

Health equity at a crossroads: the rise of AI

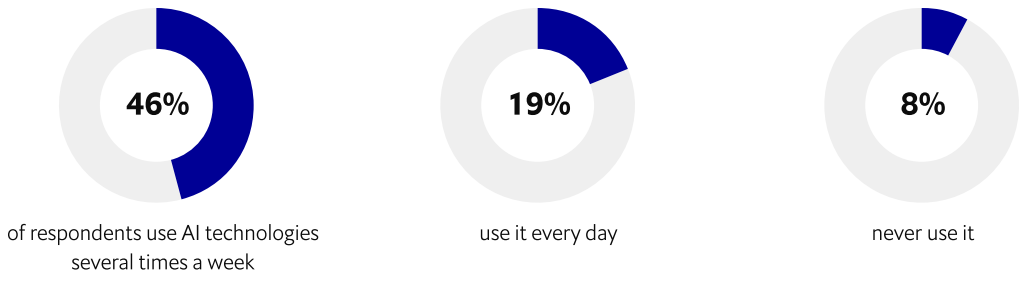
The United States (US) healthcare system is beset by significant disparities, spanning race, ethnicity, gender, age, and geography.¹ Tackling these disparities calls for innovative solutions. One promising approach is the growing use of Artificial Intelligence (AI) in healthcare. Economist Impact, commissioned by EMD Serono, set out to assess how AI can mitigate and/or exacerbate health disparities in the US.

Commissioned by

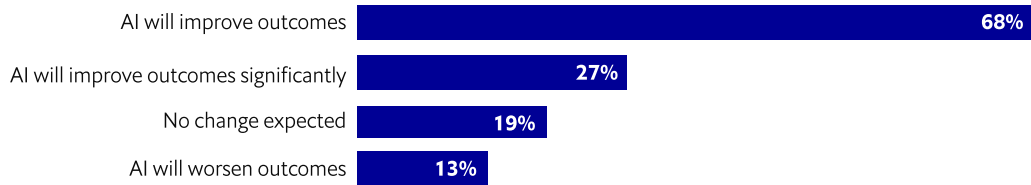


AI usage, expected impact and challenges

According to our survey of 600 US healthcare providers, executives, payers, and patient advocates:



When asked if the use of AI in health and medicine will change patient outcomes in the **next five years**:



In the next five years, AI is expected to have the **biggest positive impact*** on:



84%
Objective data analysis



83%
Diagnostic accuracy and reliability



83%
Optimization of resource allocation

*Note: frequency selected

In the next five years, AI is expected to have the **least positive impact*** on:



36%
Patient engagement and experience

*Note: frequency selected



32%
Bias in clinical decision-making

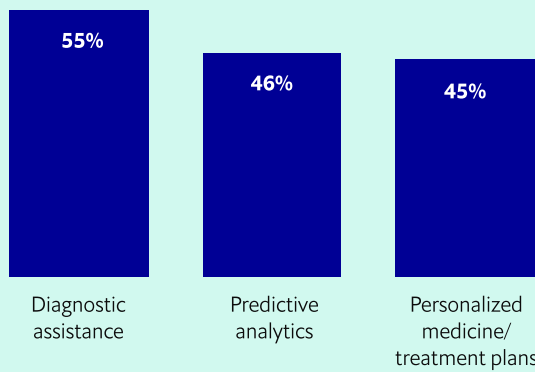


31%
Patient-provider relationship

This suggests that while AI has the potential to **enhance clinical decision-making and healthcare efficiency**, **patients will continue to value the personal, emotional, and ethical aspects of patient care.**



The leading uses of AI among healthcare providers and hospital administrators are:

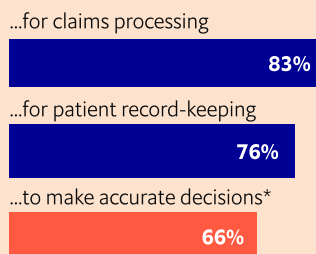


While AI is also increasingly used to streamline administrative tasks such as **scheduling, billing, and patient data management**,² **fewer than 1 in 5** of surveyed healthcare providers and executives use AI for 'scheduling and resource management' and 'patient flow management'.

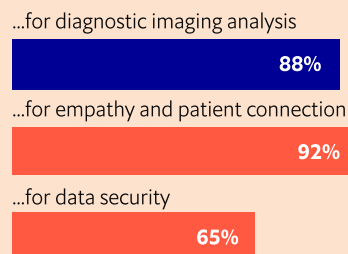
When it comes to trusting AI to make accurate decisions:

■ Trust AI... ■ Distrust AI...

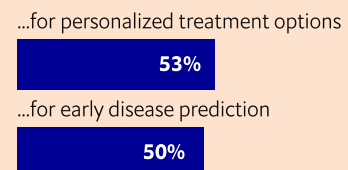
Payers and patient advocates:



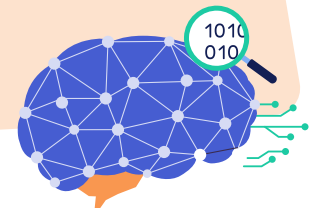
Healthcare providers:



Healthcare executives:

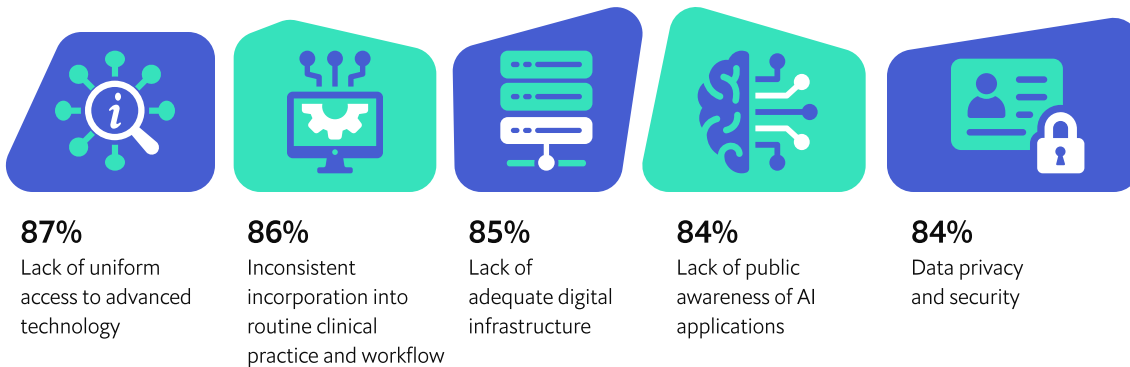


*regarding insurance coverage for AI-driven services and assessing patient needs, values and priorities



This suggests overall trust in AI for administrative and diagnostic tasks with a **preference for human involvement in areas requiring emotional intelligence**, as well as concerns about **data privacy and security**.

The relatively recent and rapid rise of AI means that its adoption will also face challenges. Our survey identified **top* five perceived barriers**:



*Note: frequency selected

This suggests key concerns involve **implementation, access, and ethics**.

The role of AI in advancing health equity

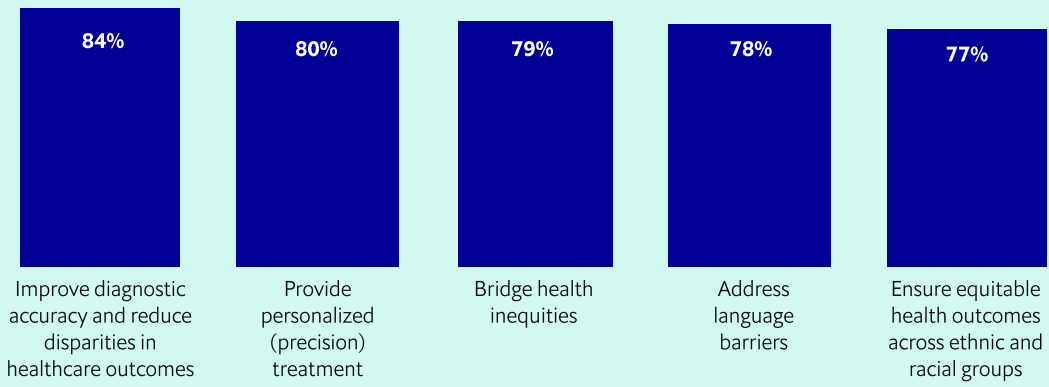


If individuals aren't well represented ... then we shouldn't expect the decisions [regarding] individuals to always be the best ones.

Dr. Colin G Walsh, Associate Professor, Department of Biomedical Informatics, Vanderbilt University

AI has the potential to help reduce disparities in healthcare

Survey respondents overwhelmingly agree that AI can:



Or amplify existing inequities and create new disadvantages

AI systems are only as reliable as the data and algorithms upon which they are built. Racial and ethnic minorities are frequently under-represented in datasets, largely due to variations in access to care and healthcare-seeking behaviors.³ These data gaps can worsen health disparities and affect the generalizability of the data.⁴ If not carefully implemented, AI could amplify existing inequities and create new ones, particularly for vulnerable populations.





The biggest risk that we have cited or we have ascribed to AI is the fact that AI is trained on historical data.

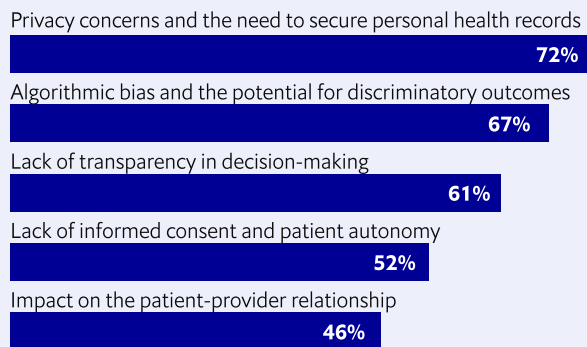
Leo Anthony Celi, Senior Research Scientist, Massachusetts Institute of Technology (MIT); Clinical Research Director, Laboratory of Computational Physiology, MIT

Most survey respondents are not confident in AI's ability to reduce **bias** in healthcare decision-making (only 24% of respondents believe it will) or **improve trust** in the healthcare system (20% say it will).

The **top* five ethical concerns** raised by respondents include:



*Note: frequency selected



Ensuring AI works for all—policymaking priorities

AI can transform healthcare, but it must be designed with diverse input, patient trust, and transparency to ensure fairness and equity. Collaboration among stakeholders is crucial to prevent bias, safeguard patient rights, and ensure equitable access. Our research highlights the key priorities for US policymakers:

1

Combat bias in data and algorithmic design

Algorithmic vigilance is crucial for ensuring AI systems are designed to prevent adverse effects and remain fair and inclusive.



2

Assure patients a seat at the table

The needs, concerns, perspectives, and rights of patients must be prioritized and considered at every step, from conception to implementation.



3

Place patients at the center of AI implementation

Regulators and policymakers must work to ensure that standards are developed to ensure AI transparency and explainability—and, ultimately, trust. Access is also key.

4**Anticipate and manage unintended or negative consequences**

To mitigate the unintended consequences of AI use, collaboration between all stakeholders is required.

5**Establish regulation and oversight suited to the new challenges created by AI**

Policymakers and regulators must work with developers, healthcare providers, insurers, and patient groups to ensure that patients' needs and rights are safeguarded and protected.

**6****Implement a fair, impact-based pricing model**

A pricing model is needed that ensures both value and equitable access, without creating additional cost-related barriers for patients.

**7****Implementing a transparent, ethical, equitable system operated by trusted partners**

All stakeholders must work together to ensure that AI solutions are developed and applied responsibly and ethically, emphasizing transparency and equity.



It starts with patients. For a very long time, we have ignored patients... We have created solutions for patients without [their] involvement... As we build new tools, it's critically important—no matter who the stakeholder is—if they think about a 'trusted partner', they should think about patients.

Smit Patel, Director of Digital Health & AI, Digital Medicine Society

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