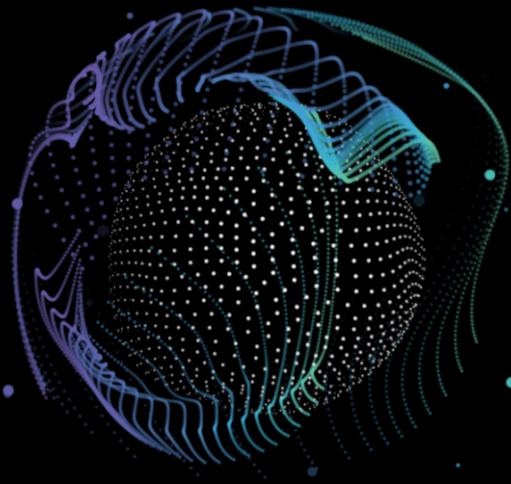


Using AI responsibly in healthcare

AI technologies are re-shaping the way organizations across industries do business. Healthcare is no different. Successfully integrating AI into an organization requires industry leaders to practice big-picture thinking that considers not just what AI **can** do, but what it **should** do.

At Microsoft, we are collaborating with healthcare customers, partners, and experts to create a collective approach to engaging with AI in a responsible way. As you try to navigate what this shift could mean for the healthcare industry, we'd like to share a few key insights and perspectives that we've learned on our journey of building more responsible AI technologies.



Opportunities

Ambient clinical intelligence

Implementing data sharing across academia, clinical staff and industry
Eliminating excessive paperwork to reduce physician burnout

Drug discovery

Accelerating research and development
Diagnosing and treating rare diseases

Population health

Forming city-wide collaboratives
Resourcing data and developing infrastructure



Risks



Data privacy and security

Personal health information is highly regulated and contains a patient's most sensitive data



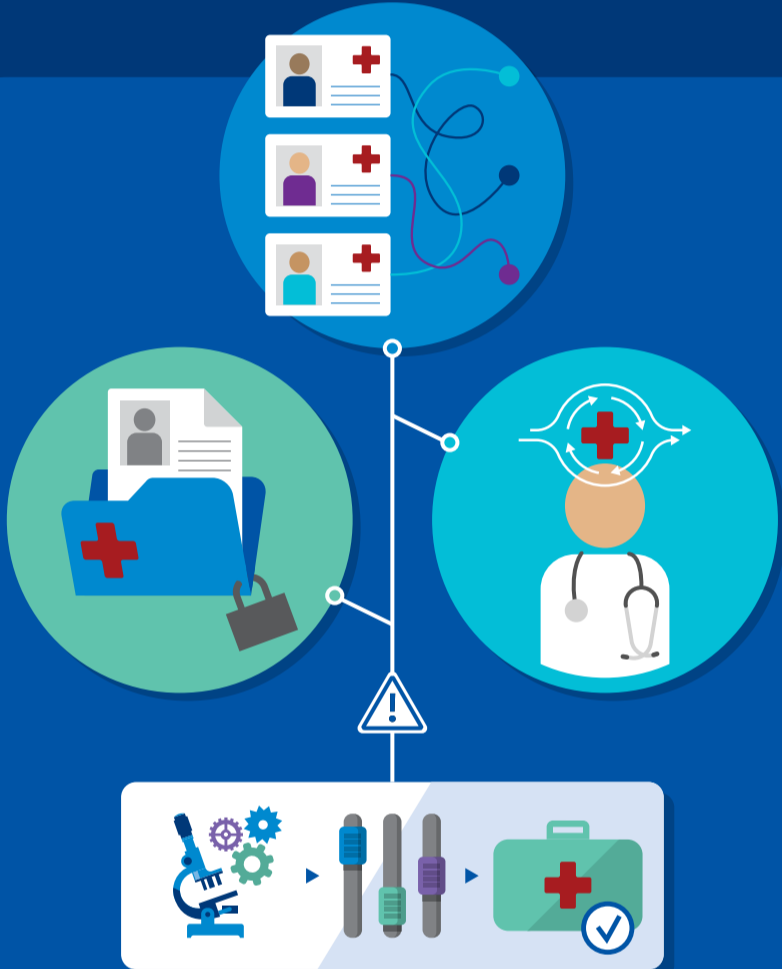
Data bias

Unconscious biases can lead to disparity among population groups while overfitting models may lead to incorrect diagnoses or unforeseen outcomes



Clinical efficacy of AI models

Clinicians should assess models beyond training data sets and develop constant feedback loops with human oversight for continuous monitoring



A responsible path forward

How do you manage AI responsibly?



Establish guiding principles to articulate your AI approach



Adopt practices and tools to apply throughout the development lifecycle



Determine a pervasive trust ecosystem between patients, caregivers, researchers and administrators

Remember, decisions made by healthcare organizations directly impact people's well-being and livelihoods. For AI to play a role in these decisions, it's essential that organizations use the technology responsibly and plan for unintended consequences. AI can abide by safety, privacy and compliance regulations as well as foster innovation within the broader healthcare ecosystem. These can include predicting and preventing cyclical disease outbreaks, accelerating research for rare diseases, better health infrastructure planning, and reducing physician burnout.

How can you start your own journey to develop responsible AI in healthcare?

Visit Microsoft's page on [Responsible AI](#) to learn more about our approach.

Learn more about AI in healthcare from industry experts at the [Microsoft AI Business School](#).

Explore more about [Microsoft for Healthcare](#).

