

Analysis of Use of an Automated Bolus Calculator Reduces Fear of Hypoglycemia and Improves Confidence in Dosage Accuracy in Type 1 Diabetes Mellitus Patients Treated with Multiple Daily Insulin Injections

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Abstract

In this issue of *Journal of Diabetes Science and Technology*, Barnard and colleagues evaluate the use of the ACCU-CHEK® Aviva Expert blood glucose meter/bolus advisor system in patients with type 1 diabetes mellitus. Hypoglycemia is a major limiting factor to intensive glucose control, and fear of hypoglycemia, especially in those who have experienced severe reactions, is a major barrier. The bolus advisor improved overall glucose control and increased adherence by overcoming the patients' fear of hypoglycemia, giving them more confidence to give adequate doses of insulin to control hyperglycemia. In this review, we discuss other human factors that become barriers to intensive control, which can benefit from new technologies, including numeracy literacy, information overload, time required for diabetes self-care, and device incompatibility.

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Abbreviations: (CGM) continuous glucose monitoring, (MDI) multiple daily injections

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