



## JLPH: Journal of Law, Politic and Humanities

<https://dinastires.org/JLPH> ✉ [dinasti.info@gmail.com](mailto:dinasti.info@gmail.com) ☎ +62 811 7404 455

E-ISSN: 2962-2816  
P-ISSN: 2747-1985

DOI: <https://doi.org/10.38035/jlph>  
<https://creativecommons.org/licenses/by/4.0/>

# Confidentiality in Digital Health Records: Aligning Privacy and Care Advancement in Hospitals

**Ari Andayani<sup>1</sup>, Siska<sup>2</sup>, Sagung Putri Purwani<sup>3</sup>.**

<sup>1</sup>Universitas Udayana, Bali, Bali, Indonesia, [andayaniari88@gmail.com](mailto:andayaniari88@gmail.com).

<sup>2</sup>Universitas Soegyapranata, Jawa Tengah, Semarang, Indonesia, [dr.siska821@gmail.com](mailto:dr.siska821@gmail.com).

<sup>3</sup>Universitas Udayana, Bali, Bali, Indonesia, [sagung\\_putri@unud.ac.id](mailto:sagung_putri@unud.ac.id).

Corresponding Author: [andayaniari88@gmail.com](mailto:andayaniari88@gmail.com)<sup>1</sup>

**Abstract:** The development of medical services is undergoing a period of transformation towards digitalization. One form of medical services development in Indonesia is electronic medical records. Electronic Medical Records can help facilitate health services, but on the one hand, Electronic Medical Records can potentially pose a risk of patient data leakage. The purpose of the study is to analyze the responsibility of hospitals in the management of Electronic Medical Records and analyze the legal protection of patients in maintaining the confidentiality of Electronic Medical Records data. This research is a type of normative legal research with a Case Approach and a Statue Approach. The method of data collection is through literature study, and data analysis techniques are used through qualitative descriptive analysis. The research results stated Hospital's accountability in the management of Electronic Medical Records is to apply the principles of data security, restrict access to Medical Records, and store data. Meanwhile, the legal protection of patients to maintain the confidentiality of Electronic Medical Record data is the use of electronic signatures as a verification tool and provides criminal sanctions for violators in the form of fines, imprisonment, and dissolution of corporations.

**Keyword:** Electronic Medical Records, Accountability, Legal Protection.

## INTRODUCTION

Health is a priceless treasure (Siregar & Rangkuti, 2024). The development of medical services in Indonesia is still in a transition period from conventional medical services to digitalization. The digitalization of health services in Indonesia is still in the transition stage, as evidenced by the emergence of informal health organizations or facilities, changes in patient service models in hospitals, and changes in communication patterns between patients and doctors (Purwaningrum & Madrah, 2019). One form of medical services development in Indonesia is electronic medical records.

Medical records are the foundation of the implementation of medical services. This is because medical records are the embodiment of written medical secrets. Medical records contain data

on the patient's identity, health services, and medical services that have been provided to the patient (Dachban et al., 2023). Electronic medical records include diagnoses, prescriptions, tests, allergies, vaccines, treatment plans, and other important patient information that helps healthcare providers to provide advice on patient care plans (Hamdan et al., 2023). The application of electronic medical records is one of the efforts to improve the quality of health services, increase cost efficiency, and the carrying capacity of medical personnel, and have an important role in the safety of medical services for patients (Amir, 2019). The use of Electronic Medical Records has a legal basis, namely the Regulation of the Minister of Health Number 24 of 2022 concerning Medical Records where Article 3 states that every Health Service Facility, whether an independent practice of doctors, dentists, and/or other health workers, health centers, clinics, hospitals, pharmacies, health laboratories, and halls is obliged to hold an Electronic Medical Record.

Electronic medical record recording is very important because the medical record contains social data, health demographic data, and the results of doctors' diagnoses after examinations and complaints faced by patients (Amir, 2019). When the government changes conventional medical records to electronic medical records, there are various pros and cons. The use of electronic medical records has a positive impact on making it easier for the magic house to diagnose patients' diseases, but on the other hand, there is also a risk of disclosure of patient secrets because electronic systems that use sophisticated information technology with a level of security cannot be guaranteed to be safe (Sofia et al., 2022).

Although the government has established Permenkes Number 24 of 2022 as the basis and legal protection from the use of Electronic Medical Records, there are still various cases related to the failure of the confidentiality of Electronic Medical Records. One of these cases is the case of the leak of Electronic Medical Record data at BPJS Kesehatan. In 2022, a hacker named Bjorka leaked 3.2 billion PeduliLindungi application data to the public. The uploaded data includes name, email, population identification number (NIK), identity card number (KTP), phone number, date of birth, device identity, COVID-19 status, check-in history, contact tracing history, vaccination, and many other data. The data is correct and valid recorded in the population data when checked using an ID card number checking application (Wuwungan et al., 2020).

Cases of leakage of personal data of patients with medical records can occur due to internal and external factors. Internal factors are caused by the lack of adequate human resources in hospitals and also due to the negligence of medical personnel in maintaining personal data of patient's medical records, the factor of deliberately knowingly leaking patients' data for personal interests, namely taking advantage of these actions and the factor of incomprehension carried out by medical personnel that the confidentiality of medical records is a secret that must be maintained and only certain parties can accessing it while external factors are factors that exist outside the hospital, for example, the family who may post or spread the patient's existence on social media without the patient's permission or knowledge and this is all regulated in the PMK on Medical Records (Tampubolon et al., 2024).

Based on the above problems, it can be seen that the use of Electronic Medical Records must be carried out by every Health Service Institution in Indonesia. The existence of the Electronic Medical Record aims to simplify the process of public health services. On the other hand, the use of Electronic Medical Records risks causing leakage of privacy data in Electronic Medical Records. Based on the description above, the author is interested in conducting research entitled "Confidentiality in Digital Health Records: Harmonizing Privacy and Advances in Hospital Care."

## METHOD

The type of research carried out is normative legal research which is a process to find legal principles, legal principles, and legal doctrines to overcome the legal problems faced (Christiani, 2016). This research is normative and empirical juridical where the research method refers to legal norms contained in statutory regulations, whether from library materials, written regulations, or other legal materials (Palenewen et al., 2024).

In normative law research, a study will be carried out related to positive legal provisions to find legal rules and principles in the analyzed legal cases. This research uses a problem approach method, namely the Statue Approach and Case Approach. Approach The Statue Approach is an approach that is carried out by analyzing, and studying is used as a guideline for legal problems to resolve legal cases (Marzuki, 2020). The legal guidelines used are Law No. 29 of 2004 concerning Medical Practice, Permenkes Number 24 of 2022 concerning Medical Records, and Regulation of the Minister of Health Number 24 of 2022 concerning Personal Data Protection and Criminal Code (KUP). Meanwhile, a law-based approach will examine all relevant laws and regulations related to the legal issues being handled (Marzuki, 2020). The case discussed in the study was the case of the BPJS Kesehatan data leak by Bjorka. The research data collection method uses the Literature Study technique. Literature study is a study that analyzes and synthesizes existing literature collections by identifying, challenging, and advancing theoretical foundations through examination of previous collections of works (Kraus et al., 2022). Meanwhile, the research data analysis technique uses qualitative descriptive analysis that analyzes legal cases descriptively (Loeb et al., 2017).

## RESULTS AND DISCUSSION

### Hospital Accountability in Electronic Medical Record Management

According to Article 1 Point 1 of the Regulation of the Minister of Health Number 24 of 2022 concerning Medical Records, the definition of medical records is as follows: "Medical records are documents that contain patient identity data, examinations, treatments, actions, and other services that have been provided to patients". Electronic medical records contain data related to patient health and are classified as the main factor in the implementation of e-health (Keshtha & Odeh, 2021). According to Article 26 paragraph (6) of the Minister of Health Regulation Number 24 of 2022 concerning Medical Records, the contents of the medical record consist at least of Patient identity, Results of physical examination and support, Diagnosis, treatment, and follow-up plan for health services and Name and signature of the health worker providing health services.

Electronic medical records are an information method in the form of electronic health records used in a patient-focused health order, involving various health professions (doctors, nurses, pharmacists, and public health) consisting of patient clinical information, supporting collaboration between health professions for information exchange and being able to establish relationships between institutions or organizations (Agustina, 2023). The processing of electronic medical record information includes a) Coding (provision of clinical classification codes by international classifications of diseases and medical procedures such as the International Statistical Classification of Disease and Related Health Problems); b) Reporting (including internal reporting of health service facilities and external reporting from health service facilities to the health office, the Ministry of Health, and related stakeholders) and c) Analysis (quantitative and qualitative analysis of electronic medical record data) (Dachban et al., 2023).

Regulations regarding the security and protection of medical record data are explained in Permenkes Number 24 of 2022 concerning Medical Records. According to Article 29 of Permenkes No. 24 of 2022, Electronic Medical Records must meet the principles of data and information security, including: a) confidentiality; b) integrity; and c) availability. The

Principle of Confidentiality is a guarantee of data and information security from interference from internal and external parties who do not have access rights. Then the principle of integrity is a guarantee of the accuracy of the data and information in the Electronic Medical Record, and changes to the data can only be made by the person who is given access rights to change. Meanwhile, the principle of availability is a guarantee that the data and information contained in the Electronic Medical Record can be accessed and used by people who already have access rights determined by the leadership of the Health Service Facility. These three principles must be carried out by every health institution, including the Hospital as the holder of the responsibility for the security and protection of Electronic Medical Record data (Yunisa & Gunawan, 2024).

Based on Article 30 of the Minister of Health Regulation No. 24 of 2022 states that to maintain the security and protection of Electronic Medical Record data, the leadership of the Health Service Facility grants access rights to Health Workers and/or other personnel in the Health Service Facility where the access rights of Electronic Medical Records are only used for data input, data correction, and data viewing. The Hospital is fully responsible for the data input process, where Article 30 of the Minister of Health Regulation No. 24 of 2022 explains that the input of Electronic Medical Record data is carried out by Health Workers, health service providers, and administrative officers, including Medical Recorders and Health Information Recorders, by the authority of their respective fields. The hospital can make data corrections if there is an error in the input of administrative data and patient clinical data. Regarding the Right of Access to view data, the Hospital can read the patient's Electronic Medical Record only to be used as a means of obtaining information related to data in the Electronic Medical Record for service or administrative purposes.

The contents of the Medical Record must be kept confidential by all parties involved in health services at the Health Service Facility even if the patient has passed away (Article 32 of the Minister of Health Regulation No. 24 of 2022). Therefore, the Hospital is responsible for maintaining the confidentiality of data on Electronic Medical Records. The contents of electronic medical records must be kept confidential by all parties involved in health services and medical services in each health care facility but also for health workers, health service providers, doctors and dentists, and/or other health workers who have access to the patient's health data and information; leaders of Health Service Facilities; Personnel related to health service financing; legal entities/corporations and/or Health Service Facilities; students/students who are in charge of examination, treatment, treatment, and/or information management at the Service Facility even though the patient has passed away.

The Hospital has the responsibility for opening the contents of the Medical Record which is carried out with the consent of the Patient and not with the consent of the Patient. Article 34 of Permenkes No. 24 of 2022 states that the opening of the contents of the Medical Record with the patient's approval is carried out for a) the interests of maintaining the patient's health, treatment, healing, and treatment; b) the patient's request; and/or c) administrative purposes, insurance payments or health financing guarantees. Meanwhile, the opening of the contents of the Medical Record without the patient's consent is carried out based on the provisions of laws and regulations, for the interests of: a) fulfilling the requests of law enforcement officials in the context of law enforcement; b) ethical or disciplinary enforcement; c) medical audits; d) handling of extraordinary events/infectious disease outbreaks/public health emergencies/disasters; e) education and research; f) efforts to protect against the danger of threats to the safety of others individually or the community; and/or g) Other efforts regulated in laws and regulations (Article 35 of Permenkes No. 24 of 2022).

Regarding the confidential nature of the contents of medical records, several rights are a form of confidentiality law, namely the Right to Privacy, the Right to Access Patients, the Right to Medical Confidentiality, and the Right to Refuse to Open Medical Secrets. The content of a

patient's medical record or electronic medical record contains juridical consequences, namely the nature of its confidentiality so that the Electronic Medical Record is a file that must be kept confidential by Article 4 of Law Number 17 of 2023 which states that everyone has the right to obtain the confidentiality of their personal health data and information. This is also strengthened by the content of Article 177 of Law Number 17 of 2023 where "Every Health Service Facility must keep the patient's personal health secrets". Every Medical Personnel and Health Worker carrying out Health Services is obliged to keep the confidentiality of the Patient's health

The Hospital is not responsible for the actions of patients who inform the public of the contents of the Medical Record through the mass media. In addition, Article 39 of Permenkes No. 24 of 2022 states that Hospitals can store Electronic Medical Record data at Health Service Facilities for a minimum of 25 years from the date of the last visit of the patient. After the deadline expires, the Electronic Medical Record data can be destroyed, unless the data is still in use.

### **Legal protection of patients in maintaining the confidentiality of Electronic Medical Record data**

Legal protection is an effort to protect a person's interests by allocating a Human Rights power to him or her to act in the context of his interests (Raharjo, 2019). Indonesia as a legal country based on Pancasila must provide legal protection to its citizens, therefore the legal protection will give birth to the recognition and protection of human rights in its form as individual beings and social beings in the forum of a unitary state that upholds the spirit of kinship to achieve common prosperity. This is also included in the legal protection of the confidentiality of Electronic Medical Record data.

Regarding the use of Electronic Medical Records by Article 41 of the Minister of Health Regulation No. 24 of 2022, the government through Ministers, governors, and regents/mayors conducts guidance and supervision over the implementation of Electronic Medical Records by their respective authorities and the provisions of laws and regulations. The purpose of coaching and supervision in the implementation of Electronic Medical Records is to ensure and improve the quality of Electronic Medical Records services. To maintain the security of data and information in electronic medical records, Minister of Health Regulation Number 24 of 2022 concerning Medical Records suggests that the implementation of electronic medical records in healthcare facilities is equipped with the use of electronic signatures used as a means of verification and authentication of the contents of electronic medical records and the identity of the signatories (Purwaningrum & Madrah, 2019). The implementation of electronic medical records must also be accompanied by quality assurance carried out internally by health service facilities which is carried out periodically by the team tasked with reviewing medical records formed by health facility leaders and carried out by the guidelines of Electronic Medical Records (Bahreini et al., 2019).

Article 9 of the Regulation of the Minister of Health Number 24 of 2022 concerning Medical Records states that the electronic system used in the processing of electronic medical records can be in the form of a medical record system developed by the government (SIMGos Klinik), a medical record system managed by its health service facility or an electronic system in collaboration with an electronic system operator through Cooperation. Then the electronic system operator must be registered as an electronic system operator in the health sector in the ministry responsible for the culprit of communication and informatics by the provisions of the regulation where the Health Service Facility that provides Electronic Medical Records or Electronic System Operators is required to register the Electronic System they use at the Ministry of Health. The registration of the Electronic System is carried out by attaching documents that at least consist of a. the name of the Electronic System; b. system

documentation; c. available features/functions; d. data storage location; e. variables and metadata; and f. list of Facilities.

Regulation of the Minister of Health Number 24 of 2022 concerning medical records is one of the legal instruments that also touches on data and information security, however, the protection of personal data from personal data subjects, in this case, patients, will still rest on Law Number 27 of 2022 concerning Personal Data Protection by the legal principle of the Lex Superior Derogat Legi Inferiori Principle which means that the lower regulations should not conflict with the higher regulations. Article 67 of Law Number 27 of 2022 concerning Personal Data Protection states:

"Any Person who intentionally and unlawfully obtains or collects Personal Data that is not a private to benefit himself or others that may result in losses to the Personal Data Subject shall be sentenced to imprisonment for a maximum of 5 years and/or a maximum fine of Rp5,000,000,000.00"

"Any person who deliberately and unlawfully steals Personal Data that does not belong to him shall be sentenced to imprisonment for a maximum of 4 years and/or a maximum fine of Rp4,000,000,000.00. "

"Every person who unlawfully and unlawfully uses Personal Data that does not belong to him is sentenced to imprisonment for a maximum of 5 years and/or a maximum fine of Rp5,000,000,000.00. "

In addition, corporations or health service providers such as hospitals can also be subject to criminal penalties if proven to violate the confidentiality of Electronic Medical Record data. Article 70 of Permenkes No. 24 of 2022 states that the penalty that can be imposed on a corporation is only a fine of a maximum of 10 times the maximum penalty that is threatened. In addition to being sentenced to a fine, the Corporation may be sentenced to additional penalties in the form of a) deprivation of profits and/or assets obtained or proceeds of criminal acts; b) freezing of all or part of the Corporation's business; c) permanent prohibition of performing certain acts; d) closure of all or part of the Corporation's place of business and/or koactivities; e) carrying out obligations that have been neglected; f) payment of compensation; g) revocation of permits; and/or h) dissolution of the Corporation.

Based on Article 42 of the Minister of Health Regulation No. 24 of 2022, it is stated that administrative sanctions by the Minister are carried out through the Director General in the form of: a) a written reprimand; and/or b) recommendation for revocation or revocation of accreditation status. In addition, if you open a "medical record" without the patient's permission, you can be criminally prosecuted under Article 322 of the Criminal Code where "Whoever deliberately discloses secrets that he must keep because of his position or livelihood, both current and past, is threatened with imprisonment for a maximum of 9 months or a maximum fine of six hundred rupiah.

## CONCLUSION

Based on the results of the data analysis and discussion above, several conclusions were obtained that answered the formulation of the problem, namely: 1) Hospital accountability in the management of Electronic Medical Records is to apply the principles of data and information security of Electronic Medical Records in the form of Principles Confidentiality, Integrity; and Availability, providing access to Health Personnel only for data input, data correction and data viewing, maintaining data confidentiality on Electronic Medical Records, opening the contents of Medical Records by the purpose of having or not patient consent and storing Electronic Medical Record data for a minimum of 25 years from the date of the last visit of the Patient. 2) Legal Protection that can be granted to patients for maintaining the confidentiality of Electronic Medical Record data is The use of electronic signatures as a means of verification and authentication of the contents of electronic medical records, provides

criminal sanctions for violators of the confidentiality of personal data who using Personal Data that does not belong to them is punishable by imprisonment for a maximum of 5 years and/or a maximum fine of Rp5,000,000,000.00 and Criminal for Health Service Institutions such as Hospitals in the form of a fine of up to 10 times the maximum of the threatened fine and additional penalties such as deprivation of profits and/or wealth obtained or proceeds of criminal acts; freezing of all or part of the Corporation's business; permanent prohibition of performing certain acts; closure of all or part of the business place and/or activities of the Corporation; carry out obligations that have been neglected; payment of compensation; g) revocation of permits; and/or dissolution of the Corporation

## REFERENCE

- Agustina, R. (2023). Pelindungan Hak Pasien Dalam Implementasi Rekam Medis Elektronik Di Instalasi Rawat Inap Charitas Hospital Palembang. *Masters Thesis, Universitas Katholik Soegijapranata Semarang*.
- Amir, N. (2019). Legal Protection of Patient Data Confidentiality Electronic Medical Records (Perlindungan Hukum Kerahasiaan Data Pasien dalam Rekam Medik Elektronik). *SOEPRA Hukum Kesehatan*, 5(2), 198–208.
- Bahreini, R., Doshmangir, L., & Imani, A. (2019). Influential factors on medical equipment maintenance management: In search of a framework. *Journal of Quality in Maintenance Engineering*, 25(1), 128–143. <https://doi.org/https://doi.org/10.1108/JQME-11-2017-0082>
- Christiani, T. A. (2016). Normative and Empirical Research Methods: Their Usefulness and Relevance in the Study of Law as an Object. *Procedia - Social and Behavioral Sciences*, 219, 201–207. <https://doi.org/https://doi.org/10.1016/j.sbspro.2016.05.006>
- Dachban, Y. B., Sidi, R., & Saragih, Y. M. (2023). Juridical Review of Hospital Readiness and Hospital Responsibilities Post Minister of Health Regulation Number: 24/2022 Concerning Medical Records and Hospital Readiness. *Nursing Journal*, 7(1), 232–239. <https://doi.org/https://doi.org/10.31004/jn.v7i1.13001>
- Hamdan, A. ., Manaf, R. ., & Mahmud, A. (2023). Challenges in the use Electronic Medical Records in Middle Eastern Countries: A Narrative Review. *Malaysian Journal of Medicine and Health Sciences* 19, 334–340.
- Keshta, I., & Odeh, A. (2021). Security and privacy of electronic health records: Concerns and challenges. In *Egyptian Informatics Journal (Vol. 22, Issue 2, Pp. 177–183)*. Elsevier B.V. <https://doi.org/https://doi.org/10.1016/j.eij.2020.07.003>
- Kraus, S., Breier, M., Lim, W. M., Dabić, M., Kumar, S., Kanbach, D., Mukherjee, D., Corvello, V., Piñeiro-Chousa, J., Liguori, E., Palacios-Marqués, D., Schiavone, F., Ferraris, A., Fernandes, C., & Ferreira, J. J. (2022). Literature reviews as independent studies: guidelines for academic practice. *Review of Managerial Science*, 16(8), 2577–2595. <https://doi.org/https://doi.org/10.1007/s11846-022-00588-8>
- Kurniawan, A. L., & Setiawan, A. (2021). Perlindungan Data Rekam Medis Sebagai Bentuk Perlindungan Data Pribadi Pasien Selama Pandemi Covid 19. *Jurnal Hukum Dan Pembangunan Ekonomi*, 9(1), 95–112.
- Loeb, S., Dynarski, S., McFarland, D., Morris, P., Reardon, S., & Reber, S. (2017). Descriptive analysis in education: A guide for researchers The National Center for Education Evaluation and Regional Assistance (NCEE) conducts unbiased large-scale evaluations of education programs and practices. *National Center for Education Evaluation and Regional Assistance*, 2(2), 1–53. <http://ies.ed.gov/ncee/>.
- Marzuki, P. M. (2020). Penelitian Hukum. *Prenada Media Group*.
- Palenewen, J. Y., Alfa, T., & Reumi, S. (2024). *Settlement of Customary Law Community Land Disputes Regarding the Construction of the Lukas Enembe Stadium in Kampung*

- Harapan Jayapura Regency*. 4(5), 1296–1304.
- Purwaningrum, A. R., & Madrah, M. Y. (2019). Digitalization of Health Services in an Islamic Perspective. *In Conference on Islamic Studies FAI 2019*, 231-44.
- Raharjo, S. (2019). Penegakan Hukum Suatu Tinjauan Sosiologis. *Yogyakarta: Genta Publishing*.
- Siregar, Z. M., & Rangkuti, Z. A. (2024). Implementation of An Integrated Referral System ( Sisrute ) In Improving Health Service Referrals at Rumah Sakit Umum Pusat. *Journal of Law, Politic and Humanities*, 4(5), 1293–1303. <https://doi.org/10.38035/jlph.v4i5>
- Sofia, S., Ardianto, E. T., Muna, N., & Sabran, S. (2022). Analisis Aspek Keamanan Informasi Data Pasien Pada Penerapan RME di Fasilitas Kesehatan. *Jurnal Rekam Medik & Manajemen Informasi Kesehatan*, 1(2), 94–103. <https://doi.org/https://doi.org/10.47134/rmik.v1i2.29>
- Tampubolon, E. T. F., Putera, A. P., & Huda, M. K. (2024). Hospital Legal Liability Regarding Leaks of Patient Personal Data Based on Legislation. *Journal Syntax Idea*, 6(3).
- Wuwungan, M. S. S., Massie, C. D., & Pinori, J. J. (2020). Legal Protection for Owners of Personal Data of Information Technology Users Due to Hacking Crimes. *Lex Privatum*, 13(4).
- Yunisa, C., & Gunawan, E. (2024). Pengaruh Implementasi Rekam Medis Elektronik Terhadap Kualitas Pelayanan Rawat Jalan Di Rumah Sakit X. *Open Journal Systems*, 18(11). <https://doi.org/https://doi.org/10.33758/mbi.v18i11.827>