

## Healthcare AI: Credibility, Safety & Accountability



Dr. John Halamka, President of Mayo Clinic Platform, highlighted the significant potential benefits and potential harm of artificial intelligence (AI) in healthcare during <u>HIMSS 2024</u>. He emphasised the credibility issue in healthcare AI due to the lack of transparency and accountability in AI models. Halamka stressed the importance of strategies to ensure the safety of AI applications in clinical settings.

## Trustable health data need to be diverse and representative

One crucial aspect he discussed was the quality of data used to train Al algorithms. He pointed out that curated and normalised data with a clear understanding of its sources and purposes is essential. However, he highlighted challenges such as poor data integrity in electronic health records and the inadequacy of social determinants of health data, which can lead to biased results. Halamka raised questions about the diversity and representativeness of data, emphasising the need for comprehensive datasets to develop resilient Al models. He suggested considering multimodal data elements and data breadth, as well as addressing heterogeneity across different populations. Moreover, he emphasised the necessity of addressing biases in Al models, particularly regarding sensitive factors like race and ethnicity. He advocated for cautious inclusion of such data to avoid unintended biases in predictive models. Halamka also insisted on the importance of testing Al models on diverse datasets to evaluate fairness and effectiveness. He highlighted the role of organisations like the Coalition for Health Al in defining standards and frameworks for evaluating Al models.

## Mayo Clinic's approach to Al challenges

New challenges are posed by generative AI, which requires more complex evaluation due to its ability to generate responses based on prompts. New potential risks associated with generative AI appear, such as misdiagnosis based on ambiguous prompts. In addressing these challenges, Halamka shared insights from Mayo Clinic's approach to AI, including data de-identification, model generation, validation, and deployment. He acknowledged the resource disparities among healthcare systems and encouraged organisations to leverage available resources and learnings to establish a responsible AI lifecycle.

Dr. John Halamka emphasised the importance of prioritising patient safety in the development and deployment of AI in healthcare. He called on healthcare organisations to adopt best practices, collaborate with global partners, and utilise available resources to maximise the benefits of AI while minimising potential harm.

Source: <u>HIMSS 2024</u> Image Credit: <u>iStock</u>

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