

# HEALTH IMPACT STATEMENT

## Hawai'i Trains and Utilizes CHWs and Non-Physician Team Members to Decrease High Blood Pressure Through Self-Monitor Blood Pressure Support (Domain 2 / Strategy 4)

### PROBLEM DESCRIPTION

High blood pressure (or hypertension) and resulting heart disease and stroke, are major problems in Hawai'i. Heart disease is the leading cause of death in the state while stroke is third. Three out of ten deaths occur each year as a result of cardiovascular disease. In 2014, 29% of Hawai'i adults were diagnosed with hypertension. Across the state's community health centers (CHCs), only 63% of patients diagnosed with hypertension had their blood pressure under control. Among four different populations—Native Hawaiians, Pacific Islanders, Filipinos, and/or low-income persons—a combined 40% had high blood pressure, which is higher than the overall state prevalence of 26.2% (BRFSS/Hawai'i IBIS, 2013). In 2014, few CHCs had self-measured blood pressure monitoring (SMBPM) programs in place, even though such programs can lower blood pressure and reduce the risk of death related to hypertension (CDC, 2017).



### INTERVENTION

Through funding from the US Centers for Disease Control and Prevention (CDC), the Hawai'i Department of Health (HDOH) partnered with the Hawai'i Primary Care Association (HPCA) to identify and address a number of gaps related to hypertension control in the state. The lack of SMBPM programs at a number of CHCs across the state that serve Native Hawaiians, Pacific Islanders, Filipinos, and/or low-income persons was identified as a major barrier. Additionally, non-physician team members at health centers and other physician practices across the state lacked training in blood pressure measurement and management.

At the state level, the HDOH facilitated blood pressure trainings with its partners at the American Heart Association with 40 providers from across the state. HDOH also developed training on blood pressure reading guidelines and scheduled six trainings across the state for non-physician trainees. Community health workers (CHWs) who help to implement SMBPM programs at 1422-funded CHCs were provided additional training opportunities. HDOH also provided training on team-based care to support hypertension and SMBPM efforts across the state through Learning Action Network meetings.

HPCA worked to identify gaps in capacity with CHCs across the state. A number of activities were undertaken. HPCA facilitated trainings on CDC's Million Hearts and American Heart Association's Target BP programs with CHC staff. HPCA and HDOH also worked to distribute 100 blood pressure monitors donated by the American Heart Association to CHCs to help facilitate SMBPM programs. Some CHCs purchased monitors for distribution or sold them to patients. Common features across SMBPM programs in CHCs included providing warm handoff referrals by providers who assessed patient readiness, training patients to read their own blood pressure, developing logs for recording and monitoring blood pressure, providing blood pressure monitor "loaners" for those who are unable to purchase their own monitors, and providing lifestyle modification supports (e.g., wellness classes or advice). Novel SMPBM program differences included importing blood pressure readings into electronic medical records via Bluetooth or through home visits by CHWs. Novel lifestyle change support varied across centers, but included referrals to on-site gyms or trainers, cooking demonstrations that drew on the DASH diet guidelines, and implementing culturally-appropriate group activities like "Hula for Health."

## HEALTH IMPACT

At the state level, three network meetings were held, reaching 30 participants in Maui County, 45 in Hawai'i County, and 70 in Honolulu County with information about team-based care, hypertension, and SMBPM efforts across the state. In sum, HDOH trained and certified 48 non-physician health professionals, including CHWs, care coordinators, certified medical assistants, health educators, dental assistants, and dietitians to accurately take and record blood pressure readings.

By the end of the grant, all nine 1422-funded CHCs had implemented SMBPM programs tailored to the needs of their respective communities. A total of 703 patients with hypertension enrolled in a SMBPM or participated to confirm a hypertension diagnosis. Among the 586 patients who had confirmed hypertension, 40.1% achieved hypertension control. Three CHCs started blood pressure monitor loan programs to overcome barriers related to cost, reaching over 200 patients. Two health centers, Lanai Community Health Center and Waianae Coast Comprehensive Health Center, received Target BP recognition from the American Heart Association and American Medical Association.

Moving forward, HDOH envisions a larger role for non-physician team members to support SMBP. Currently, the state partners with the American Heart Association to support state legislation to cover blood pressure monitors as a Medicaid benefit. Also, HDOH is working with the YMCA to create community SMBPM programs. HDOH continues working with and training CHWs and other non-physician team members in blood pressure and cholesterol management.



### References

1. US Centers for Disease Control and Prevention. (2017, December 21). Self-measured blood pressure monitoring with clinical support. Retrieved from <https://www.cdc.gov/dhdsp/pubs/guides/best-practices/smbp.htm>



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This project was supported by the CDC State and Local Public Health Actions to Prevent Obesity, Diabetes, and Heart Disease and Stroke (DP14-1422) grant.