

HEALTH IMPACT STATEMENT

Hawai'i Prevents Diabetes Through Lifestyle Change and Awareness Campaign (Domain 1 / Strategy 6)

PROBLEM DESCRIPTION

Hawai'i residents are generally viewed as healthy, but there are underlying health disparities that affect many subgroups in the state. In 2012, 7.8% of Hawai'i adults reported diabetes and 11.6% reported prediabetes (BRFSS). In the same year, Native Hawaiians, Other Pacific Islanders, Filipinos, and/or low-income persons had a higher prevalence of both prediabetes (14.9%) and diabetes (12.0%) compared to the general population (BRFSS). In 2012, diabetes was the 7th leading cause of death in the state. As the population ages, diabetes rates are expected to increase. The state's estimated economic burden resulting from diabetes was \$1.5 billion (Dall et al., 2014).

Diabetes is preventable. In 2014, the American Diabetes Association estimated 442,000 adults in Hawai'i have prediabetes. However, the Centers for Disease Control and Prevention (CDC) estimates that 9 out of 10 people do not know their prediabetes status. The Hawai'i Department of Health (HDOH) estimated that certain groups have higher proportions of undiagnosed diabetes or prediabetes, including Other Pacific Islanders (22.8%), Filipinos (15.6%), and Native Hawaiians (12.3%). In September 2014, no lifestyle change programs for the prevention of diabetes existed at community health centers (CHCs) across the state, which serve members of these populations. Additionally, no programs existed to increase prediabetes awareness or provide guidance around lifestyle change.



INTERVENTION

In 2014, CDC awarded a grant to the Hawai'i Department of Health (HDOH) to address the issues of prediabetes and diabetes prevention knowledge and lack of lifestyle change programs for diabetes prevention, especially among Filipinos, Native Hawaiians, and Other Pacific Islanders, groups with the greatest prevalence of undiagnosed prediabetes. HDOH created a diabetes awareness campaign to address prediabetes and diabetes prevention knowledge. HDOH also partnered with the Hawai'i Primary Care Association (HPCA) to start National Diabetes Prevention Program (DPP) lifestyle change programs in community health centers. The National DPP lifestyle change program, based on a successful clinical trial using behavior change, is a year-long intervention delivered in-person in a group setting, online, and/or via telehealth. The clinical trial demonstrated a diabetes risk reduction of 58% by achieving a weight loss of 5-7%.

"DPP put my life in perspective. I knew I was at risk but wanted to worry about it later. Well, now is 'later'. I still struggle with food choices but thanks to my Health Coach and her gentle advice, I've gained confidence and lost 15 pounds."

– DPP Patient (from Success Story)

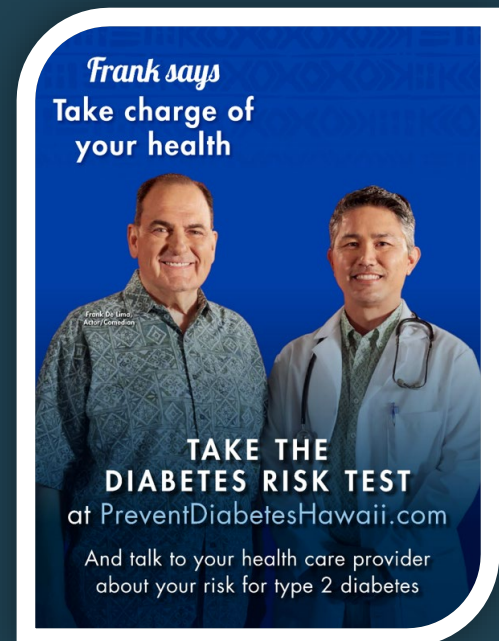
In 2015, HDOH conducted focus groups with members of the priority populations to inform the awareness campaign. Campaign materials created included posters for CHC waiting rooms, a website with diabetes prevention information, an electronic risk assessment, a television public service announcement that aired statewide featuring a local celebrity, and other materials (e.g., educational brochures). Diabetes risk tests were translated to languages spoken by members of the priority populations, such as Ilocano and Tagalog among Filipinos, Chuukese and Marshallese among Other Pacific Islanders, as well as Hawaiian, Samoan, Laotian, and Tongan. HDOH partnered with the Hawai'i Public Health Institute to distribute campaign materials through an online clearinghouse. CHCs, diabetes self-management education providers (e.g., Queen's Hospital System, Straub, and Times Pharmacy), other agencies also implementing DPP such as the YMCA, employers (e.g., Hawai'i Pacific Health, Bank of Hawai'i, Outrigger Hotels, Hawai'i State Employees), and bilingual health aides at HDOH district offices received campaign materials. In sum, 1,000 posters, 2,500 brochures, 31,000 pens, 4,000 English-language risk tests, and 500 of each translated risk test were disseminated to partners. HDOH also facilitated a DPP partner network of 55 organizations, including CHCs implementing lifestyle change programs. HDOH developed a shared cloud-based folder with action plans, meeting minutes, and resources to support the partner network.

HDOH's partnership with HPCA resulted in eight CHCs across the state offering the National DPP lifestyle change program on-site. CHCs also offered a telemedicine DPP lifestyle change program called Lifeweighs and an online program called Omada. Two health centers achieved preliminary and two achieved full CDC recognition for their lifestyle change programs, meeting CDC's standards and performance criteria. The remainder have pending recognition. Participating CHCs provided support and shared lessons learned about recruitment and retention of program participants. Eighteen lifestyle coaches from CHCs and other sites were trained by HDOH. HPCA provided lifestyle coach trainings to 16 additional coaches. Each participating CHC site tailored activities to meet the needs of their communities, such as integrating cultural activities like hula, adding cooking demonstrations featuring local foods or food grown by program participants, or encouraging friends or family members also at risk for diabetes to join classes to create social support. Community health workers assisted in providing interpretation during lifestyle change program meetings in different languages, including Spanish, Samoan, Chuukese, and Marshallese. HDOH also assisted with Omada recruitment and updated the state's 2-1-1 system, a comprehensive statewide community telephone and online information and referral service, to include National DPP lifestyle change programs.

HEALTH IMPACT

The awareness campaign reached an estimated 446,000 people statewide. A total of 39,833 Hawai'i residents visited the diabetes awareness campaign website and 8,940 completed a diabetes awareness test, helping to close the awareness gap for prediabetes in the state. HDOH and HPCA worked with eight CHCs across the state to offer DPP, which was not available previously. These CHCs serve large numbers of clients from the three populations with the largest gaps in prediabetes awareness. Two CHCs received preliminary CDC recognition, and two more achieved full CDC recognition. Through September 2018, a total of 751 patients enrolled in a DPP, of which 635 were patients at a 1422-funded FQHC. Face-to-face, online, or telehealth versions of the program (i.e., Omada, Lifeweighs) were offered. Overall, participants lost a total of 3,827 pounds (among 710 participants for whom we have data).

The HDOH and its partners plan to build on the successes related to the National DPP lifestyle change program. Future plans include further translation of the risk test. HDOH continues to engage employers around prediabetes awareness among their employees and to advocate for DPP as a health or wellness benefit. DOH is also extending the diabetes awareness campaign throughout health systems in a dual effort to build algorithms and workflows around identifying patients with undiagnosed prediabetes and referring them to DPP. HDOH continues to promote the campaign digitally on their website and through social marketing. Finally, HDOH plans to create a Lifestyle Coach Network to share resources and ideas between coaches, with expanded training opportunities to provide "advanced" topics to existing coaches.



References

1. Dall, TM, Yang, W, Halder, P, Pang, B, Massoudi, M, Winfield, N, Semilla, AP, Franz, J, & Hogan, PF. (2014). The economic burden of elevated blood glucose in 2012: Diagnosed and Undiagnosed Diabetes, Gestational Diabetes Mellitus, and Prediabetes. *Diabetes Care*, 37, 3172-3179.



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