SPONSORED CONTENT | WHITE PAPER

White paper

Ready for AI in Healthcare: Evolving beyond hype to enterprise Scale AI

CIO

SPONSORED BY HCLTech

White paper

Generative AI is clearly a transformative technology that, arguably, may have more impact in the long run than past transformative technologies. It's already having an impact on healthcare, but there are significant challenges and key considerations that these organizations should plan for as they look to leverage this technology.

ChatGPT, Microsoft Azure OpenAI, and other generative AI technologies have drawn the attention of almost everyone. Suffice to say, it's a powerful technology. Like any technology, generative AI solves specific problems better than it does others. It's important to first identify a problem that needs to be solved, and only deploy generative AI if it can solve the problem. Most business leaders have a good general sense of the unique user experiences and intelligent assistance these technologies offer.

But that's just scratching the surface of generative AI's capabilities. Combined with traditional machine learning (ML) technology, potential use cases could include:

- **Respond to natural language queries from patients in a conversational way**
- **Assist employees with keeping current on regulatory updates and changes**
- **Automate audits to shorten the process from weeks to hours**
- **Provide healthcare professionals with summaries of research papers and articles as they appear**
- **Generate initial answers for patient queries, reducing the amount of time practitioners must spend answering email and chats**

- **Assist with disease diagnosis and imaging analysis**
- **Perform administrative and management functions like healthcare fraud detection and prevention**

And beyond specific healthcare use cases, there are valuable IT use cases, such as:

- **Increase the efficiency of the organization's software development and maintenance teams**
- **Strengthen and automate cybersecurity operations**

Enterprises are under pressure from the C-suite to implement these and other use cases. However, it is critical to ensure that these deliver the promised returns for healthcare providers, payers, medical practitioners and, above all, to patients. Ultimately, generative AI promises to make healthcare more efficient and more effective at addressing patient needs.

Challenges to leveraging generative AI in healthcare

That said, the gap between healthcare leaders' desires to become data-driven and AI-empowered, and where they stand right now, is fairly large. According to IDC, 87% of healthcare CXOs say that their top priority is to become an intelligent enterprise. But just 30% say their actions are driven by data analysis, and only a third are comfortable questioning their organization's KPIs. About the same percentage (34%) say it's easy to find external or internal collaborators to help with the effort.

White paper

Generative AI technology is still evolving, and, even at current pace of development, guardrails to mitigate unintended consequences such as the breach of ethical, social, and privacy norms are lagging behind. Even within a given healthcare organization several impediments need to cleared.

First, generative AI needs access to truly immense amounts of good data, and that's not easy for most healthcare organizations to achieve. Data is often stored in disconnected siloes across many different environments. Sometimes, IT has no way of knowing exactly what data the organization is storing or where it can be found.

And that's just the beginning. A lack of interoperability between different systems can render the data inaccessible, even if IT knows exactly where it is. Plus, IT and healthcare often use different style guides when it comes to integrating data. Finally, if data quality is poor, outcomes will reflect the quality of the data. Generative AI needs high-quality data to generate high-quality results.

Compliance is another enormous challenge. Given how new generative AI is, it's unclear where generative AI can and cannot be used. Both HIPAA and FDA regulations govern how personal health information can be used, stored, shared, and secured. In fact, life sciences companies are often sharply limited about how they are permitted communicate about their products. The claims they may make are specific and strictly bounded, often down to the specific words and phrases that must be employed. Sometimes, regulations even specify the layout and font size.

Transparency and visibility

Beyond the technical complications, many in healthcare distrust AI. To overcome this distrust and inspire confidence, the organization must be

transparent with the data used to train the large language models (LLMs), and ensure people are in the training loop with the model, both of which are critical to ensure quality and engender trust. Providing output comparisons of generative AI versus human and / or non-AI systems, whichever is more appropriate, can help. There is nothing like seeing accuracy in action.

Security should be addressed at the start. Especially since the LLM will access sensitive data, the system must be secure. This means the CISO, and security teams must be deeply involved from the very beginning of the project.

Finally, it's critical to show return on investment to leadership and the organization as a whole to build trust. Take care to choose concrete KPIs that relate to the outcomes you're aiming to achieve. Examples include workflow reduction, time saved, and completeness of a task.

Requirements for success

Success requires an enterprise-level governance mechanism around trust, risk and security management, with centralized mechanisms to drive policies and compliance to contain and manage generative AI. A strong, comprehensive ecosystem of partners can bring in technology and organization competencies to ensure the right IT infrastructure and human skills are in place. A systems integrator with specialized experience in generative AI can help fill these critical gaps for healthcare organizations.

Together, HCLTech and Microsoft help empower healthcare customers to harness the full power of AI by reshaping their data landscape to the unified AI-Ready Data Platform powered by Microsoft Fabric, which integrates seamlessly with AI tools.

White paper

HCLTech, with its proven Data & AI Solutions (Data Analytics Services: Taking Business to Next Level | HCLTech), Data Modernization, Simplify Insights and ScaleAI, can help customers accelerate their adoption of Microsoft Fabric and their transition to AI readiness at enterprise scale. HCLTech data modernization solutions enable intelligent data management and SmartOps using XOps (DataOps+ML Ops+BizOps), which ensure that data assets are ready and accessible for analysis. HCLTech's ScaleAI Foundry extends the Microsoft Azure AI portfolio with the trusted data assets and AI solution patterns enable AI innovation to delivered at enterprise grade.

Simplify Insights solutions help eliminate the clutter of reports and dashboards and bring technology and analytics processes together for deep and impactful insights for decision support. A few ScaleAI solutions built on the Microsoft Data & AI platforms include:

- **Smart labeling**
- **Audit building**
- **ER reporting tools**
- **Claims**
- **Admin reporting**
- **Patient experience**

AI is rapidly becoming a must-have technology for healthcare, but deploying and managing it requires specialized skills. Working with a trusted advisor like HCLTech can help ensure that the journey runs smoothly and that AI provides the value it promises.◆

For more information, visit Microsoft Ecosystem: HCLTech & Microsoft Partnership, Scaling AI at enterprise level | HCLTech and | HCLTech Life Sciences & Healthcare Solutions.

CIO

SPONSORED BY HCLTech