Preparation Efforts by Three Hawai'i Organizations to Implement the Online Hawai'i Diabetes Prevention Program

Introduction: The CDC's Diabetes Prevention Recognition Program defines online services for delivery of the National Diabetes Prevention Program as 100% online material for all participants accessing courses via a computer, tablet, or smartphone. Execution requires attention to implementation fidelity of an evidence-based intervention in a non-randomized clinical trial real world setting and operational effectiveness/efficiency of the technology. Potential benefits include extension of reach of care, management, and self-management of patients. As part of the Hawai'i Department of Health's (HDOH's) strategy to increase enrollment in CDC-recognized Lifestyle Change Programs, the HDOH contracted a third-party vendor, ProVention Health Foundation (PHF), for a customized online platform, Hawai'i Diabetes Prevention Program (HI DPP). This assessment examines and describes the implementers' experience and progress achieved in adapting HI DPP by June 30, 2021.

Method: A general literature review of digital health technology developments and implementation was conducted, administrative documents were analyzed, and the participating groups' business profiles were summarized. Theoretical elements from the Exploration Planning Implementation and Sustainment and the Consolidated Framework for Implementation Research frameworks were used to examine steps, phases, organizational contexts, and constructs. The CDC's and American Medical Association's guides for using telehealth technologies informed the line of inquiry focusing on elements essential for adaptation and applicable across private, public, for-profit and nonprofit sectors in systems of differing sizes and complexities, eliminating elements processed prior to this assessment. Semi-structured interviews with questions developed in consultation with the HDOH were conducted using the Zoom online platform. Informants' responses were coded and analyzed for barriers and facilitators to implementation.

Key Findings: The three participating providers from Oʻahu and Hawaiʻi Island are recipients of funds from the DP18-1815 Improving the Health of Americans Through Prevention and Management of Diabetes, Heart Disease, and Stroke cooperative agreement. Group One and Group Two Implementers are part of separate community pharmacies in two different supermarket chains. Group Three Implementer is part of a large health system with presence in the Pacific region. Barriers included varying levels of recruitment challenges, the need for primary care providers to be more informed about the program, lack of online service insurance reimbursement, lack of implementers' preparatory work prior to applying to the program, and incompatible implementation materials made available by PHF/HDOH. Facilitators included an efficient online recognition process, responsive PHF representatives, lessons learned during the transition of in-person to online services, testing software from the administrator and participant perspective, the creation of end user tools, leveraging partnerships to promote/recruit, and communication efficiency.

Recommendations: Understanding differences between operational characteristics can inform targeted strategies. We recommend addressing existing barriers and facilitators and leveraging/supplanting resources to target gaps in preparatory work. The informants' projections for potential barriers and facilitators may be viewed as opportunities to eliminate or minimize risks for delays and improve outcomes. Providing materials/opportunities for patients to acquire user knowledge prior to the start and clarifying insurance reimbursement requirements would likely improve implementation and sustainability.