

# Comparative Analysis of the Contribution of Electronic Medical Records to Bettering the Standard of Healthcare Services

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## Abstract

Electronic Medical Records (EMRs) are computerized versions of traditional paper medical records. EMRs have revolutionized healthcare delivery by creating an electronic storage system that enables healthcare providers to manage patient data more efficiently. This technology has significantly improved the quality of care provided to patients in recent years. This paper aims to conduct a comparative analysis of the contribution of electronic medical records to bettering the standard of healthcare services.

**Keywords:** Healthcare services • Electronic medical records • Health safety

## Introduction

### Benefits of electronic medical records

One of the most significant advantages of EMRs is that they provide easy access to patient information. Physicians can quickly access patient information, including medical history, allergies, and medication lists, and make informed decisions regarding patient care. EMRs also allow healthcare providers to share patient information with other healthcare providers, which is particularly beneficial in cases where a patient is being treated by multiple healthcare providers. EMRs have also been shown to improve patient safety. With EMRs, healthcare providers can easily track a patient's medication history and avoid prescribing medications that could cause adverse reactions. Additionally, EMRs provide reminders to healthcare providers regarding scheduled follow-up appointments and tests, ensuring that patients receive timely care [1].

## Literature Review

Another significant benefit of EMRs is that they improve the efficiency of healthcare delivery. With EMRs, healthcare providers can quickly enter and retrieve patient data, reducing the time spent on administrative tasks. This efficiency translates into more time spent on patient care, ultimately resulting in better outcomes for patients. Finally, EMRs are beneficial for healthcare providers and the healthcare system as a whole. With EMRs, healthcare providers can reduce the number of unnecessary tests and procedures, leading to cost savings for both patients and healthcare providers. Additionally, EMRs allow healthcare providers to analyse patient data more effectively, leading to better treatment outcomes [2].

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### Limitations of electronic medical records

While EMRs have many benefits, there are also some limitations to their use. One significant limitation is the potential for data breaches. With EMRs, patient data is stored electronically, making it vulnerable to cyber-attacks. As such, healthcare providers must take measures to protect patient data, including implementing robust security protocols. Another limitation of EMRs is the potential for errors in data entry. Data entry errors can lead to incorrect diagnoses and treatments, potentially causing harm to patients. Healthcare providers must ensure that all patient data is accurately entered into the EMR to avoid such errors. EMRs also require significant investment in terms of time and resources. Healthcare providers must train staff members to use the EMR effectively, and they must ensure that the system is maintained and updated regularly. Additionally, EMRs require significant financial investment, which may be challenging for smaller healthcare providers or those operating in resource-limited settings [3].

### Comparative analysis of EMRs

To conduct a comparative analysis of the contribution of EMRs to bettering the standard of healthcare services, we will compare the use of EMRs in two different settings: a developed country and a developing country.

#### Developed country

In developed countries, EMRs have become an essential component of healthcare delivery. In the United States, for example, the adoption of EMRs has increased significantly in recent years. According to a 2018 survey, approximately 96% of hospitals in the United States used certified EMRs, compared to only 9% in 2008. The widespread adoption of EMRs in the United States has led to significant improvements in healthcare delivery. One study found that hospitals that implemented EMRs saw a 13% reduction in patient mortality rates. Additionally, EMRs have been shown to reduce the length of hospital stays, leading to cost savings for patients and healthcare providers. EMRs have also been beneficial in managing chronic diseases, such as diabetes and hypertension. With EMRs, healthcare providers can monitor patients' conditions more effectively, leading to better disease management and fewer complications [4].

## Discussion

Due to its impact on maintaining safe and high-quality health care services through performing numerous activities like documentation, prescription management, practise management, and communication functions, electronic medical records (EMRs) are regarded as the most used E-health applications

globally [1]. EMRs keep track of a variety of patient data that is arranged digitally, including demographic information, medical history, and findings from radiology and lab tests [2]. The quality of the information system and services provided by the application, the costs associated with the application, the degree of secrecy and privacy offered by the application, and the users are only a few of the factors that influence the adoption of EMRs [3]. Efficiency, availability, fulfilment, and privacy are used to gauge how well an electronic medical record is performing. Accessibility is efficiency [5].

Paper-based documentation is thought to be time-consuming, repetitious, and inaccurate, not meeting the standards of high-quality documentation and communication among health care practitioners. Also, because it is labor-intensive to acquire information from paper-based records, a number of issues are inherited. Many studies have shown how EMR may improve job effectiveness by cutting down on process time and expenses which in turn improves service quality. In contrast, numerous studies shown that EMRs increase time waste across a number of EMR tasks, including the data management and communication functions [6].

The effectiveness of medical treatment in enhancing patients' health outcomes is referred to as the quality of medical care. Its effectiveness can be assessed by determining patients' or medical professionals' perceptions. However, several characteristics, including dependability, responsiveness, tangibles, certainty, and empathy, have a significant influence in improving the perception of the quality of health care services. The current paper-based medical records are always a solid foundation for an improved EMR. Yet, compared to paper-based records, it has been suggested that the deployment of EHRs will lead to improved accuracy and consent to the multi-professional usage of all healthcare practitioners. As a result, electronic medical records are now widely used in hospitals worldwide. But, it's not quite obvious from the evidence which.

## Conclusion

This study helps to build the necessary strategies and policies targeted at enhancing the quality of health care services by providing health managers with sufficient information regarding the impact of the quality of electronic medical records on the quality of health care services. The study's findings advance

our understanding of EMR quality and its function in raising the standard of healthcare services as well as the body of existing knowledge. Lastly, the findings are used as a starting point for future research aimed at raising the calibre of healthcare services. The purpose of this study was to compare the quality of hospital EMRs that were adopted and those that were not. Also, to determine how the effectiveness of electronic medical records (EMRs).

## Acknowledgement

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## Conflict of Interest

None.

## References

1. Agyapong, Ahmed, Joel Duah Afi and Kwame Owusu Kwateng. "Examining the effect of perceived service quality of health care delivery in Ghana on behavioural intentions of patients: The mediating role of customer satisfaction." *Int J Health Manag* 11 (2018): 276-288.
2. Batbaatar, Enkhjargal, Javkhlanbayar Dorjdagva, Ariunbat Luvsannyam and Matteo Mario Savino, et al. "Determinants of patient satisfaction: A systematic review." *Perspect Pub Health* 137 (2017): 89-101.
3. Chen, Ya-Ling, Joseph Chen, Wan-Yu Liu and Tanmay Sharma. "Expected benefits of people interactions and guest experiences." *Int Hosp Rev* 34 (2020): 187-202.
4. Cyr, Dianne, Khaled Hassanein, Milena Head and Alex Ivanov. "The role of social presence in establishing loyalty in e-service environments." *Interact Comput* 19 (2007): 43-56.
5. Etemad-Sajadi, Reza and Gil Gomes Dos Santos. "Senior citizens' acceptance of connected health technologies in their homes." *Int J Health Care Qual Assur* 32 (2019): 1162-1174.
6. Etemad-Sajadi, Reza, Antonin Soussan and Theo Schöpfer. "How Ethical Issues Raised by Human-Robot Interaction can Impact the Intention to use the Robot?." *Int J Soc Robot* 14 (2022):1103-1115.

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