

Telemedicine Services in Personal Data Protection (Legal Review)

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Abstract

The development of digital technology has driven significant transformation in healthcare services, one of which is through the implementation of telemedicine between healthcare facilities. Telemedicine provides easy access to medical services, especially in remote areas, by utilizing information technology for consultation, diagnosis, and clinical data exchange. This study aims to analyze and examine legal regulations regarding personal data protection and the responsibility of telemedicine providers in protecting patients' personal data. The research method used is a normative legal research method, also known as doctrinal legal research or dogmatic legal research. This study focuses on written regulations, so it is closely related to a literature study. The results of the study confirm that to ensure that personal data is managed very carefully and cautiously by telemedicine service providers, more serious sanctions can be considered in this case, namely criminal liability for telemedicine service providers as controllers of personal data in the event that personal data is distributed illegally from management activities carried out using Hans Kelsen's legal liability theory, which states "Failure to exercise the care required by law is called negligence, and negligence is usually considered

Keywords: Telemedicine, Legal Regulation, Personal Data Protection

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Introduction

Several data breaches at healthcare facilities, including government servers, indicate weaknesses in the security systems used or human error, such as misdirected emails or security misconfigurations, that open up opportunities for hackers. Between November 1, 2020, and October 31, 2021, at least 5,212 data breaches were identified across various industries within a year. The healthcare industry accounted for 571 of these breaches. This figure places the healthcare industry as the third most vulnerable sector to data breaches. The string of patient data breaches at hospitals and healthcare providers demonstrates the extremely weak data security protections in Indonesia. Yet, patient data security is an absolute requirement for the government and healthcare providers.¹ Therefore, this study aims to examine the legal regulations and responsibilities of telemedicine providers in protecting patient personal data.

Research Methodology

The research method used is the normative legal research method, which is often also referred to by other terms, namely doctrinal legal research or dogmatic legal research. This research is only aimed at written regulations, so the research is closely related to library research. Research sources are in the form of legal materials, namely materials traced to legal sources (formal) with the aim of being used to analyze applicable law, which consists of primary legal materials, secondary legal materials, and tertiary legal materials.

Discussion 3.1. Legal regulations regarding the protection of personal data in the implementation of telemedicine in Indonesia

In order to increase the capacity and resilience of Health within the framework of Health transformation to achieve the highest level of public health improvement, Health Efforts, Health Resources, and Health management are carried out which are supported by strengthening regulations with the enactment of Law Number 17 of 2023 concerning Health. In Article 549 paragraph (1) of Government Regulation (PP) Number 28 of 2024 concerning Implementing Regulations of Law Number 17 of 2023 concerning Health, the Implementation of Health Efforts can utilize information and communication technology with the aim of expanding access and improving the quality of Health Services. The use of information and communication technology as referred to in Article 549 paragraph (1) can be implemented through Telehealth and Telemedicine. Telehealth consists of providing clinical services and non-clinical services while the provision of clinical services is carried out through Telemedicine. Every Health Service Facility that provides Health Services through information and communication technology is required to implement data security standards and electronic systems in accordance with the provisions of laws and regulations.²

3.2. Responsibility of telemedicine providers in protecting patient personal data Law of the Republic of Indonesia Number 20 of 2022 concerning Personal Data Protection regulates legal accountability for personal data protection by imposing administrative and criminal sanctions for violations of personal data protection. However, law enforcement in the field remains weak, as evidenced by news reports. To date, no parties have been criminally charged for violations of personal data protection. Furthermore, an independent and operational data protection oversight body has not been established, resulting in no institution having full authority to audit, verify, or take action against violations that occur in the implementation of personal data protection, including in telemedicine services. This situation still creates the potential for leaks of personal data originating from healthcare services, including telemedicine, as existing regulations regarding the personal data protection system in the management of telemedicine services are not yet optimal. The consequences of administrative and criminal

sanctions in Law of the Republic of Indonesia Number 20 of 2022 concerning Personal Data Protection are not yet optimal enough to create general deterrence for others from committing violations of the law, as the relative theory emphasizes that the purpose of criminal law is to prevent crime.³

Conclusion

To ensure that personal data management is carried out with great care and caution by telemedicine service providers, it is possible to consider the application of more serious sanctions, in this case criminal liability, against the telemedicine service provider as the controller of personal data in the event that personal data is distributed illegally from management activities carried out using the legal liability theory approach from Hans Kelsen, which states that "Failure to exercise the care required by law is called negligence, and negligence is usually seen as another type of error (culpa)."

References

- [1] Adelina Yussy Mannas and Siska Elvandari, 2022, "Legal Aspects of Telemedicine in Indonesia", 1st Edition of Rajawali Pers, Depok
- [2] Asti Dwiyantri, et al., 2024, "Introduction to Criminal Law: Theory, Principles, and Implementation", PT. Green Pustaka Indonesia, Jakarta
- [3] National Cyber and Crypto Agency, 2023, "2022 Health Sector Data Leak Incident Report", BSSN, Jakarta
- [4] Djafar Wahyudi, 2016, Personal Data Protection: Proposed Institutionalization of Policy from a Human Rights Perspective, Institute for Community Research and Advocacy
- [5] Danrivanto Budhijanto, 2021, "Personal Data Protection Law in Indonesia", PT. Refika Aditama, Bandung
- [6] Hariri Ahmad, Puspa Pamela, et al., 2024, Telemedicine: Health at Your Fingertips, Indonesia's Intellectual Pearl
- [7] HS Salim and Erlies Septiana Nurbani, 2009, "Application of Legal Theory in Dissertation and Thesis Research", Second Book, Rajawali Pres, Jakarta
- [8] Irwansyah, Ahsan Yunus, 2020, Legal Research, Choice of Methods and Practice of Article Writing, Revised Edition, Miarra Buana Media, Yogyakarta
- [9] Kelsen Hans, 2018. Pure legal theory: The Basics of Normative Legal Science Hans Kelsen, Translator, Raisul Muttaqien editor Nurainun Mangunsong, Nusa Media, Bandung
- [10] Mudrajat Kuncoro, 2003, Research Methods for Business and Economics, Erlangga, Jakarta Executive Board of the Indonesian Medical Association, 2018, Telemedicine
- [11] Recommendations of the Indonesian Medical Association for the Future of Digital Health in Indonesia
- [12] Raharjo Satjipto, 2000, "Legal Science", Bandung, PT. Citra Aditya Bakti
- [13] Romli, Muhammad Sadi, 2024, "Legal Protection", CV. Doki Course and Training, South Sumatra
- [14] S. Budi, S., Medina, R., & Trisnanti, SP S, 2015, "The development and future of telemedicine in Indonesia". Research Gate
- [15] SR Sianturi, 1996, "Principles of Indonesian Criminal Law and Their Implementation", Alumni Ahaem-Petehaem, Jakarta
- [16] Daniel Tombokan, Christian et al., "Legal Protection of Patient Data Confidentiality in Misused Online Health Service Applications", Lex Privatum, Vol 14 No 4, 2024
- [17] Darma, Damasus Wulan et al., "Legal Study of Telemedicine Services in Providing Protection of Patient Personal Data", Cahaya Mandalika Journal, 2022

- [18] Dewaanti, I., & Firdaus, S. U, "Telemedicine in Indonesia: Perspective of Ethics, Discipline and Law", https://doi.org/10.2991/978-2-494069-75-6_2, 3–15, 2022
- [19] Ediwarman, Monograph on Legal Research Methodology: Guide to Writing Theses, Dissertations and Dissertations, Genta Publishing, Yogyakarta, 2016
- [20] Fauzullail, Ahmad Rifki. "Legal Protection for Patients According to Minister of Health Regulation Number 20 of 2019 Concerning the Provision of Telemedicine Services Between Health Care Facilities." Scientific Journal, Faculty of Law, University of Mataram, 2023
- [21] H. Puspitosari, "Legal Protection of Telemedicine Patient Data in Receiving" 2023 [22] IGD G Devara, Dewi, AASL, & Ujianti, NM P, Legal Protection of Personal Data of Online Transportation Service Users. Journal of Legal Preferences, 1(1), 1–7. <https://doi.org/10.22225/jph.1.1.2259.1-7>, 2020
- [23] Jerri Gultom, et al., "Criminal Crimes in Health Services in the Digital Era", Progressive Law Journal, Vol 8 No 6, June 2025
- [24] Kuswardani, Zainal Abidin, "Legal Protection for Patients as Users of Health Service Features in the Fisdok Application", Journal of Islamic Law and Social Institutions, Volume 5 Number 1, 2023
- [25] Lestari H, Puteri Alike Rahma Syawalia, Olih Solihin, "Privacy and Protection of Medical Data in the Digital Era", National Health Insurance Law, Student Library, https://www.researchgate.net/publication/394275915_Privasi_Dan_Perindungan_Data_Medis_Di_Era_Digital, 2020
- [26] Max Bonsapia, Jumiran, "Legal Aspects of Telemedicine in Indonesia", Journal of Legal Studies "THE JURIS" <http://ejournal.stih-awanglong.ac.id/index.php/juris>, Vol. IX, No. 1, June 2025
- [27] Mursalat Mohammad Hilman, et al., "Legal Problems and Principles of Legal Protection in Remote Health Services Using Information and Communication Technology", Padjadjaran Law Axis Journal, P-ISSN: 2715-7202
- [28] Mustafa, A., Ahmad, 2024, "Telemedicine practice: current challenges of consent and autonomy, patient privacy and data security worldwide". Journal of the Society of Prevention, Advocacy and Research KEMU
- [29] Nadiroh Aenun, Sidi Ahyar Wiraguna, "Legal Analysis of Data Leakage in Digital Health Services: A Case Study of Telemedicine Applications in Indonesia", Indonesian Legal Media, Vol. 2, No. 6, May 2025, 313-320
- [30] Prasetyo, A, "Implementation of the Personal Data Protection Law in digital health services: Challenges and solutions", Journal of Health Law, 7(1), 2023, 112–125
- [31] Putra Calvin Anthony and Muhammad Ali Masnun, "Analysis of Hospital Liability Regarding Potential Electronic Medical Record Data Leaks Due to Cyber Crime," Novum: Jurnal Hukum 9, no. 2, 2022, 191–200
- [32] RD Lestari, "Legal Protection for Patients in Telemedicine. Journal of Information Horizons", <https://doi.org/10.54066/jci.v1i2.150>, 51–65, 2021
- [33] Samsul Arifin, "Protecting Privacy in the Digital Era: Addressing COVID-19 Patient Medical Record Data Leaks," <https://jatim.tribunnews.com/2025/01/08/melindungiprivasi-di-era-digital-mengatasi-kebocoran-data-rekam-medis-pasien-covid-19>, 2025
- [34] Susanto Edy, Adhani Windari, and Rizkiyatul Amalia, "EDIKASI: Empowering Data Integrity and Knowledge on Health Information Release in the Digital Era," LINK 20, no. 2, 2024: 113–17
- [35] Ulfathea Mulyadita et al., "Mapping Telemedicine in Indonesia: Evidence for Policy Action at a Critical Juncture," 2025

- [36] Wahyu Andrianto, Amira Budi Athira, "Telemedicine (Online Medical Services) in the New Normal Era Reviewed Based on Health Law (Study: An (Study: Indonesian Telemedicine Program/Temenin at Dr. Cipto Mangunkusumo Hospital)", *Journal of Law & Development* Year 52 No. 1 January-March 2022 [37]
- The 1945 Constitution.
- [38] Government Regulation Number 82 of 2012 concerning the Implementation of Electronic Systems and Transactions stipulates that Electronic System Organizers
- [39] Minister of Health Regulation Number 20 of 2019
- [40] Law Number 27 of 2022 concerning Personal Data Protection Law Number 17 of 2023 concerning Health
- [41] <https://upk.kemkes.go.id/new/layanan/telemedisin>
- [42] <https://jmiki.apfirmik.or.id/jmiki/article/view/505/291>
- [43] <https://www.hukumonline.com/berita/a/teori-perlindungan-hukum-menurut-para-ah>
- [44] <https://doi.org/10.54543/fusion.v3i07.339> "Online-Based Medical Services" Syntax Fusion Journal, 658–668
- [45] <https://www.hukumonline.com/berita/a/kebocoran-data-pribadi-kemenkeslt61dc13b07180f/> <https://www.tribunnews.com/nasional/2022/09/10/ahli-digitalforensik-beberkan-penyebab-bocornya-247-juta-data-nik-peserta-bpjs-kesehatan> <https://nasional.kompas.com/read/2021/05/25/11140881/dugaan-kebocoran-data-279juta-wni-bpjs-kesehatan-tempuh-langkah-hukum>

