A Dynamic Duo: Virtual DSMES and a Digital App, a New Model for Self-Management Education

Dawn McCarter, RN, BSN, CDCES, Alina Health Diabetes Education, Minneapolis, Minnesota, USA;
Jennifer Scarsi, RD, CDCES, Welldoc, Columbia, MD, USA [1]Welldoc, Columbia, Maryland, USA

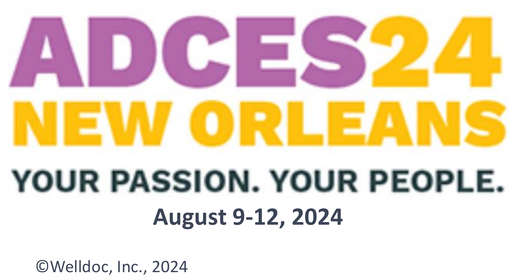
BACKGROUND

Cardiometabolic digital health solutions, which address conditions like diabetes, are increasingly being integrated into clinical care. These solutions can provide personalized, AI-driven self-management support for individuals living with chronic conditions and treatment insights to inform timely therapy optimization for clinicians (1, 2). The Allina health system (Minneapolis, MN) digital health implementation is a successful real-world example of integrating a cardiometabolic digital app, focused on diabetes, across the health system. This poster describes a real-world view of the challenges and successes of a multi-year implementation of a digital health solution into Diabetes Self-Management Education and Support (DSMES) services at a large Minneapolis health system. The authors discuss the impact of the implementation plan on reach, access, health outcomes, and Certified Diabetes Care and Education Specialist (CDCES) operational efficiencies at the individual and population levels. Implementing a digital app is best done in a team approach (3) and the CDCES team at the Allina health system created strategies for introduction and configuration of the digital app to increase reach and access.

SPECIFIC AIMS/PURPOSE

1. Discuss successful implementation strategies and challenges when engaging individuals living with chronic conditions with digital health solutions.
2. Share real world results of integration and use of a digital therapeutic app across a large health system.

Figure 1: Screenshots of the Digital Health Solution



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IMPLEMENTATION

Welldoc's BlueStar, the FDA-cleared digital health app for type 1 and type 2 diabetes management was made available to all providers to offer to all newly diagnosed patients with type 2 diabetes at Allina. This app is now part of Welldoc's broader platform addressing multiple cardiometabolic conditions. The CDCES team created a unique model to easily integrate the digital app into clinical care and DSMES services. The DSMES program is available, in person and virtually, to all individuals newly diagnosed with type 2 diabetes. The following implementation plan has resulted in over 1100 total activations of the digital app in just over 2 years.

Class 1: BlueStar is introduced, and all DSMES participants are invited to enroll. Individuals receive a follow-up email after class 1 with a link embedded to download and begin using the app. Each individual self identifies, which reduces provider bias and need to assess an individual's technology literacy. Note, using the digital app is not a requirement of the program. Technology support is provided, through the digital app customer care phone number, for those with low technology literacy. Participants of the program are offered a new blood glucose (BG) meter so that all individuals have access to a device that is updated and has the ability to connect to the app.

Class 2: Participants are invited to share their experiences with BlueStar with the group which creates an environment facilitating peer to peer learning. The course curriculum is integrated into the app and app tools are highlighted and shared according to the topics presented. In class 2, exercise is discussed including how to track, both manually and via connected device, in the digital app. Meal planning is a second focus of class 2 and digital app tools including the food photo feature, which allows the individual to easily capture meals by taking a picture, is taught. Additional nutrition features are discussed in class such as meal planning and restaurant meals and app tools are integrated into the conversation.

Class 3: Peer to peer support of using the digital app is again integrated into the start of class 3. This model allows slow technology adopters to again consider using a digital app. The clinical report generated by the app (the SMART Visit report) is automatically available to the care team in their electronic health record. The report provides a one-month summary of person-generated health data including biometric data and self-management behaviors. The CDCES team alerts providers to availability of the report and encourages it's use in scheduled clinical encounters. The CDCES team has provided education sessions for the clinical team on interpretation and use of the data to optimize therapy. Workflows and roles and responsibilities for who receives, reviews, and responds to the data are being determined.

Figure 2: Smart Visit Report (clinical report)

IMPACT ON DIABETES CARE AND EDUCATION

The Allina health system engaged the CDCES team in the implementation of the Welldoc Bluestar digital app.

- Self identification, access to connected devices, and peer support have resulted in an activation rate that is over 50%.
- Engagement metrics: 38% Male, 62% Female; 21% 55-64 years of age, 29% 65+ years of age.
- Connected devices: 36% of participants are using connected devices and fitness trackers (Table 1).
- Highest engagement of the tools within the app included BG entry, accessing recipes, food item entry, weight comment entry, and med list entry supporting daily self-management.
- Engagement persistence (ongoing use) is shown in Figure 3. Individuals have a weighted average lifespan of 8 months on the BlueStar app. Persistence of 11% at 18 months indicates use of the app for DSMES support.

Percent of participants using connected technologies	Connected technology/device
36%	Blood glucose monitor
18%	Fitness tracker
8.4%	Imported labs
1.7%	Continuous Glucose Monitoring System
1.3%	Imported medications
0.6%	Blood pressure cuff
0.4%	Weight scale

Table 1: Connectivity Status

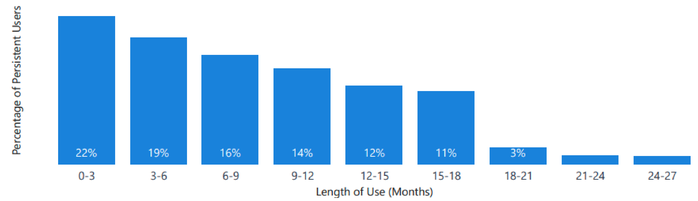

Figure 3: Persistence Distribution

CONCLUSIONS

- Integration of a digital solution across the health care system can help achieve optimal benefits.
- Implementation of a digital solution benefits from a team approach. The CDCES team developed an efficient method to introduce and onboard newly diagnosed individuals to the digital therapeutic. Integration of the app tools into DSMES services and sessions facilitated peer-to-peer engagement and education and supported self-management.
- The CDCES team supported care team members with learning about the digital solution by leading education sessions in the clinics. In addition, the CDCES informs the clinician when a SMART Visit report is available prompting the use of person-generate health data to optimize the therapy plan on a timely basis.

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