

LEGAL PROTECTION FOR HEALTH WORKERS AFTER THE IMPLEMENTATION OF ELECTRONIC MEDICAL RECORDS (RME)

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Article Info

Abstract

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The development of information technology in the health sector has facilitated the use of Electronic Medical Records (EMR), which is regulated in the Regulation of the Minister of Health of the Republic of Indonesia Number 24 of 2022. EMR is intended to improve efficiency, accuracy, and security in patient data management. However, this transition also presents legal challenges, especially related to legal protection for health workers. This study aims to analyze the impact of the implementation of EMR on the legal protection of health workers, identify problems that arise, and propose policy recommendations. The method used is normative juridical with an analysis of related regulations and literature studies related to health data management practices. The results of the study indicate that although EMR provides various advantages in health data management, there are still shortcomings in implementation that can pose legal risks to health workers. Based on these findings, this study recommends increasing training and resources for health workers, as well as adjusting the technology infrastructure in health facilities to ensure compliance with the security and privacy standards set by the regulations. These recommendations are expected to support the effectiveness of the implementation of EMR and provide better legal protection for health workers.

I. INTRODUCTION

The development of digital technology in healthcare has brought about major changes in the way healthcare facilities manage and store records. The implementation electronic medical records (EMR) through the Regulation of the Minister of Health No. 24 of 2022 concerning Medical Records marks an important milestone in the transformation of health management in (Permenkes No. 24 2022) EMR aims to improve efficiency, accuracy, and security in storing and accessing patient data, which was previously regulated through manual and semi-electronic systems that were less effective and vulnerable to security risks. (Darmawan, et al. 2023).

Article 3

- (1) Every Health Service Facility is required to maintain Electronic Medical Records.
- (2) Health Service Facilities as referred to in paragraph (1) consist of:
- a. independent practice of doctors, dentists and/or other health workers;
- b. health center;
- c. clinic;

- d. hospital;
- e. pharmacy;
- f. health laboratory;
- g. hall; and
- h. Other Health Service Facilities determined by the Minister.

Following the enactment of the Minister of Health Regulation No. 24 of 2022 concerning Medical Records, all health service facilities are required to organize this Electronic Medical Record. With the transition to EMR, there is an urgent need to examine the legal implications of implementing this new system, especially in the context of legal protection for health workers. Health workers are at the forefront of EMR implementation and are indirectly at risk of facing legal issues that may arise from the management of electronic medical records, such as data privacy violations, information security, and compliance with service standards.

RME supports the principle of data security and confidentiality, which is an important component of the legal protection of patients and health workers. Maintaining patient data confidentiality allows health workers to carry out

their duties more efficiently without worrying about the risk of information leakage that can lead to legal consequences. However, in practice, there are challenges in ensuring full compliance with this principle due to technical limitations and policy variations in various health facilities. (Legal Aspects of Electronic Medical Records, 2019).

The EMR policy has repealed and replaced previous regulations by including stricter standards related to the management and storage of electronic health data. This requires health workers to update their knowledge of relevant laws and technologies to ensure that they do not violate applicable legal provisions. The success of EMR implementation depends heavily on health workers' understanding and adaptation to this legal framework.



Figure 1. RME's novelty

One crucial aspect that must be considered is the control and audit mechanism for access to electronic medical records. The regulation states that any access to medical records must be documented and carried out only based on medical necessity and with the patient's consent. This ensures that health workers are responsible for managing such access, which requires a robust data security system and a strong understanding of the law to prevent potential misuse.

Another legal issue that arises is liability for data errors or damage to the EMR system that could impact patient diagnosis or treatment. In the event of a technical error that results in harm to the patient, healthcare workers and healthcare facilities could be subject to lawsuits. Therefore, it is important for healthcare facilities to have adequate security protocols and data backup systems in place to avoid critical data loss.

Furthermore, the RME regulation also touches on the importance of training and certification for health workers in operating electronic systems. This aims to minimize operational errors that could lead to violations of the law. This training must cover the legal aspects of using RME, data privacy, and medical ethics.

To ensure compliance with applicable regulations, healthcare facilities need to actively monitor their EMR practices and conduct regular

internal audits. This approach will help identify and correct deficiencies in EMR management before they lead to legal issues. ((Student, 2017)This study will explore more deeply how the EMR regulation is implemented in the field, identify deficiencies in implementation, and recommendations to strengthen legal protection for health workers involved in the management of electronic medical records. Specifically, this study will discuss How are the Legal Regulations on Electronic Medical Records and their Advantages and Disadvantages? Then, how is the legal protection for health workers if there is a leak in the management of Electronic Medical Records?

II. RESEARCH METHODS

This research entitled "Legal Protection for Health Workers after the Implementation of Electronic Medical Records (EMR)" focuses on legal analysis (Saragih, YM 2017)regarding the implementation and impact of the Regulation of the Minister of Health of the Republic of Indonesia Number 24 of 2022 concerning Medical Records. The main objective of this study is to evaluate how the regulation regulates and protects health workers in the use of electronic medical record systems, as well as its implications for the responsibilities and rights of health workers. (Khaliludin, et al. 2023) This study will explore in more depth the provisions governing the obligation to provide and manage electronic medical records in health facilities, as well as how these regulations affect the legal and ethical aspects of medical practice.

The main source of this research is the Regulation of the Minister of Health Number 24 of 2022, which will be analyzed to understand the legal framework established for the management of electronic medical records. In addition, this research will also involve the study of other regulations related to the management of health data and information, including aspects of confidentiality, data security, and patient consent. By using a normative legal approach, this research aims to produce policy recommendations that can improve legal protection for health workers, while ensuring the effectiveness and security of the use of electronic medical records in the health sector in Indonesia.

III. RESULTS AND DISCUSSION

A. Legal Regulations on Electronic Medical Records and their Advantages and Disadvantages Quoting from the Minister of Health Regulation (PMK) No. 24 of 2022 concerning Medical Records, electronic medical records are medical records created using an electronic system intended for organizing medical records. With this electronic medical record, health workers on duty can provide appropriate health services to patients and reduce the risk of medical errors.

Another important thing is that it can help hospital management in documenting some important information such as doctor visits and the accuracy of care delivery, so that it is expected to save time, costs, and avoid data duplication. (Soraya et al., tt)Patient records have a long history, at least since 4,000 years ago, when they were made for instructional purposes. As the forerunner of modern medical records, medieval doctors developed written case history reports for educational and reference purposes.

It wasn't until the early 19th century that the beginnings of the modern medical record emerged in Paris and Berlin. Healthcare providers routinely documented patient visits and medical histories in the early 20th century, and recognized that accurate and comprehensive records were essential to patient care. Seeing this, the American College of Surgeons (ACOS) founded the American Association of Record Librarians standardize patient record keeping. This organization is now known as the American Health Information Management Association (AHIMA). Until the mid- to late 20th century, paper patient charts were handwritten and stored on special shelves.

However, with the advent of new technologies, patient medical records have shifted to electronic systems. Electronic health records (EHRs) were initially developed for hospitals and universities, but have slowly been adopted by medical practice.

Over the past 4,000 years, patient record keeping has come a long way. Today, electronic medical records (EMRs) allow seamless access and sharing of patient data among healthcare providers, making it easier for primary care physicians to coordinate care in an accurate and efficient manner. As a result, patient outcomes can be optimized to achieve the highest quality of care. (Amir, N. 2019).

In 2022, precisely in July, the Indonesian government set new regulations regarding the obligation of health facilities to implement patient medical records. PMK No. 24 of 2022 was issued to replace the old regulation, namely PMK No. 269 of 2008. The Indonesian government is aware that with the rapid development of technology, the use of conventional medical records in the current situation is no longer relevant. Therefore, there needs to be a digital transformation of health services so that patient medical records need to be implemented electronically.

The following is a summary of the entire contents of PMK No. 24 of 2022regarding Medical Records. PMK Regulation No. 24 of 2022 contains 47 articles. Of all the articles, there are several points that we need to pay attention to, including:

1) Purpose of Procurement of Electronic Medical Records (Berutu, CA N, 2020).

Article 2 states that the government's goal in starting to regulate the implementation of conventional patient medical records to digital is in addition to realizing the implementation of digital and integrated patient medical records. With this regulation, it is hoped that it can improve the quality of health services and provide legal certainty during the implementation of electronic medical records. Thus, patient medical record data can be guaranteed security, confidentiality, integrity, and availability.

- 2) Electronic-Based Patient Medical Record Organizer. This is stated in article 3 which states that health facilities such as;
 - (1) Independent practice of doctors.
 - (2) Dental practice
 - (3) Health Center
 - (4) Clinic
 - (5) Hospital
 - (6) Pharmacy
 - (7) Health laboratory
 - (8) Hall

It can be concluded that all health facilities that provide health services to patients are required by the government to organize digital-based patient medical records no later than December 31, 2023. This also applies to health facilities that provide health services via telemedicine.

- 3) Things That Must Be Included in Electronic Patient Medical Records. In Article 26, at a minimum, digital patient medical records must contain:
- (1) Patient identity

- (2) Results of physical and supporting examinations
- (3) Diagnosis
- (4) Treatment
- (5) Health service follow-up plan
- (6) Name and signature of the person responsible for providing health services.
- 4) Regulation of Electronic-Based Patient Medical Record System Organizers

In article 9 the government provides options for health facilities to independently developed systems, systems developed by the Ministry of Health, or to collaborate vendors with providing information systems for digital medical records. In the note that the parties invited to collaborate have been licensed and registered as Electronic System Organizers (PSE) in the from health sector the Ministry Communication and Information.

5) Electronic Medical Record System Standards

Article 10 states that a system that organizes digital-based patient medical records must have compatibility interoperability capabilities. This means that electronic systems must be integrated and compatible with other electronic systems. For example, a digital-based patient medical record system is also expected to be integrated with a drug prescription system or a health laboratory system. Then, the electronic system used must also have the ability to interact with applications outside the system itself. For example, an application used by a health facility must be able to interact and integrate with government-owned applications such as Peduli Lindungi or IHS (Indonesia Health Services) Satu Sehat.

The position of Electronic Medical Records is mandatory as stated in Article 3 Paragraph (1) Every Health Service Facility is required to organize Electronic Medical Records. Therefore, until December 31, 2023, all Health Services should have implemented EMR in their Medical Services. (Kesuma, SI 2023). However, based on the Author's observations, there are still several Health Services that have not implemented EMR effectively. Based on the Analysis and Survey conducted by the author with several fellow Authors who work in several Health Services, it was found that there are several advantages and disadvantages to implementing EMR. (Hamama, L. 2023).

Advantages of Electronic Medical Records (EMR) Implementation:

- 1) Process Efficiency: Implementation of RME makes the process of recording and managing medical data more concise and automatic, reducing the workload of health workers in manual recording.
- 2) Data Consistency: RME helps in eliminating gaps or discrepancies in patient data, so that every shift transition or referral between doctors and nurses can be done with consistent and accurate data.
- 3) Completeness of Information: The RME system ensures that every detail of patient information is stored completely and can be updated easily.
- 4) Improved Accessibility: Patient information can be accessed quickly without the need for further confirmation with healthcare workers on the previous shift, speeding up response time and efficiency of care.

Disadvantages of Electronic Medical Records (EMR) Implementation:

- 1) Infrastructure Readiness: Several health service institutions in North Sumatra still do not have adequate infrastructure to implement the RME system effectively.
- 2) Funding Limitations: Funding limitations are one of the main obstacles in the procurement and maintenance of EMR systems, including training health workers in their use.

Data Security Concerns: There are concerns that the applications provided by the Ministry of Health may not have sufficient security systems to protect patient data from the risk of information leakage or misuse.

B. Legal Protection for Health Workers After the Implementation of Electronic Medical Records

The development of digital technology in society has significantly changed the way health services undergo a broad digital transformation. Currently, the patient registration process has shifted to a digital platform, and information technology has been implemented through health applications. The process of recording patient data which was previously done manually has now been transferred to a digital format. Therefore, it is important to manage medical records electronically by ensuring that the security and

confidentiality of data and information remain protected. (Rospita Adelina Siregar, 2023).

Medical records play a central role in the provision of medical services because they reflect medical secrets that are recorded in writing. In medical records, there is data on patient identity and all health and medical services provided, including the results of examinations, treatments, actions, and other services that have been received by the patient. The advantages of medical records, often referred to by the abbreviation "ALFRED", include the following aspects:

- 1) Administrative (medical records reflect the actions, authority, and responsibilities of medical personnel).
- 2) Legal (medical records can be used as evidence in legal proceedings).
- 3) Financial (medical records can be used as a basis for determining medical service fees).
- 4) Research (medical records can be used as a source for scientific research and technology development).
- 5) Education (medical records can be used as teaching materials or learning references).
- 6) Documentation (medical records record medical actions that have been performed on the patient).
- 7) Quality assurance of electronic medical records.
- 8) Transfer of electronic medical records.

The digital storage media in question includes servers, cloud computing systems that have been verified in accordance with legal requirements, and other digital storage media that have been certified to follow advances in information technology. On August 31, 2022, the Minister of Health of the Republic of Indonesia issued Regulation of the Minister of Health of the Republic of Indonesia Number 24 of 2022 concerning Medical Records, which replaces Regulation of the Minister of Health of Republic of Indonesia 269/Menkes/PER/III/2008. This replacement was made due to the inconsistency of the old Regulation of the Minister of Health with developments in science and technology, as well as the needs of health services and legal demands of the community. In addition, digital transformation in society also drives the need for digitalization of health services, with an emphasis on the principles of data security and confidentiality in the management

electronic medical records. (Wahyu Andrianto, 2022).

In essence, Regulation of the Minister of Health of the Republic of Indonesia Number 24 of 2022 is designed to provide a legal basis for the implementation of electronic medical records. Overall, this regulation introduces three new concepts, namely the electronic medical record system, the implementation of electronic medical record management, and aspects of security and data protection in electronic medical records.

Electronic medical record systems can come from the Ministry of Health of the Republic of Indonesia, health care facilities, or Electronic System Providers (PSE) that have official permits. The electronic system used must meet compatibility or interoperability standards in order to communicate and exchange data with other systems. Electronic medical record data must be stored in health care facilities for a minimum of 25 years after the patient's last visit. After that period, the data can be deleted, unless it is still needed or useful. Several key points related to the Regulation of the Minister of Health of the Republic of Indonesia Number 24 of 2022 concerning Medical Records include: (Pri Agung Danarahmanto et al. 2021).

- Regulation of the Minister of Health of the Republic of Indonesia Number 24 of 2022 requires all health service facilities. including independent practices run by health and medical personnel, implement electronic medical records in accordance with the provisions that have been set, with a deadline of December 31, 2023 at the latest. Facilities that violate these provisions are potentially subject to administrative sanctions, such as written warnings or revocation of accreditation status, which can be imposed by the Minister of Health through the Director General of Health Services of the Ministry of Health.
- 2) Regulation of the Minister of Health of the Republic of Indonesia Number 24 of 2022 grants significant authority to the Ministry of Health regarding electronic medical record data and content and its system arrangements. Health care facilities are required to provide complete access to the contents of electronic medical records to the Ministry of Health, and the system used to manage electronic medical

- records must have official registration with the Ministry of Health.
- Regulation of the Minister of Health of the Republic of Indonesia Number 24 of 2022 serves as the main legal framework in the implementation of electronic medical records. As a general regulation, further interpretation is needed in more detailed regulations such as Standard Operating Procedures or Guidelines for Organizing Electronic Medical Records. The purpose of this interpretation is to avoid misunderstandings of the provisions contained in Regulation of the Minister of Health of the Republic of Indonesia Number 24 of 2022 and to provide a comprehensive explanation contents.

Medical records play a very important role in providing health services in various types of medical facilities. As the main source of information. medical records significant contribution to the management of data and information that supports the development of health services by management. In a number of basic health facilities in Indonesia, such as clinics and doctors' practices, electronic medical records are implemented to improve the quality of health services. This electronic medical record refers to a patient's medical documents stored in digital format, including individual health information that can be accessed via a computer from a certain network. This aims to provide more effective, efficient, coordinated health services. (Sinta Apriliyani, 2021). Sugiyono stated that success is based on effectiveness, which refers to doing the job right. (Sugivono, 2013).

Regulation of the Minister of Health of the Republic of Indonesia Number 24 of 2022 concerning Electronic Medical Records (EMR) is a significant step in the modernization of the Indonesian health system, with a direct impact on legal protection for health workers. First, the importance of electronic medical records in the context of data security and integrity cannot be underestimated. Article 25 of Permenkes 24/2022 states that medical record documents belong to health care facilities. The facility has full responsibility for the loss, damage, falsification, and misuse documents. This implicitly provides protection to health workers, because the burden of responsibility for data security does not lie

entirely with individual health workers, but rather with the institution. Thus, if there is a security breach or data management error, health workers are not directly affected by the law as long as they have followed the existing protocol.

Article 25

- (1) Medical Record Documents belonging to Health Care Facilities.
- (2) Health Service Facilities are responsible for the loss, damage, falsification and/or use by unauthorized persons and/or bodies of Medical Record documents as referred to in paragraph (1).

Second, Article 26 emphasizes that (1) The contents of the Medical Record belong to the Patient and may only be opened or given to other parties with the patient's consent or a valid legal order. This rule provides clear guidelines for health workers on how and when patient information can be accessed and shared, which directly reduces the risk of privacy violations. If information is leaked without any fault on the part of health workers, they can be protected from lawsuits because they have complied with the established procedures.

In the context of violations or negligence, the Minister of Health Regulation has also established a structure that facilitates non-litigative dispute resolution. According to Article 310 of Law Number 17 of 2023 concerning Health, if there is an alleged error by a health worker that results in a loss, this case should be resolved through alternative dispute resolution channels, such as mediation or restorative justice. This approach helps reduce the likelihood of harsh legal sanctions and provides health workers with the opportunity to correct mistakes without stigmatization or long-term negative impacts on their careers.

Article 310

In the event that Medical Personnel or Health Personnel are suspected of making an error in carrying out their profession which causes harm to the Patient, the dispute arising from the error must first be resolved through alternative dispute resolution outside the courts.

Article 304 adds another layer of protection by establishing the enforcement of professional discipline for health workers. By having a disciplinary panel that regulates and assesses professional behavior, health workers are given the opportunity to maintain their integrity and address allegations of misconduct in a fair and structured manner. This panel can act as a buffer that prevents hasty or unfair decisions against health workers, offering a more objective and fact-based review process.

Article 304

- (1) In order to support the professionalism of Medical Personnel and Health Personnel, it is necessary to enforce professional discipline.
- (2) In order to enforce professional discipline as referred to in paragraph (1), the Minister shall form a council which carries out duties in the field of professional discipline.
- (3) The assembly as referred to in paragraph (2) determines whether or not there have been any violations of professional discipline committed by Medical Personnel and Health Personnel.
- (4) The assembly as referred to in paragraph (2) may be permanent or ad hoc.
- (5) Further provisions regarding the duties and functions of the assembly as referred to in paragraph (2) are regulated by Government Regulation.

By implementing these rules, Permenkes 24/2022 not only creates a framework for more efficient and secure medical record management, but also offers a series of protective mechanisms that support health workers. These rules help ensure that in the digital age, where sensitive data is becoming more accessible and therefore more vulnerable to breaches, health workers can work with confidence that they are protected by the law, as long as they comply with the standards that have been set. In doing so, Permenkes 24/2022 effectively reduces the individual legal burden on health workers and places greater responsibility on the systems and protocols managed by health facilities.

IV. CONCLUSIONS AND RECOMMENDATIONS

The conclusion of this study underlines that the Regulation of the Minister of Health of the Republic of Indonesia Number 24 of 2022 concerning Electronic Medical Records (EMR) has brought about significant changes in the management of health data, with direct implications for legal protection for health

workers. EMR ensures effective data security, confidentiality, and accessibility, while establishing clear operational standards for health workers in managing medical records. However, this study also identified several challenges, including the need for better infrastructure and more comprehensive training for health workers. Based on these findings, the main recommendations for stakeholders are to increase training efforts, provide sufficient resources, and ensure uniform implementation of technology across health care facilities to maximize the benefits of EMR and minimize the legal risks that may arise.

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