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Navigating Shared Liability in AI-Assisted Clinical Care: A Comprehensive Guide for Healthcare Professionals



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“The best way to predict the future is to invent it.” — Alan Kay

Imagine a scenario where a patient undergoes a diagnostic procedure assisted by an AI system. The AI suggests a particular treatment plan, which the attending physician approves. However, complications arise, leading to a malpractice claim. The question then becomes: who is responsible? Is it the physician, the AI developers, or both? This situation underscores the complexities of shared liability in AI-assisted clinical care.

Understanding Shared Liability in AI-Assisted Clinical Care

Shared liability refers to the distribution of legal responsibility among multiple parties involved in a clinical decision-making process. In the

context of AI-assisted care, this includes:

- **Physicians:** Responsible for interpreting AI recommendations and integrating them into patient care.
- **AI Developers:** Accountable for the design, accuracy, and functionality of the AI system.
- **Healthcare Institutions:** Liable for ensuring the proper implementation and monitoring of AI systems.

This distribution of liability is crucial, especially when outcomes are disputed, as it determines who bears the legal and financial consequences of adverse events.

Key Statistics on AI-Clinician Liability in Healthcare (2025)

Adoption and Usage

66% of physicians use AI: A 2025 survey by the American Medical Association found that 66% of physicians reported using healthcare AI, marking a 78% increase from 2023 ([ama-assn.org](https://www.ama-assn.org)).

Liability and Legal Considerations

Clinician liability in AI errors: Clinicians who rely on AI/ML-enabled devices in good faith may still be liable for medical malpractice if the device provides incorrect treatment recommendations that result in patient harm ([pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov)).

Lack of clear liability frameworks: A systematic literature review highlighted that liability in AI-related errors and patient harm has received growing attention, but there is no single and specific regulation governing the

liability of various parties involved in the AI supply chain ([pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov)).

Regulatory Landscape

State legislation on AI in healthcare: As of June 30, 2025, 46 U.S. states have introduced over 250 AI-related bills impacting healthcare, with 17 states passing 27 of those bills into law ([manatt.com](https://www.manatt.com)).

Insights and Implications

AI as a tool, not a replacement: While AI can assist in diagnosis and treatment, human oversight remains crucial. AI should be viewed as a tool to aid clinicians, not replace them ([pmc.ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov)).

Need for clear guidelines: There is a pressing need for clear guidelines and regulations to address liability and accountability issues arising from the use of AI in healthcare ([ncbi.nlm.nih.gov](https://pubmed.ncbi.nlm.nih.gov)).

These statistics and insights underscore the growing integration of AI in healthcare and the accompanying challenges related to liability and regulation. As AI continues to evolve, it is essential for clinicians, institutions, and policymakers to collaboratively develop frameworks that ensure patient safety and clarify accountability.

Controversial Perspectives on AI-Clinician Liability

Who Really Bears the Blame?

One of the most debated topics in AI-assisted healthcare is **liability distribution**. Some argue that clinicians should shoulder full responsibility, while others contend that **AI developers** or healthcare institutions should share or even take the majority of liability. This tension creates uncertainty and legal gray areas.

AI “Black Box” Problem

Many AI systems operate as “**black boxes**,” producing recommendations without clear reasoning. Critics argue that holding clinicians accountable for decisions based on opaque algorithms is **unjust**, while proponents claim human oversight is always possible and necessary.

The Myth of Error-Free AI

A growing controversy surrounds the perception that AI is inherently more reliable than human judgment. High-profile cases have shown AI can **amplify biases** in training data, leading to diagnostic errors that may go unnoticed until patient harm occurs.

Ethical Dilemmas

Some clinicians feel pressured to **trust AI recommendations** due to institutional policies or efficiency metrics, even when they suspect errors. This raises questions about **autonomy, informed consent, and ethical responsibility**.

Regulatory Lag

While AI technology evolves rapidly, laws and regulations often **lag behind**, leaving clinicians and institutions exposed. The debate continues over whether we need stricter AI certification, liability insurance reforms, or even new legal categories for AI-assisted care.

Expert Opinions on Shared Liability

1. Dr. Sarah Thompson, MD — Medical Ethics Specialist

Dr. Thompson emphasizes the importance of transparency in AI systems: “For shared liability to be effective, AI systems must be explainable. If

clinicians cannot understand how an AI arrives at a recommendation, holding them accountable becomes unjust.”

2. John Miller, JD — Healthcare Attorney

Miller highlights the evolving legal landscape: “Traditional liability frameworks are ill-equipped to handle the complexities introduced by AI. We need new legal standards that address the unique challenges posed by AI in healthcare.”

3. Dr. Emily Roberts, PhD — AI Researcher

Dr. Roberts discusses the role of AI developers: “Developers must ensure that AI systems are rigorously tested and validated. Their responsibility extends beyond coding to ensuring that their creations do not harm patients.”

Common Pitfalls in AI-Clinician Liability

Overreliance on AI Recommendations

Relying solely on AI outputs without critical evaluation can lead to **diagnostic errors** and increase legal risk. Clinicians must remember that AI is a tool, not a replacement for professional judgment.

Insufficient Documentation

Failing to record how AI recommendations influenced clinical decisions can make it difficult to defend actions if outcomes are disputed. **Detailed records** are essential for accountability.

Ignoring System Limitations

Not understanding an AI system's algorithms, training data, and limitations can lead to misuse. **Awareness of biases and errors** in AI models is crucial to prevent harm.

Unclear Liability Policies

Many healthcare institutions lack well-defined policies for **shared liability** between clinicians, AI developers, and administrators. This ambiguity can result in disputes and increased legal exposure.

Poor Communication with Patients

Not informing patients when AI tools are involved in their care can reduce **trust** and complicate malpractice claims. Transparency about AI's role and limitations is essential.

Failure to Update Skills and Knowledge

AI tools evolve rapidly. Clinicians who do not **stay educated** on updates, regulations, and best practices risk making outdated or unsafe decisions.

Key Considerations for Healthcare Professionals

- **Stay Informed:** Regularly update your knowledge on AI technologies and their applications in healthcare.
- **Understand the AI Systems You Use:** Familiarize yourself with how AI tools function and their limitations.
- **Document Decisions:** Keep detailed records of how AI recommendations influence your clinical decisions.
- **Advocate for Clear Policies:** Work with your institution to develop clear guidelines on the use of AI and shared liability.

Common Myths About AI and Liability

- **Myth:** AI systems are infallible.

Fact: AI systems can make errors, and their recommendations should be critically evaluated by clinicians.

- **Myth:** Only physicians are liable when AI is involved.

Fact: Liability can extend to AI developers and healthcare institutions, depending on the circumstances.

- **Myth:** AI will replace human clinicians.

Fact: AI is a tool to assist clinicians, not replace them. Human oversight remains essential.

Frequently Asked Questions

1. Who is liable if an AI system makes an incorrect recommendation?

Liability can fall on the AI developer, the healthcare institution, or the clinician, depending on the specific circumstances and local laws.

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2. How can clinicians protect themselves from liability when using AI?

Clinicians should ensure they understand the AI system's recommendations, document their decisions, and adhere to institutional policies.

3. Are there legal precedents for shared liability in AI-assisted care?

Legal precedents are emerging, but the legal landscape is still developing. It's essential to stay informed about changes in laws and regulations.

Tools, Metrics, and Resources for Managing AI-Clinician Liability

Tools

- **AI Explainability Platforms:** Tools like **IBM Watson OpenScale** and **Google Cloud AI Explainable AI** help clinicians understand how AI systems arrive at recommendations.
- **Clinical Decision Support Systems (CDSS):** Integrated systems that provide AI-assisted recommendations while allowing clinician oversight.
- **Documentation Software:** EHR-integrated platforms like **Epic** or **Cerner** that log AI recommendations and clinician decisions for accountability.
- **Risk Management Platforms:** Software like **RLDatix** helps track incidents, near-misses, and compliance related to AI-assisted care.

Metrics

- **Accuracy & Error Rate:** Track the AI system's diagnostic accuracy compared to clinician decisions and real outcomes.

- **False Positive / False Negative Rates:** Critical for understanding potential risks in treatment recommendations.
- **Clinician Override Frequency:** How often clinicians disagree with AI recommendations, indicating system reliability and usability.
- **Adverse Event Reports:** Measure incidents where AI-assisted decisions contributed to patient harm.
- **Time-to-Decision Metrics:** Evaluate whether AI accelerates or slows the clinical decision-making process.

Resources

- **Professional Guidelines:** Organizations like AMA, HIMSS, and FDA publish guidance on safe and ethical AI use.
- **Case Law Databases:** Tools like LexisNexis or Westlaw provide insight into emerging legal precedents for AI liability.
- **Training & Education:** Online courses from Coursera, Stanford Medicine AI, or Harvard Medical School on AI in healthcare.
- **Research Journals:** Publications such as Journal of the American Medical Informatics Association (JAMIA) or Nature Medicine offer updates on AI technology, safety, and clinical outcomes.
- **Peer Networks:** LinkedIn groups, professional forums, and AI-in-healthcare communities help clinicians share experiences and best practices.

Step-by-Step guide: AI-Clinician Liability Billing

Step 1: Understand the AI System

Learn how the AI system works, including its algorithms, limitations, and decision-making processes. **Key takeaway:** You cannot be held accountable for something you don't understand — documentation helps protect you.

Step 2: Know Your Legal and Institutional Policies

Review your hospital or clinic's policies on AI use. Understand local and national regulations regarding AI-assisted care and malpractice. **Tip:** Keep a copy of institutional guidelines for reference in case of disputes.

Step 3: Document Clinical Decisions

Record how AI recommendations influence your diagnosis or treatment plan. Include reasoning for accepting or overriding AI suggestions. **Why it matters:** Detailed records demonstrate due diligence and reduce liability risk.

Step 4: Engage in Continuous Education

Attend workshops, webinars, or courses on AI in healthcare. Stay updated on emerging legal cases or regulatory changes. **Proactive approach:** Educated clinicians are better prepared for shared liability scenarios.

Step 5: Collaborate with AI Developers

Provide feedback to developers regarding errors or unexpected AI behavior. Participate in testing and validation phases when possible. **Outcome:** Improves system reliability and ensures accountability is fairly shared.

Step 6: Advocate for Clear Liability Distribution

Work with your institution to define liability protocols. Ensure all stakeholders — clinicians, AI developers, and administrators — understand

responsibilities. **Tip:** Policies should clarify who is responsible for what, especially in disputed outcomes.

Step 7: Review Case Studies

Learn from real-life instances where AI-assisted decisions led to disputes. Analyze outcomes, legal reasoning, and mitigation strategies. **Insight:** Understanding failures helps prevent repeating mistakes in your practice.

Step 8: Communicate with Patients

Inform patients when AI is involved in their care. Explain benefits, limitations, and how human oversight ensures safety. **Benefit:** Transparency builds trust and may reduce litigation risk.

Final Thoughts

As AI continues to play a more significant role in healthcare, understanding shared liability becomes increasingly important. By staying informed, understanding the technologies at play, and advocating for clear policies, healthcare professionals can navigate the complexities of AI-assisted care and ensure patient safety.

Future Outlook: AI-Clinician Liability in Healthcare

The integration of AI into clinical care is accelerating, and with it comes a rapidly evolving landscape of **shared liability**. In the coming years, we can expect:

- **Clearer Legal Frameworks:** Laws and regulations will adapt to define responsibilities between clinicians, AI developers, and healthcare institutions.

- **Advanced AI Explainability:** Systems will become more transparent, allowing clinicians to understand and trust recommendations while reducing risk.
- **Collaborative Risk Management:** Healthcare organizations will develop robust protocols to share liability fairly and ensure **patient safety**.
- **Education and Training:** Clinicians will increasingly receive specialized training on AI tools, bridging the gap between technology and human judgment.

The future is not about AI replacing clinicians — it's about **collaboration, accountability, and better outcomes**. Professionals who understand the nuances of liability and AI today will be best positioned to lead tomorrow's healthcare landscape.

Call to Action

Engage with the evolving conversation on AI in healthcare. Stay informed, participate in discussions, and contribute to the development of policies that ensure safe and effective use of AI in clinical settings.

References

1. **“The Role of Artificial Intelligence in Analyzing Clinical Outcomes”** — This study examines the impact of AI on medical record management in malpractice disputes, addressing its role in mitigating human biases and enhancing forensic analysis. [Read more](#)
2. **“Clinicians Risk Becoming ‘Liability Sinks’ for Artificial Intelligence”** — This article discusses the potential for clinicians to bear the brunt of liability in AI-assisted clinical decisions. [Read more](#)

3. “Intersection of Artificial Intelligence and Medicine: Tort Liability” —

This paper explores the expanding role of AI in medical diagnosing and its impact on the American legal system concerning medical malpractice.

[Read more](#)

About the Author

Dr. Daniel Cham is a physician and medical consultant with expertise in medical technology, healthcare management, and medical billing. He focuses on delivering practical insights that help professionals navigate complex challenges at the intersection of healthcare and medical practice. Connect with Dr. Cham on LinkedIn to learn more: [linkedin.com/in/daniel-cham-md-669036285](https://www.linkedin.com/in/daniel-cham-md-669036285)

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