



LETTER TO THE EDITOR

# The Potential of GPT-4 as a Personalized Virtual Assistant for Bariatric Surgery Patients

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Dear Editor,

Recent artificial intelligence (AI) advances have transformed various industries, including healthcare [1, 2]. The rapid advancements in technology-based interventions have shown promise in addressing the obesity epidemic, and generative pre-trained transformer-4 (GPT-4) could revolutionize support for individuals undergoing bariatric surgery [3]. I want to highlight the potential role of GPT-4, a cutting-edge artificial intelligence language model developed by OpenAI, as a personalized virtual assistant for bariatric surgery patients. The GPT-4 is the latest predecessor to ChatGPT that exhibits human-level performance on various professional benchmarks [1].

Bariatric surgery is an effective treatment for severe obesity; long-term success requires ongoing support to facilitate significant lifestyle changes [4]. Current literature highlights various technology-based interventions for obesity management, such as apps, wearables, and other digital tools [3]. While these interventions have merits, they often face limitations and challenges, such as a lack of personalization and inadequate behavioral support.

GPTs have demonstrated remarkable applications in healthcare, and their potential use as a virtual assistant for bariatric surgery patients could address some of the limitations of existing technology-based interventions [5]. By providing personalized nutrition and physical activity recommendations, tracking weight and food intake, and supporting mental health and behavior change, GPT-4 could offer a comprehensive, tailored approach to postoperative care.

The benefits of GPT-4 as a virtual assistant include its accessibility, convenience, and low cost, which could help overcome barriers to traditional forms of support. However, it is essential to acknowledge the limitations and challenges associated with GPT-4 in this context, such as technical

limitations, ethical and privacy considerations, and patient acceptance and adherence. To advance our understanding of GPT-4's potential in assisting bariatric surgery patients, further research is needed to explore its applications, assess its effectiveness, and address the challenges it may face. Moreover, healthcare providers should actively support patients' use of GPT-4 and other technology-based interventions, ensuring that these tools align with best practices and contribute to improved patient outcomes.

This letter hopes to start a dialogue among the academic community and prompt further investigation into the role of GPT-4 as a personalized virtual assistant for bariatric surgery patients.

Sincerely

## Declarations

**Conflict of Interest** The author declares no competing interests.

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