Using a Digital Health Solution to Scale Diabetes Self Care across the State of Montana

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Collaborative Demonstration Projection between: Montana Diabetes Program (MT DPHHS), Montana Coordinating Body – Association Diabetes Care and Education Specialists, and Welldoc

Introduction

The Montana Diabetes Digital Health Learning Network (MDDHLN) is a collaborative project between Montana public health department, MT ADCES, and Welldoc, a chronic care digital health company.

Montana identified a need to scale diabetes self-management education and support (DSMES) for populations in rural/frontier communities due to limited diabetes care and education coverage and utilization. Nationally, only 5-7% of individuals living with diabetes meet with a Diabetes Care and Education Specialist (DCES)[1].

This project was designed to provide Welldoc's digital health solution for diabetes, BlueStar®, to eligible individuals so the DCES could assess the integration of digital health tools to increase access to self-management education and optimize population health management.

The DCES introduced BlueStar*, an FDA-cleared digital health solution to their people with diabetes (PWD) in group sessions or individually as part of their DSMES program. BlueStar connects important health data and provides AI-driven, personalized, real-time digital coaching and pattern-based insights via a smartphone app or web-based access . BlueStar's AI engine connects vital health data across six dimensions: food, activity, symptoms, medications, labs, plus psycho-social factors, and includes a digital evidence-based diabetes education curriculum, collaboratively developed with ADCES.

BlueStar is aimed at helping individuals living with diabetes by building awareness and supporting better health habits over time (ongoing support). Additionally BlueStar provides the DCES with a management portal and SMART Visit Reports™ for viewing summarized individual data, and communicating with PWDs regarding, goal setting and shared decision- making for glycemic control and overall health.

*Welldoc Diabetes Rx/OTC is an FDA-cleared medical device ("BlueStar"), intended for use by health care providers and their adult patients with type 1 or type 2 diabetes. For full labeling information, visit www.welldoc.com.

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Methods

The MDDLHN is a group of DCESs throughout Montana (n=11) who participate in regular sessions led by the Steering Committee that is made up of clinical and public health officers of the stakeholder groups. The project is part of a multi-year innovation CDC grant. The Learning Network was established with the following objectives:

- Explore technology-enabled delivery of DSMES leveraging a digital health tool.
- Assess program implementation and feasibility, as well as patient engagement and self-management.
- Increase the DCES technology-enabled skill set and expertise.
- Develop a model for expansion of technology-enabled virtual diabetes education services to optimize services and scale.

Phase 1: Recruit participating DCES's

A virtual learning network was launched in Montana. DCESs were invited to participate, and a core group was identified based on interest. The initial meeting and subsequent trainings were conducted virtually. Ongoing support and episodic webinars were provided to engage the DCES in strategies on how to introduce digital tools as part of the DSMES program. The DCES was encouraged to use the digital health solution to support their ability to practice at the "top of their license" and explore ways to move from an individual to a population view.

Phase 2: Identify best practices for those providing diabetes care, education, and support in making technology enabled care. Through interactive sessions, the DCES group shared experiences and challenges (particularly due to the COVID-19 pandemic) on PWD engagement, integrating the digital solution into their DSMES workflow, and exploring interaction with population health approaches.

Results

The MDDHLN activities prepared the DCES to *Identify* the appropriate PWD candidates for the digital health solution, to *Configure* the tool to support self-management plans and *Collaborate* with their PWDs to leverage Bluestar insights to support goal setting, shared decision making, glycemic control and healthy lifestyles[2].

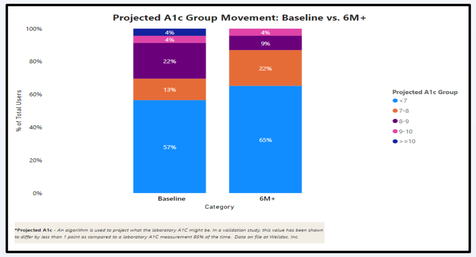
Engagement: Adults with type 1 or type 2 diabetes were offered use of the app. For the enrolled PWDs, 60% were male, and 90% had T2, 29% of the PWDs were over 65 years old. PWDs engaged with the following features: curriculum-35%, food tracking-44% and BG entries-12%.

Participants could share their data with their DCES based on the treatment plan goals.

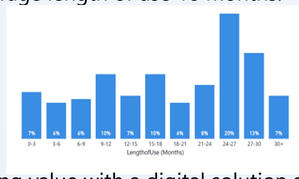
Over 53% of the participants sent the SMART Visit Report to their DCES at least once per month.

Outcomes:

Engagement with BlueStar for > 6 months of use demonstrated an improvement in A1C. After 6 months, 87% of the population had an A1C of 8 or less.



Persistence average length of use 18 months.



PWDs are finding value with a digital solution as evidenced in 20% still using the app at 2 years.

Conclusions

ADOPTION: Continued engagement strategies and ongoing support are required to help PWDs and DCESs understand the benefits of digital health and optimize deployment/use of digital health into practice.

Access to internet/cellular services does limit feasibility for some PWDs. Leveraging community-based assistance services/programs need to be considered.

IMPLEMENTATION: The ability to scale to a broader population base requires communication and enrollment strategies beyond dependence on DCES staff.

EFFECTIVENESS: Sustained engagement with a digital health tool led to positive clinical outcomes and engagement of 60% in the MDDHLN priority population.-making this an ideal solution to provide DSMES ongoing support.

References

1. Diabetes Self-Management Education and Support (DSMES) Toolkit. Published 2019. https://www.cdc.gov/diabetes/dsmes-toolkit/index.html. Accessed 7.22.22.

2. Greenwood, D. Peeples, M et.al. A framework for optimizing technology-enabled diabetes and cardiometabolic care and education. The role of the diabetes care and education specialist. The Diabetes Educator, 2020 Aug; 40: 315-33.

Source of Funding

This poster was supported by the State of Montana and the Cooperative Agreement RFA-DP18-1817, funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official view of the Centers for Disease Control and Prevention or the Department of Health and Human Services.

Baltimore Maryland, August 2022