

Analysis of the Evaluation of a New Glucose Meter with Integrated Self-Management Software and USB Connectivity

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Abstract

Glucose meter technology has not kept up with the advances that have occurred in other sectors in mobile and health care technology. A new device that combines strip-based capillary blood glucose monitoring and USB flash drive technology is evaluated in an industry-funded study in a cohort of patients and health care professionals. The expanded memory capacity of flash drives allows the software program to be stored on the device for analyzing the blood glucose readings in memory. The study analyzes the device for precision and accuracy as well as for ease of adaptability and usage. This analysis focuses on shortcomings in the design of the study and methodology in addition to features of the hardware device itself. Although the device has distinct advantages over many devices on the market, a challenge is made to device manufacturers to encourage further innovation.

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Abbreviations: (BGM) blood glucose monitoring, (CGM) continuous glucose monitoring, (FDA) Food and Drug Administration, (HCP) health care professional, (IrDA) Infrared Data Association, (USB) universal serial bus

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