# Agentic AI: Revolutionising healthcare with autonomous technology



At the forefront of technological advancement in healthcare, a new form of artificial intelligence (AI)—agentic AI—has emerged, marking a shift from traditional generative AI. This innovative technology is designed to operate autonomously, capable of planning and executing multistep tasks without constant human prompting. The concept was highlighted by leaders in the field during the HIMSS25 Global Health Conference and Exhibition in March, indicating a significant step forward in medical technology.

Epic, a leader in electronic health records, announced plans to utilise agentic AI to enhance patient experiences when preparing for medical appointments. These AI agents are able to perform a range of tasks independently, from scheduling tests to managing pre-appointment logistics, tasks that conventional AI, which requires explicit commands, would struggle to accomplish without direct input from users.

Aashima Gupta, global director of healthcare strategy and solutions for Google Cloud, elaborated on this evolution: “Generative AI, it’s very task driven, be it you’re saying ‘Write me a letter’ or ‘Summarize this document.’ Now we are in the era of agentic AI. Agentic AI is not just simple task-driven search and synthesization. It is actually an agent, your personal collaborator,” she stated while addressing attendees at the HIMSS25 event.

The practical applications of agentic AI in healthcare are diverse. Mika Newton, CEO of data platform xCures, described its potential in replicating the functions of human employees, particularly in the context of medical record management. His company employs agentic AI to efficiently extract information from patient records and complete healthcare forms, thus streamlining workflows that would typically require significant manual input.

Don Woodlock, head of global healthcare solutions for InterSystems, provided insight into another potential application within surgical settings. He stated, “If you were to come in for surgery, there’s all the presurgical testing, and the visits, and booking the room, and booking the resources,” explaining that patients could simply instruct an AI agent to handle the logistics, effectively delegating the pre-surgery tasks to the AI.

The implementation of agentic AI is viewed as a potential remedy for the growing healthcare workforce shortages projected by the National Center for Health Workforce Analysis, which anticipates a deficit of 187,130 physicians, 207,980 registered nurses, and 302,440 licensed practical nurses by 2037. Furthermore, it may serve to alleviate clinician burnout; a recent survey from the American Medical Association revealed that 48.2% of physicians experienced at least one symptom of burnout in 2023.

Despite its promising prospects, the integration of agentic AI into healthcare raises significant challenges. Concerns about the safety and validity of these systems are paramount. Newton described these as likely being the “biggest concern” among stakeholders. Questions remain about accountability, particularly how to manage AI agents that may produce unreliable information or exhibit “hallucinations” resulting in fabricated outputs.

Gupta mentioned that developers are implementing safeguards to mitigate such risks, noting efforts to enable AI systems to cite their sources, thus allowing clinicians to verify the accuracy of an AI agent's recommendations. Conversely, there is apprehension regarding the potential for these systems to displace human involvement in decision-making processes. The World Economic Forum has emphasised the necessity for human oversight on AI decisions and the establishment of ethical guidelines to govern their use.

Gupta added, “Healthcare is a complex thing. We need human judgment, empathy,” underscoring the crucial role humans will continue to play even as agentic AI takes on more responsibilities within the healthcare landscape. The developing discourse surrounding agentic AI underscores the balance between innovation and the necessity for ethical considerations and human touch within medicine.

Source: [Noah Wire Services](https://www.noahwire.com)

## References

* <https://dhinsights.org/blog/what-is-agentic-ai-and-what-does-it-mean-for-healthcare> - This article explains what agentic AI is and how it can support various healthcare applications, such as optimizing staff scheduling and automating repetitive tasks, which aligns with the potential of agentic AI to alleviate workforce shortages and enhance patient experiences.
* <https://medcitynews.com/2025/03/healthcare-agentic-ai-hospital/> - This article discusses how healthcare organizations are implementing agentic AI for administrative and clinical use cases, which supports the idea of using AI agents to manage tasks like scheduling and logistics, as mentioned in the context of Epic and other healthcare leaders.
* <https://automationedge.com/home-health-care-automation/blogs/what-is-agentic-ai-in-healthcare-and-its-role-in-improving-care-delivery/> - This blog post highlights the role of agentic AI in improving healthcare delivery by providing decision support, managing electronic health records, and enhancing care coordination, which aligns with the practical applications described by leaders like Mika Newton and Don Woodlock.
* <https://www.google.com/search?q=HIMSS25+Global+Health+Conference+and+Exhibition> - This search result can provide information about the HIMSS25 Global Health Conference and Exhibition, where leaders discussed the emergence of agentic AI in healthcare, as mentioned in the article.
* <https://www.ama-assn.org/press-center/press-releases/physician-burnout-reaches-all-time-high> - This article from the American Medical Association discusses physician burnout, which is a concern that agentic AI may help alleviate by automating tasks and reducing workload, as noted in the article.