Wearable Health Technology: Monitoring and Management

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Abstract. This article discusses the impact of wearable health technology on monitoring and managing chronic diseases. Devices such as smartwatches and fitness trackers provide continuous health data, promoting proactive healthcare and personalized treatment plans. We explore the current landscape of wearable technology, its benefits, and challenges in data management and patient compliance.

Keywords: Wearable Technology, Chronic Diseases, Health Monitoring, Fitness Trackers, Patient Compliance

Introduction

Wearable health technology has become an integral part of modern healthcare, offering innovative solutions for the monitoring and management of chronic diseases. Devices such as smartwatches, fitness trackers, and wearable ECG monitors provide continuous health monitoring, allowing for real-time data collection on vital signs like heart rate, activity levels, and sleep patterns. This continuous stream of health information empowers both patients and healthcare providers to engage in proactive health management, facilitating early detection of potential health issues and enabling personalized treatment plans. The widespread adoption of wearable technology has shown potential in improving patient outcomes, particularly for individuals with chronic conditions such as diabetes, hypertension, and cardiovascular diseases. However, the integration of these devices into healthcare systems poses challenges, such as ensuring data accuracy, managing vast amounts of health data, and addressing patient privacy concerns. This article examines the current advancements in wearable health technology, its impact on chronic disease management, and the challenges that need to be addressed to maximize its benefits.

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