

## OPPORTUNITIES AND CHALLENGES OF IMPLEMENTING MACHINE LEARNING IN MODERN HEALTHCARE

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*Machine learning (ML) is revolutionizing healthcare through predictive analytics and enhanced clinical decision-making. By leveraging big data and supervised learning, ML identifies complex patterns to improve diagnostic accuracy and accelerate drug discovery. However, integrating these technologies introduces critical challenges, including data privacy concerns and the “black box” nature of AI interpretability. To navigate these ethical and technical complexities, medical education must evolve. This study proposes incorporating ML into medical school curricula, ensuring future practitioners can responsibly harness AI’s potential while mitigating its risks, ultimately fostering a more informed, data-driven approach to patient care and public health.*

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