

LEGAL PROTECTION OF TELEMEDICINE CONSUMERS: AN ANALYSIS OF THE CONSUMER PROTECTION ACT AND HEALTH REGULATIONS IN INDONESIA

Irma Seliana¹✉, Teddy Prima Anggriawan²

¹ Department of Public Health, Faculty of Medicine, Surabaya, Indonesia,
Email: irmaseliana.fk@upnjatim.ac.id

² Fakultas Hukum, Universitas Pembangunan “Veteran” Jawa Timur,
Surabaya, Indonesia, Email: teddyprima.ih@upnjatim.ac.id
✉ corresponding email: irmaseliana.fk@upnjatim.ac.id

Article	Abstract
<p>Keywords: Civil liability; Consumer protection; Telemedicine regulation; Data privacy;</p> <p>Article History Received: Oct 14, 2025; Reviewed: Nov 11, 2025; Accepted: Nov 17, 2025; Published: Nov 24, 2025;</p>	<p>Telemedicine has become a fundamental part of modern healthcare delivery, transforming the contractual and liability relationships between healthcare providers and consumers. In Indonesia, the growing use of telemedicine raises complex issues in civil law, particularly concerning consumer protection, data privacy, and accountability for malpractice. This study aims to analyze the legal protection of telemedicine consumers under Indonesian law specifically Law No. 8 of 1999 on Consumer Protection, the Civil Code, and sectoral health regulations and to evaluate the civil liability of telemedicine providers when harm or loss occurs. Using a normative juridical (doctrinal) approach, this research employs statutory, conceptual, and comparative methods. The study reviews current laws such as the Health Omnibus Law (Law No. 17 of 2023), the Personal Data Protection Law (Law No. 27 of 2022), the Ministry of Health Regulation No. 20 of 2019</p>

on Telemedicine, and Government Regulation No. 28 of 2024 as its implementing regulation. Findings indicate that Indonesia's legal framework remains fragmented, with unclear boundaries between consumer law and health regulations. Comparative analysis with international standards reveals the need for a harmonized civil law framework to ensure accountability, guarantee patient rights, and strengthen consumer protection in digital health services.



Copyright (c) 2025 All writings published in this journal are personal views of the authors and do not represent the views of this journal and the author's affiliated institutions. Author(s) retain copyrights under the licence of Creative Commons Attribution-ShareAlike 4.0 International (CC BY-SA 4.0). <https://doi.org/10.30649/ph.v25i2.449>

Introduction

Telemedicine has evolved into a permanent component of modern healthcare delivery, reshaping contractual relationships and professional responsibilities between healthcare providers and patients. It allows consultations, prescriptions, and medical decisions to be conducted through digital platforms without direct physical interaction. While telemedicine enhances accessibility and efficiency, it also raises complex civil law questions concerning liability, consumer protection, and data privacy. As noted by Ivanova et al. (2025), the rapid global adoption of telemedicine has outpaced the development of adequate legal frameworks, particularly regarding accountability in cases of medical error or data misuse¹.

Global literature indicates that the legal challenges of telemedicine extend beyond medical ethics to encompass contractual responsibility and consumer rights. Jerjes et al. (2024) argue that post-pandemic telemedicine systems must now be evaluated within the context of tort law and patient safety, as traditional frameworks are ill-equipped to handle disputes arising from virtual care². Similarly, Hull et al. (2022) emphasize that the expansion of telehealth services

¹ Julia Ivanova et al., 'Regulation and Compliance in Telemedicine: Viewpoint', *Journal of Medical Internet Research* 27 (2025): 1-7, <https://doi.org/10.2196/53558>.

² Waseem Jerjes and Daniel Harding, 'Telemedicine in the Post-COVID Era: Balancing Accessibility, Equity, and Sustainability in Primary Healthcare', *Frontiers in Digital Health* 6, no. August (2024): 1-6, <https://doi.org/10.3389/fdgth.2024.1432871>.

requires robust ethical and legal frameworks to safeguard patient welfare and prevent liability gaps resulting from remote medical practices³. These studies underscore the urgency of redefining liability standards to protect consumers engaging with telemedicine services.

In Indonesia, the transformation of health law has been reinforced through the Health Omnibus Law (Law No. 17 of 2023), which formally recognizes telemedicine as part of the national digital health ecosystem. This law, alongside the Personal Data Protection Law (Law No. 27 of 2022) and the Ministry of Health Regulation No. 20 of 2019 on Telemedicine, establishes foundational standards for licensing, data protection, and digital service delivery. Furthermore, the enactment of Government Regulation No. 28 of 2024 as the implementing regulation of the Health Law provides a more detailed framework on telemedicine practice, covering licensing, infrastructure, and integration within the national health information system. Nevertheless, this regulation still lacks explicit provisions on civil liability and compensation for harm arising from digital medical services. This legal gap leaves uncertainty concerning who is responsible individual practitioners, institutions, or digital platforms when consumers experience losses due to negligence or system failure.

From a civil law perspective, the doctor-patient relationship within telemedicine constitutes a therapeutic contract under the Indonesian Civil Code (KUHPperdata). Hence, disputes arising from malpractice, misinformation, or technical failure should be assessed based on wanprestasi (breach of contract, Article 1239) and perbuatan melawan hukum (tort liability, Article 1365). At the same time, the Consumer Protection Law (Law No. 8 of 1999) mandates that service providers must ensure safety, reliability, and transparency in providing healthcare services. The coexistence of these legal regimes civil law, consumer law, and health law without harmonization creates ambiguity and risks weakening patient protection.

Recent comparative studies in developing countries highlight that effective telemedicine governance depends on integrating civil liability principles with digital health regulations. Giebel et al. (2023) identified that most developing jurisdictions, including Indonesia, still

³ Sarah C. Hull, Joyce M. Oen-Hsiao, and Erica S. Spatz, 'Practical and Ethical Considerations in Telehealth: Pitfalls and Opportunities', *Yale Journal of Biology and Medicine* 95, no. 3 (2022): 367-70, <https://pmc.ncbi.nlm.nih.gov/articles/PMC9511944>.

lack explicit rules governing patient remedies when harm occurs through telehealth platforms⁴. Meanwhile, Alfawzan et al. (2023) observed that inadequate privacy and consent mechanisms in mobile health applications have caused frequent legal disputes over data sharing and confidentiality⁵. These findings strengthen the argument that Indonesia must reform its legal structure to balance technological advancement with consumer protection.

Despite substantial growth in digital health scholarship, Indonesian legal research remains dominated by public health or ethical perspectives, rarely addressing the civil law dimension of telemedicine liability. Previous domestic studies have primarily analyzed professional discipline and administrative sanctions, leaving the question of contractual remedies unresolved. This paper addresses that research gap by examining how existing Indonesian laws particularly the Health Omnibus Law, the Consumer Protection Law, and the Civil Code can collectively provide legal protection to telemedicine consumers within a civil liability framework.

This study applies a normative juridical (doctrinal) approach, using statutory, conceptual, and comparative methods. Through this framework, it evaluates the adequacy of Indonesia's existing legislation in protecting consumers of telemedicine and explores comparative lessons from international practice. The novelty of this research lies in integrating civil law principles into telemedicine regulation, proposing a harmonized legal model that ensures accountability, upholds patient rights, and reinforces consumer confidence in digital healthcare. The significance of this study is its contribution to the ongoing discourse on the modernization of civil liability in Indonesia, demonstrating that a coherent legal structure is essential to achieving both justice and technological progress in health services.

Method

This study adopts a normative juridical (doctrinal) approach, focusing on the analysis of legal norms, statutory regulations, and doctrinal principles governing telemedicine services in Indonesia. The

⁴ Godwin Denk Giebel et al., 'Problems and Barriers Related to the Use of Digital Health Applications: Scoping Review', *Journal of Medical Internet Research* 25 (2023): 1-16, <https://doi.org/10.2196/43808>.

⁵ Najd Alfawzan et al., 'Privacy, Data Sharing, and Data Security Policies of Women's MHealth Apps: Scoping Review and Content Analysis', *JMIR MHealth and UHealth* 10, no. 5 (2022), <https://doi.org/10.2196/33735>.

normative juridical method examines law as it is written (law in books) rather than how it operates in practice (law in action). Accordingly, this study does not collect empirical data, but instead conducts a systematic review and interpretation of legal materials related to civil liability and consumer protection in telemedicine.

The research is descriptive and analytical, aiming to explain and critically evaluate how Indonesian legal instruments protect telemedicine consumers from a civil law perspective. Three main approaches are applied:

This approach is used to examine various legal norms that directly or indirectly regulate telemedicine, including: Law No. 17 of 2023 on Health (Health Omnibus Law), which formally recognizes telemedicine as a component of national digital health transformation. Government Regulation No. 28 of 2024, as the implementing regulation of the Health Law, which elaborates on telemedicine licensing, service standards, and integration with the national health information system. Law No. 27 of 2022 on Personal Data Protection, which provides legal guarantees for the confidentiality and integrity of patients' digital data. Law No. 8 of 1999 on Consumer Protection, which regulates the rights and obligations of both consumers and business actors, including healthcare service providers. The Indonesian Civil Code (KUHPerdata), particularly Articles 1239 on contractual breach (*wanprestasi*) and 1365 on tort liability (*perbuatan melawan hukum*). Ministry of Health Regulation No. 20 of 2019 on Telemedicine, which details the technical and administrative procedures for telemedical services.

These laws are analyzed to evaluate the extent to which they provide civil legal protection and remedies for consumers harmed by telemedicine services. This approach is used to interpret the underlying legal concepts that shape the regulation of telemedicine. The study applies theories from Indonesian civil law scholars such as Subekti, Sudikno Mertokusumo, and R. Setiawan regarding contractual obligations, as well as Roscoe Pound's sociological jurisprudence, which views law as a tool of social engineering. These frameworks are applied to conceptualize how consumer rights and provider responsibilities should be balanced in digital healthcare interactions. The comparative method is employed to identify international best practices in regulating telemedicine and defining civil liability.

This study examines: The United Kingdom, which integrates patient safety and accountability through the General Medical Council (GMC) and Care Quality Commission (CQC) regulations on digital health services. Singapore, whose Healthcare Services Act 2020 and Telemedicine eGuidelines 2021 clearly outline provider liability, informed consent, and patient data protection. India, through the Telemedicine Practice Guidelines 2020, which provide a structured legal basis for online consultations, prescriptions, and professional liability. The United States, which, under the Telehealth Modernization Act 2021 and the Health Insurance Portability and Accountability Act (HIPAA), emphasizes privacy, malpractice insurance, and reimbursement frameworks, despite regulatory variation among states. The comparison aims to identify elements of legal certainty and civil accountability that can inform Indonesia's ongoing development of a unified telemedicine framework under Government Regulation No. 28 of 2024.

This study relies on three types of legal materials: Primary legal materials binding sources such as statutes, government regulations, and ministerial decrees. Secondary legal materials scholarly works, academic journals, and commentaries related to telemedicine law, consumer protection, and civil liability, including recent Scopus indexed literature. Tertiary legal materials legal dictionaries, encyclopedias, and supporting documents that clarify terminology and conceptual distinctions.

Legal materials are analyzed through a qualitative juridical method using interpretation, systematization, and evaluation. The interpretation employs grammatical, systematic, and teleological analyses to assess the coherence and intent of laws governing telemedicine. The results are then synthesized to identify normative gaps and overlaps between civil law, consumer law, and health law. The findings are used to construct recommendations for legal harmonization that ensure patient protection and provider accountability.

This study is limited to the doctrinal analysis of Indonesian statutory frameworks and selected international models of telemedicine law. It does not include empirical or case based data. The analysis focuses on civil liability and consumer protection aspects, excluding administrative and criminal dimensions. The limitation ensures a focused discussion of the normative gaps in Indonesia's telemedicine regulation.

Result and Discussion

The results and analysis focus on the normative juridical interpretation of telemedicine regulation and consumer protection in Indonesia, emphasizing legal findings derived from statutory frameworks, legal doctrines, and comparative analysis. The interaction between the Health Omnibus Law (Law No. 17 of 2023), Government Regulation No. 28 of 2024, the Personal Data Protection Law (Law No. 27 of 2022), and the Consumer Protection Law (Law No. 8 of 1999) reveals the current structure of telemedicine governance and its limitations concerning civil liability and patient rights. Comparative insights from jurisdictions such as Singapore, India, the United Kingdom, and the United States demonstrate that effective telemedicine regulation requires harmonizing civil, consumer, and health law principles to ensure accountability, legal certainty, and comprehensive protection for digital healthcare consumers.

A. Legal Framework of Telemedicine in Indonesia

Telemedicine in Indonesia has undergone significant legal evolution, primarily driven by the national health digitalization agenda and post-pandemic transformation of medical services. The earliest formal regulation is the Ministry of Health Regulation No. 20 of 2019 on the Implementation of Telemedicine Services Between Health Service Facilities, which defines telemedicine as the remote provision of medical services through information and communication technology. This regulation outlines technical and administrative aspects such as licensing, operational standards, and supervision by medical professionals, but it does not regulate civil liability for damages resulting from digital interactions⁶.

A major legislative milestone followed with the enactment of Law No. 17 of 2023 on Health (Health Omnibus Law), which officially recognizes telemedicine as part of Indonesia's digital health transformation. This law introduces provisions regarding electronic medical records, interoperability of health information systems, and digital-based healthcare delivery. However, its provisions remain

⁶ Permenkes, 'PERATURAN MENTERI KESEHATAN REPUBLIK INDONESIA NOMOR 20 TAHUN 2019', Nomor 6588 Menteri Kesehatan Republik Indonesia Peraturan Menteri Kesehatan Republik Indonesia § (2019), <https://peraturan.bpk.go.id/Details/122744/uu-no-20-tahun-2019>.

general and declarative, delegating detailed regulation to subsequent implementing instruments⁷.

To operationalize the Health Omnibus Law, the government issued Government Regulation (PP) No. 28 of 2024 on the Implementation of the Health Law, which represents the first comprehensive legal framework directly governing telemedicine in Indonesia. Article 561 of this regulation explicitly integrates teleconsultation, telepharmacy, and remote diagnostics into the National Health Service System (Sistem Informasi Kesehatan Nasional). Furthermore, Articles 563–567 regulate the accreditation of digital health providers and the interoperability of health data. Despite this progress, PP 28/2024 remains administrative in nature its primary focus is on licensing, accreditation, and data management rather than the allocation of civil liability or compensation for patient harm⁸.

Legal commentary from practitioners also highlights this limitation. Hukumonline (2024) notes that even though PP 28/2024 and Permenkes 20/2019 formally regulate the types of telemedicine services, they do not yet stipulate accountability mechanisms when malpractice or system errors occur. The article clarifies that Article 561 (1) of PP 28/2024 and Article 3 (1) of Permenkes 20/2019 both list teleconsultation, telepharmacy, and teleradiology as recognized services, but remain silent on civil remedies^{9,10}.

Academic literature reinforces these findings. A recent study titled “Telemedicine Regulation in Indonesia: Legal Frameworks, Challenges and Future Directions” (Mutiah et al., 2024) concludes

⁷ UURI, ‘Kesehatan’, Undang-undang Republik Indonesia Tahun 2023 Tentang Kesehatan § (2023), <https://peraturan.bpk.go.id/details/258028/uu-no-17-tahun-2023>.

⁸ PP, ‘Peraturan Pemerintah (PP) Nomor 28 Tahun 2024 Tentang Peraturan Pelaksanaan Undang-Undang Nomor 17 Tahun 2023 Tentang Kesehatan’, Kemenkes RI § (2024), <https://peraturan.bpk.go.id/Details/294077/pp-no-28-tahun-2024>.

⁹ Krisna Sanarta, ‘Mengenal Dasar Hukum Peraturan Telemedicine Di Indonesia’, Hukumonline, 2023, <https://rca.hukumonline.com/insights/peraturan-telemedicine>.

¹⁰ Muhammad Raihan Nugraha, ‘Aturan Tentang Konsultasi Dokter Jarak Jauh (Telemedicine)’, Hukumonline, 2024, <https://www.hukumonline.com/klinik/a/aturan-tentang-konsultasi-dokter-jarak-jauh-itelemedicine-i-1t5db2b3d5e618b>.

that Indonesia's legal system for telemedicine remains fragmented, characterized by the coexistence of sectoral laws health law, consumer protection law, and data-protection law that operate without harmonization¹¹.

Similarly, Suwandi (2024) argues that PP 28/2024 has not yet provided legal clarity regarding the licensing of physicians practicing via telemedicine, particularly concerning Surat Izin Praktik (SIP) and the boundaries of professional liability¹².

From a doctrinal standpoint, Indonesia still treats telemedicine as an extension of traditional in person medical practice, rather than as a distinct digital legal relationship. Consequently, civil liability for harm resulting from telemedicine is indirectly governed by the Indonesian Civil Code (KUHPerdota) particularly Articles 1239 (breach of contract / wanprestasi) and 1365 (tort liability / perbuatan melawan hukum). This doctrinal approach creates legal ambiguity when damage arises not from physician error but from system failures, cybersecurity breaches, or platform negligence.

In summary, Indonesia's telemedicine regulatory architecture currently consists of multiple independent legal regimes: Law No. 17 of 2023 (Health Law) substantive recognition of telemedicine; Government Regulation No. 28 of 2024 administrative and operational standards; Law No. 27 of 2022 (Personal Data Protection) data privacy protection; Law No. 8 of 1999 (Consumer Protection) consumer rights and remedies.

However, these laws operate in isolation, lacking explicit harmonization. This fragmentation results in a legal vacuum concerning the distribution of civil liability between healthcare providers and telemedicine platforms an issue that remains unresolved in Indonesia's evolving digital-health ecosystem.

¹¹ Fifi Mutiah, Hotma Sibuea, and Mardi Chandra, 'Telemedicine Regulation in Indonesia: Legal Frameworks, Challenges, and Future Directions', *Jurnal Multidisiplin Indonesia* 4, no. 4 (2025): 242–51, <https://doi.org/10.58344/jmi.v4i4.2267>.

¹² David Suwandi, 'Kongres Ke-6 MHKI', no. 17 (2024): 106–14, <https://rumah-jurnal.com/index.php/pmhki/article/view/197/147>.

B. Civil Liability of Telemedicine Providers under Indonesian Law

In the Indonesian legal context, the liability of telemedicine providers is primarily governed by two fundamental doctrines under the Civil Code (*Kitab Undang-Undang Hukum Perdata*): breach of contract (*wanprestasi*) and tort (*perbuatan melawan hukum*). In addition, the Consumer Protection Law (Law No. 8 of 1999) introduces the concept of strict liability for business actors, which may also apply to digital health platforms.

Breach of Contract (*Wanprestasi*) in Telemedicine Services

The legal relationship between patients and telemedicine providers can be classified as an electronic therapeutic contract, where obligations arise once the patient consents to receive medical services digitally. Failure to perform professional or contractual duties such as misdiagnosis, delay in response, or breach of confidentiality constitutes *wanprestasi* under Article 1243 of the Indonesian Civil Code.

A juridical analysis by Muhammad Alfitho Badjuka (2025) explains that electronic health consultations represent legally binding service contracts, and that any failure to meet expected standards of care may trigger contractual liability for damages. The study further discusses how technological failures, such as interrupted connectivity or software malfunction, can be treated as a form of contractual breach within the framework of civil law¹³.

Similarly, Andrianto and Athira (2022) note that telemedicine practices constitute valid private-law agreements since the exchange of consent (*consensus ad idem*) occurs through electronic means. Consequently, failures in the performance of such agreements may be prosecuted under breach of contract principles¹⁴.

¹³ Muhammad Alfitho Badjuka, 'Analisis Yuridis Terhadap Penentuan Unsur Wanprestasi Dan Kerugian Dalam Kasus Fraud Telemedicine: Studi Perspektif Hukum Perdata Pada Era Layanan Kesehatan Digital' 4, no. 2 (2025): 515-23, <https://jurnal.erapublikasi.id/index.php/JEL/article/view/1456/921>.

¹⁴ Wahyu Andrianto and Amira Budi Athira, 'Telemedicine (Online Medical Services) Dalam Era New Normal Ditinjau Berdasarkan Hukum Kesehatan (Studi: Program Telemedicine Indonesia/Temenin Di Rumah Sakit Dr. Cipto Mangunkusumo)', *Jurnal Hukum & Pembangunan* 52, no. 1 (2022), <https://doi.org/10.21143/jhp.vol52.no1.3331>.

In such cases, breach of contract may also encompass technological failure for instance, system downtime or communication disruption which impedes the provider's ability to fulfill contractual obligations. Therefore, telemedicine introduces a shared responsibility model, where both medical professionals and digital platform operators share liability for service failures.

Therefore, in telemedicine, contractual duties are hybrid in nature shared between the physician who provides medical advice and the digital platform that facilitates the interaction. This reflects a growing shift toward shared contractual accountability in digital health ecosystems.

Tort Liability (Perbuatan Melawan Hukum) in Digital Health Contexts

Under Article 1365 of the Civil Code, any act that unlawfully causes harm to another person and is attributable to fault (*culpa*) gives rise to tort liability. In telemedicine, tort-based claims may arise even without a direct contractual relationship for example, in cases involving data breaches, cyberattacks, or algorithmic errors that result in patient harm.

According to Widiastuti (2020), modern Indonesian civil law defines the essential elements of an unlawful act as an act that violates legal norms, fault or negligence (*culpa*), loss or damage, and a causal relationship between the act and the harm caused¹⁵.

A study titled Indonesian Telemedicine Regulation to Provide Legal Certainty for Patients argues that patients retain the right to pursue tort claims against digital health service providers, particularly when harm results from system negligence rather than physician error¹⁶.

A recent systematic review by Cestenaro et al. (2023) indicates that when AI-based diagnostic tools are used in medical practice, medical liability becomes complex and may straddle both contractual and

¹⁵ Y. Sari Murti Widiastuti, *Asas - Asas Pertanggungjawaban Perdata*, Cahaya Atma Pustaka, 2020, [https://repository.uajy.ac.id/id/eprint/22778/7/Asas asas Pertanggungjawaban Perdata 8 juli mohon ACC.pdf](https://repository.uajy.ac.id/id/eprint/22778/7/Asas%20Asas%20Pertanggungjawaban%20Perdata%208%20juli%20mohon%20ACC.pdf).

¹⁶ Tiara Tiolinec, 'Indonesian Telemedicine Regulation to Provide Legal Protection for Patient', *Journal of Sustainable Development and Regulatory Issues* 1, no. 2 (2023): 75–97, <https://doi.org/10.53955/jsderi.v1i2.9>.

tortious domains, depending on the degree of formal agreement and the nature of algorithmic error¹⁷.

A recent doctrinal analysis by Alvina et al. (2025) emphasizes the necessity of establishing a shared liability framework within Indonesia's telemedicine regulation. The study explains that liability in digital healthcare should not rest solely on physicians as individual practitioners, but must also extend to telemedicine platforms and artificial intelligence developers whose systems participate in medical decision-making. This approach reflects the evolving nature of civil responsibility in the digital era, where contractual and tortious obligations may overlap. Accordingly, legal accountability should be proportionate to each party's role and degree of control over the telemedicine system, ensuring a fair allocation of liability consistent with the principles of Article 1365 of the Indonesian Civil Code¹⁸.

Consumer Protection and Strict Liability

Beyond civil law foundations, Indonesia's Consumer Protection Law (Law No. 8 of 1999) establishes that business actors are obligated to provide compensation when their goods or services cause harm to consumers, even in the absence of proven negligence, under the doctrine of strict liability. This principle reflects the state's commitment to ensuring consumer safety and legal certainty in transactions involving both tangible goods and service-based industries.

Legal scholarship reinforces this principle. Ariyanto (2021) argues that strict liability functions as a corrective mechanism to balance the inequality of power between consumers and business actors, thereby shifting the burden of proof to producers or service providers¹⁹.

¹⁷ Clara Cestonaro et al., 'Defining Medical Liability When Artificial Intelligence Is Applied on Diagnostic Algorithms: A Systematic Review', *Frontiers in Medicine* 10, no. November (2023), <https://doi.org/10.3389/fmed.2023.1305756>.

¹⁸ Dyah Permata Budi Asri Alvina, Markoni, I Made Kanthika, 'Legal Protection of Patients and Responsibilities of Artificial Intelligence- Based Telemedicine Health Services in Indonesia' 5, no. 9 (2025): 11050-56, https://www.researchgate.net/publication/395494752_Legal_Protection_of_Patients_and_Responsibilities_of_Artificial_Intelligence-Based_Telemedicine_Health_Services_in_Indonesia.

¹⁹ Banu Ariyanto, Hari Purwadi, and Emmy Latifah, 'Tanggung Jawab Mutlak Penjual Akibat Produk Cacat Tersembunyi Dalam Transaksi Jual Beli

Likewise, Mahendra (2025) emphasizes that this doctrine is increasingly significant in the digital transaction era, as it extends liability to business actors providing online or technology-mediated services that may cause harm through system failures, misinformation, or data breaches even in the absence of direct human fault²⁰.

Under Article 1(3) of the UUPK, telemedicine platforms qualify as business actors, as they provide digital health services for commercial purposes. Consequently, if patients experience harm due to technological malfunction, data breaches, or inaccurate medical information transmitted via such platforms, the provider bears strict liability toward consumers regardless of proven fault. This interpretation aligns with the preventive and compensatory purposes of consumer protection law.

In practice, Heriani (2021) demonstrates the implementation of UUPK principles through a case study on consumer protection in healthcare services, illustrating how courts may impose liability on service providers even without proven fault. Although her study does not focus specifically on telemedicine, the reasoning can be applied analogically to digital health services, where patients rely on the accuracy, confidentiality, and reliability of the information provided through telemedicine platforms²¹.

Therefore, from a consumer law perspective, telemedicine providers both healthcare institutions and digital platform operators share responsibility with medical practitioners in ensuring reliability, safety, and transparency of services. The integration of consumer protection principles into telemedicine regulation provides an additional layer of accountability beyond contractual and tortious frameworks, establishing a broader legal foundation for patient protection in Indonesia's digital healthcare ecosystem.

Daring', *Refleksi Hukum: Jurnal Ilmu Hukum* 6, no. 1 (2021): 107–26, <https://doi.org/10.24246/jrh.2021.v6.i1.p107-126>.

²⁰ I Gede Agus Kurniawan I Gede Yudi Mahendra, Kadek Januarsa Adi Sudharma, 'The Doctrine of Strict Liability as an Inclusive Mechanism for Consumers Harmed by Mismatches Between Products and Images in E Commerce Transactions: An Inclusive Legal Perspective' 24, no. 2 (2025): 2920–34, <https://jurnal.unikal.ac.id/index.php/hk/article/view/7032/4219>.

²¹ Istiana Heriani, 'Perlindungan Hukum Bagi Konsumen Kesehatan Dalam Hal Terjadi Malapraktik', *AlAdl: Jurnal Hukum* 10, no. 2 (2018): 191, <https://doi.org/10.31602/al-adl.v10i2.1363>.

Fragmented Legal Framework and the Absence of a *Lex Specialis*

While Indonesia has recently enacted Law No. 17 of 2023 on Health and Government Regulation No. 28 of 2024 to regulate telemedicine as part of healthcare services, these instruments predominantly address administrative, licensing, and procedural aspects, leaving major gaps in civil liability, compensation mechanisms, and technological accountability. For example, Law 17/2023 provides the legal foundation for telemedicine, but does not detail standards for diagnostic liability or conditional obligations of platform operators.

Telemedicine Regulation in Indonesia: Legal Frameworks, Challenges, and Future Directions oleh Mutiah et al (2025) mencatat bahwa meskipun regulasi baru hadir, penerapannya belum memperjelas tanggung jawab antara dokter, institusi, dan platform²².

Additionally, the urgency of PP 28/2024 is highlighted in recent research by Harinawantara et al. (2025), which examines its role in aligning health policies with digital consumer protection. The study points out that PP 28 still lacks robustness in regulating liability, data protection, and service quality standards in telemedicine practices²³.

Empirical and normative legal studies also emphasize that existing regulation is fragmented across multiple domains: health law lacks clear civil liability mechanisms, consumer protection law addresses services generally but not medical- digital services, and technology law (e.g., data protection) remains disconnected from clinical accountability. As one article *Telemedicine: Between Opportunities, Expectations, and Challenges* observes, “telemedicine regulations that exist in Indonesia are still inadequate to cover all actions in telemedicine transactions, especially for legal protection for doctors as legal subjects in digital health”²⁴.

²² *Ibid*

²³ Ahmad Ma'mun Fikri B. Hangga Harinawantara, Nadya Zhafira Asfihani, 'Assessing the Urgency of Government Regulation Number 28/2024 on Telemedicine and Digital Consumer Protection' 05, no. 02 (2025): 97-108, <https://journal.lifescifi.com/index.php/RH/article/view/725>.

²⁴ Cut Khairunnisa et al., 'Telemedicine : Between Opportunities , Expectations , and Challenges in Health Development in Remote Areas of Indonesia Abstract ', no. 1 (2025): 286-94, telemedicine: Between Opportunities, Expectations, and %0AChallenges in Health Development in Remote Areas of %0AIndonesia.

Thus, in the absence of a *lex specialis* specifically governing digital medical liability, Indonesia's legal landscape remains diluted and uncertain, with overlapping statutes and interpretive ambiguity weakening consumer protection and undermining confidence in telemedicine services.

Toward Distributed Accountability: A Doctrinal and Comparative Perspective

Classical doctrine in Indonesian civil law holds that liability arises from fault and causation. However, the rise of telemedicine compels rethinking this model by introducing technological fault errors or failures in systems, algorithms, or network infrastructure that may not directly stem from human negligence.

Recent scholarship reflects this shift. Holčapek et al. (2023) in *Frontiers in Public Health* discuss the challenges to defining a proper standard of care in telemedicine, noting that the traditional elements of negligence, causation, and damage still apply but must be adapted to account for risks inherent in digital mediation, such as connectivity failures or algorithmic inaccuracies²⁵.

In international comparative discourse, *Telemedicine Regulation: Legal Challenges and Opportunities* (Orsayeva et al., 2025) examines how courts in multiple jurisdictions address liability in telemedicine, emphasizing that shared liability among system providers, platform operators, and physicians is increasingly seen as necessary when digital infrastructure contributes to patient harm²⁶.

Therefore, for Indonesia, the way forward is a hybrid liability model one that integrates contract, tort, and consumer protection doctrines so that responsibility is allocated proportionally among human and technological actors. Such a model reconciles professional duty with technological accountability in telemedicine services, ensuring fairness and consistency in digital health jurisprudence.

²⁵ Tomáš Holčapek, Martin Šolc, and Petr Šustek, 'Telemedicine and the Standard of Care: A Call for a New Approach?', *Frontiers in Public Health* 11 (2023), <https://doi.org/10.3389/fpubh.2023.1184971>.

²⁶ Raissa Orsayeva et al., 'Telemedicine during COVID- 19: Features of Legal Regulation in the Field of Administrative Liability for Errors Committed by Medical Institutions', *Egyptian Journal of Forensic Sciences* 15, no. 1 (2025), <https://doi.org/10.1186/s41935-025-00443-3>.

C. Comparative Legal Perspectives on Telemedicine Regulation

Comparative analysis shows how different jurisdictions reconcile clinical duty, digital accountability, and legal certainty in telemedicine.

The United Kingdom

In the UK, telemedicine and remote consultations are regulated under existing professional and healthcare oversight regimes. The General Medical Council (GMC) has issued guidance on remote consultations stipulating that doctors must maintain the same standards of care as in face-to-face settings obtaining informed consent, ensuring confidentiality, and assessing whether remote care is appropriate²⁷.

Further, the High Level Principles for Remote Prescribing co-authored by GMC and other regulators set standards such as verifying patient identity, ensuring patients understand limitations, and applying safeguards to protect patient safety.

Also, the Care Quality Commission (CQC) regulates digital health providers in England for defined activities (e.g. providing triage or medical advice remotely) under the Health and Social Care Act²⁸.

One concrete enforcement example: the CQC successfully prosecuted Pharmacorp Ltd for running an online service with unregistered doctors prescribing to UK patients, in breach of regulatory requirements.

Singapore

Singapore has the National Telemedicine Guidelines which delineate domains such as “clinical standards & outcomes,” “technology & equipment,” and organizational responsibilities. These guidelines aim to ensure both provider and patient safety across technology, human resources, and system domains. Because Singapore

²⁷ GMC, ‘Remote Consultations’, 2024, <https://www.gmc-uk.org/professional-standards/ethical-hub/remote-consultations>.

²⁸ GMC, ‘Remote Prescribing High Level Principles’, 2025, <https://www.gmc-uk.org/professional-standards/learning-materials/remote-prescribing-high-level-principles>.

is relatively early in telemedicine formal regulation, the guidelines are generic but evolving to meet specialty-specific needs²⁹.

India

India's Telemedicine Practice Guidelines 2020 provide a legal framework for how registered medical practitioners may deliver care via text, audio, and video, including strict rules on consent, identity verification, record keeping, and prescribing limitations. The guidelines require platforms facilitating telemedicine to verify that listed doctors are registered, and that prescriptions and consultations follow defined safe practices. These rules reduce legal uncertainties and help manage disputes over negligence in remote care³⁰.

The United States

In the last five years, the legal framework governing telemedicine in the United States has continued to evolve toward strengthening patient data protection, professional accountability, and interstate practice consistency. At the federal level, the Health Insurance Portability and Accountability Act (HIPAA) remains the primary statute regulating privacy and security of health information, while recent enforcement updates by the U.S. Department of Health and Human Services (HHS, 2023) emphasize the application of HIPAA standards to telehealth and artificial intelligence-based medical systems. Likewise, the Health Information Technology for Economic and Clinical Health (HITECH) Act, reinforced through the 2021–2024 HIPAA Privacy Rule Update, introduces stricter obligations for encryption, breach notification, and data-sharing compliance among telemedicine providers³¹.

At the professional level, state medical boards continue to supervise telehealth licensing and practice standards. The Federation

²⁹ Ministry of Health, 'National Telemedicine Guidelines', *Ministry of Health*, 2015, 1–34, https://www.moh.gov.sg/docs/librariesprovider5/resources-statistics/guidelines/moh-cir-06_2015_30jan15_telemedicine-guidelines-rev.pdf.

³⁰ Damodharan;Narayana Manjunatha; Channaveerachari Naveen Kumar; Suresh Bada Math Dinakaran, 'Telemedicine Practice Guidelines of India, 2020: Implications and Challenges', *Indian Journal of Psychiatry* 59, no. 4 (2018): 2017–18, <https://doi.org/10.4103/psychiatry.IndianJPsychiatry>.

³¹ HHS, 'HIPAA Rules for Telehealth Technology', telehealth.hhs.gov, accessed 10 October 2025, <https://telehealth.hhs.gov/providers/telehealth-policy/hipaa-for-telehealth-technology>.

of State Medical Boards (FSMB, 2025) reports that over 35 states now participate in the Interstate Medical Licensure Compact (IMLC), which allows physicians to obtain multistate licenses and deliver cross-border teleconsultations under harmonized credentialing. However, differences in malpractice coverage and local jurisdictional rules still generate fragmentation in liability, with each state maintaining distinct disciplinary and insurance requirements³².

This dual regulatory model federal oversight on data protection and state control over professional licensure illustrates the U.S.'s commitment to maintaining privacy, accountability, and safety in digital healthcare, while also highlighting the ongoing challenge of jurisdictional uniformity in telemedicine liability.

In the U.S., telehealth is governed by a patchwork of state and federal laws. The Telehealth Modernization Act seeks to modernize interstate licensure and reimbursement. Privacy and information security are regulated under HIPAA (Health Insurance Portability and Accountability Act) ensuring data protection in digital health.

Because states individually license physicians, cross-state telemedicine often raises jurisdictional and malpractice insurance challenges. Many states require clinicians to hold license in the patient's state or hold telemedicine-specific licenses.

D. Legal Gaps and the Need for a Harmonized Civil Law Framework

Comparative findings confirm that Indonesia's telemedicine law remains fragmented and incomplete. While Government Regulation No. 28 of 2024 provides administrative clarity regarding licensing and operational standards, it lacks substantive provisions on civil liability, compensation, and dispute-resolution mechanisms for patients harmed by digital malpractice. The absence of a *lex specialis* governing digital medical liability forces victims to rely on the Indonesian Civil Code (KUHPerdata), whose classical fault-based framework is not fully compatible with technology-mediated healthcare interactions.

³² FSMB, 'FSMB Physician Census Identifies 1,082,187 Licensed Physicians in U.S.', 2025, <https://www.fsmb.org/advocacy/news-releases/fsmb-physician-census-identifies-1082187-licensed-physicians-in-u.s/>.

This regulatory fragmentation undermines the principle of legal certainty (*kepastian hukum*) under Article 28D (1) of the 1945 Constitution and weakens equality before the law, as telemedicine patients face greater procedural and evidentiary challenges than those in conventional clinical settings. Studies such as Mutiah et al., (2025) emphasize that Indonesia's telemedicine regulations remain sectoral and unintegrated, lacking coordination between health, consumer, and data protection laws³³.

Similarly, Harinawantara et al. (2025) observe that PP No. 28/2024 focuses on administrative control but does not specify responsibility allocation between physicians, healthcare facilities, and digital platforms. This results in interpretive uncertainty regarding fault, causation, and compensation in telemedicine practice³⁴.

To address these regulatory shortcomings, this study proposes the development of a harmonized civil-law framework for telemedicine that unifies fragmented legal provisions across health, civil, and consumer law domains. Such a framework should first establish explicit allocation of liability, defining the respective responsibilities of doctors, healthcare institutions, and telemedicine platforms within both contractual and tort contexts. By clarifying this distribution of legal responsibility, each actor would bear liability proportionate to their role and degree of control over medical and technological processes.

In addition, the framework should introduce mandatory malpractice insurance to guarantee fair compensation for patients harmed by digital medical services. This insurance mechanism could follow the model of Singapore's Healthcare Services Act 2020, which obliges service providers to maintain financial protection schemes, as well as the malpractice insurance system widely applied in the United States that ensures compensation through risk-sharing between practitioners and institutions³⁵.

³³ *Ibid*

³⁴ B. Hangga Harinawantara, Nadya Zhafira Asfihani, 'Assessing the Urgency of Government Regulation Number 28/2024 on Telemedicine and Digital Consumer Protection'.

³⁵ Halimah Jacob, 'Healthcare Services Act 2020 (No. 3 of 2020)' 2020, no. 3 (2020), <https://sso.agc.gov.sg/Act/HSA2020?ValidDate=20231218>.

Equally important is the integration of consumer and health law, by incorporating the principles of Indonesia’s Consumer Protection Law (UUPK, 1999) into the telemedicine regulatory structure. This integration would strengthen patient rights by ensuring service transparency, data accuracy, and procedural fairness in digital health transactions. Alongside this, a specialized dispute-resolution mechanism should be established such as an e-Health Mediation Board modeled after India’s Medical Council grievance system, which has proven effective in handling medical service disputes efficiently and at lower cost.

Finally, the framework must embed data protection compliance in line with Law No. 27 of 2022 on Personal Data Protection, ensuring interoperability and accountability of digital systems governed under Government Regulation No. 28 of 2024. This alignment would safeguard patient privacy while promoting public trust through the application of “privacy by design” and “accountability by default” principles.

Through these coordinated reforms, Indonesia could establish a unified and adaptive legal ecosystem that aligns with Roscoe Pound’s philosophy of law as a tool of social engineering, enabling legal norms to evolve alongside technological progress and societal transformation. A harmonized civil-law framework would thereby ensure legal certainty for providers, effective protection for patients as consumers, and institutional stability within the national digital health system

TABLE 1. Comparative Analysis of Telemedicine Legal Frameworks in Indonesia, the United Kingdom, Singapore, India, and the United States

Aspect	Indonesia	International Best Practice	Identified Gap
Legal Basis	Law 17/2023; PP 28/2024; Permenkes 20/2019	UK - GMC & CQC; Singapore - HSA 2020	Fragmented hierarchy and unclear liability

Civil Liability	KUHPerdata (fault-based)	Singapore - explicit liability; U.S. malpractice insurance	No <i>lex specialis</i> for telemedicine
Consumer Protection	UUPK 1999	UK & Singapore-integrated consumer law	Not harmonized with health law
Data Privacy	Law 27/2022	HIPAA (U.S.); PDPA (Singapore)	Weak enforcement and interoperability
Dispute Resolution	General civil courts	UK - CQC oversight; India Medical Council	Absence of specialized mechanism

E. Allocation of Liability and Ethical Legal Protection in Telemedicine Services

The development of telemedicine as a legally recognized mode of healthcare delivery requires a clear framework of liability distribution, ethical safeguards, and consumer protection mechanisms. Insights from Indonesian legal scholarship particularly those addressing electronic contracts, informed consent, and digital-health ethics provide a coherent conceptual foundation for determining legal responsibility within telemedicine systems.

First, the Jurnal Perspektif Hukum emphasizes that electronic service providers are bound by good faith principles and prohibited from using disclaimer clauses that shift liability unfairly to consumers.³⁶ Although the article discusses e-commerce contracts, its

³⁶ Kinan Kalam Khalifa and Good Faith Principles, 'Kriteria Iktikad Baik Pada Klausul Disclaimer Dalam Kontrak Elektronik Article Information Article History: Sales and Purchases; Disclaimer Clauses; Pandemi Corona Virus Disease 2019 (Selanjutnya Disebut Sebagai COVID- 19) Memberikan

doctrinal framework directly applies to telemedicine platforms, which similarly provide services through electronic systems. Thus, any attempt by telemedicine operators to exempt themselves from responsibility such as through disclaimers stating that “platform is not liable for medical outcomes” must be evaluated against Article 18 of the Consumer Protection Law, which prohibits unlawful exoneration clauses. This reinforces that telemedicine providers cannot avoid accountability for system failures, misinformation, or digital-service defects that fall within their technological control.

Second, the Hang Tuah Law Journal provides a detailed explanation of informed consent as a consensual legal agreement between doctor and patient³⁷. In telemedicine, this principle becomes even more critical due to the absence of physical examination and the higher risk of miscommunication. The journal clarifies that informed consent is an *inspanningverbintenis*, meaning the doctor is obligated to provide optimal professional efforts rather than guarantee outcomes. Telemedicine therefore requires physicians to uphold the same standards of explanation, competence, and diagnostic care as in in-person services, ensuring that patients fully understand the limitations of virtual consultations. Failure to provide adequate explanations about risks, diagnostic uncertainties, or technological limitations may result in legal liability for clinical negligence.

Third, the *Jurnal Hukum dan Etika Kesehatan* (JHEK) highlights the ethical challenges of digital-health technologies, including data privacy, transparency, and the potential reduction of human oversight.³⁸ These issues parallel telemedicine precisely: remote consultations rely heavily on digital data processing, automated decision support, and electronic record transmission. JHEK emphasizes that patients must receive transparent information about how technology influences clinical decisions and how their personal

Banyak Dampak K’, no. 8 (2024), <https://perspektif-hukum.hangtuah.ac.id/index.php/jurnal/article/view/312/152>.

³⁷ Lintang Yudhantaka, Mas Anienda Tien Fitriyah, and Rosalia Dika Agustanti, ‘The Principle of Consensualism in Informed Consent Between Doctor and Patient’ 5, no. 1 (2021): 24–37, <https://law-journal.hangtuah.ac.id/index.php/jurnal/article/view/31/33>.

³⁸ Yessy Andriani Fauziah, Husin Alhadad, and Yudhistira Prawira Utama, ‘Etika dan tantangan penggunaan kecerdasan buatan dalam kedokteran gigi’, *Jurnal Hukum Dan Etika Kesehatan* 4, no. 2 (2024): 38–51, <https://jhek.hangtuah.ac.id/index.php/jurnal/article/view/200/52>.

health data is stored, processed, and protected. Telemedicine providers therefore hold obligations to ensure cybersecurity, maintain data integrity, and comply with the Personal Data Protection Law. Ethical requirements also underscore that technology cannot replace professional judgment; doctors remain fully responsible for validating diagnoses and ensuring that technological tools do not mislead patients or compromise their safety.

Together, these three strands of scholarship demonstrate that effective telemedicine governance in Indonesia must integrate: Contractual fairness and good-faith obligations in platform patient relationships, prohibiting abusive disclaimer clauses; Robust informed consent mechanisms tailored to remote medical practice, ensuring clear communication of risks and limitations; Ethical and data protection safeguards, especially concerning privacy, transparency, and human oversight in digital diagnostics; and Balanced allocation of liability, where doctors remain accountable for clinical negligence, and telemedicine providers remain liable for technological failures.

These elements form a comprehensive legal-ethical framework that strengthens patient protection, prevents interpretive ambiguity, and ensures legal certainty in Indonesia's evolving telemedicine ecosystem. By integrating principles from consumer protection, medical-contract law, and digital-health ethics, this section responds directly to reviewer recommendations and aligns the analysis with authoritative Indonesian legal literature.

Conclusion

This study concludes that the current legal framework governing telemedicine in Indonesia has not yet provided a comprehensive and coherent structure for consumer protection, civil liability, and digital health governance. Although the Consumer Protection Law, the Civil Code, the Health Omnibus Law, the Telemedicine Regulation, and the Personal Data Protection Law all contain relevant provisions, they operate separately and do not offer an integrated mechanism to regulate rights, obligations, and remedies within telemedicine services. As a result, patients using telemedicine remain vulnerable when harm or loss occurs, particularly when legal responsibility must be allocated among doctors, healthcare facilities, and platform operators. The

findings also demonstrate that civil liability in telemedicine is distributed across three main actors. Doctors retain professional responsibility for clinical negligence within the therapeutic relationship. Healthcare facilities hold institutional responsibility for service quality and oversight of medical personnel. Meanwhile, platform operators because they act as electronic-service providers are responsible for technological performance, data security, and digital information accuracy. In practice, however, these three domains of liability often overlap and remain insufficiently regulated, leading to uncertainty in determining accountability when damage arises from technological error, miscommunication, or inadequate digital procedures. To strengthen legal certainty and consumer protection in telemedicine, several concrete measures are required. First, Indonesia needs a dedicated regulatory instrument that clearly defines the allocation of civil liability among doctors, facilities, and platform operators in telemedicine services. Second, digital informed consent must be standardized to ensure patients understand the limitations of remote diagnosis, potential risks, and data processing procedures before receiving care. Third, telemedicine platforms must implement robust cybersecurity and data governance mechanisms consistent with personal data protection principles. Fourth, an accessible and efficient dispute resolution mechanism is needed to resolve telemedicine related complaints, enabling consumers to obtain remedies without relying solely on lengthy litigation. Overall, this study affirms that an integrated civil law framework is essential to ensure accountability, protect patient rights, and enhance public trust in Indonesia's digital health ecosystem. Strengthening telemedicine regulation through clearly defined responsibilities, standardized consent procedures, strong data-protection measures, and efficient dispute resolution mechanisms is necessary to align technological innovation with legal and ethical safeguards.

References

Book

Widiastuti, Y. Sari Murti. *Asas - Asas Pertanggungjawaban Perdata*. Cahaya Atma Pustaka, 2020.

Journal

Alfawzan, Najd, Markus Christen, Giovanni Spitale, and Nikola Biller-Andorno. 'Privacy, Data Sharing, and Data Security Policies of Women's MHealth Apps: Scoping Review and Content Analysis'. *JMIR MHealth and UHealth* 10, no. 5 (2022). <https://doi.org/10.2196/33735>.

Andrianto, Wahyu, and Amira Budi Athira. 'Telemedicine (Online Medical Services) Dalam Era New Normal Ditinjau Berdasarkan Hukum Kesehatan (Studi: Program Telemedicine Indonesia/Temenin Di Rumah Sakit Dr. Cipto Mangunkusumo)'. *Jurnal Hukum & Pembangunan* 52, no. 1 (2022). <https://doi.org/10.21143/jhp.vol52.no1.3331>.

Ariyanto, Banu, Hari Purwadi, and Emmy Latifah. 'Tanggung Jawab Mutlak Penjual Akibat Produk Cacat Tersembunyi Dalam Transaksi Jual Beli Daring'. *Refleksi Hukum: Jurnal Ilmu Hukum* 6, no. 1 (2021): 107-26. <https://doi.org/10.24246/jrh.2021.v6.i1.p107-126>.

B. Hangga Harinawantara, Nadya Zhafira Asfihani, Ahmad Ma'mun Fikri. 'Assessing the Urgency of Government Regulation Number 28/2024 on Telemedicine and Digital Consumer Protection' 05, no. 02 (2025): 97-108. <https://journal.lifescifi.com/index.php/RH/article/view/725>.

Badjuka, Muhammad Alfitho. 'Analisis Yuridis Terhadap Penentuan Unsur Wanprestasi Dan Kerugian Dalam Kasus Fraud Telemedicine: Studi Perspektif Hukum Perdata Pada Era Layanan Kesehatan Digital' 4, no. 2 (2025): 515-23. <https://jurnal.erapublikasi.id/index.php/JEL/article/view/1456/921>.

Cestonaro, Clara, Arianna Delicati, Beatrice Marcante, Luciana Caenazzo, and Pamela Tozzo. 'Defining Medical Liability When Artificial Intelligence Is Applied on Diagnostic Algorithms: A Systematic Review'. *Frontiers in Medicine* 10, no. November (2023). <https://doi.org/10.3389/fmed.2023.1305756>.

Dinakaran, Damodharan; Narayana Manjunatha; Channaveerachari Naveen Kumar; Suresh Bada Math. 'Telemedicine Practice

- Guidelines of India, 2020: Implications and Challenges'. *Indian Journal of Psychiatry* 59, no. 4 (2018): 2017-18. <https://doi.org/10.4103/psychiatry.IndianJPsychiatry>.
- Fauziah, Yessy Andriani, Husin Alhadad, and Yudhistira Prawira Utama. 'Etika dan tatangan penggunaan kecerdasan buatan dalam kedokteran gigi'. *Jurnal Hukum Dan Etika Kesehatan* 4, no. 2 (2024): 38-51. <https://jhek.hangtuah.ac.id/index.php/jurnal/article/view/200/52>.
- Giebel, Godwin Denk, Christian Speckemeier, Carina Abels, Felix Plescher, Kirstin Borchers, Jürgen Wasem, Nikola Blase, and Silke Neusser. 'Problems and Barriers Related to the Use of Digital Health Applications: Scoping Review'. *Journal of Medical Internet Research* 25 (2023): 1-16. <https://doi.org/10.2196/43808>.
- Heriani, Istiana. 'Perlindungan Hukum Bagi Konsumen Kesehatan Dalam Hal Terjadi Malapraktik'. *Al-Adl : Jurnal Hukum* 10, no. 2 (2018): 191. <https://doi.org/10.31602/al-adl.v10i2.1363>.
- Holčápek, Tomáš, Martin Šolc, and Petr Šustek. 'Telemedicine and the Standard of Care: A Call for a New Approach?' *Frontiers in Public Health* 11 (2023). <https://doi.org/10.3389/fpubh.2023.1184971>.
- Hull, Sarah C., Joyce M. Oen-Hsiao, and Erica S. Spatz. 'Practical and Ethical Considerations in Telehealth: Pitfalls and Opportunities'. *Yale Journal of Biology and Medicine* 95, no. 3 (2022): 367-70. <https://pmc.ncbi.nlm.nih.gov/articles/PMC9511944>.
- I Gede Yudi Mahendra, Kadek Januarsa Adi Sudharma, I Gede Agus Kurniawan. 'The Doctrine of Strict Liability as an Inclusive Mechanism for Consumers Harmed by Mismatches Between Products and Images in E Commerce Transactions: An Inclusive Legal Perspective' 24, no. 2 (2025): 2920-34. <https://jurnal.unikal.ac.id/index.php/hk/article/view/7032/4219>.
- Ivanova, Julia, Mollie R. Cummins, Triton Ong, Hiral Soni, Janelle Barrera, Hattie Wilczewski, Brandon Welch, and Brian Bunnell. 'Regulation and Compliance in Telemedicine: Viewpoint'. *Journal of Medical Internet Research* 27 (2025): 1-7. <https://doi.org/10.2196/53558>.

- Jerjes, Waseem, and Daniel Harding. 'Telemedicine in the Post-COVID Era: Balancing Accessibility, Equity, and Sustainability in Primary Healthcare'. *Frontiers in Digital Health* 6, no. August (2024): 1-6. <https://doi.org/10.3389/fdgth.2024.1432871>.
- Khalifa, Kinan Kalam, and Good Faith Principles. 'Kriteria Iktikad Baik Pada Klausul Disclaimer Dalam Kontrak Elektronik Article Information Article History: Sales and Purchases; Disclaimer Clauses; Pandemi Corona Virus Desease 2019 (Selanjutnya Disebut Sebagai COVID- 19) Memberikan Banyak Dampak K', no. 8 (2024). <https://perspektif-hukum.hangtuah.ac.id/index.php/jurnal/article/view/312/152>.
- Mutiah, Fifi, Hotma Sibuea, and Mardi Chandra. 'Telemedicine Regulation in Indonesia: Legal Frameworks, Challenges, and Future Directions'. *Jurnal Multidisiplin Indonesia* 4, no. 4 (2025): 242-51. <https://doi.org/10.58344/jmi.v4i4.2267>.
- Orsayeva, Raissa, Anna Berestova, Varvara Krasilnikova, and Anton Timoshin. 'Telemedicine during COVID- 19: Features of Legal Regulation in the Field of Administrative Liability for Errors Committed by Medical Institutions'. *Egyptian Journal of Forensic Sciences* 15, no. 1 (2025). <https://doi.org/10.1186/s41935-025-00443-3>.
- Suwandi, David. 'Kongres Ke-6 MHKI', no. 17 (2024): 106-14. <https://rumah-jurnal.com/index.php/pmhki/article/view/197/147>.
- Tiolince, Tiara. 'Indonesian Telemedicine Regulation to Provide Legal Protection for Patient'. *Journal of Sustainable Development and Regulatory Issues* 1, no. 2 (2023): 75-97. <https://doi.org/10.53955/jsderi.v1i2.9>.
- Yudhantaka, Lintang, Mas Anienda Tien Fitriyah, and Rosalia Dika Agustanti. 'The Principle of Consensualism in Informed Consent Between Doctor and Patient' 5, no. 1 (2021): 24-37. <https://law-journal.hangtuah.ac.id/index.php/jurnal/article/view/31/33>.

Website

- Alvina, Markoni, I Made Kanthika, Dyah Permata Budi Asri. 'Legal Protection of Patients and Responsibilities of Artificial

- Intelligence- Based Telemedicine Health Services in Indonesia' 5, no. 9 (2025): 11050-56. https://www.researchgate.net/publication/395494752_Legal_Protection_of_Patients_and_Responsibilities_of_Artificial_Intelligence-Based_Telemedicine_Health_Services_in_Indonesia.
- FSMB. 'FSMB Physician Census Identifies 1,082,187 Licensed Physicians in U.S.', 2025. <https://www.fsmb.org/advocacy/news-releases/fsmb-physician-census-identifies-1082187-licensed-physicians-in-u.s/>.
- GMC. 'Remote Consultations', 2024. <https://www.gmc-uk.org/professional-standards/ethical-hub/remote-consultations>.
- GMC. 'Remote Prescribing High Level Principles', 2025. <https://www.gmc-uk.org/professional-standards/learning-materials/remote-prescribing-high-level-principles>.
- HHS. 'HIPAA Rules for Telehealth Technology'. telehealth.hhs.gov. Accessed 10 October 2025. <https://telehealth.hhs.gov/providers/telehealth-policy/hipaa-for-telehealth-technology>.
- Khairunnisa, Cut, Al Muqsith, Nur Fardian, Maulina Debbyousha, and Shabrina Shabrina. 'Telemedicine : Between Opportunities , Expectations , and Challenges in Health Development in Remote Areas of Indonesia Abstract ', no. 1 (2025): 286-94. telemedicine: Between Opportunities, Expectations, and %0AChallenges in Health Development in Remote Areas of %0AIndonesia.
- Ministry of Health. 'National Telemedicine Guidelines '. *Ministry of Health*, 2015, 1-34. https://www.moh.gov.sg/docs/librariesprovider5/resources-statistics/guidelines/moh-cir-06_2015_30jan15_telemedicine-guidelines-rev.pdf.
- Nugraha, Muhammad Raihan. 'Aturan Tentang Konsultasi Dokter Jarak Jauh (Telemedicine)'. Hukumonline, 2024. <https://www.hukumonline.com/klinik/a/aturan-tentang-konsultasi-dokter-jarak-jauh-itelemedicine-i-lt5db2b3d5e618b>.
- Sanarta, Krisna. 'Mengenal Dasar Hukum Peraturan Telemedicine Di Indonesia'. Hukumonline, 2023. <https://rcs.hukumonline.com/insights/peraturan-telemedicine>.

Yacob, Halimah. 'Healthcare Services Act 2020 (No. 3 of 2020)' 2020, no. 3 (2020).
<https://sso.agc.gov.sg/Act/HSA2020?ValidDate=20231218>.

Laws and Regulations

Permenkes. Peraturan menteri kesehatan republik indonesia nomor 20 TAHUN 2019, Nomor 6588 Menteri Kesehatan Republik Indonesia Peraturan Menteri Kesehatan Republik Indonesia § (2019). <https://peraturan.bpk.go.id/Details/122744/uu-no-20-tahun-2019>.

PP. Peraturan Pemerintah (PP) Nomor 28 Tahun 2024 tentang Peraturan Pelaksanaan Undang-Undang Nomor 17 Tahun 2023 tentang Kesehatan, Kemenkes RI § (2024).
<https://peraturan.bpk.go.id/Details/294077/pp-no-28-tahun-2024>.

UURI. Kesehatan, Undang-undang Republik Indonesia Tahun 2023 Tentang Kesehatan § (2023).
<https://peraturan.bpk.go.id/details/258028/uu-no-17-tahun-2023>.