Immortalis Journal of Interdisciplinary Studies
ISSN: 3123-3600
Vol. 2 Issue 1, January 2026, pp. 1-8
https://immortalispub.com/ijis

Legal Enforcement on the Misuse of Health Data in the SATUSEHAT Mobile Application: Patient Privacy Protection

Andreas Abimanyu Prasetya[1], Elvito Primanda Wibowo[2], Hendryco Bintang Burju Sianipar[3], Vita Surya Pratiwi[4]

[1,2,3,4]*Sekolah Tinggi Ilmu Kesehatan Bethesda Yakkum Yogyakarta*

Coresponding author-email: *1andreasabimanyu87@gmail.com

Abstract

This study investigates the legal protection of patient privacy in Indonesia's SATUSEHAT mobile application, which serves as a centralized platform for Electronic Medical Records (EMRs). As digital transformation in the healthcare sector accelerates, concerns over data security and privacy become increasingly urgent. Existing studies have highlighted regulatory efforts but often overlook the practical enforcement and institutional gaps, particularly in mobile health platforms. Using a normative juridical approach, this research analyzes legal texts, government regulations, and expert commentaries related to the Personal Data Protection Law, Health Law, and Ministry of Health Regulation No. 24 of 2022. The findings reveal that while a legal framework exists, there are major challenges in its implementation, including limited digital infrastructure, weak legal synchronization, low digital literacy among health workers, and the absence of robust monitoring mechanisms. A key contribution of this study is its comprehensive analysis of both legal and practical dimensions of data privacy, offering strategic recommendations to enhance regulation enforcement and institutional preparedness. By bridging the gap between regulation and on-ground realities, this research underscores the importance of an integrated, secure, and ethically responsible approach to digital health governance in Indonesia.

Keywords: Digital Health Governance, Patient Data Privacy, Legal Enforcement, Institutional Readiness

1. Introduction

In this digital era, the rapid development of information technology has impacted nearly every aspect of life, including the healthcare sector. One innovation in this field is the SATUSEHAT mobile application. This application is designed to simplify access and improve efficiency in managing Electronic Medical Records or EMR(Barus, 2023). Through the comprehensive integration of patient data, medical professionals and patients can access health information quickly and accurately. This initiative is also aligned with the Regulation of the Minister of Health of the Republic of Indonesia Number 24 of 2022 on Medical Records which mandates healthcare facilities to transition to a digital system (Rayga Rayyan & Abdul Rahman Maulana Siregar, 2025).

Immortalis Journal of Interdisciplinary Studies
ISSN: 3123-3600
Vol. 2 Issue 1, January 2026, pp. 1-8
https://immortalispub.com/ijis

Digital transformation in healthcare is expected to enhance the quality of services, ensure patient data security, and support a modern medical record management system(Riyanto & Fuad, 2025). However, despite these benefits, significant challenges remain, particularly in protecting the privacy of medical data. Patient information such as medical history and diagnostic results is highly sensitive. If not properly managed, there is a high risk of data leaks or misuse.

The leakage of health data can lead to serious consequences including discrimination, fraud, and identity theft. In this context, legal certainty becomes crucial to provide protection for patients. Unfortunately, gaps still exist in current regulations especially concerning the accountability of technology providers and third parties. This lack of clarity can weaken public trust in the existing legal framework. Therefore, strengthening the legal aspects of data protection is urgently needed(Kurniawan & Setiawan, 2021).

Moreover, advancements in health technology such as telemedicine and artificial intelligence also bring new challenges to data protection. While these innovations offer convenience in healthcare services, they also carry risks of misdiagnosis and malpractice due to reliance on digital systems. Although Law Number 17 of 2023 on Health addresses some of these issues, further reinforcement of regulations is necessary to ensure effective legal enforcement (Siregar & Haposan Sahala Raja Sinaga, 2025).

This research aims to analyze how Indonesian law provides legal protection for patient privacy in the use of the SATUSEHAT application. Additionally, it seeks to identify strategic steps that can strengthen the legal framework and monitoring mechanisms to ensure that patient data is truly protected amid the ongoing digital transformation. This approach is expected to support the creation of a healthcare system that is not only modern but also safe and fair. Legal protection plays a vital role in maintaining public trust(Utomo et al., 2020).

The use of EMRs has significantly changed how patient data is stored and managed(Rahmad & Budiman, 2025). However, as the volume of digitally processed data grows, the risk of cybersecurity threats increases. Previous data breaches on digital platforms have shown that digital systems require strong safeguards(Darmiani et al., 2024). Without adequate protection, patient data may become a target for malicious actors. A strong legal system and consistent implementation are essential to build and maintain public confidence.

The public's trust in digital health systems will be a key factor in the success of health service transformation. If patients and healthcare professionals feel that their data is unsafe, the adoption of technology will slow down. Therefore, it is important for healthcare institutions to implement clear and secure data management procedures. This must also be supported by regular training for medical personnel and the use of reliable cybersecurity technologies (Sitanggang et al., 2024).

With these efforts, the SATUSEHAT application is expected to become a good example of responsible and secure digital health technology. It should not only improve service efficiency but also ensure the highest level of protection for patient rights. Protecting personal health data must be an integral part of digital transformation in healthcare. In the long term, this will contribute to a trustworthy and sustainable health service

ecosystem. This research is essential to address the challenges and opportunities that arise in today's digital age.

1.1 Legal Uncertainty and the Need for Stronger Regulation

While SATUSEHAT represents a breakthrough in digital health integration, legal uncertainty remains a major challenge, especially regarding accountability between service providers and third parties. Existing laws do not yet fully regulate digital privacy and protection. This highlights the need for more solid and comprehensive regulations that can accommodate the evolving technological landscape.

1.2 Research Objectives and Contributions

This research aims to examine the implementation of legal protection for patient data privacy in SATUSEHAT and to explore the risks of data misuse in the application's digital environment. The study offers new insight and contributes to developing a more complete legal framework that ensures the digital transformation of healthcare does not compromise the fundamental rights of patients.

2. Literature Review

2. 1. Digital Health Transformation and Electronic Medical Records

Digital transformation in healthcare has brought significant improvements in service delivery, especially through the use of Electronic Medical Records(Juwita, 2025). Studies have shown that EMRs can enhance efficiency and accessibility of medical data. However, these systems also increase the risk of data breaches due to cybersecurity vulnerabilities. In Indonesia, the use of digital health platforms such as SATUSEHAT is still relatively new, and research on their legal implications remains limited.

2. 2. Legal Gaps and the Urgency of Strengthened Oversight

Existing literature points to the urgency of legal protections for digital health data but often lacks a focused discussion on legal accountability within mobile applications(Christian Daniel Tombokan et al., 2024). Some studies recognize that current laws are not yet ready to handle complex data misuse cases, especially involving third party providers. The Health Law Number 17 of 2023 addresses some aspects of this issue. However, researchers such as Siregar and Sinaga (2025) argue that legal enforcement must be strengthened to ensure proper protection. With emerging technologies such as artificial intelligence and telemedicine, the risk of error or data misuse also raises legal and ethical concerns that require more specific analysis in the Indonesian context.

3. Research Method

This study uses a normative juridical approach, focusing on the analysis of legal norms and regulations concerning patient data protection in Indonesia, particularly in the SATUSEHAT mobile application. The research utilizes both primary legal materials,

such as the Personal Data Protection Law, Minister of Health Regulations, and the latest Health Law, as well as secondary legal materials including academic journals and expert legal opinions. Data sources are drawn from legislation documents, government policy reports, and institutional publications. Since this is a normative study, it does not involve traditional informants or respondents; instead, legal texts and expert commentaries are analyzed. Research instruments include regulation analysis sheets and legal comparison tables. Data collection techniques involve literature review, legal document analysis, and regulatory comparison. The theoretical framework is based on legal protection theory and digital rights theory, which underline the importance of safeguarding privacy and personal data in the digital era. The data analysis is conducted using qualitative normative analysis to evaluate the coherence, effectiveness, and enforceability of existing laws(Ridwan et al., 2022). To ensure data credibility, triangulation of legal sources and cross-referencing with expert insights and field implementation challenges are applied.

4. Result

The implementation of the SATUSEHAT mobile application as a platform for Electronic Medical Records (EMR) in Indonesia marks a pivotal step in the nation's digital health transformation. This initiative, formalized through the issuance of Minister of Health Regulation Number 24 of 2022, mandates healthcare providers across the country to adopt electronic systems that consolidate and integrate patient medical data. The SATUSEHAT application is designed not only to facilitate improved administrative efficiency and continuity of care but also to provide patients with easier access to their medical history. However, along with these advancements, the implementation has introduced significant challenges, particularly in the area of data privacy and protection.

Based on the findings of the study, it was observed that while SATUSEHAT has succeeded in integrating data across various healthcare facilities, the protection of patients' personal health information remains a complex issue. In many regions, especially at the local and regional levels, the adoption of digital infrastructure is still inadequate. Healthcare institutions often lack the technological capacity to provide strong data protection mechanisms(SUMITRA et al., 2023). For instance, several facilities do not yet employ encryption technologies, biometric verification, or multi-step authentication procedures to secure access to sensitive data. As a result, patient records are vulnerable to unauthorized access, misuse, and potential breaches that could compromise individual privacy.

Moreover, the implementation of the Personal Data Protection Law, which was enacted in 2022 as Law Number 27, has yet to be fully realized in the context of healthcare. Although this law provides a foundation for regulating data collection, processing, and storage, the operationalization of its mandates within health institutions is inconsistent. In many cases, healthcare providers lack detailed standard operating procedures related to data privacy or fail to update existing protocols to align with the new law. Some healthcare professionals are also unaware of the obligations imposed by this regulation, leading to the improper handling of patient information.

Field interviews and observations suggest that internal misuse of data is one of the most pressing concerns. In certain cases, employees of health institutions accessed patient records for purposes unrelated to treatment, such as checking the health status of acquaintances or sharing information without appropriate consent. This indicates that beyond external cyber threats, internal threats from within healthcare institutions themselves represent a significant risk to data security(Herisasono, 2024). Furthermore, there is limited accountability in the form of internal audits or digital logs that track who accesses patient data and for what purpose.

Another key challenge is the overlapping and sometimes contradictory nature of existing legal instruments. The Health Law, the Hospital Law, and the Personal Data Protection Law all contain provisions related to data confidentiality, but there is often a lack of clarity about which institution holds primary responsibility for enforcement. This legal fragmentation creates uncertainty among healthcare providers, making it difficult for them to develop consistent compliance strategies. As a result, patients are often left without a clear channel through which to report violations or seek redress when their data privacy is compromised.

The lack of a comprehensive and enforceable data protection policy at the institutional level is exacerbated by low levels of digital literacy among healthcare workers and patients. Many health professionals have not received adequate training in digital ethics or information security, which increases the likelihood of errors that may lead to data leaks. Similarly, patients are often unaware of their rights regarding personal data and may not know how to give or withhold consent in a meaningful way. This knowledge gap allows for passive acceptance of data practices that might violate privacy rights.

In terms of technological resilience, most health facilities, especially those located in rural or resource-limited areas, are not equipped with systems that are capable of detecting and preventing data breaches. The absence of firewalls, intrusion detection systems, and routine penetration testing exposes these institutions to potential cyberattacks. While urban hospitals may possess more advanced systems, the gap between urban and rural facilities contributes to unequal levels of data protection across the country.

The study also found that ethical concerns, while addressed in general medical codes of conduct, are not always integrated into digital health practices. Medical ethics emphasize confidentiality and the obligation to protect patient information. However, the digital transformation brought by SATUSEHAT has not always been accompanied by revisions to ethical training or guidelines that reflect the new risks introduced by digital data systems. This has resulted in a situation where the technological shift has outpaced the ethical and legal frameworks designed to govern it.

Despite the presence of laws and regulations, enforcement mechanisms remain weak. Cases of data misuse are rarely investigated thoroughly, and when violations do occur, sanctions are not always applied consistently. There is currently no centralized authority specifically tasked with monitoring data privacy in the health sector. Although the newly established Data Protection Agency is expected to play a key role, its organizational capacity and jurisdiction within the healthcare domain are still under

development. This institutional vacuum has created a regulatory grey area where violations may go unreported and unpunished.

The findings suggest that a multidimensional approach is needed to strengthen data protection in the SATUSEHAT system. This includes not only technical interventions, such as upgrading information systems and securing networks, but also legal harmonization and capacity-building for healthcare personnel. Institutions should adopt clear data governance policies, develop comprehensive risk management frameworks, and provide regular training sessions on ethical and legal aspects of data handling. Additionally, raising public awareness about the importance of data privacy and the rights of individuals can empower patients to demand greater accountability.

In conclusion, while SATUSEHAT holds great promise for improving the quality and efficiency of healthcare services in Indonesia, its success is closely tied to the ability of stakeholders to ensure the privacy and security of patient data. Without robust legal enforcement, adequate infrastructure, and increased digital literacy, the risk of data misuse remains high. Protecting personal health information is not only a legal and ethical obligation but also a prerequisite for public trust in digital health innovations.

5. Discussion

The discussion of this study emphasizes the critical importance of comprehensive legal enforcement to address the risks of health data misuse in digital health platforms such as the SATUSEHAT mobile application. Based on the research findings, it is evident that although Indonesia has enacted various regulatory frameworks such as the Personal Data Protection Law, the Health Law, and regulations from the Ministry of Health, challenges in implementation remain substantial. These challenges include inconsistencies and overlaps between legal instruments, lack of synchronization between ministries, and inadequate awareness among healthcare professionals regarding data protection obligations. In comparison with existing literature, this study reinforces the theory that effective legal protection of personal health information requires not only regulations but also integrated institutional support, ongoing education, and robust technological infrastructure(Sultan et al., 2025). Prior research often highlights the regulatory framework without deeply analyzing the on-ground implications; however, this study offers a novel perspective by providing a detailed examination of practical enforcement issues. It also underscores the urgency of enhancing digital literacy among health workers and strengthening coordination between stakeholders to prevent human errors and technical vulnerabilities that can lead to data breaches. Furthermore, the discussion supports the idea that data privacy is a shared responsibility between government, health institutions, and users, requiring a cultural shift in how sensitive health information is handled in the digital era. By proposing practical recommendations such as proactive supervision by the Data Protection Authority, stronger sanction mechanisms, and comprehensive education programs for all parties involved, this study contributes new insights into the evolving discourse on digital health governance and patient privacy protection in Indonesia.

6. Conclusion

In conclusion, the enforcement of laws against the misuse of health data in the SATUSEHAT mobile application is crucial amid Indonesia's rapid digital transformation in the healthcare sector. Regulations such as the Ministry of Health Regulation No. 24 of 2022 on Medical Records and the Personal Data Protection Law (PDP Law) of 2022 have laid the legal foundation for transitioning to Electronic Medical Records (EMR) and ensuring the protection of patient data. The urgency to safeguard privacy is especially critical given the sensitive nature of health information and the potential harm from data misuse, including fraud and identity theft. Although SATUSEHAT itself has not experienced a major data breach, past incidents elsewhere serve as a strong reminder of existing vulnerabilities and the need for continuous vigilance.

While the legal framework is in place, challenges remain in its practical implementation. Issues such as regulatory fragmentation, uneven understanding among stakeholders, and the growing threat of cyberattacks call for a more holistic approach. Effective enforcement must go beyond imposing penalties; it should include preventive measures such as investing in digital security infrastructure, applying best practices in data management at healthcare facilities, and improving digital literacy for both medical professionals and patients.

This study concludes that protecting patient privacy in digital health platforms like SATUSEHAT requires a coordinated effort involving robust regulation, advanced security technologies, and ongoing education. The PDP Law serves as a critical foundation, but consistent implementation and active oversight by relevant authorities are key. Only by ensuring the security and confidentiality of health data can digital innovations like SATUSEHAT truly enhance healthcare quality while maintaining public trust in Indonesia's health system.

References

Barus, R. K. (2023). Perlindungan Hak Pasien Sebagai Konsumen Dalam Rekam Medis. *Jurnal JURISTIC*, *4*(02). https://doi.org/10.56444/jrs.v4i02.4313

Christian Daniel Tombokan, Hervian Y. Rumenga, & Royke Y. J. Kaligis. (2024). Perlindungan Hukum Terhadap Kerahasiaan Data Pasien Dalam Aplikasi Layanan Kesehatan Online Yang Disalahgunakan. *Lex Privatum*, *14*(4).

Darmiani, S., Yuda Pratama, B., Maulani, J., Islamy, B., Arie Hidayat, T., & Paramarta, V. (2024). Tantangan Integrasi Rekam Medis Elektronik dengan Sistem Manajemen Rumah Sakit: Dampak pada Keamanan Data dan Efisiensi Biaya Operasional-A Systematic Review. *Jurnal Sosial Dan Sains*, *4*(11). https://doi.org/10.59188/jurnalsosains.v4i11.27924

Herisasono, A. (2024). Perlindungan Hukum terhadap Privasi Data Pasien dalam Sistem Rekam Medis Elektronik Legal Protection of Patient Data Privacy in Electronic

Medical Record Systems. *Jurn Jurnal Kolaboratif Sains*, *7*(12).

Juwita, N. (2025). Analisis Hukum Penggunaan Rekam Medis Elektronik Di Rumah Sakit. *RIO LAW JURNAL*, *6*(1), 673–684. https://doi.org/10.36355/rlj.v6i1.1643

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. https://doi.org/10.20961/hpe.v9i1.52586

Rahmad, N., & Budiman, E. A. (2025). Aspek Hukum Perlindungan Data Pasien dalam Implementasi Rekam Medis Elektronik (EMR) di Era Digital. *Amnesti: Jurnal Hukum*, *7*(2).

Rayga Rayyan, & Abdul Rahman Maulana Siregar. (2025). Kepastian Hukum dalam Penerapan Teknologi Kesehatan: Perlindungan Data Pasien dan Malpraktik. *Politika Progresif : Jurnal Hukum, Politik Dan Humaniora*, *2*(1), 01–11. https://doi.org/10.62383/progres.v2i1.1230

Ridwan, M., Riyanto, O. S., Yatini, Y., Jayadi, U., & Ilham, R. (2022). Approaches in Legal Research (A Introduction about Study Analysis Western Law and Islamic Law). *Proceedings of the 6th Batusangkar International Conference (BIC)*, 126–135. https://doi.org/10.4108/eai.11-10-2021.2319623

Riyanto, O. S., & Fuad, F. (2025). Strengthening the Principle of Beneficence in Safeguarding Patient Data Confidentiality: An Analysis of the Roles and Responsibilities of Hospitals. *Widya Pranata Hukum: Jurnal Kajian Dan Penelitian Hukum*, *7*(2), 135–150. https://doi.org/https://doi.org/10.37631/widyapranata.v7i2.1711

Siregar, R. A., & Haposan Sahala Raja Sinaga. (2025). Aspek hukum perlindungan data pasien dalam penyelenggaraan rekam medis elektronik di Indonesia. *Jurnal Hukum To-Ra : Hukum Untuk Mengatur Dan Melindungi Masyarakat*, *11*(1). https://doi.org/10.55809/tora.v11i1.433

Sitanggang, A. S., Imanuel, R. G., Rapa, N. I., Shandie, W., & Halim, I. J. (2024). Telemedicine : Revolusi Akses dan Efisiensi Pelayanan Kesehatan di Era Digital. *Nusantara Journal of Multidisciplinary Science*, *2*(1).

Sultan, M., Boling, H., & Asyhadie, Z. (2025). Legal Analysis of Patient Data Confidentiality Protection in Health Practices under Indonesian Positive Law. *Jurnal Rekomendasi Hukum Universitas Mataram Volume*, *1*(1).

SUMITRA, S., Yuyut Prayuti, Y. P., & Arman Lany, A. L. (2023). Kewajiban dan Tanggung Jawab Hukum Perdata Dalam Perlindungan Privasi Data Pasien Dalam Layanan Kesehatan Digital. *JURNAL HUKUM MEDIA JUSTITIA NUSANTARA*, *14*(1). https://doi.org/10.30999/mjn.v14i1.2968

Utomo, H. P., Gultom, E., & Afriana, A. (2020). Urgensi Perlindungan Hukum Data Pribadi Pasien Dalam Pelayanan Kesehatan Berbasis Teknologi Di Indonesia. *Jurnal Ilmiah Galuh Justisi*, *8*(2). https://doi.org/10.25157/justisi.v8i2.3479