Critical Review

By:

Marcelo Maia Rêgo Toscano[1] iD

[1] Faculdade de Medicina de Olinda. Olinda, Pernambuco, Brazil.

LEE, Peter; GOLDBERG, Carey; KOHANE, Isaac. A Revolução da Inteligência Artificial na Medicina: GPT-4 e Além. São Paulo: Editora Ciência Moderna, 2023.

The book The AI Revolution in Medicine: GPT-4 and Beyond*,* by Peter Lee, Carey Goldberg, and Isaac Kohane was published in 2023 and explores the impacts of artificial intelligence (AI) in medicine, focusing on the GPT-4 model, developed by OpenAI. The work presents a detailed overview of transformations in the field of diagnoses, treatments, and medical data management, taking a critical look at ethical and safety challenges. The narrative stands out for the association of practical examples with theoretical reflections, ensuring a fluid and engaging reading.

The authors begin the book by describing the first interaction of Peter Lee with the Davinci3 AI system, the precursor of GPT-4. The report sets a tone of fascination and caution, reflecting the mixed reactions that are common to cutting-edge technologies. The most impressive ability of GPT-4 is to conduct natural conversations, providing detailed and contextually accurate responses. However, Lee mentions limitations and challenges, such as the tendency of the AI to "hallucinate" information, which is a critical point for safety in medical contexts.

The book addresses the integration of AI into healthcare systems, promoting greater accuracy and speed in analyzing exams and screening patients. The book presents compelling data on the reduction of human errors using AI and also highlight sthe importance of ongoing supervi-

Corresponding author:
Marcelo Maia Rêgo Toscano
E-mail: marcelo.maia@fmo.edu.br

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sion by healthcare professionals. The automation of medical records, which saves time and minimizes errors, is highlighted as one of the main benefits of AI, especially in medical research and the development of new treatments.

The authors highlight the difference between correlation and causality in medical data, emphasizing that the AI fails to understand causal relationships. In this sense, human supervision remains essential to ensure patient safety. Furthermore, continuous verification of responses generated by AI is crucial to ensure the reliability of medical decisions.

One of the most futuristic aspects discussed in the book is the potential of wearable devices, which monitor the health of the patient in real-time, providing personalized recommendations. However, the authors address the ethical challenges, such as the privacy of health data. The need for regulation and clear standards for the collection and analysis of this data is discussed in depth.

Last, the authors present a comprehensive vision of the future of medicine alongside AI, proposing that technology can complement human capabilities as long as it is used ethically and transparently. Furthermore, healthcare professionals need to be continuously trained to ensure the correct interpretation of AI recommendations, highlighting the need for a careful and gradual transition of these technologies.

In summary, The AI Revolution in Medicine: GPT-4 and Beyond is an essential reading for healthcare professionals and researchers and offers a balanced analysis of the promises and challenges of AI. The book highlights the transformative potential of this technology in the medical field, as well as the importance of ethics, safety, and human supervision in this implementation.

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