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Legal Discovery on Artificial Intelligence Accountability in Medical Diagnostics within West Java Province

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Abstract

The rapid development and integration of Artificial Intelligence (AI) within medical diagnostics present complex legal challenges that cannot be resolved merely by attributing absolute liability to either the physician or the machine. In Indonesia, regulations concerning health, health technology, electronic medical records, personal data protection, medical devices, and regional digital governance have evolved significantly. However, there remains a critical absence of a specific legal regime that explicitly delineates accountability when AI outputs contribute to misdiagnosis. This article investigates how legal discovery can reconstruct the accountability framework for diagnostic AI, specifically within the regional context of West Java Province. Utilizing a normative legal method supplemented by statutory, conceptual, philosophical, and limited comparative approaches, this study examines primary legal materials including Health Law Number 17 of 2023, Government Regulation Number 28 of 2024, Personal Data Protection Law Number 27 of 2022, and relevant West Java gubernatorial regulations. The analysis reveals that AI accountability currently exists within a fragmented legal regime. Consequently, legal discovery through systematic and teleological interpretation, legal analogy, and legal construction is imperative. This article proposes a multilayered accountability model that more clearly delineates the obligations of developers, healthcare facilities, medical personnel, central regulators, regional governments, and patients.

Keywords

Accountability, Artificial Intelligence, Legal Discovery, Medical Diagnostics.

1. Introduction

The rapid integration of Artificial Intelligence (AI) into healthcare has fundamentally transformed medical diagnostics by improving clinical triage, interpreting complex medical images, stratifying patient risks, and supporting clinical decision-making (Kharisma, 2023; Aravazhi et al., 2025). By processing large-scale, multidimensional datasets, AI offers unprecedented opportunities to enhance diagnostic accuracy and healthcare efficiency. Nevertheless, the increasing reliance on autonomous and semi-autonomous AI systems also introduces complex legal challenges that extend beyond conventional medical negligence. Patient harm may arise not only from physicians' clinical errors but also from algorithmic bias, flawed model design, inadequate software validation, poor system integration, insufficient human oversight, or automation bias that leads clinicians to over-rely on AI-generated recommendations (Habli et al., 2020; Mello & Guha, 2024). These developments have shifted the legal discourse from individual professional responsibility toward broader questions of accountability across multiple actors involved in AI deployment.

Recognizing these challenges, Indonesia has introduced several regulations governing digital healthcare. Law Number 17 of 2023 concerning Health establishes the legal foundation for health services, medical technology, health information systems, and state responsibility in healthcare delivery. This framework is further operationalized through Government Regulation Number 28 of 2024, which regulates health technology assessment, operational standards for healthcare facilities, and regulatory supervision. Complementing these provisions, Law Number 27 of 2022 concerning Personal Data Protection classifies health information as sensitive personal data requiring enhanced protection, while Ministry of Health Regulation Number 24 of 2022 accelerates the nationwide implementation of Electronic Medical Records (EMR). Collectively, these regulations demonstrate Indonesia's commitment to digital health transformation. However, none explicitly determines how legal responsibility should be allocated when AI-generated diagnostic recommendations contribute to patient injury (Benseghir et al., 2025).

Existing scholarship has primarily examined AI in healthcare through three separate perspectives. First, Char et al. (2018) and Gerke et al. (2020) emphasize the ethical implications of AI deployment, particularly the lack of explainability associated with "black-box" algorithms and its implications for informed consent, transparency, and physicians' duty of care. Second, studies have highlighted the importance of fairness and data quality. Cross et al. (2024) demonstrate that AI models trained using homogeneous datasets frequently produce unequal diagnostic performance across demographic groups, thereby reinforcing healthcare disparities. In response, Lekadir et al. (2025) argue that trustworthy medical AI requires continuous validation, fairness assessment, and post-deployment auditing throughout its lifecycle. Third, the legal literature has focused predominantly on liability allocation between physicians and AI developers. Mello and Guha (2024) contend that physicians remain responsible under traditional malpractice principles when AI merely provides clinical recommendations, whereas software developers may bear product liability when harm results from algorithmic defects embedded within the system itself.

These concerns have also attracted significant international attention. The OECD (2019) identifies human-centered values, transparency, fairness, and accountability as fundamental principles for trustworthy AI governance. Similarly, UNESCO (2021) and the World Health Organization (2021) emphasize that AI in healthcare must preserve human autonomy, promote patient well-being, and establish clear accountability mechanisms. More recently, the World Health Organization (2025) extended this guidance to Large Multi-Modal Models,

reaffirming the necessity of continuous human oversight and post-market surveillance throughout AI implementation. These international frameworks indicate that accountability for medical AI cannot be assigned solely to physicians but should instead be distributed across developers, healthcare institutions, regulators, and clinical users.

Despite these advances, significant legal uncertainty remains in Indonesia. Current domestic discussions predominantly examine the implications of personal data protection and electronic medical records, while limited attention has been devoted to integrating these regulatory regimes with the Health Law to establish a comprehensive framework for AI accountability in medical diagnostics. Furthermore, although previous studies have largely navigated three distinct pathways the ethics of AI deployment, patient data privacy, and the traditional legal liability of physicians or hospitals there remains a critical academic gap in explaining how these fragmented legal regimes can be synthesized into a coherent accountability model for AI-assisted diagnosis (Karimian et al., 2022). This gap is particularly relevant in West Java, where Provincial Regulation Number 14 of 2019 on Health Implementation and the provincial digital governance policies, including Gubernatorial Regulations Number 47 of 2022 and Number 161 of 2022, provide an institutional foundation for implementing AI-enabled healthcare while simultaneously demanding legal certainty regarding accountability.

Accordingly, this study addresses the existing gap by integrating global AI governance principles with Indonesian positive law through the theory of legal discovery proposed by Mertokusumo (2007). Rather than limiting the legal debate to determining whether liability belongs to physicians or AI systems, this article reconstructs accountability by identifying which actors should bear responsibility at each stage of AI deployment and under what legal basis. Therefore, the study aims to analyze the fragmented legal norms governing diagnostic AI accountability in Indonesia, formulate a multilayered accountability framework applicable to healthcare institutions in West Java, and provide both theoretical and practical contributions for policymakers, healthcare providers, technology developers, and regulators in developing legally sound and patient-centered AI governance.

2. Methods

This research employs a normative legal research method supported by a limited socio-legal analysis. The normative legal method is paramount because the core objective of this article is to discover, interpret, and reconstruct legal norms that are currently scattered across various domestic legal instruments concerning health, personal data protection, electronic medical records, medical devices, and regional digital governance. Limited socio-legal support is used to contextualize these legal norms within the operational realities of West Java Province, specifically examining how healthcare facilities, regional government bodies, and health information systems interact in practice.

The analytical approaches utilized in this study include the statutory approach, the conceptual approach, the philosophical approach, and a limited comparative approach. The statutory approach meticulously examines the Health Law (Law Number 17 of 2023), Government Regulation Number 28 of 2024, the PDP Law (Law Number 27 of 2022), MoH Regulation on Medical Records, West Java Health Regulation, and West Java Gubernatorial Regulations regarding Single Data and Electronic-Based Government System (*Sistem Pemerintahan Berbasis Elektronik*/SPBE). The conceptual approach breaks down and defines critical legal doctrines such as accountability, liability, human oversight, patient safety, and clinical decision support. The philosophical approach evaluates the legitimacy of AI deployment based on foundational legal principles: human dignity, corrective justice, the precautionary principle, and the ultimate protection of the patient. The limited

comparative approach benchmarks Indonesian norms against international guidelines promulgated by WHO, UNESCO, and the OECD, alongside contemporary literature on medical AI liability.

Primary legal materials comprise national legislation and regional regulations pertinent to healthcare, data privacy, and digital governance. Secondary legal materials include scientific journals, legal treatises, international policy reports, and ethical frameworks for healthcare AI. The technique for collecting legal materials involves comprehensive literature review and normative mapping. Data analysis is conducted qualitatively through several stages: the inventory of existing norms, vertical and horizontal legal synchronization, identification of normative voids, systematic interpretation, teleological interpretation, legal analogy, and finally, the construction of a comprehensive, multilayered accountability model.

3. Results and Discussion

3.1. The Scattered Legal Regime of AI Diagnostic Accountability

The comprehensive analysis of current Indonesian positive law reveals that diagnostic AI operates within a deeply fragmented and scattered legal regime. There is no single, unified *lex specialis* that comprehensively dictates the rules of engagement, procurement, utilization, and liability of AI in medical settings. Instead, the legal parameters must be synthesized from a mosaic of statutory frameworks, each designed with different primary objectives but intersecting at the point of clinical AI application. The bedrock of this regime is Law Number 17 of 2023 concerning Health, reinforced by its implementing regulation, Government Regulation Number 28 of 2024. These instruments lay down the overarching mandate for the administration of health services, the integration of health technologies, and the absolute requirement for patient safety. Under the Health Law, any technological intervention must meet stringent standards of efficacy and safety before integration into public or private healthcare facilities. However, the legislation treats "health technology" in broad strokes, lacking specific provisions addressing the unique risks of machine learning, namely, its non-deterministic outputs and the "black box" nature of its decision-making process. This generic classification means that while AI is legally permissible, the specific parameters of its validation, continuous monitoring, and the allocation of liability upon failure are left largely to administrative interpretation (Morley et al., 2020).

Complementing the health regulations is Law Number 27 of 2022 concerning Personal Data Protection (PDP Law). AI diagnostics fundamentally rely on the ingestion and processing of massive volumes of patient data. The PDP Law categorizes health data, biometric data, and genetic data as specific (sensitive) personal data. This classification triggers heightened legal obligations for data controllers (hospitals) and data processors (AI vendors). They are legally bound to ensure data accuracy, implement robust cybersecurity measures, and respect the data subject's rights, including the right to be informed about automated decision-making processes. When an AI system produces a flawed diagnosis due to biased or inaccurate training data, the legal breach occurs not just under medical malpractice, but directly under the PDP Law, exposing both the hospital and the vendor to severe administrative fines and civil lawsuits (Vokinger et al., 2021). This concern highlights the importance of trustworthy AI governance frameworks that ensure transparency, accountability, data protection, and human oversight throughout the AI lifecycle in healthcare applications (Zhang & Zhang, 2023).

Furthermore, the Ministry of Health Regulation Number 24 of 2022 concerning Medical Records acts as a crucial operational bridge. By mandating the use of EMR, this regulation inadvertently creates the infrastructure necessary for AI deployment. The EMR serves as both the feeding mechanism for AI algorithms and the vital legal

ledger the audit trail that records when an AI was consulted, what it recommended, and whether the physician accepted or rejected that recommendation. At the regional level, West Java provides a critical testing ground for the convergence of these national laws. West Java Provincial Regulation Number 14 of 2019 on Health Implementation establishes the regional government's authority to enforce health service quality. More importantly, Gubernatorial Regulations Number 47 of 2022 and Number 161 of 2022 mandate the integration and interoperability of regional data systems. This means that if diagnostic AI is adopted within West Java's public hospitals, it must interface with the regional digital architecture, adding a layer of administrative accountability to the provincial government regarding data security and system interoperability (Reddy et al., 2020).

The dispersion of these norms yields two significant legal implications. First, the absence of an AI-specific law does not grant immunity to AI developers or users; AI diagnostic tools are heavily regulated, albeit implicitly, by the intersection of health, data, and regional administrative laws. Second, this dispersion necessitates complex legal reasoning. When an adverse event occurs, liability does not automatically attach to a single actor. Judges, regulators, and hospital administrators must meticulously trace the chain of causation through multiple legal frameworks to determine fault.

Table 1. Mapping of Legal Norms Relevant to Diagnostic AI

Legal Instrument	Relevance to Diagnostic AI	Accountability Implications
Health Law Number 17 of 2023	Serves as the basis for health implementation, health technology, health information systems, and state responsibility.	Forms the baseline for evaluating service standards, patient safety, and healthcare supervision.
Government Regulation Number 28 of 2024	Regulates the execution of the Health Law, encompassing healthcare facilities, medical devices, supervision, and technology governance.	Acts as the entry point for technical and administrative standards regarding the use of AI-based diagnostic systems.
PDP Law Number 27 of 2022	Protects personal data, classifying health data as specific data requiring maximum legal protection.	Dictates the legal basis for data processing, patient rights, data security, and the liability of data controllers/processors.
MoH Regulation Number 24 of 2022 (Medical Records)	Regulates electronic medical records and the stringent documentation of health services.	Crucial for establishing audit trails, evidentiary support, patient access, and documenting AI usage logs.
West Java Regulation Number 14 of 2019	Acts as the foundational legal basis for the administration of healthcare within West Java.	Provides legitimacy for regional policies concerning quality enhancement, patient safety, and service oversight.
West Java Gubernatorial Regs Number 47 of 2022 & 161 of 2022	Regulates the West Java Single Data system and the Electronic-Based Government System (SPBE).	Serves as the bedrock for data integration, system interoperability, information security, and regional digital governance.

Table 1 demonstrates that Indonesia already possesses multiple legal instruments relevant to AI-assisted medical diagnosis; however, these regulations remain sectoral and were not specifically designed to govern autonomous or semi-autonomous diagnostic AI systems. While the Health Law and its implementing regulation establish the general framework for healthcare delivery and technology

governance, the PDP Law and Medical Records Regulation primarily address data protection, privacy, and documentation obligations rather than algorithmic accountability. At the regional level, West Java regulations strengthen digital governance through data integration and interoperability but do not specify legal responsibilities for AI-generated diagnostic decisions. Consequently, the existing legal framework provides important normative foundations for patient safety and health data governance, yet leaves significant accountability gaps concerning liability allocation, transparency, explainability, and oversight when AI contributes to clinical decision-making (Amann et al., 2020; Haryanto et al., 2025).

3.2. Legal Discovery and the Conceptual Framework for Liability

Because the aforementioned legal regime is scattered, the attribution of liability for AI-induced medical errors cannot be resolved through mere grammatical reading of the statutes. It demands the active application of legal discovery, a fundamental jurisprudential process wherein judges and legal scholars interpret, analogize, and construct the law to address concrete events not explicitly detailed in legislation (Mertokusumo, 2007). The conceptual framework for AI liability must be synthesized through multiple interpretative lenses.

First, systematic interpretation is required. The Health Law, the PDP Law, and the Medical Record regulations cannot be read in isolation; they must be interpreted as an interconnected system of patient protection. From this perspective, digital security and clinical safety are legally indivisible. An AI system that processes patient health data without robust cybersecurity protocols, or one that generates diagnostic outputs that cannot be clinically audited, simultaneously violates data privacy mandates and threatens the patient safety imperatives of the Health Law. The liability, therefore, bridges both domains (Gerke et al., 2020).

Second, teleological interpretation is essential. The ultimate purpose (*telos*) of Indonesian health law is the protection of human dignity, the assurance of patient safety, the elevation of service quality, and the maintenance of public trust in healthcare institutions. Applying this purposive approach means that AI must legally be positioned strictly as an auxiliary tool, a clinical decision support system designed to augment, not usurp, human professional judgment (Nogaroli, 2025). Therefore, the legality of any AI deployment is contingent upon its ability to demonstrably enhance safety, provide relevant explainability for its outputs, remain under continuous human oversight, and facilitate immediate corrective actions when errors are detected (Ploug & Holm, 2020).

Third, the doctrine of legal analogy must be employed to bridge the normative gap regarding the technology itself. Diagnostic AI is not perfectly identical to conventional medical devices like a scalpel or a standard Magnetic Resonance Imaging (MRI) machine, nor is it merely administrative software. However, because it actively influences clinical decision-making, it is analogous to high-risk medical devices and pharmaceutical products. Consequently, the legal principles of product liability and consumer protection apply. Technology vendors cannot be absolved of liability through boilerplate End-User License Agreements (EULAs) claiming the software is "provided as is." By analogy, if a pharmaceutical company is liable for a drug with undisclosed side effects, an AI developer must be liable for an algorithm with undisclosed performance limitations or unmitigated demographic biases (Mello & Guha, 2024).

Legal construction is necessary to formulate an operational framework of accountability. This construction explicitly rejects the notion of granting legal personhood to AI. Instead, it traces liability back to the human actors and legal entities that exercise control over specific operational risks. The fundamental axiom established here is: liability follows control over risk. The entity that designs the system holds liability for its architecture and validation; the hospital that procures the system holds liability for institutional governance and staff training; the

physician who utilizes the system holds liability for the final clinical judgment; and the government holds liability for overarching regulatory oversight.

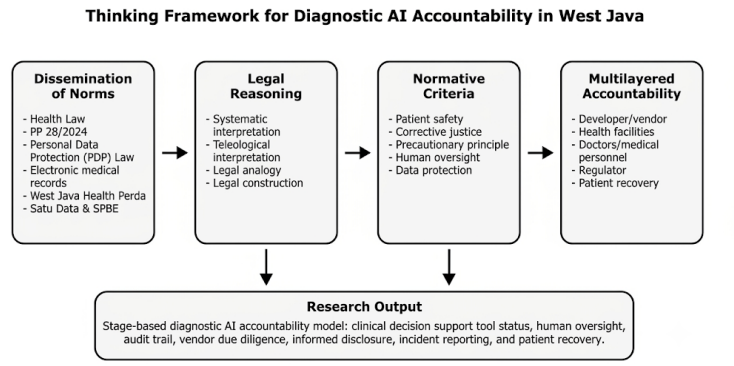

Figure 1. Conceptual Framework for Diagnostic AI Accountability in West Java

Figure 1 illustrates a conceptual framework for diagnostic AI accountability in West Java, beginning with the identification of relevant legal norms and continuing through legal discovery to address regulatory gaps. The framework establishes normative criteria, including patient safety, corrective justice, human oversight, and data protection, as the basis for determining accountability. It culminates in a multilayered accountability model that assigns responsibilities to all stakeholders while ensuring auditability, transparency, and patient protection.

This conceptual framework fundamentally reframes the discourse. It utilizes corrective justice to ensure that victims of AI-assisted misdiagnosis have clear legal avenues for remediation, preventing the "many hands problem" where no one takes responsibility. Furthermore, it integrates the precautionary principle, mandating that highly complex, opaque AI systems cannot be deployed in West Java's hospitals without rigorous pre-market validation, continuous auditing, and strict human oversight mechanisms (Leslie, 2019).

3.3. Multilayered Accountability Model and Regional Governance Roadmap

Relying solely on traditional medical malpractice law, which predominantly targets the individual physician, is wholly inadequate and unjust in the era of AI. It places an impossible burden on doctors to compensate for opaque algorithmic flaws over which they have no technical control, while inadvertently shielding the corporations that profit from the technology and the institutions that deploy it. To rectify this, legal discovery leads to the construction of a Multilayered Accountability Model, distributing liability equitably across different stages of the AI lifecycle (Cestonaro et al., 2023).

This model is structured sequentially. In the first stage (Design and Development), the technology developer or vendor bears primary liability. Their legal obligations include rigorous mathematical validation of the model, transparent documentation of the training datasets to prevent algorithmic bias, implementation of robust cybersecurity architectures, and the clear articulation of the system's operational limitations (Cross et al., 2024). If a patient is harmed because the AI was trained on flawed data, the vendor is liable under product liability and data protection laws (Benjamens et al., 2020).

In the second stage (Procurement and Institutional Deployment), the healthcare facility (hospital or clinic) assumes liability. Hospital management is legally required to conduct comprehensive due diligence before purchasing AI systems. They must ensure the AI aligns with the specific clinical needs of the demographic they serve (local validation), draft precise Standard Operating Procedures (SOPs), mandate specialized training for all end-users, ensure secure integration with the existing

EMR systems, and establish immutable audit trails. Institutional failure to implement these safeguards shifts the liability from the individual doctor to the hospital management.

In the third stage (Clinical Application), the physician's traditional duty of care is preserved but redefined. The physician must exercise human oversight, utilizing the AI critically rather than passively accepting its outputs. The doctor remains liable if they blindly follow an AI recommendation that a competent physician should have recognized as erroneous (automation bias), or if they fail to document their clinical reasoning when deviating from or accepting the AI's advice. In the fourth stage (Oversight and Remediation), the state steps in. Central regulators (Ministry of Health) govern national standards and device registration. Concurrently, regional entities like the West Java Provincial Government hold administrative liability to ensure these technologies integrate safely into the regional health ecosystem, providing platforms for incident reporting and overseeing the remediation of systemic failures to protect patient rights.

Table 2. Multilayered Liability Matrix for Diagnostic AI.

Actor	Pre-Deployment / Operational Obligations	Post-Incident Obligations
Developer / Vendor	Model validation, dataset documentation, cybersecurity, risk disclosure, system updates, and defining use-case limitations.	Error investigation, software patching, product recall, reporting, and technical evidentiary support.
Healthcare Facility	Procurement due diligence, drafting SOPs, user training, local clinical validation, EMR integration, and maintaining audit trails.	Root cause analysis, suspension of faulty systems, institutional disclosure, remediation, and evidence preservation.
Physician / Medical Staff	Active human oversight, independent clinical verification, proportional informed disclosure to patients, and documenting clinical reasoning.	Retrospective evaluation of decisions, EMR correction, and bearing professional liability if negligent.
Central Regulator	Establishing risk classification standards, device registration, national oversight, incident guidelines, and technology harmonization.	Administrative enforcement, standard updates, and systemic remediation actions.
West Java Provincial Gov.	Issuing regional implementation guidelines, integration with Satu Data & SPBE, providing training, and establishing policy sandboxes.	Implementation evaluation, coordinating regional reporting, and advising on national standards.
Patient	Right to receive relevant information, data protection, access to medical records, and the right to object to automated processing.	Access to grievance channels, relevant audit trail evidence, and legal avenues for compensation/remediation.

Table 2 summarizes the responsibilities of key stakeholders before, during, and after the deployment of diagnostic AI. It highlights a multilayered accountability framework to ensure safe implementation, transparency, and effective incident management. The cornerstone of this multilayered model is the strict enforcement of human oversight. However, philosophical oversight is legally meaningless unless mathematically and administratively verifiable. This necessitates the mandatory implementation of immutable audit trails. EMR systems in West Java must be programmed to automatically log the exact timestamp an AI was consulted, the

software version, the specific biometric data inputted, the algorithmic output generated, the identity of the consulting physician, and crucially, a mandatory text field where the physician justifies accepting, altering, or rejecting the AI's diagnostic suggestion. Furthermore, accountability demands proportional informed disclosure to the patient. Doctors are not expected to explain complex neural networks to patients; instead, they must legally disclose that an AI system is assisting in their diagnosis, explain how the patient's data is being processed, and reaffirm that the human physician retains ultimate responsibility for the final medical decision. This preserves patient autonomy and fulfills the mandate of the PDP Law without overburdening clinical workflows (Doležal & Doležal, 2025).

West Java does not need to wait for a comprehensive national AI law to take proactive measures. Utilizing the existing legal architecture of the West Java Health Regulation and SPBE frameworks, the provincial government can pioneer a regional governance roadmap. In the short term, the Provincial Health Office must issue definitive circulars classifying diagnostic AI strictly as "clinical decision support" and mandating human oversight. In the medium term, West Java should establish regulatory sandboxes controlled testing environments involving top-tier provincial hospitals (Hasan Sadikin), local universities, and tech vendors to rigorously test AI reliability, bias, and audit trail functionality before widespread public deployment. In the long term, the empirical data gathered from West Java's integrated data systems can serve as the empirical foundation for drafting national AI health legislation.

Table 3. Roadmap for Diagnostic AI Governance in West Java.

Phase	Primary Deliverables / Outputs	Responsible Entities
Short-term	Issuance of guidelines/circulars establishing AI strictly as a clinical support tool and mandating human oversight.	West Java Provincial Health Office and regional healthcare facilities.
Facility Strengthening	Implementation of procurement SOPs, local validation, audit trails, informed disclosure protocols, and AI incident reporting.	Hospitals, primary care centers (Puskesmas), quality committees, legal/compliance officers.
Policy Sandbox	Limited pilot programs to empirically test system safety, reliability, usability, algorithmic explainability, and data protection compliance.	Health Office, Dept. of Communication and Informatics (Diskominfo), universities, referral hospitals, and AI vendors.
Data Integration	Secure synchronization with West Java Single Data (Satu Data) and SPBE through interoperable and auditable data governance.	West Java Provincial Government, Diskominfo, and health data administrators.
National Standardization	Formulating policy briefs and academic recommendations to shape national standards for medical AI accountability.	Research teams, West Java Provincial Government, Ministry of Health, and legal policy institutions.

Table 3 presents a governance roadmap for the phased implementation of diagnostic AI in West Java. It outlines key actions, ranging from regulatory guidance and institutional capacity building to data integration and national standardization, with responsibilities assigned to relevant stakeholders. The phased approach emphasizes that effective AI governance cannot rely solely on legal regulation but also requires institutional readiness, technical safeguards, and coordinated multi-stakeholder collaboration. These stages provide a practical

pathway for strengthening accountability, enhancing patient safety, and generating empirical evidence to support the development of a comprehensive national regulatory framework for diagnostic AI.

4. Conclusion

Diagnostic AI in Indonesia does not operate within a legal vacuum; rather, it is governed by a fragmented regulatory framework comprising health law, personal data protection, electronic medical records, medical device regulation, institutional liability, and regional governance. Nevertheless, these legal instruments remain sectoral and do not yet provide a coherent allocation of responsibility when AI contributes to diagnostic errors. This study demonstrates that legal discovery is essential for reconstructing accountability from a simplistic single-actor liability model into a comprehensive, multilayered framework that distributes legal responsibility according to each stakeholder's degree of control over technological and clinical risks. Under this framework, technology vendors are responsible for system design and validation, healthcare facilities for institutional governance and implementation, physicians for maintaining human oversight and professional judgment, national regulators for establishing regulatory standards, and the West Java Provincial Government for regional implementation, data governance, and regulatory experimentation, while safeguarding patients' rights to information, data protection, and effective remedies.

The principal contribution of this study lies in shifting the legal discourse beyond the conventional "doctor versus machine" paradigm toward an actor- and governance-based accountability model. The findings provide policy guidance for West Java by supporting the adoption of mandatory human oversight, standardized audit trails, informed disclosure mechanisms, and regulatory sandboxes as preparatory steps toward a national governance framework for diagnostic AI. This study is limited by its normative juridical approach, which does not empirically evaluate the implementation of AI systems or stakeholder perspectives in healthcare settings. Future research should therefore incorporate empirical methods, comparative analyses across jurisdictions, and interdisciplinary approaches involving law, medicine, and computer science to assess the practical effectiveness of the proposed accountability framework and inform the development of adaptive AI governance in Indonesia.

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