

Establishing a Continuous Glucose Monitoring Program

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Abstract

Real-time continuous glucose monitoring (RT-CGM) devices provide detailed information on glucose patterns and trends, and alarms that alert the patient to both hyper- and hypoglycemia. This technology can dramatically improve the day-to-day management of patients with diabetes and promises to be a major advance in diabetes care. The safe and effective use of RT-CGM in diabetes management rests on an understanding of several physiological as well as technological issues. This article outlines the key issues that should be addressed in the training curriculum for patients starting on RT-CGM: (1) physiologic lag between interstitial and blood glucose levels and the implications for device calibration, and interpretation and use of data in diabetes management; (2) practical considerations with the use of sensor alarms and caveats in the setting of alarm thresholds; and (3) potential risk for hypoglycemia related to excessive postprandial bolusing by RT-CGM users, and the practical implications for patient training.

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Abbreviations: (CGM) continuous glucose monitoring, (RT-CGM) real-time CGM

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