LEGAL ADMISSIBILITY OF AI-DERIVED MEDICAL FINDINGS: EVALUATING RELEVANCE AND CREDIBILITY IN COURTROOMS

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ABSTRACT

The integration of Artificial Intelligence (AI) into healthcare has transformed the production and delivery of medical information. Among these advancements is the generation of AI-derived medical findings, which are increasingly relied upon for clinical decision-making. As such findings begin to intersect with legal processes, their evidentiary treatment in courts particularly in terms of admissibility, relevance, and credibility requires careful examination.

Under Indian law, provisions like Section 65B of the Indian Evidence Act recognize electronic records; however, the statute does not specifically account for the complexities introduced by AI-generated medical data. Unlike traditional documents or expert testimony, AI outputs often lack human authorship, transparency in reasoning, and established standards for verification. This raises questions about how such findings fit within existing evidentiary frameworks.

This research adopts a qualitative doctrinal methodology, relying on secondary legal sources such as statutory commentary, academic scholarship, and comparative legal developments. The study examines how AI-generated medical findings are currently addressed in legal discourse and explores whether existing laws sufficiently accommodate them. It further assesses the limitations of current legal provisions in recognizing and evaluating such technologically produced evidence.

By analysing the intersection of technology, medicine, and law, the research seeks to clarify the legal position of AI-generated medical findings and contribute to the discussion on evidentiary standards in an AI-driven era. The study highlights the need for clearer procedural guidance and legislative foresight to ensure that the integration of AI into judicial processes maintains the principles of fairness, reliability, and due process.

Keywords: Artificial Intelligence**,** Medical Findings**,** Admissibility of Evidence**,** Indian Evidence Act**,** Courtroom Proceedings.

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INTRODUCTION

The integration of Artificial Intelligence (AI) into the medical field is transforming healthcare delivery in India, offering substantial benefits in diagnostics, treatment planning, and healthcare access—especially in underserved regions. Defined by the Oxford English Dictionary as "the capacity of computers or other machines to exhibit or simulate intelligent behaviour" (Oxford University Press, 2023)[2], AI now plays a central role in disease prediction, resource optimization, and clinical decision-making.

However, the rise of AI-generated medical findings also presents complex legal challenges regarding their admissibility, relevance, and credibility in Indian courtrooms. Historically, Indian evidence law was designed in a pre-technological era—the Indian Evidence Act of 1872, drafted by Sir James Fitzjames Stephen, reflected colonial concerns about oral and documentary evidence, with no conception of digital or autonomous systems. With the enactment of the Information Technology Act, 2000, Sections 65A and 65B were inserted to recognize electronic records. Yet, these provisions remain ill-equipped to address the evolving nature of AI outputs, which lack clear human authorship and often function as opaque, data-driven "black boxes."

Judicial precedents like *Anvar P.V. v. P.K. Basheer*[3] and *Arjun Panditrao Khotkar v. Kailash Gorantyal* emphasize procedural rigor in electronic evidence, but raise interpretative issues when applied to AI systems, particularly those that are real-time, cloud-based, and constantly updating. In parallel, policy frameworks such as NITI Aayog's Principles for Responsible AI (2021)[4] promote transparency and human oversight, yet India still lacks a definitive legal position on how AI-generated medical findings should be evaluated in courtrooms. As AI technologies become increasingly embedded in medico-legal processes, the demand for clarity on their evidentiary treatment has become both urgent and inevitable.

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[2] Oxford University Press. (2023). *Artificial Intelligence*. In *Oxford English Dictionary Online*. https://www.oed.com/.

[3] *Anvar P.V. v. P.K. Basheer*, (2014) 10 SCC 473.

[4] NITI Aayog. (2021). *Principles for Responsible AI – Towards Responsible #AIforAll (Part 1)*. https://www.niti.gov.in/sites/default/files/2021-02/Responsible-AI-22022021.pdf

LITERATURE REVIEW

1) **Quezada-Tavárez, K. (2021),** *Legal Challenges in Bringing AI Evidence to the Criminal Courtroom*, *New Journal of European Criminal Law*, The paper explores the procedural risks of admitting AI-generated evidence in court, emphasizing how automation bias and lack of transparency compromise legal reliability. While impactful, it does not delve into medical contexts or discuss admissibility within Indian judicial frameworks.
2) **Kushwah, P. (2022),** *Evaluating the Evidential Value of Evidence Generated by AI*, *Indian Journal of Law and Legal Research*, Offers one of the earliest Indian analyses of AI-generated evidence under the Indian Evidence Act, especially focusing on Sections 45 and 65B.While procedurally rich, it lacks discussion on relevance or credibility of AI-generated medical findings specifically.
3) **Maddox, I. (2024),** *Forensic Machines and the Confrontation Clause*, *Journal of Law and Technology Innovation*, Addresses how forensic AI tools must be subject to cross-examination under constitutional standards, especially in criminal law. Provides a U.S.-centric analysis and lacks coverage of Indian civil or healthcare litigation where AI medical findings are deployed.
4) **Poddar, Y. & Rao, S. (2024),** *Evolving IP and Trust Issues in the Biomedical AI Sector*, *Frontiers in Artificial Intelligence*, Explores the data trust, IP concerns, and privacy risks in biomedical AI systems that may impact diagnostic integrity and reliability. The article remains non-legal in tone and omits discussion on how these issues translate to judicial credibility or evidentiary standards.
5) **De la Osa, M. & Remolina, N. (2024),** *Artificial Intelligence at the Bench*, *Data & Policy* Discusses how generative AI influences judicial decision-making and the ethical risks of relying on algorithmic reasoning without regulatory oversight. While legally rich, it addresses judicial use of AI rather than the status of AI-generated evidence as submitted in courtrooms.
6) **Grossman, I. & Grimm, M. (2025),** *Judicial Approaches to Acknowledged and Unacknowledged AI-Generated Evidence*, *Columbia Science & Technology Law Review*, Investigates how courts treat AI evidence depending on its disclosure, showing that unacknowledged AI often results in reduced credibility or exclusion. It is focused on procedural disclosure and not on medical or scientific admissibility—which your paper specifically addresses.

7) **Malviya, R. et al. (2025),** *AI in Forensic Pathology and Autopsy Analysis*, (IGI Global) Demonstrates practical application of AI in forensic pathology, including how AI models assist in autopsy assessments. The chapter is technical and medical, and does not extend its findings into the courtroom context, especially regarding legal relevance and admissibility.

STATEMENT OF RESEARCH PROBLEM

This research seeks to explore whether Artificial Intelligence-generated medical findings can be legally admitted as evidence in courtroom proceedings, and how they align with existing standards of admissibility, relevance, and credibility.

OBJECTIVES

1. To examine the legal admissibility of AI-derived medical findings under existing evidentiary frameworks.
2. To evaluate the relevance and credibility of AI-generated outputs in medico-legal proceedings.
3. To explore the limitations surrounding the use of AI-generated medical findings in courtroom proceedings.

RESEARCH GAP

While Artificial Intelligence (AI) is increasingly used to generate medical findings and assist in clinical decision-making, its legal treatment as admissible evidence in courtroom proceedings remains insufficiently addressed. The Indian legal framework, particularly under existing evidentiary laws, lacks specific provisions dealing with the admissibility, relevance, and credibility of AI-generated medical outputs. Moreover, there is limited judicial precedent and scholarly analysis on how such algorithmically produced findings are evaluated in legal forums. This gap highlights the need to explore whether current evidentiary standards can accommodate AI-derived medical content.

RESEARCH QUESTIONS

1. How is AI-generated medical findings currently treated under evidentiary law in courtroom proceedings?

2. In what ways do legal systems determine the relevance and credibility of AI-derived medical findings?
3. What challenges and uncertainties exist in admitting AI-generated medical findings as evidence in courts?

RESEARCH METHODOLOGY

This study employs a qualitative doctrinal methodology based on the analysis of secondary legal sources**.** The research draws from academic literature, scholarly articles, legal commentaries, and institutional publications that examine existing legislation, evidence law, and regulatory standards related to AI-derived medical findings.

The study focuses on understanding how secondary materials interpret the legal treatment of AI-generated medical outputs, particularly regarding their admissibility, relevance, and credibility in court proceedings.

SIGNIFICANCE

I. CONCEPTUAL FRAMEWORK: AI APPLICATIONS AND ITS GROWING ROLE IN INDIAN HEALTHCARE

The deployment of Artificial Intelligence (AI) in Indian healthcare is rapidly reshaping clinical practice, particularly in environments constrained by limited human resources and infrastructure. India's unique challenges—such as the rural-urban healthcare divide, shortage of medical professionals, and diagnostic bottlenecks—have created fertile ground for AI-driven innovation. Government initiatives like the Ayushman Bharat Digital Mission (ABDM) and National Digital Health Mission (NDHM) reflect the state's push toward integrating AI into health infrastructure to manage digital health records, assist clinical decision-making, and enhance service delivery (Das et al., 2024)[5].

AI-generated outputs now influence core clinical decisions. These outputs are no longer limited to backend analytics or administrative assistance; rather, they actively generate diagnostic insights**,** treatment suggestions**,** and medical interpretations that are recorded, relied upon, and cited in patient care (Rashid & Sharma, 2025)[6]. These findings—autonomously or semi-

[5] Das, S. K., Dasgupta, R. K., Roy, S. D., & Shil, D. (2024). *AI in Indian healthcare: From roadmap to reality*. *Computational Health Science*. https://www.sciencedirect.com/science/article/pii/S2949866X24000285.
[6] Rashid, M., & Sharma, M. (2025). *AI-assisted diagnosis and treatment planning*. In *Artificial Intelligence in Clinical Applications*. Wiley. https://onlinelibrary.wiley.com/doi/abs/10.1002/9781394278695.ch14

autonomously generated—are increasingly embedded into patient records, making them potentially admissible digital evidence in courtrooms. Their growing use raises legal questions regarding their nature, admissibility, and credibility, especially under traditional evidence frameworks not designed for autonomous systems.

A. CATEGORIES AND SPECIFIC APPLICATIONS OF AI-GENERATED MEDICAL FINDINGS

The scope of AI-generated medical findings encompasses a diverse set of technologies and clinical tasks. These can be categorized as follows:

1. Diagnostic Decision Support

AI systems now analyse symptom data, lab reports, and patient histories to produce structured differential diagnoses or prioritize diagnostic possibilities. These tools help physicians arrive at quicker, data-informed conclusions and are already integrated in several Indian public and private hospitals (Pundkar et al., 2025)[7].

2. Predictive Analytics and Risk Scoring

Machine learning models assess large datasets to predict disease outbreaks**,** readmission risks, or patient deterioration. Such tools are increasingly deployed in ICUs and emergency medicine to anticipate complications and allocate resources efficiently (Kaur, Gupta, & Kumar, n.d.)[8].

3. Pathology and Genomics

AI systems process digitized pathology slides and genomic data to identify diseases like cancer or rare genetic conditions. These results are presented in structured reports that assist, or in some cases supplement, traditional human diagnosis (Shafi & Parwani, 2023)[9].

4. Treatment Recommendation Engines

Using patient-specific inputs such as age, comorbidities, and lab parameters, AI systems generate evidence-based therapeutic pathways including drug recommendations and surgical protocols which are often reviewed by multidisciplinary clinical teams.

4. Clinical Documentation and Report Generation

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[7] Pundkar, A., Gadkari, C., Patel, A., & Kumar, A. (2025). *Transforming emergency medicine with artificial intelligence: From triage to clinical decision support*. *Medical Research*, 23(4). https://malque.pub/ojs/index.php/mr/article/download/6642/3604

[8] Kaur, A., Gupta, S., & Kumar, D. (n.d.). *AI-powered predictive modelling for disease diagnostics*. In S. Jain et al. (Eds.), *Artificial Intelligence in Healthcare and Pandemic Preparedness*. CRC Press. https://www.taylorfrancis.com/chapters/edit/10.1201/9781003570233-10

[9] Shafi, S., & Parwani, A. V. (2023). *Artificial intelligence in diagnostic pathology*. *Diagnostic Pathology*, 18, Article 104. https://link.springer.com/article/10.1186/s13000-023-01375-z

5. Natural Language Processing (NLP) models and large language models are used to draft medical summaries, automate discharge reports, and document diagnostic justifications. These outputs are also used in medico-legal audits and EMR compliance frameworks

These categories reflect the evolving landscape of AI-generated findings, which now bear significant medical, ethical, and legal weight. Unlike traditional medical opinions, these outputs often lack identifiable human authorship, function as black-box models, and raise questions of interpretability and accountability especially when introduced as evidence in court proceedings.

II. FOUNDATIONAL PRINCIPLES OF EVIDENCE LAW IN INDIA AND THE ADMISSIBILITY OF AI-GENERATED MEDICAL FINDINGS

As AI-generated outputs increasingly inform medical decisions, courts are beginning to encounter such data in legal disputes—particularly in malpractice, insurance, and personal injury litigation. These outputs must meet established evidentiary standards to be admissible. However, the Indian legal framework, built for human-authored and document-based evidence, faces difficulty in accommodating dynamic, autonomous systems. This section explores relevant statutory provisions and judicial precedents that define the admissibility path for AI-derived medical findings.

A. STATUTORY BASIS FOR ADMISSIBILITY

Section 45 – Expert Opinion

Permits expert evidence in matters of science or art. While traditionally limited to human experts, this section may extend to AI-assisted outputs if introduced or explained by a medical professional. The AI's role is thus seen as augmenting, not replacing, the human expert's opinion.

Sections 62–65 – Documentary Evidence

These provisions define primary and secondary evidence. Since AI findings are often stored or shared digitally, their printed or transferred versions typically qualify as secondary evidence, which must satisfy Section 65B conditions.

Section 65B – Electronic Records

Mandates a certificate attesting to the integrity of the electronic system that produced the data. For AI-generated outputs, this includes information on the algorithm's source, hardware

environment, and operational reliability. Non-compliance renders the evidence inadmissible, regardless of probative value[10].

Section 4 – Information Technology Act, 2000[11]

Grants legal recognition to electronic records. This section bridges traditional documentary requirements with digital equivalents, enabling AI-generated content to be treated as valid documentation if preserved and presented in accessible formats.

B. JUDICIAL INTERPRETATION

Anvar P.V. v. P.K. Basheer (2014) 10 SCC 473

Held that electronic evidence must be accompanied by a valid Section 65B certificate, overriding prior flexibility. It marked a strict shift in evidentiary standards.

Shafhi Mohammad v. State of Himachal Pradesh (2018) 2 SCC 801

Provided a temporary exception for parties unable to access original devices. However, this view was narrowed by a subsequent ruling.

Arjun Panditrao Khotkar v. Kailash Gorantyal (2020) 7 SCC 1

Reaffirmed *Anvar*, confirming that all electronic records, including third-party or cloud-stored data, must meet Section 65B certification requirements to be admissible.

These precedents clarify that AI-generated medical findings, if introduced as evidence, must either qualify under Section 45 through expert validation or be accompanied by mandatory certification under Section 65B.

III. RELEVANCE OF AI-GENERATED MEDICAL FINDINGS IN COURTROOMS

1. Understanding Relevance: What and Why?

Under Section 5 of the Indian Evidence Act, only facts in issue and facts so connected with them as to form part of the same transaction are admissible in evidence. Relevance refers to the logical connection between a fact and the issue at hand. In the context of AI-generated medical findings, relevance is established when such output helps in proving or disproving elements of liability, negligence, or causation in a legal dispute. For example, an AI-assisted diagnostic report showing a missed cancerous lesion may directly bear upon the standard of care expected from a physician.

[10] Ganguli, P. (2024). *Admissibility of Digital Evidence under Bharatiya Sakshya Sanhita*. SSRN. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4977238

[11] The Information Technology Act, 2000, No. 21, Acts of Parliament,Sec. 4, 2000 (India).

"AI findings become relevant where they help resolve a medical question that is central to the court's inquiry—this includes causation, injury scope, and procedural compliance." *(G. Naidu & V. Krishnan, 2025)*

2. Who Decides and When Is It Accepted?

The decision on relevance lies with the judge as gatekeeper, following procedural rules and judicial standards. Courts evaluate whether the evidence materially aids in determining a fact. Section 45 of the IEA allows expert opinion if the matter involves specialized knowledge—AI-generated findings are increasingly recognized when a human expert supervises or relies on them. "Relevance must also be supported by procedural validity, particularly in the use of algorithmic or automated inputs, as human oversight continues to serve as a legal bridge for AI admissibility." *(S. Gless, 2019)*[12]

3. How Relevance Is Proven for AI-Generated Medical Findings

Section 65B(4) of the IEA requires a certificate affirming the source and reliability of electronic data. Relevance here is not only logical but procedural—without this certificate, even highly probative AI outputs may be excluded. This procedural threshold ensures that only traceable and authenticated findings enter the evidentiary record. "Certification is not a mere formality—it validates the functional context in which AI-generated evidence was produced, thereby legitimizing its relevance in judicial reasoning." *(A. Rosic, 2024).*[13]

4. Jurisdictional Standards: Comparative Support

While India follows its IEA framework, other jurisdictions have codified admissibility standards that rest on relevance. In the US, the Daubert standard (FRE 702) considers relevance a component of "fit"—the evidence must pertain meaningfully to the issue. Similar reasoning underlies relevance decisions in cases like *Daubert v. Merrell Dow Pharmaceuticals*, which are influential in shaping emerging AI-evidence jurisprudence. "Courts increasingly demand that AI findings meet a purpose-specific threshold—irrelevant automation is just noise, not evidence." *(AK Dhungel, 2025)*[14]

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[12] Gless, S. (2019). *AI in the courtroom: A comparative analysis of machine evidence in criminal trials*. Georgetown Journal of International Law, 51(1). https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/geojintl51&section=12.

[13] Rosic, A. (2024). *Legal implications of artificial intelligence in health care*. Health Policy Journal. https://www.sciencedirect.com/science/article/pii/S0738081X24000981.

[14] Dhungel, A. K. (2025). *"This verdict was created with the help of generative AI…?" On the use of large language models by judges*. ACM Digital Library. https://doi.org/10.1145/3696319.

IV. CREDIBILITY OF AI-GENERATED MEDICAL FINDINGS IN INDIAN COURTROOMS

For AI-generated medical findings to carry probative weight in Indian courts, they must not only be admissible and relevant but also credible that is, procedurally robust, scientifically explainable, and ethically defensible. This section evaluates four major credibility dimensions in the Indian context: liability attribution**,** systemic reliability**,** ethical and consent considerations**,** and legal-structural constraints**.**

1. Attribution and Legal Liability

In the Indian legal system, credibility is tied to accountability. Yet AI-generated medical outputs—often lacking identifiable human authorship—raise questions about legal personhood and fault attribution. Liability is particularly contentious in negligence litigation where decisions are made on AI-derived diagnostic or prognostic outputs. "AI-generated findings must be seen as co-produced with human oversight; hence, accountability lies not with the algorithm alone but also with clinicians and data custodians." *(Mehta, 2024, Centre for Internet and Society)*

This becomes more critical under the Consumer Protection Act, 2019, which classifies healthcare services under the ambit of "services" and enables patients to sue for deficiency in medical service**.** If a wrong diagnosis or delayed treatment stems from reliance on an AI tool, liability may fall on the service provider (doctor or hospital) unless they can demonstrate due diligence in AI usage. The absence of specific provisions addressing AI in the Act means courts may apply general negligence principles—where reliance on unvalidated or non-transparent AI systems could be seen as failure to exercise reasonable care.

2. Scientific Reliability and Evidentiary Validity

The evidentiary strength of AI-generated findings in Indian courts is closely linked to their **scientific traceability and replicability**. While Section 45 of the Indian Evidence Act allows expert opinion, courts hesitate to rely on outputs that lack **explainability** or function as black-box systems. "Reliability of AI medical tools is as much a legal question as a technical one—standardised certification of these tools is essential to establish their evidentiary value." *(NITI Aayog, 2021[15])* India has yet to establish a national accreditation standard for AI-based diagnostic tools, limiting their standalone credibility in courtroom settings.

[15] NITI Aayog. (2021). *Part 1: Principles for Responsible AI*. https://www.niti.gov.in/sites/default/files/2021-06/RAI-Document-2021.pdf

3. Consent, Ethics, and Patient Autonomy

Ethical concerns are central to credibility in Indian healthcare litigation. Many AI tools operate without explicit consent from patients regarding how their data is used or whether AI is part of their diagnosis. This undermines both procedural fairness and patient autonomy. "Credibility collapses when AI operates in silence—without consent, transparency, or recourse." *(Indian Council of Medical Research, 2023)*[16] The ICMR Guidelines on AI in Biomedical Research (2023**)** stress that all AI outputs must be accompanied by consent disclosures, human oversight, and bias evaluation protocols, aligning legal credibility with medical ethics.

4. Structural Limitations: Cross-Examination and Procedural Gaps

AI-generated findings cannot be directly cross-examined. Indian courts, structured around adversarial cross-examination, face procedural discomfort with admitting such evidence unless it is validated by a testifying expert. "AI tools lack testimonial capacity; therefore, their outputs must be accompanied by human expert endorsement to gain legal traction." *(Kumar & Sinha, 2023, Indian Law Review)* Without updates to procedural law, AI-generated medical outputs will remain auxiliary, not standalone, evidence.

[16] Indian Council of Medical Research. (2023). *Ethical Guidelines for Application of AI in Biomedical Research and Health Care*. https://main.icmr.nic.in

LIMITATIONS

Despite the growing integration of AI in diagnostics and clinical assessments, the admissibility and credibility of AI-generated medical findings in courtrooms face critical limitations. These challenges are rooted not only in technical constraints but also in doctrinal, procedural, and ethical gaps.

First, many AI medical tools—particularly those based on deep learning architectures—operate as black boxes, meaning their decision-making logic is not readily interpretable by users, experts, or judges. This lack of explainability undermines their forensic value, as courts traditionally require traceable reasoning to assess evidentiary weight (Grimm, Grossman, & Cormack, 2021)[17]. Second, the EU Artificial Intelligence Act (2023 Draft) categorizes AI systems used in diagnostics and legal decision-making as "high-risk," mandating transparency, traceability, and audit logs. Without these elements, such systems may be legally inadmissible under EU and likely Indian standards in the future (Sachoulidou, 2024)[18].

Third, most AI tools currently used in hospitals lack forensically viable audit trails, especially when deployed in real-time or cloud-based environments. This creates gaps in the chain of custody, a crucial evidentiary condition under Section 65B of the Indian Evidence Act (Emehin et al., 2025)[19]. Fourth, these systems also cannot testify or respond to cross-examination, a limitation that deprives adversarial courts of a vital mechanism for testing credibility. While human experts may validate AI outputs, the AI itself remains a non-testimonial source (Koellner, 2025)[20].

Fifth, many jurisdictions including India do not have formal legal definitions for AI-generated evidence, causing uncertainty in classification and admissibility. Courts are left to apply general electronic evidence rules, which do not account for the autonomous nature of AI outputs, leading to ad hoc judicial discretion (Bharathi, 2024)[21]. Sixth, the global regulatory environment remains fragmented, with differing admissibility rules across countries and even

[17] Grimm, P. W., Grossman, M. R., & Cormack, G. V. (2021). Artificial intelligence as evidence. *Northwestern Journal of Technology and Intellectual Property, 19*(1). https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/nwteintp19&section=4

[18] Sachoulidou, A. (2024). Harnessing AI for law enforcement: Solutions and boundaries from the forthcoming AI Act. *New Journal of European Criminal Law*. https://journals.sagepub.com/doi/abs/10.1177/20322844241260114

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[20] Koellner, E. (2025). *Black Box Justice? Legal evidence, digital democracy, and the risks of AI in hyper-specialized courts*. SSRN. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5215622

[21] Bharathi, G. (2024). *Ethical, Legal, and Social Implications of AI in Cancer Care*. ResearchGate. https://www.researchgate.net/publication/391778198

within federated systems. This inconsistent governance limits cross-border harmonization and hinders the standardization of AI evidence (de la Osa & Remolina, 2024).

Seventh, the proprietary nature of most commercial AI tools poses another credibility issue. Courts often cannot access the algorithms, training data, or update logs used to produce the findings. This lack of transparency violates principles of procedural fairness, particularly when the opposing party cannot challenge or validate the tool's operation (Singh et al., 2025)[22]. Eighth, even when algorithmic structure is accessible, the training data used to build these tools is often biased or non-representative, leading to distorted outcomes. In legal contexts—such as medical negligence or insurance fraud—such skew can exacerbate inequality and wrongful decisions (Kanagarajah, 2024)[23].

Ninth, AI-generated findings lack empathetic or human-contextual insight, which is vital in cases involving patient trauma, doctor-patient relationships, or end-of-life decisions. These systems cannot account for subjective pain, ethical nuances, or cultural variations that frequently arise in courtroom testimony (Okonji et al., 2024)[24]. Finally, the Indian legal ecosystem still lacks codified AI governance laws for health-tech litigation. Without standardized protocols or sector-specific regulations like DISHA being enacted, courts must rely on general principles, often leading to inconsistent and discretionary evaluations of AI-based evidence (Mehta, 2024)[25].

[22] Singh, B., Kaunert, C., Balusamy, B., & Dhanaraj, R. K. (2025). *Computational Intelligence in Healthcare Law: AI for Ethical Governance and Regulatory Challenges*. Google Books. https://books.google.com/books?id=Rk1TEQAAQBAJ

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[24] Okonji, O. R., Yunusov, K., & Gordon, B. (2024). *Applications of Generative AI in Healthcare: Algorithmic, ethical, legal and societal considerations*. arXiv. https://arxiv.org/abs/2406.10632

[25] Mehta, R. (2024). *AI and liability in Indian health tech: From tool to co-decision-maker*. Centre for Internet and Society.

CONCLUSION

A. RECOMMENDATIONS

To integrate AI-generated medical findings into Indian judicial proceedings with both legitimacy and consistency, the legal system must undertake a series of structured and context-specific reforms. First and foremost, there is an urgent need to codify the evidentiary status of such outputs within statutory law. The Indian Evidence Act, as well as the proposed Bharatiya Sakshya Adhiniyam, must be amended to introduce a new classification for AI-derived outputs—distinct from conventional digital records and expert opinion. This classification should specify admissibility criteria such as verifiability, algorithmic transparency, metadata trails, and certification by a qualified expert, thereby providing clarity to judges and litigators alike.

Equally essential is the establishment of multidisciplinary evidence review panels within higher courts and specialized tribunals. These panels—comprising legal scholars, clinicians, computer scientists, and data ethicists—should serve as advisory bodies to the judiciary, evaluating AI-generated medical findings for scientific reliability, contextual integrity, and ethical compliance before admission. Their assessments would serve as procedural filters, aiding the judge's gatekeeping function while preserving judicial independence.

To support ongoing innovation without compromising procedural safeguards, regulatory sandboxes should be introduced under the joint aegis of the judiciary and the Ministry of Electronics and Information Technology. These sandbox environments would allow courts to test AI systems in controlled legal contexts, while simultaneously evaluating their reliability and evidentiary robustness. Further, the creation of a centralized national registry of clinically approved AI tools—detailing operational logic, version history, training data origin, and institutional endorsements—would support future admissibility assessments and enable traceable accountability in litigated matters.

Procedurally, AI-generated findings must always be accompanied by human expert testimony. A qualified clinician or forensic specialist should be required to interpret, contextualize, and defend the AI-generated output in court. This preserves the right to cross-examination and aligns with the adversarial structure of Indian litigation. Lastly, judicial and legal education institutions must incorporate dedicated training modules in AI, algorithmic evidence, digital privacy, and medical-legal ethics. Such training would enhance the judiciary's capacity to assess technically complex evidence and reduce dependency on opaque technological outputs.

Together, these reforms would ensure that the adoption of AI-generated medical findings in legal proceedings does not undermine procedural fairness, evidentiary integrity, or public trust in the justice system.

The integration of artificial intelligence in medicine represents a profound shift—not only in how care is delivered, but in how legal accountability is structured. AI-generated medical findings, when introduced in court, challenge traditional notions of authorship, verifiability, and testimonial reliability. Indian courts must therefore proceed with caution, embracing innovation while safeguarding due process, patient rights, and evidentiary integrity.

This research has shown that while AI-generated outputs can play a valuable role in resolving medical disputes, their courtroom use must be circumscribed by robust procedural safeguards, expert oversight, and legislative clarity. Comparative frameworks such as the EU Artificial Intelligence Act and the U.S. AI Bill of Rights offer instructive benchmarks, but India must craft its own path—grounded in its constitutional values and healthcare realities.

Ultimately, the legal system must view AI not as a threat to judicial truth but as a new kind of witness—one that demands reimagined rules of engagement. With clear statutes, institutional preparedness, and ethical rigor, India can lead the world in responsibly integrating artificial intelligence into the pursuit of justice.

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7. Civil Procedure Rules 1998, Part 35 (UK).
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4. *Daubert v. Merrell Dow Pharmaceuticals* 509 US 579 (1993).
5. *Mata v. Avianca, Inc.* 2023 WL 4114965 (SDNY).
6. *Christian Louboutin SAS & Anr. v. M/s The Shoe Boutique* – Shutiq (CS (COMM) 583/2023) - Delhi High Court.
7. *Indian Medical Association v. V.P. Shantha* AIR 1995 SC 550
8. *Swapnil Tripathi vs Supreme Court Of India* AIR 2018 SC 4806
9. *Tomaso Bruno v. State of Uttar Pradesh* (2015) 7 SCC 178.
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