Ensuring Responsible AI Integration in Healthcare

The integration of artificial intelligence (AI) tools in healthcare promises improved quality, safety, and care equity by enabling real-time data analysis to support clinical decision-making and personalized treatment. However, inherent biases and lack of transparency regarding AI systems pose safety and accessibility risks if deployment proceeds without appropriate safeguards.

As the leading organization for clinical informatics, the American Medical Informatics Association (AMIA) recommends the following to encourage innovation while prioritizing patient wellbeing through responsible development and oversight of healthcare AI.

1. **Require transparency in the function of AI tools that clearly explains intended use and data context in non-technical language.**

To encourage confident use of healthcare AI, AMIA recommends requiring transparency labels that describe the purpose of the AI tool, the population on which the data was trained, and mandating testing in diverse user populations during development to address equity. This information will allow clinical users to assess risk when considering the use of a particular AI tool.

Patients must also have confidence in healthcare AI. AMIA recommends an additional transparency label, focused on the patient as the audience, that describes the purpose of the AI tool and how it is used in their care. Labels should not include formulas, algorithms, or technical jargon that is not readable to a lay person to allow informed consent prior to care provision.

Labels must provide information on how the AI tool may support clinical decision-making and must be used in conjunction with human clinical judgement to ensure compliance with standards of care.

For legitimate and effective policies, Congress must engage in public-private partnerships to ensure expertise in both the technology development, day-to-day use of AI, constituent concerns, and policy implementation.

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1. [Survey](https://cartahealthcare.com) | Carta Healthcare, 2023
2. [Report](https://www.pewresearch.org) | Pew Research Center, 2023
3. [AI in Healthcare](https://www.rcplondon.ac.uk) | Transforming the Practice of Medicine | Royal College of Physicians
Validate and Monitor Healthcare AI through Assurance Labs.

The need to create accepted procedures to assure the fair, appropriate, valid, effective, and safe use of AI in healthcare is needed to ensure good patient outcomes and to strengthen trust in healthcare. A nation-wide network of health AI assurance labs, supported by public-private partnership, will contribute to consistency and such accepted procedures. In this network, community best practices could be applied for testing health AI models to produce reports on their performance that can be widely shared for managing the lifecycle of AI models over time and across populations and sites where these models are deployed. Finally, these labs can support regulation of AI through the testing of standards and evaluation metrics.⁴

Minimize or limit any possible increase in documentation burden for providers and patients caused by policies regulating the use of AI tools in healthcare.

AI has the potential to improve the glaring issue of documentation burden, currently devastating our healthcare workforce and patient access to quality care, while fitting into the workflow.⁵ Focusing on eliminating documentation redundancies while maintaining patient data accuracy is direly needed to avoid preventable errors and positively impact patient care.⁶

Work directly with clinical informaticians when developing and implementing national AI policies.

For legitimate and effective policies, Congress must engage and leverage the expertise of the hundreds of members with decades of real-world AI expertise, from algorithm development through to point-of-care implementation. AMIA’s diverse membership spans healthcare companies creating AI tools, hands-on clinicians, and medical researchers. AMIA works closely with Harvard’s Division of Clinical Informatics (DCI) and the Coalition for Health AI (CHAI) on responsible AI integration in healthcare and urges Congress to work with AMIA, DCI, and CHAI as well.⁷

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6. For more information on documentation, please see AMIA’s 25x5 Task Force.

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