

AI: Crucial enabler to simplify healthcare delivery

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Rapid advancements are taking place in AI for imaging analysis in healthcare



A revolution is underway in the healthcare industry due to the rising total costs of healthcare and a lack of skilled professionals. As a result, the healthcare industry is looking to implement new information technology-based solutions and processes that can cut costs and provide solutions to these rising difficulties.

Our focus on these issues should not overlook the fact that they are interconnected, giving the impression that healthcare is difficult, when in fact it is delivered through complex systems. That isn't to suggest providing outstanding healthcare is not difficult; however, we can create systems with less complexity, leading to better care for all and a system that works. In order to simplify healthcare and develop intelligent tools, artificial intelligence (AI) should be a crucial enabler.

What does the market say?

The global artificial intelligence (AI) in healthcare market is expected to generate substantial revenue by the end of 2033, rising at a CAGR of 45% during the forecast period. Furthermore, the industry produced significant revenue in 2022.

The growing number of older individuals and their increasing need for assisted living facilities can be attributed to the market's rise. According to data from the National Library of Medicine, around 1.5 million geriatrics reside in nursing homes, while nearly 1 million lives in assisted living facilities.

AI funding worldwide was anticipated to be around \$18 billion in 2022, a considerable rise from around \$650 million in 2011.

Exploring the implementation

Since the 1970s, when MYCIN was developed at Stanford to diagnose blood-borne bacterial infections, AI has been focused on disease diagnosis and treatment.

And now in 2022, IBM's Watson has been receiving significant media attention for its focus on precision medicine, specifically

cancer diagnosis and treatment. Watson uses a combination of machine learning and natural language processing (NLP).

Royal Philips, a global leader in health technology, has recently showcased its portfolio of AI-enabled, scalable and smart connected solutions. The company's new and enhanced artificial intelligence-enabled solutions feature an integrated approach across the imaging and connected care enterprise focused on critical areas to help meet the challenges facing clinicians today.

On the other hand, Siemens Healthineers has incorporated AI solution for denoising and increased sharpness on faster MRI sequences, enabling improved image quality, optimised workflow, and a better patient experience.

Future of AI in healthcare

We believe that AI will play an important role in future healthcare offerings. It is the primary capability driving the development of precision medicine, which is widely acknowledged to be a much-needed advance in care.

Given the rapid advancements in artificial intelligence for imaging analysis, it appears likely that most radiology and pathology images will be examined by a machine at some point. Speech and text recognition are already used for tasks such as patient communication and clinical note capture, and their use will grow.

AI can automate some tasks, like pre-authorising insurance, following-up on unpaid bills, and maintaining records. This reduces the workload of healthcare professionals and ultimately save them money. AI has the ability to analyse big data sets-pulling together patient's insights and leading to predictive analysis.

About the authors-

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