

The Potential Applications And Dangers Of Artificial Intelligence In Healthcare

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As innovative technologies continue to revolutionize the medical sector, artificial intelligence will soon lead the forefront of change in patient care. Despite being in its early stages, the advantages of AI applications in healthcare thus far have been astounding. Most healthcare professionals are embracing the valuable support provided by AI systems. However, amidst the endless potential applications offered by AI-based technologies are potential risks.



The Applications Of AI In The Health Industry

AI-based technologies and its limitless applications will ease the workload of medical practitioners and researchers. Many healthcare settings are already taking advantage of AI-based support to enable medical professionals to provide the best and most efficient patient care possible.

One of the most impressive applications of artificial intelligence in the medical industry is in diagnosis and treatment. AI has proven capable of diagnosing patients with improved accuracy and speed. The early detection of certain illnesses has the potential to save a patient's life. "AI's ability to systematically sift through vast amounts of data and research can empower medical practitioners to provide better patient care," explains Lillie Tyson, a writer at [Origin Writings](#) and [Brit Student](#). "With the support of artificial intelligence, errors during treatment can be greatly reduced."

AI-based medical systems can significantly improve efficiency in the healthcare industry. These systems are able to provide accurate diagnosis more quickly. They can also dramatically reduce costs in patient care. AI's ability to answer and diagnose nonemergent concerns allows healthcare providers to focus more on patients who need their care. AI-based technologies can also streamline the work processes of medical professionals. In addition to easing the workload of the clinician, these technologies can also save patients time and money.

When applied to preventative medicine, AI can save patients from the burdens of expensive medical bills in the future. Due to the machine learning capabilities of artificial intelligence, they can analyze patient data to prevent potential diseases. Many hospitals are already using AI-based systems for the prevention of chronic diseases including blood pressure, diabetes, and heart disease.

The Dangers Of AI In The Medical Sector

In spite of its benefits, there are some potential risks to implementing artificial intelligence in clinical settings. The rapid and widespread advances of AI in the medical field necessitates a conversation over its ethical implications.

As healthcare providers gradually begin to rely on AI-based technologies to support them, concerns regarding regulation and liability must be raised. There is always the risk of healthcare professionals becoming too reliant on artificial intelligence to detect abnormalities and threatening conditions in the patient's health. In worst case scenarios, the extent to which clinicians are responsible for the accuracy of the diagnosis and the quality of the treatment are complicated by AI.

It's possible that the increasing role of AI in clinical settings could erode patient-physician trust. While most patients trust their healthcare providers to care for them to the best of their abilities, the same cannot be said for an artificial system. In the event that an AI-based technology delivers a diagnosis, treatment, or advice to a patient, the patient might struggle to accept their judgment over a human doctor.

One of the biggest challenges that plagues the introduction of AI to patient care is data protection. With AI's access to immense amounts of data, the issue of privacy in regards to the collection, sharing, and regulation of that data comes into question. "Medical records are the epitome of sensitive, personal information," according to Pamela Rivera, a journalist at [Write my X](#) and [Australia 2 write](#). "Therefore, it's imperative for AI technology developers to strictly adhere to laws and regulations in place. Their ability to do so will define confidentiality in healthcare."

Many have raised concerns over the future of radiology in the face of rapid advancements in artificial intelligence. AI's machine learning capabilities is continuously improving its analysis of medical images and the detection of potential illnesses. While some believe that AI will enable radiologists to provide more accurate and specialized diagnosis, others have a more pessimistic prediction.

Conclusion

Artificial intelligence is inevitably a force of good in the health sector. However, unless AI developers and healthcare practitioners take the necessary precautions, many things can quickly go wrong with a technology as powerful as artificial intelligence.

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