

The State of Artificial Intelligence (AI) Adoption in Healthcare

2023 Hospital and Health System IT Leadership Survey



Artificial intelligence (AI) is rapidly transforming the healthcare landscape with the potential to revolutionize the way hospitals and health systems deliver care.

Al-powered solutions are already being used to improve patient outcomes, reduce costs, and enhance operational efficiency.

Its promise notwithstanding, AI adoption in U.S. healthcare is still in the early stages. Most CIOs that we work with at Healthcare IT Leaders or speak to on our Leader-to-Leader podcast acknowledge that this is transformative technology, but their current levels of spend and mindshare devoted to AI vary greatly.

While some are diving headlong into proprietary Al development, many health systems are taking a wait-and-see approach or plan to follow the lead of their enterprise vendors, several of whom have already integrated AI features into their clinical and operational systems.

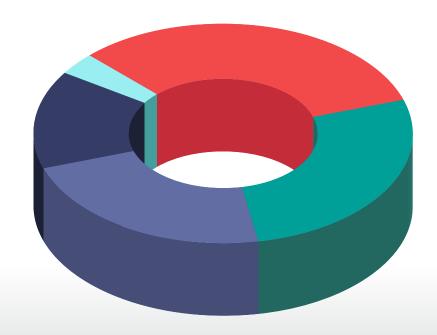
For greater insight into where U.S. hospitals and health systems are in their AI journey, we surveyed (Oct '23) CHIME-member CIOs and IT leaders. Their responses give a snapshot of an industry on the cusp of a major transformation, while highlighting that these are early days with challenges and concerns to address.

One thing is clear: Al use will accelerate rapidly in the months and years to come. We hope our survey helps you benchmark your own Al activities and investments against those of your peers.

Ben Hilmes. President Healthcare IT Leaders



How would you rate the level of AI adoption in your organization?





Partial Implementation



25% Early Exploration Phase



23%
Pilot Projects
Underway



16% Not Adopted



3%
Fully Integrated Into Operations



What are the primary barriers to implementing AI in your organization? (Select all that apply)





How confident are you in the accuracy and reliability of Al powered systems in healthcare?





10% Very Confident



56% Somewhat Confident



20% Neutral



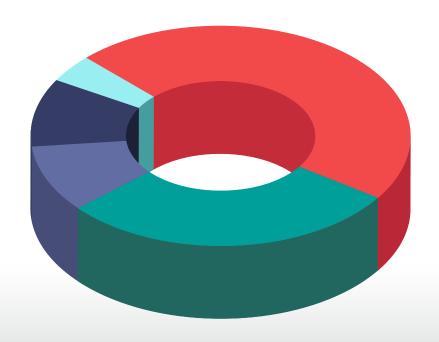
14% Somewhat Skeptical



0% Very Skeptical



What impact do you believe AI will have on alleviating healthcare workforce shortages?





10%
Al Will Significantly
Alleviate Workforce
Shortages



47%
Al Will Moderately
Alleviate Workforce
Shortages



29%
Al Will Have Minimal Impact on Workforce Shortages



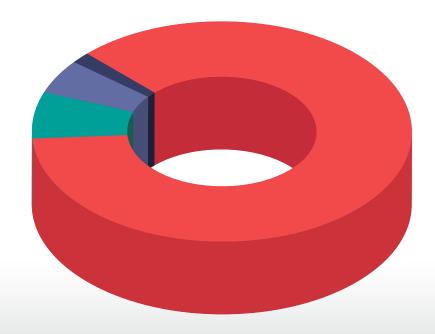
10%
Al Will Not
Alleviate Workforce
Shortages



3% Unsure



How extensively do you involve clinicians and end users in development & deployment of AI solutions?





86%
Clinicians/End Users
Play Primary Role



Clinicians/End Users
Provide Input



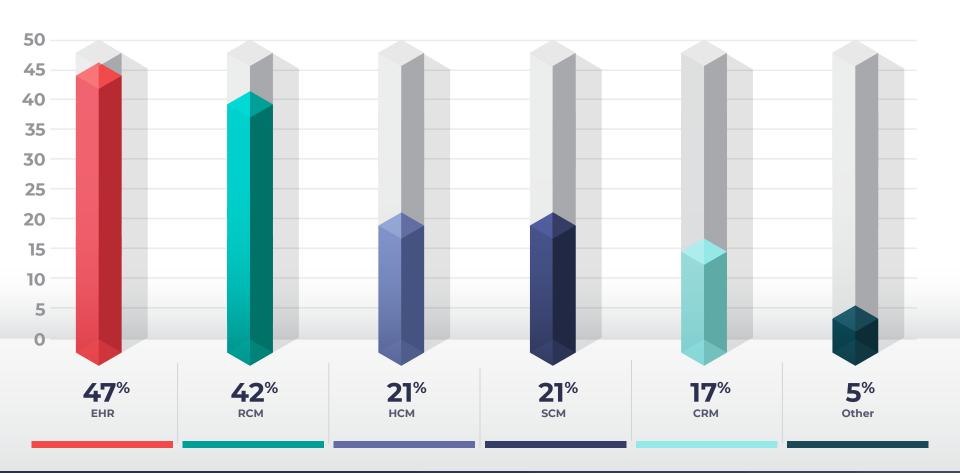
Clinicians/End Users Have Limited Involvement



Clinicians/End Users Have No Involvement

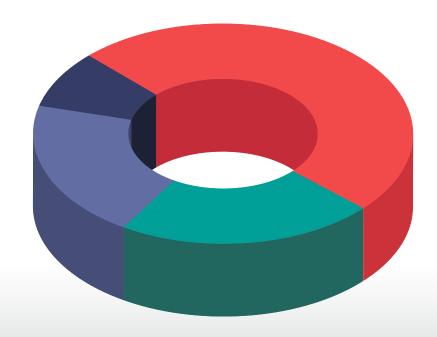


Which applications / functions are priorities for your organization in terms of AI adoption? (Select all that apply)



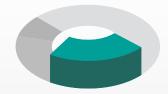


How do you address concerns around bias and fairness in AI algorithms used in healthcare?





49%
We Do Not Have
Formal Process In Place



Regularly Assess & Monitor Algorithms For Bias



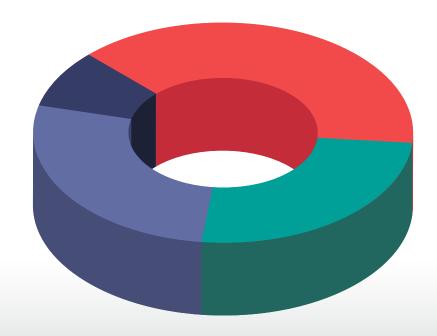
20%
Collaborate With Diverse
Teams During Development



8%
Use Third Parties To
Evaluate Algorithms



Does your organization have plans to implement or pilot Al projects over the next 12 to 24 months?





25%
Yes, We Plan To Implement
3 Or More Projects



39% Yes, We Plan To Implement 1 - 2 Projects



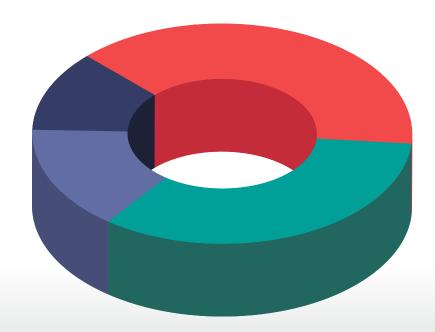
We Are Considering Al But Have No Firm Plans Yet



8% No, We Have No Current Plans



What do you expect your spending / investment in Al to be over the next 3 years?





34% Stay About The Same As Current Spending



39%
Increase Up To 25%
Over Current Spending



12%
Increase 25% To 50%
Over Current Spending



15%
Increase More Than 50%
Over Current Spending



Advice for Your Al Journey

By one estimate, healthcare could unlock \$1 trillion of improvement potential through AI innovations that automate tedious and error-prone operational work, accelerate clinical data processing, and modernize health systems infrastructure.

But tapping into these benefits requires a foundation of IT governance, organizational buy-in, and a clear strategy and roadmap for AI implementation and adoption. Some tips below from our experts at Healthcare IT Leaders.

Identify a clear need and use case for any AI project.

What specific problem or challenge are you trying to solve with AI? What are the desired outcomes? How will AI supplement or supplant your current solution? Asking and answering these questions is a good starting place.

Set up institutional guardrails. Al is a powerful technology, and it is important to use it responsibly. Consider ethical and regulatory implications, such as data privacy and security, bias and fairness, and transparency and accountability. Key stakeholders across your organization should have a voice in these discussions.

Engage with clinicians early and often. Providers must be part of any AI assessment and implementation process. This will help to ensure that the AI solution is aligned with the needs of the users and that it is implemented in a way that is safe and effective.

Start small and spread your bets. Consider starting with a series of small pilot projects for varied use cases. A contained pilot will help to identify and address any potential challenges before implementing an AI solution more widely. Pilot projects also help set expectations that there may be setbacks and failures along the way.

Work closely with vendors. If you're not investing in AI, understand that your software and infrastructure partners are. Learn from them as they roll out new AI-enabled features and seek winwin partnerships that align with your AI goals and roadmap.



