

Closing the Circle of Care with New Firmware for Diabetes: MyDiaBase+RxChecker

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Abstract

Background:

Satisfactory glycemic control, meeting American Diabetes Association recommendations, is difficult to achieve. Technologically, this is most likely because the circle of care is incomplete. Many have suggested that the introduction of information technology may remedy the situation. However, previous attempts have not succeeded. Recognizing this, we evolved firmware that supports and links *both* the patient at home and their care providers in the clinic.

Firmware Design and Methods:

The device includes software and a database, all contained in a standard USB flash drive. At home, patients use the database portion of the device (MyDiaBase). It fully complements their diabetes education while capturing pertinent self-management information by tracking self-monitored blood glucose data, body weight, medication dosing, physical activity, diet, lifestyle, and stress. In the clinic, providers use the RxChecker program to perform prescription checks that are based on their patients' outcomes data, thereby effectively closing the circle of care.

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Abbreviations: (A1C) glycated hemoglobin A1c, (BMI) body mass index, (GUI) graphical user interface, (Rx) prescription, (SMBG) self-monitored blood glucose

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