HEALTH IMPACT STATEMENT

Growing Diabetes Self-Management Education and Support in Hawaii Through Capacity Strengthening and Collaboration (Domain 4 / Strategy 1)

PROBLEM DESCRIPTION

Type-2 diabetes is a significant and growing public health concern in the United States (US). The number of people with this condition is growing because obesity and physical inactivity are more common now than before and because the US population is aging [1]. Diabetes is very common among older adults. More than a quarter of adults 65 and older have the condition [1, 2]. In the US, about \$300 billion dollars are spent annually on patients with diabetes [3]. It is also a significant concern in Hawaii. Four to fourteen percent of the general population reports this condition. In places like Molokai and parts of Oahu, 10% or more of the population has diabetes (Figure). These numbers are expected to increase as obesity trends continue to track upwards and the population ages [4]. Hawaii already has one of the largest proportions of older adults in the US [5].

Diabetes is a complex chronic condition. Those affected navigate numerous daily decisions regarding food, physical activities, and medications. Diabetes selfmanagement education and support (DSMES) programs help people with these decisions by providing them with the knowledge and skills for appropriate selfcare [6]. These programs help people manage diabetes, prevent complications, and take control of symptoms such as tiredness, pain, and depression [7]. DSMES is cost-effective, limits hospital admissions and readmissions, and reduces lifetime healthcare costs [6]. Examples of DSMES in Hawaii include the American Diabetes Association (ADA)-recognized and American Association of Diabetes Educators (AADE)-accredited programs, as well as the Diabetes Self-Management Program (DSMP) developed by Stanford University. In Hawaii, Medicare, Medicaid, and most commercial plans cover ADArecognized and AADE-accredited DSMES programs. Most people (93%) in Hawaii have health insurance [8]. However, better access to these programs and sufficient reimbursement are essential to improving diabetes care in the state.

INTERVENTION

Prior to 2015, the Hawaii Department of Health (DOH) had little relationship with DSMES programs, especially those recognized or accredited by ADA and AADE. At that time, only 14 such programs existed in the state, and these did not always serve the highest need communities or provide services in places most convenient to patients. Recognizing the benefits of effective DSMES, the Hawaii DOH: 1) increased DSMES numbers in the state by hosting a Building Your Diabetes Education Program; 2) developed and reinforced Stanford DSMP capacity by coordinating updated training for 12 Master Trainers and Lay Leaders; 3) enhanced DSMES financial capacity and long-term viability by hosting two reimbursement training meetings and one sustainability meeting, attended by several dozen DSMES providers; 4) created a standard referral form for DSMES providers that is currently implemented by the four county Offices on Aging that deliver this service; and 5) increased awareness of programs in the state by coordinating workshops with over 100 participants on Oahu, Maui, and Hawaii islands to promote teambased care, including diabetes education, as well as sharing a DSMES directory to providers and physician organizations, mapping various DSMES programs online, and listing them on 2-1-1.

"In terms of 1305 or in terms of our diabetes, well, they [Department of Health] host a diabetes conference that we get to attend, so it's continuing education.... because if they didn't bring those trainers here, we would not be able to afford to go on the mainland."

HEALTH IMPACT

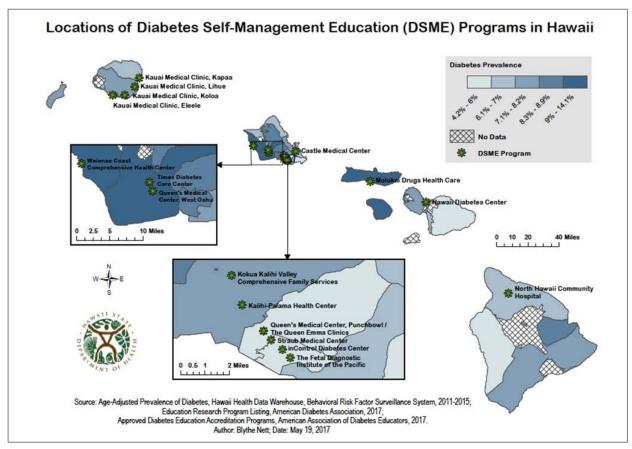
The Hawaii DOH evaluated its impact by tracking activities and new sites. DOH also contracted an external evaluation team to interview DSMES managers and coordinators to better understand statewide efforts.

Evaluation results show increased access to DSMES in Hawaii. Between 2015 and 2018, the number of programs in Hawaii grew from 14 to 18, a 30% increase. Two of the programs are found in pharmacies located in popular grocery stores. Two additional sites are in federally qualified health centers, reaching low-income and ethnic minority populations. A benefit of accreditation or recognition is that providers can bill insurance companies for their services, which is essential to the sustainability of many programs. There are also ongoing plans to expand programs in the state, especially through the grocery-store pharmacy model, which is convenient for patients.

Reimbursement training provided by the Hawaii DOH produced new service delivery models. For example, the National Kidney Foundation (NKF) is working toward combining DSMES accreditation with the delivery of the Stanford Program. When fully implemented, this hybrid program should allow NKF to bill for its DSMES services to the older Medicare population, which has high rates of diabetes.

"You had people from Queens and people from Waianae and all the ones that were running their things...networking where people could just talk and get ideas about what was working for that. Very effective. I think that it went a long way. ...afterwards [DOH] had these phone conferences ... It's a really good idea."

Technical assistance and continuing education provided by DOH contributed to strengthened DSMES capacity in the state. This support is especially important in Hawaii, because most professional training activities occur on the distant US mainland. Technical assistance came in many forms, including a webinar, phone conferences and in-person gatherings and all were appreciated. The Hawaii DOH continues to bring DSMES providers together to strengthen capacity and develop novel service delivery and reimbursement models. With proper lifestyle support programs, diabetes is a manageable condition. Hawaii is working hard to make programs more widely available and accessible.



References

- Kirkman, M.S., et al., Diabetes in older adults. Diabetes Care, 2012. 35(12): p. 2650-64
- 2. Centers for Disease Control and Prevention, National Diabetes Statistics Report: Estimates of Diabetes and Its Burden in the United States, 2014. 2014, Department of Health and Human Services: Atlanta, GA: U.S.
- 3. Herman, W.H., The economic costs of diabetes: is it time for a new treatment paradigm? Diabetes Care, 2013. 36(4): p. 775-6.
- 4. Robert Wood Johnson Foundation. The state of obesity in Hawaii. The state of obesity: Better policies for a healthier America 2016 [cited 2018 Sep. 5]; Available from: https://stateofobesity.org/states/hi/.
- 5. United States Census Bureau. QuickFacts United States. 2017 [cited 2018 Sep. 5]; Available from: https://www.census.gov/quickfacts/fact/table/US/PST045217.
- 6. Powers, M.A., et al., Diabetes Self-management Education and Support in Type 2 Diabetes: A Joint Position Statement of the American Diabetes Association, the American Association of Diabetes Educators, and the Academy of Nutrition and Dietetics. Diabetes Care, 2015. 38(7): p. 1372-82.
- 7. Centers for Disease Control and Prevention. Self-Management Education: Learn more and feel better. 2017 [cited 2018 Sep. 11]; Available from: https://www.cdc.gov/learnmorefeelbetter/programs/diabetes.htm.
- 8. Henry J Kaiser Family Foundation. Key facts about the uninsured population. 2017 [cited 2018 Sep. 7]; Available from: https://www.kff.org/uninsured/fact-sheet/key-facts-about-the-uninsured-population.





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