

Rural-D1D: Using a Hybrid Telehealth DSMES Intervention to Reach Multiple Rural Primary Care Practices and Patients

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BACKGROUND:

Diabetes self-management education and support (DSMES) equips people with the knowledge and skills necessary to manage diabetes. Individuals in rural areas have decreased access to DSMES, especially DSMES that is culturally tailored to the rural context. Given the population density is sparse across large rural areas, interventions that can deliver group DSMES across a large geographic space are needed.

We developed the Rural Diabetes One Day (R-D1D) program, a multidisciplinary 5.5-hour DSMES intervention in English and Spanish that is culturally tailored to the rural context. This study was to explore the feasibility of delivering R-D1D to multiple rural primary care practices and patients at home simultaneously using telehealth.

METHODS:

An implementation science framework was used to deliver four R-D1D interventions using an iterative process. R-D1D was delivered by a Utah-based DSMES telehealth team (nurse practitioner/physician, dietitian, social worker, and pharmacist) to rural Colorado. Primary care practice patients were given the choice to receive R-D1D in their home or at the clinic where they receive care.

Key Findings

1. A hybrid telehealth DSMES intervention simultaneously delivered to multiple rural primary care practices and patients in their home is feasible and acceptable.
2. Using a hybrid telehealth approach to deliver DSMES shares resources across multiple primary practices.
3. Providing patients with the ability to choose how to receive telehealth DSMES (in the home or primary care practice where they receive care) increasing reach to people with diabetes across geographically sparse rural areas.

RESULTS:

Patients (N=34; 70.6% female, 92.2% type 2 diabetes, 52.9% Hispanic/Latino) participated in one of the following R-D1D groups.

Group 1 was delivered in Spanish to one primary care practice. Group 2 was delivered in English simultaneously to one primary care practice and two participants in the home. Group 3 was delivered in Spanish simultaneously to two primary care practices. Group 4 delivered in English simultaneously to two primary care practices and one participant in the home and used a breakout session for two 30-minute sessions to split up the practices, allowing for more engagement. See Figure 1.

Patients who received the intervention in their home reported these reasons : decreased mobility due to a recent surgery, recent COVID-19 infection, and an unknown personal preferences.

Primary care practices found the sharing of DSMES resources to be acceptable.

CONCLUSION

Using an iterative approach, we found that hybrid telehealth to deliver DSMES to rural Colorado was feasible and acceptable. Patient choice on where to receive DSMES (home or primary care practice) can increase reach as it addresses personal preferences as well as needs related to transportation, childcare, and internet access.

Figure 1. Iteration of Groups Over Time

