Overview of Core Research Project

The risk of type 2 diabetes (T2D) is significantly higher in low- vs. high-income populations. Lifestyle interventions, like the Diabetes Prevention Program (DPP), can prevent progression to T2D. However, social determinants of health barriers such as transportation, work schedules, and childcare hinder DPP participation. A virtual diabetes prevention program (v-DPP) can be useful in addressing these types of barriers.

The Yale-Griffin Prevention Research Center is assessing the feasibility of v-DPP with community-based care coordination, led by community health workers in two contrasting settings in Connecticut. The v-DPP aims to improve body weight, blood pressure, diet quality, and physical activity in low-income individuals at risk for T2D. Participants in New Haven and the Lower Naugatuck Valley are being supported by community health workers to address systemic barriers. This innovative, and potentially cost-effective approach may reduce health inequities and serve as a model for other socio-economically vulnerable communities in CT and beyond.

This study applies community-based participatory research methods and the socio-ecological model, the Program Impact Pathways quality assurance approach, and the RE-AIM framework.

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Recruitment and Enrollment Results

From July 2021 through May 2023, we aimed to enroll 60 participants per site aged 18 or older, residing in Greater New Haven (GNH) or Lower Naugatuck Valley (LNV), Medicaid-eligible, and at risk for T2D. Original, in-person recruitment strategies were revised due to the COVID-19 pandemic and early recruitment challenges led to expanding the catchment area in both locations.

Of 389 screened, 128 people were eligible, and 97 enrolled as participants. In LNV, the most effective recruitment strategies included provider referrals (28 enrolled), referrals through community partners (11 enrolled), and targeted social media ads (7 enrolled). For provider referrals, direct mail was especially successful (15 of 28).

In GNH, the most effective strategies were community-based outreach (14 enrolled), community partner referrals (12 enrolled) and messages through the local health care system's patient portal, based on medical records (5 enrolled). For community-based outreach, recruitment through health screenings were particularly successful. (11 of 14).

Across both sites, less successful methods included posting flyers in community locations, distributing flyers at community events, press releases, virtual presentations during community meetings, and non-targeted social media and newspaper ads.

Figure 2. Social media graphics used to recruit participants through Facebook and Instagram.

Conclusion

Recruitment was most successful when personalized and conducted by trusted messengers, such as community partners, medical providers, and trained study staff. This underscores the importance of adapting recruitment approaches to the local context through community-engaged approaches. The Yale-Griffin Prevention Research Center is now in the process of assessing the effectiveness, feasibility, and participant satisfaction with our culturally tailored, community-engaged v-DPP.