an EHR system, nurses' contribution is crucial for making them useful and effective. Moreover, access to a patient's records by more than one discipline will promote collaboration among multi-disciplinary healthcare professionals, facilitating effective communication and a coordinated approach towards patient care.

The study by Upadhyay and Hu (2022) has provided the dual benefit of EHR on healthcare delivery. The article presents a balanced view by discussing the benefits and challenges of the technology; hence, it is a critical resource for healthcare organizations in implementing and utilizing EHR.

Kutney-Lee, A., Carthon, M. B., Sloane, D. M., Bowles, K. H., McHugh, M. D., & Aiken, L. H. (2021). Electronic health record usability: associations with nurse and patient outcomes in hospitals. *Medical Care*, *59*(7), 625-631. Retrieved from <https://pmc.ncbi.nlm.nih.gov/articles/PMC8187272/>

In this respect, Kutney-Lee et al. (2021) present research regarding the usability of EHR systems and their relationships with nurse and patient outcomes in acute care settings. This study indicates that the design and functionality of EHR systems directly influence user satisfaction and quality of care provided. Whereas poorly designed systems promote inefficiency and a predisposition to errors, well-designed user interfaces enhance workflow efficiency and decrease the possibility of mistakes.

The authors indicated that EHR usability and patient safety go hand in glove; a well-designed system facilitates adherence to clinical guidelines and helps minimize the occurrence of errors. For example, usability in EHR affects the accurate documentation of care by nurses, good communication among members within the same clinical workforce team, and time management. Better usability of EHR also impacts job satisfaction of nurses, thereby curtailing the level of burnout and attrition rates.

Another significant benefit of EHR systems is the potential for interdisciplinary collaboration since it provides an avenue for communication and coordination at all levels of healthcare provision. The results thus indicate that hospitals should invest more in user-friendly EHR systems and train their staff to efficiently use the technology.

The following article provides valuable insights into the relationship of EHR usability and health outcomes with regard to design and training for maximizing EHR benefits. This is quite an informative source for health organizations that want to improve the experience of nurses and patients by offering a better EHR implementation experience.

**References**

Kutney-Lee, A., Carthon, M. B., Sloane, D. M., Bowles, K. H., McHugh, M. D., & Aiken, L. H. (2021). Electronic health record usability: associations with nurse and patient outcomes in hospitals. *Medical Care*, *59*(7), 625-631. Retrieved from <https://pmc.ncbi.nlm.nih.gov/articles/PMC8187272/>

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