

Artificial Intelligence in Health



AI will be a powerful tool to improve patient outcomes, advance public health and well-being, enhance health and human services delivery, increase health equity, reduce administrative burden, and decrease waste and fraud.

Our Capabilities

MITRE has two decades of experience solving the toughest healthcare and public health problems. We operate the U.S. Health and Human Services-sponsored Health Federally Funded R&D Center. Along with our Center for Transforming Health, Health Innovation Center, AI and Autonomy Innovation Center, MITRE Labs, independent research, and the other FFRDCs we manage, we innovate to transform health systems and improve the care experience for all.

We bring 65 years of knowledge in the defense and civil domains and in forging strategic collaborations with government, industry, and academia. Our goal is to catalyze the consequential use of AI for public good.

“When managed well, AI can highlight and help to reduce inequalities, save lives, improve work for health providers, and protect society from public health emergencies among other benefits we have not even conceptualized.”

Dr. Brian Anderson, Chief Digital Health Physician, MITRE

Artificial Intelligence in Health and Healthcare

Our Expertise

Our interdisciplinary teams of physicians, nurses, epidemiologists, biomedical experts, AI and systems engineers, social scientists, analysts, economists, informaticists, and cyber and policy specialists bring deep expertise to advance how AI is—and will be—applied to health.

AI-enabled Solutions

Healthcare teams, organizations, and agencies can improve patient care, increase accuracy and efficiency, and reduce burden and costs by leveraging AI technologies, large language models, and other natural language processing methods. **MITRE and our partners are exploring ways to leverage AI to:**

- Improve patient safety
- Promote preventive care
- Enhance patient and public health education, including materials in multiple languages
- Support precision medicine
- Automate medical coding, data entry, and program enrollment
- Verify benefits eligibility
- Enable personalized healthcare
- Improve disease surveillance
- Strengthen emergency preparedness
- Bridge health equity gaps
- Increase payment speed and accuracy
- Expedite billing and claims processing
- Assess patient risk
- Transform quality measure development and collection
- Identify fraud, waste, and abuse
- Reduce provider time in administrative tasks
- Obtain and record clinical encounter data
- Provide clinical decision support
- Predict hospital admissions, health outcomes, demand, costs, and supply chain issues
- Identify effective treatments
- Assist with robotic surgeries

Holistic AI Lifecycle Focus

Understanding the full breadth of AI lifecycle management can help mitigate risks in health and healthcare. Healthcare organizations should consider:

- **Governance:** Assist policy makers and regulators to establish standards and mechanisms for overseeing assured AI deployment and operation.
- **Strategy & Implementation:** Assess large language models, off-the-shelf AI tools, or custom solutions. Understand how AI will integrate with existing workflows.
- **Assurance:** Provide justified confidence in an AI system to operate effectively and responsibly with acceptable levels of risk to our sponsors and their constituents.

Connecting Stakeholders

As a not-for-profit technology and R&D company, we lead public-private partnerships and convene government, industry, national labs, other non-profits, and academia to solve complex challenges that can't be solved by one entity alone.

MITRE's AI Capabilities & Resources

Coalition for Health AI

MITRE is a founding member of the Coalition for Health AI, focused on trustworthy and equitable use of AI in health and healthcare

- [CHAI's Blueprint for Trustworthy AI Implementation and Guidance in Healthcare](#)

A Sensible Regulatory Framework for AI Security

MITRE ATLAS™

A globally accessible knowledge base of adversary tactics and techniques based on real-world attack observations

AI Maturity Model

Measures an organization's progress in AI maturity as it becomes increasingly adept at incorporating AI technologies

For more information, please reach out to HealthAI@mitre.org

MITRE's mission-driven teams are dedicated to solving problems for a safer world. Through our public-private partnerships and federally funded R&D centers, we work across government and in partnership with industry to tackle challenges to the safety, stability, and well-being of our nation.