



PREDICTING HEALTHCARE'S FUTURE WITH AI

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Artificial Intelligence (AI) can process past cyber-attacks to predict future vulnerabilities and see which systems are most vulnerable to exploitation. In cyber security, this is a great approach because instead of just identifying issues after they have occurred, predicting them with AI before they happen can potentially improve the security of the system. For example, predictive analytics can study patterns in network data, helping security teams find potential threats early so they can act prior to an actual attack.

In the healthcare industry, protecting Patient Health Information (PHI) is a priority due to its sensitive nature, which makes it a consistent target for cyberattacks. For hospitals and clinics to continue to secure PHI, first, real-time monitoring has to be put into place to detect current events as they happen by analyzing live data to identify threats or system failures. Then, once real-time monitoring has enough data, it can feed this information to predictive analytic models which can help improve the real-time monitoring to find patterns that signal future risks. For example, it can detect unusual login activities and excessive information exchange, quickly alerting security teams as it happens.

Predictive analytics powered by AI could have incredible benefits for both providers and patients. It can be used to identify a patient's illness before symptoms show with the use of historical data stored in the Electronic Health Record (EHR), leading to enhanced patient outcomes. Also, it can reduce costs for the hospital/clinic just by simplifying processes and allocating resources as efficiently as possible. For example, in managing extended hospital stays, past data on discharge times for specific cases can help estimate how likely a patient is to overstay at the hospital.

AI can identify patterns in the data related to cases with a higher probability for readmission. If the rate increases, the AI can catch it and hospital staff can create a plan to address the issue sooner, helping hospitals improve the quality of care.

The Predictive analytics market is growing as more data becomes available, algorithms become stronger, and expanding use in a number of industries. The key factor for this growth is the increased focus on risk management. The market is growing in the healthcare sector as well with a demand to develop more personalized treatment plans for patients with their individual data, improving health outcomes.

Predictive analytics powered by AI has the ability to strengthen healthcare systems to keep PHI safe and help health organizations increase efficiency, reduce costs, and make data-driven decisions.

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