Optimizing Healthcare Supply Chain Management: Artificial Intelligence and Blockchain Aids in Cost Reduction

Abstract

Healthcare spending on an average rise four to seven percent each year. When further analyzed, that's approximately $14,570 per person. It's no secret that the United States of America is considered the most expensive healthcare system in the world. Of that expensive, approximately 25 percent is considered wasteful. This study takes a dive into how to reduce healthcare supply chain oversight and inconsistencies while providing cost reduction solutions. The incorporation of artificial intelligence and data analysis practices can prove to be efficient and effective to the upkeep of multi-level supply chains. Blockchain technologies and predictive analytics are combative strategies Healthcare Administrators can use to reduce expensive shortcomings (e.g., overstocking and utilization transparency). Furthermore, machine learning algorithms can assess past usage trends to adjust stock levels, guaranteeing that necessary medical supplies are kept at the right amounts to prevent shortages and surpluses. Organizations may better resource allocation and reduce waste by employing AI-driven predictive analytics to improve demand forecasts, expedite procurement procedures, and reduce surplus inventory.