



PERCEIVED USEFULNESS OF ELECTRONIC MEDICAL RECORDS ON THE IMPLEMENTATION OF PATIENT SAFETY AT DR. TADJUDDIN CHALID GENERAL HOSPITAL MAKASSAR

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ABSTRACT

Patient safety is a primary focus in the healthcare sector to minimize the risk of medical errors and improve the quality of healthcare services. This study aimed to determine healthcare workers' perceptions of ease of use and perceived usefulness of electronic medical records (EMRs) in supporting the implementation of patient safety at Dr. Tadjuddin Chalid General Hospital, Makassar. This study employed a qualitative research design with a phenomenological approach conducted at Dr. Tadjuddin Chalid General Hospital, Makassar. A total of six informants participated in this study, consisting of three nurses as main informants and three medical records staff as key informants.

The results showed that healthcare workers perceived the use of electronic medical records as highly beneficial because patient data could be accessed quickly, documentation errors were reduced, and communication among healthcare workers became easier. In terms of perceived ease of use, healthcare workers considered the electronic medical record system easy to operate, as they experienced no significant difficulties in using the system, from entering data to retrieving patient information. Furthermore, in relation to patient safety implementation, the use of electronic medical records also had a positive impact because patient data were stored clearly and comprehensively, enabling healthcare workers to provide more accurate services and reduce the risk of errors, such as patient misidentification or incorrect medical procedures.

This study suggests that Dr. Tadjuddin Chalid General Hospital, Makassar should enhance its readiness for EMR implementation by providing adequate infrastructure, including stable internet connectivity, appropriate devices, as well as regular training and monitoring for healthcare workers to ensure more effective system utilization and better support for patient safety

INTRODUCTION

Patient safety is a primary focus in the healthcare sector and represents one of the most crucial aspects of quality management.

Patient safety incidents remain a major issue in hospitals because various medical services carry risks that may threaten patient safety and

comfort. In many cases, only visible and unintentional incidents are reported, while healthcare workers are often unaware of the actual patient safety problems occurring in healthcare settings (Pertiwi et al. 2024).

Electronic Medical Records (EMRs) provide clinical information that is faster, more complete, and more accurate compared to manual documentation. Through EMRs, healthcare workers can comprehensively review patients' medical histories, enabling more accurate diagnosis, treatment, and clinical decision-making processes. EMR systems that are easy to understand, user-friendly, and equipped with clear interfaces have been proven to improve documentation quality, reduce the risk of medical errors, and enhance the implementation of patient safety (Classen et al. 2023).

Patient safety efforts aim to improve the quality of healthcare services by implementing risk management across all aspects of healthcare delivery. In addition, patient safety initiatives ensure that every healthcare action is carried out in accordance with minimum service standards and professional ethical codes for healthcare workers. Patient safety is a patient's right, meaning that every patient has the right to security and safety during hospitalization. According to the Indonesian Ministry of Health (2009), Article 53 paragraph (3) of Law No. 36/2009 on Health states that healthcare services must prioritize patients' lives. Patient safety has become a global priority in

healthcare services worldwide (Mappanganro, Hidayat, dan Reski 2020).

The World Health Organization (2021) estimated that individuals in Asia receive more than five injections annually, and approximately 50% of these injections are considered "unsafe." Around 4% of patients experience complications during hospitalization, 70% suffer temporary disabilities, and 14% result in death.

Based on data from the Indonesian Ministry of Health in 2023, there were 5,710 patient safety incidents reported, consisting of 5,364 adverse events and 346 sentinel events. Reports indicated that adverse events occurred most frequently in March 2023 and least frequently in June 2023. Meanwhile, sentinel events were reported most frequently in August 2023 and least frequently in June 2023. The most common incidents reported each month included patient falls, service or procedural errors, hospital-acquired infections, as well as medication and infusion-related incidents (Kemenkes RI 2023).

Based on preliminary data collection conducted on November 28, 2025, including patient safety incident reports from 2023 to 2025 and interviews conducted at Dr. Tadjuddin Chalid General Hospital, Makassar, patient safety incidents were still reported during those years. In 2023, there were a total of seven incidents, consisting of two adverse events, four no-harm incidents, and one sentinel event. From January to December 2024, there were 11 incidents, including seven

adverse events, one no-harm incident, and three near-miss incidents. From January to November 2025, there were also 11 incidents, consisting of six adverse events, three near-miss incidents, and two no-harm incidents. These findings indicate that the implementation of patient safety measures still faces challenges and requires improvement.

In the context of technology acceptance, Fred Davis emphasized through the Technology Acceptance Model (TAM) that system utilization is influenced by two main factors: perceived ease of use and perceived usefulness. If healthcare workers perceive EMRs as easy to use and beneficial in improving their performance, the system is more likely to be utilized effectively. However, if the system is considered difficult to use or lacking in benefits, its implementation may become ineffective.

Poor implementation of EMRs may affect patient identification processes, clinical communication, medication documentation, and the monitoring of medical procedures related to patient safety. Therefore, it is essential to evaluate how healthcare workers perceive the ease of use and usefulness of EMRs in supporting the implementation of patient safety in hospitals.

METHODS

This study employed a qualitative research design with a phenomenological approach. This approach was chosen to explore in depth the experiences of healthcare workers in using electronic medical records in

relation to the implementation of patient safety at Dr. Tadjuddin Chalid General Hospital, Makassar. The study aimed to examine healthcare workers' perceptions of the usefulness of electronic medical records in supporting the implementation of patient safety at Dr. Tadjuddin Chalid General Hospital, Makassar.

Informants were selected using purposive sampling, based on specific criteria: direct involvement in the use of electronic medical records in their daily work and a minimum of five years of employment at the hospital. A total of six informants participated in this study, consisting of three registered nurses serving as main informants and three medical records staff serving as key informants. Doctors and pharmacists were initially considered but were excluded from the final sample as they did not meet the availability and participation criteria during the data collection period.

Data were collected through in-depth interviews conducted individually with each informant, guided by a semi-structured interview guide developed based on the Technology Acceptance Model (TAM) framework. The interviews were recorded with the informants' consent and subsequently transcribed verbatim for analysis. Data collection was carried out from January 12 to January 19, 2026, at Dr. Tadjuddin Chalid General Hospital, Makassar.

Data analysis was conducted using NVivo 12 Pro software through a thematic

content analysis approach. Word cloud visualizations were generated to identify the most dominant themes emerging from the informants' responses. To ensure the trustworthiness of the findings, member checking was performed by returning the interview transcripts to the informants for verification, and triangulation was applied by cross-referencing data across multiple informants and sources.

This study received ethical approval from the institutional review board, and all informants provided written informed consent prior to participation. Confidentiality and anonymity of the participants were maintained throughout the research process.

RESULTS

This study was conducted at Dr. Tadjuddin Chalid General Hospital, Makassar, South Sulawesi. The location was selected because the hospital had already implemented

electronic medical records and still experienced patient safety issues relevant to this study. The research was carried out from January 12 to January 19, 2026.

The informants in this study consisted of main informants, namely doctors, nurses, and pharmacists, while the key informants included the head/staff of the medical records unit.

A total of six informants participated in this study, consisting of three medical records staff who also served as key informants, and three nurses who served as the main informants.

Based on the table 1, there was 1 male informant and 5 female informants. The shortest length of employment among the informants was 6 years, while the longest was 25 years. The occupations of the informants consisted of 3 medical records staff and 3 registered nurses.

Tabel 1 Characteristics of Research Informants

Initials	Gender/Length of Employment	Occupation	Description
SN	Female/12 years	Registered Nurse	Main Informant
N	Female/6 years	Registered Nurse	Main Informant
AM	Female/15 years	Registered Nurse	Main Informant
S	Female/25 years	Medical Records Staff	Key Informant
R	Female/ 10 years	Medical Records Staff	Key Informant
AR	Male/ 10 years	Medical Records Staff	Key Informant

Source: Primary Data 2026

1. Perceived Usefulness

a. Benefits of Using Electronic Medical Records in Hospitals



The results of the word cloud analysis using Nvivo 12 Pro showed that the words “direct” and “work” were the most dominant terms appearing in the informants’ responses. This indicates that electronic medical records provide quick and instant access to data, thereby simplifying work processes that were previously performed manually. The informants stated that the system improves time efficiency, practicality, and effectiveness in managing patient data. Therefore, electronic medical records contribute to supporting smoother workflows and improving the quality of healthcare services through faster, more accurate, and integrated data management.

b. The Role in Accelerating Work and Improving Healthcare Workers’ Performance



The analysis results showed that the word “helpful” was the most frequently used term by the informants. This indicates that electronic medical records play a significant role in accelerating healthcare service processes, particularly under conditions of high workload. The system enables healthcare workers to access patient data without having to wait for physical records, thereby improving work efficiency and allowing them to focus more on data analysis and processing. Thus, the use of electronic medical records has been proven to enhance healthcare workers’ performance through more systematic and responsive workflows.

c. The Influence on the Quality of Service Recording and Documentation



Based on the word cloud results, the word “service” was the most dominant term used by the informants. This indicates that electronic medical records have a positive influence on improving the quality of service recording and documentation. The system produces data that are more organized, complete, and easier to monitor compared to manual records, which are often difficult to read. In addition, the ease of accessing and retrieving data through a computerized system

enables healthcare workers to obtain information quickly and accurately. Therefore, electronic medical records not only improve the quality of documentation but also support more organized, efficient, and high-quality healthcare services.

3. Patient Safety

a. The Role of Electronic Medical Records in Supporting Patient Safety



The results of the word cloud analysis showed that the word “helpful” was the most dominant term used by the informants. This indicates that electronic medical records play an important role in supporting patient safety through the provision of complete, accurate, and integrated data. The system is equipped with access control settings based on the authority of healthcare workers, as well as warning features for service discrepancies. Therefore, electronic medical records are able to minimize errors in medical procedures and medication administration. As stated by one of the informants: *'With the electronic medical record system, we can access patient data more quickly without having to look for physical files.'* (SN, Nurse, 12 years of service)"

b. Accuracy of Patient Identification



The word “identity” was the most frequently appearing term in the analysis results. This indicates that electronic medical records contribute significantly to ensuring accurate patient identification through the provision of complete identity data and the use of medical record numbers as unique identifiers. The verification process is carried out systematically by matching the data in the system directly with the patient’s identity, thereby minimizing the risk of service errors.

c. Improvement of Effective Communication



The analysis results showed that electronic medical records help improve communication among healthcare workers. All patient data are recorded in a single system that can be accessed by authorized personnel, ensuring consistent information and reducing the need for repeated confirmation from patients. This condition supports more

effective and efficient coordination of healthcare services.

d. Safety of Medication Administration and Medical Procedures



Electronic medical records contribute to improving the safety of medication administration and medical procedures through the availability of patient histories and clear medical instructions within the system. However, their effectiveness is still influenced by the level of compliance and accuracy of healthcare workers in utilizing the system. This indicates that human factors remain an important determinant in the successful implementation of the system.

e. Accuracy of Surgical Site, Procedure, and Patient Identification



Electronic medical records support the implementation of safety procedures through multiple verification processes, such as checking patient identity (name and date of birth), matching it with the identification bracelet, and confirming data within the system. In addition, a time-out procedure is conducted before medical actions to ensure the correctness of the patient, procedure type, and surgical site. This process is effective in reducing the risk of procedural errors.

f. Reduction of the Risk of Errors in Healthcare Services



Efforts to reduce the risk of errors, particularly infections, are carried out through the implementation of standard procedures such as handwashing before and after patient contact, the use of personal protective equipment (PPE), and ensuring the sterility of medical instruments. In addition, maintaining the cleanliness of the healthcare environment and properly implementing wound care procedures also contribute to supporting patient safety.

g. Prevention of Patient Fall Risks



DISCUSSION

The results of the study showed that the perceived usefulness of Electronic Medical Records (EMRs) was very strong, as reflected by the dominance of the words “direct” and “helpful” in the NVivo 12 Pro analysis. This indicates that healthcare workers experienced faster, instant, and integrated access to data, thereby reducing manual workloads such as searching for physical files and accelerating the patient data recording process. EMRs were proven to improve time efficiency, practicality, and work effectiveness, particularly under conditions of high service workloads. The system enables healthcare workers to access patient information in real time without waiting for physical documents, making healthcare service workflows more systematic and responsive. These findings are consistent with the Technology Acceptance Model (TAM) framework and the model, which emphasize that perceived usefulness contributes to improved individual performance. Furthermore, the findings are in line with previous studies showing that EMRs can accelerate access to information, improve

Efforts to prevent patient falls are carried out through risk assessment, the provision of special markers for high-risk patients, and regular monitoring of patients' conditions. In addition, the use of bed safety rails, patient education, and family involvement in assisting patients are important measures in minimizing the incidence of patient falls.

service efficiency, and reduce the administrative burden on healthcare workers.

EMRs also had a significant impact on improving the quality of service recording and documentation. The dominance of the word “service” indicates that informants associated the use of EMRs with documentation that is more organized, structured, complete, and easier to monitor and retrieve. The system enables the rapid identification of incomplete data and supports more accurate entry of medical procedures and medication records. The ease of retrieving data through medical record numbers also accelerates healthcare service processes and supports appropriate clinical decision-making. These findings are consistent with information quality theory and previous studies stating that digitalization through EMRs can improve the accuracy, readability, and completeness of medical documentation while minimizing human error. Therefore, EMRs not only improve the work efficiency of healthcare workers but also play an important role in enhancing the overall quality of healthcare services.

The findings of this study also revealed that healthcare workers perceived the electronic medical record system as easy to use. Informants reported no significant difficulties in operating the system, from entering patient data to retrieving medical information. This finding is consistent with the Technology Acceptance Model (TAM) proposed by Davis (1989), which posits that perceived ease of use is a key determinant of system acceptance and usage behavior. When a system is perceived as easy to operate, healthcare workers are more likely to utilize it consistently and effectively, thereby improving overall service quality.

The results of this study identified seven sub-dimensions of patient safety supported by EMR implementation. First, EMRs contributed to accurate patient identification through the use of unique medical record numbers and complete identity data. Second, the system improved effective communication among healthcare workers by providing a single integrated platform accessible to all authorized personnel. Third, EMRs enhanced the safety of medication administration and medical procedures by providing clear patient histories and medical instructions. Fourth, multiple verification processes within the system supported correct surgical site and patient identification. Fifth, standard infection prevention procedures were reinforced through system-based documentation. Sixth, patient fall risk prevention was supported through risk

assessment features and patient monitoring records. Seventh, overall documentation quality was improved, enabling more organized and comprehensive healthcare service recording. These findings are consistent with the six international patient safety goals established by the Joint Commission International (JCI), which emphasize identification, communication, medication safety, and fall prevention as core patient safety standards.

The overall findings of this study demonstrate that the implementation of electronic medical records has a significant positive relationship with patient safety outcomes at Dr. Tadjuddin Chalid General Hospital, Makassar. By providing fast, accurate, and integrated access to patient data, EMRs reduce the likelihood of medical errors, miscommunication, and procedural mistakes that commonly occur in manual documentation systems. This relationship is further supported by the TAM framework, which suggests that when a technology is perceived as both useful and easy to use, its adoption leads to measurable improvements in organizational performance. In the healthcare context, this translates directly into safer, more efficient, and higher-quality patient care. These findings align with previous studies confirming that EMR adoption positively impacts clinical decision-making, reduces adverse events, and strengthens the overall culture of patient safety within hospital settings.

CONCLUSION

Healthcare workers' perceptions of the usefulness of Electronic Medical Records (EMRs) were highly positive and considered very helpful. For example, patient data could be accessed quickly, documentation errors were reduced, and communication among healthcare workers became easier. In addition, healthcare workers perceived that the implementation of patient safety through the use of EMRs had a positive impact. Since patient data were stored clearly and comprehensively, healthcare workers were able to provide more accurate healthcare services and reduce the risk of errors, such as patient misidentification or incorrect medical procedures.

SUGGESTION

Dr. Tadjuddin Chalid General Hospital, Makassar is expected to improve the quality and readiness of Electronic Medical Record (EMR) implementation by providing adequate infrastructure, such as stable internet connectivity and appropriate computer facilities. In addition, regular training and routine evaluations for healthcare workers are necessary to ensure more effective system utilization, improve the quality of healthcare

services, and support patient safety through accurate patient identification and complete medical data.

Healthcare workers are also expected to continuously improve their understanding and skills in using EMRs so that the system can be utilized optimally and contribute to providing safe and effective healthcare services.

Future researchers are recommended to expand the patient safety implementation model by incorporating additional variables such as safety culture, workload, and system quality, so that future studies can provide a broader understanding of the factors influencing the successful implementation of patient safety.

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REFERENCES

Adhistya, Maya, John S. Kekenusa, dan Jehosua S. V. Sinolungan. 2023. "Socio-Technical Aspects Of Electronic Medical Record Use Related To Patient Safety At Prof Dr. R. D. Kandou Manado Hospital." *Neo*

Journal of economy and social humanities 2(2):59–70. doi:10.56403/nejesh.v2i2.106.

Alhur, Anas. 2023. "An Investigation of Nurses' Perceptions of the Usefulness and Easiness of Using Electronic Medical Records in Saudi Arabia: A Technology Acceptance Model."

- Indonesian Journal of Information Systems 5(2):30–42.
doi:10.24002/ijis.v5i2.6833.
- Azzakia, Fatimah, Rima Diaty, dan M. Noor Aditya Pratama. 2025. “Evaluasi Implementasi Rekam Medis Elektronik Ruang VK dengan Metode HOT-FIT di RSUD Sultan Suriansyah Banjarmasin.” *Jurnal Manajemen Informasi dan Administrasi Kesehatan* 8(2):151–58.
- Burhan, Leni, dan Mardiaty Nadjib. 2023. “Hubungan persepsi pengguna terhadap keberhasilan implementasi rekam medis elektronik: Tinjauan literatur.” 4:1532–45.
- Davis. 2014. “User Acceptance of Computer Technology: A Comparison of Two Theoretical Models.” (August 1989). doi:10.1287/mnsc.35.8.982.
- Davis, Fred D. 2014. “Information Technology Introduction.” 13(3):319–40.
- Doni, Lalu Pratama. 2024. “Hubungan manajemen informas rekam medis elektronik dengan peningkatan mutu dan keselamatan pasien berdasarkan SNARS di RSUD Provinsi NTB.”
- Febriandi, Sarif_, dan Ihsan Hafidh As Syafiq. 2025. “Transformasi Keselamatan Pasien Melalui Rekam Medis Elektronik: Analisis Berbasis Literatur.” *Jurnal Kesehatan Tambusai* 6(2):5333–42.
doi:10.31004/jkt.v6i2.46140.
- Febriandi, Sarif, Ihsan Hafidh, dan As Syafiq. 2025. “Transformasi keselamatan pasien melalui rekam medis elektronik: analisis berbasis literatur.” 6:5333–42.
- Gadis Hekmawati Rohmatin, Heru Widiyanto, Agustinus Kuswiadji. 2025. “Pengelolaan Rekam Medis Elektronik dalam Peningkatan Mutu Pelayanan Kesehatan.” 3:113–23.
- Hadi, Irwan. 2017. “Manajemen keselamatan pasien.” 1–23.
- Handayani, Eka, dan Tutik Sri Hariyati. 2024. “Nurses’ Perception on the Implementation of Nursing Care Documentation Using Electronic Medical Record: A Literature Review.” *Jurnal Ilmiah Ilmu Keperawatan Indonesia* 13(04):138–51.
doi:10.33221/jiiki.v13i04.3046.
- Handayani, Ifti Amri, Marsudarinah Marsudarinah, dan Eko Budi Marwanto. 2023. “Evaluasi Penerapan Sistem Informasi Rekam Medik Elektronik Menggunakan Metode HOT-FIT di Rumah Sakit PKU Muhammadiyah Surakarta.” Hal. 361–66 in *Prosiding Seminar Informasi Kesehatan Nasional*.
- Ikawati, Fita Rusdian. 2024. “Efektivitas Penggunaan Rekam Medis Elektronik Terhadap Peningkatan Kualitas Pelayanan Pasien di Rumah Sakit.” *Journal of Multidisciplinary Research and Development* 6(3).
- Implementasi, Analisis, Budaya Keselamatan, Puskesmas Terhadap, Standar Keselamatan, dan Pasien Di. 2024. “Jurnal Kesehatan Unggul Gemilang Puskesmas terhadap standar keselamatan pasien di indonesia: A Systematic review.” 8(6):10–16.
- Intansari, Intansari, Martya Rahmaniati, dan Dian Fajar Hapsari. 2023. “Evaluasi Penerapan Rekam Medis Elektronik dengan Pendekatan Technology Acceptance Model di Rumah Sakit X di Kota Surabaya.” *J-REMI: Jurnal Rekam Medik dan Informasi Kesehatan* 4(3):108–17.
doi:10.25047/j-remi.v4i3.3914.
- Joint Commission International. 2021. “Accreditation Bulletin: JCI 7.” (December 2020):2024.
- Kemenkes RI. n.d. *Profil Kesehatan Indonesia*. Kementerian Kesehatan Republik Indonesia, Jakarta.
- Lestari, Fitri Dewi, Aditya Rachmadi, dan Niken Hendrakusma Wardani. 2020. “Evaluasi Sistem Informasi Manajemen Rumah Sakit Menggunakan Framework Human, Organization, And Technology-Fit (HOT-Fit) Model (Studi Pada RSI UNISMA Malang).” *Jurnal Pengembangan Teknologi Informasi dan Ilmu Komputer* 4(8):2688–96.
<http://j-ptiik.ub.ac.id>.
- Mallapiang, Fatmawaty fatma, Hasbi Ibrahim, Nur Fitriyani Arifuddin, Azriful

- Azriful, dan Surahmawati Surahmawati. 2021. "an Overview of Role Tim Work Dimension, Adequate Staff and Health Workers' Perception of Patients Safety Culture." *Hospital Management Studies Journal* 2(2):112–19. doi:10.24252/hmsj.v2i2.21043.
- Mappanganro, Andi, Rahmat Hidayat, dan Eka Reski. 2020. "Faktor Yang Berhubungan Dengan Upaya Pencegahan Risiko Jatuh Oleh Perawat Dalam Patient Safety di Ruang Perawatan Anak Rumah Sakit Bhayangkara Makassar." *Jurnal Medika Utama* 01(02):63–70.
- Mensah, Nathan Kumasenu, Godwin Adzakupah, Jonathan Kissi, Kasim Abdulai, Hannah Taylor-Abdulai, Stephen Benyi Johnson, Christabell Opoku, Cephas Hallo, dan Richard Okyere Boadu. 2024. "Health professionals' perceptions of electronic health records system: a mixed method study in Ghana." *BMC Medical Informatics and Decision Making* 24(1). doi:10.1186/s12911-024-02672-3.
- Muhdar. 2021. "Manajemen Patient Safety." 1–33.
- Neva CR Sinaga, Bertha Sumartini. 2025. "Effectiveness of electronic medical records on patient safety." 7(1):1095–1104.
- Niko, Yohanes, Santoso Pambudi, dan Luh Putu Mahyuni. 2024. "Rekam medis elektronik rumah sakit: Kepuasan, penggunaan, dan persepsi manfaat dengan literasi komputer sebagai pemediasi di sumba." 23(2):145–60.
- Nugroho, Yohanes, Fadma Aji Pramudita. 2024. "Peran Rekam Medis Elektronik dalam Meningkatkan Efisiensi, Kualitas Layanan Kesehatan, dan Keselamatan Perawatan Pasien: Analisis Systematic Literature Review." 7(2):343–50.
- Nurfitri, Bunga, Firna Rania, dan Nur Wahyu Rahmadiani. 2022. "Literature Review: Implementasi Rekam Medis Elektronik di Institusi Pelayanan Kesehatan di Indonesia." *ResearchGate* (October) 1–16.
- Pertiwi, Revita Anisa, Amal Chalik Sjaaf, Helen Andriani, dan Puput Oktamianti. 2024. "Peningkatan Pelaporan Insiden Keselamatan Pasien." *Syntax Literate* 9(9).
- Piping Asgiani, Yohana. 2025. "Persepsi Perawat Terhadap Pemanfaatan Rekam Medis Elektronik Dalam Mendukung Manajemen Pelayanan di RSUD dr . Rehatta." 156–64.
- Pradita, Riska, Retno Kusumo, dan Dhion Adhithia. 2024. "Penerimaan Pengguna Dalam Implementasi Rekam Medis Elektronik Di Puskesmas Kijang Menggunakan Technology Acceptance Model User Acceptance in Electronic Medical Records Implementation At the Puskesmas Kijang Using the Technology Acceptance Model." *Jurnal Manajemen Informasi ...* 9(2):313–26.
<https://ojs.stikessaptabakti.ac.id/jmis/article/view/607%0Ahttps://ojs.stikessaptabakti.ac.id/jmis/article/download/607/403>.
- Purnama, Sandi Rian, dan Sali Setiatin. 2025. "Elektronik Meningkatkan Efisiensi Dan Akurasi Data." 6:14989–93.
- Putri, Yuana. 2024. "Implementasi dan Dampak Penggunaan Sistem Rekam Medis Elektronik (RME) pada Pelayanan Kesehatan." *Sehat Rakyat: Jurnal Kesehatan Masyarakat* 3(4):255–64.
doi:10.54259/sehatrakyat.v3i4.3449.
- Rachmawati, dhian satya. 2023. *Manajemen Keselamatan Pasien. Vol. 7.*
- Romatin, Widiyanto Hekmawati, Heru Kuswiadji, dan Agustinus. 2025. "Pengelolaan RekaM Medis Elektronik Dalam Peningkatan Mutu Pelayanan Kesehatan." 3:155–66.
- Rosmita, Samur Rizki, Hartono Budi, dan Alfani. 2025. "Pengaruh Penggunaan Aplikasi Rekam Medis Elektronik (Rme) Terhadap Efisiensi Kerja Tenaga Kesehatan di Fasilitas Kesehatan Pertama." *Journal of Innovative and Creativity* 5(2):2025.
- Rubiyanti, Neng Sari. 2023. "Penerapan rekam medis elektronik di rumah sakit di Indonesia: Kajian yuridis."

- ALADALAH: Jurnal Politik, Sosial, Hukum Dan Humaniora 1(1):179–87.
- Setyawulandari, Oktavianingsih, Restu Ayu, Eka Puspita, Dwi Nur, dan Siti Marchamah. 2025. “Hubungan Penerapan Rekam Medis Elektronik Dengan Manajemen Risiko Keselamatan Pasien Di Puskesmas X Kota Malang.” 6(2):98–107.
- Siregar, Muhammad Ade Armansyah, dan Prastuti Soewando. 2022. “Faktor Yang Mempengaruhi Penerimaan Sistem Informasi Manajemen Rumah Sakit Article Information a B S T R a K.” Jurnal Kesehatan 13:512–19. <http://ejurnal.stikesprimanusantara.ac.id/>.
- Sugiyono, Prof. Dr. 2013. Metode penelitian kuantitatif, kualitatif dan R&D.
- Suhariyono, Untung Slamet, Fita Rusdian Ikawati, dan Nur Afifah. 2025. “Analisis Aspek Keamanan Informasi Data Pasien pada Rekam Medis Elektronik di UPT Puskesmas Karangploso.” Jurnal Manajemen Informasi Kesehatan Indonesia 13(1):2337–2585. <https://jmiki.apfirmik.or.id/jmiki/article/view/812/367>.
- Suryani, Suryani, Arfeni Warongan Vicky, Dini Ayuningtias Aulia, dan Lorenzza Sinaga Alesia. 2025. “Analisis Penerapan Sistem Rekam Medis Elektronik di Rumah Sakit Mitra Sejati Kota Medan.” Jurnal Riset Rumpun Ilmu Kedokteran 4(2):330–41. doi:10.55606/jurrike.v4i2.6293.
- Susanto, Agus billy, R. Poppy Yaniawati, dan Bambang Sukajie. 2024. “Efektivitas Rekam Medik Elektronik Di Klinik Kusuma Medical Center Batukajang Kalimantan Timur.” IndOmera 5(10):1–9. doi:10.55178/idm.v5i10.394.
- Syafanny, Lutfiah Dwi Amanda, Mohammad Yusuf Setiawan, Alfina Aisatus Saadah, dan Nani Purnami. 2025. “Faktor Pendukung Dan Penghambat Penggunaan Rekam Medis Elektronik (Rme) Di Instalasi Rekam Medis Rumah.” Jurnal Ilmiah Rekam Media dan Informatika Kesehatan 15(1):11–18.
- Syamsuriansyah, Hizriyansyah, Nik Azliza Nik Ariffin, dan Rizal Pratama Adi Putra. 2023. “Human Resources Needs for Medical Records Officers at the Mataram City Health Center.” Al-Sihah: The Public Health Science Journal 15(1):186–97. doi:10.24252/al-sihah.v15i2.37159.
- Tasha Gabriella, Windiyaningsih Cicilia, Trigono Ahdun. 2023. “Analisis Pengaruh Rekam Medis Elektronik Rumah Sakit Terhadap Peningkatan Kualitas Mutu dan Keselamatan Pasien di RSIA Permata Sarana Husada Tahun 2023.” 7(4):389–97.
- Tumono, dan Yuyun Yunengsih. 2025. “Implementasi rekam medis elektronik guna menunjang efektivitas pendafarn rawat jalan di rumah sakit jiwa klender.” 6(September):12253–61.
- Vya, Oktavianingsih Setyawulandari, Restu Ayu Eka Pustika Dewi, dan Dwi Nur Siti Marchamah. 2025. “Hubungan Penerapan Rekam Medis Elektronik Dengan Manajemen Risiko Keselamatan Pasien Di Puskesmas X Kota Malang.” Indonesian Journal of Health Community 6(2):98. doi:10.31331/ijheco.v6i2.3786.
- World Health Organization. 2021. Patient Safety Incident Reporting and Learning Systems Technical report and guidance.
- Yadegari, Fatemeh, dan Abbas Asosheh. 2025. “A unified IoT architectural model for smart hospitals: enhancing interoperability, security, and efficiency through clinical information systems (CIS).” Journal of Big Data 12(1):288–98. doi:10.1186/s40537-025-01197-4.