

## Heart Disease and Stroke Prevention Initiatives in Three USAPI Jurisdictions

### Overview

ASTHO and CDC have engaged the United States Affiliated Pacific Islands (USAPI) to design and implement hypertension (HTN) control programs through its Heart Disease and Stroke Prevention Learning Collaborative since 2014. In 2019, Guam, the Republic of Palau, and the Commonwealth of the Northern Mariana Islands (CNMI) evolved their efforts to improve cardiovascular health outcomes in their jurisdictions. Heart disease and stroke are the leading causes of death in [Guam](#), [Palau](#), and [CNMI](#), and HTN prevalence is over 30%. In their efforts to address HTN to prevent heart disease and stroke, each jurisdiction reviewed local data and developed programs based on the current health system in place and the needs of the community. This brief summarizes each jurisdiction's efforts and highlights successful strategies that can be applied to future HTN and chronic disease prevention projects.

### Guam, Palau, and CNMI Initiatives

In 2019, program teams in Guam, Palau, and CNMI focused on identifying people with uncontrolled HTN, or those previously diagnosed with HTN, but who no longer engaged in care. Though programs varied by jurisdiction, each shared a common goal of taking a holistic approach to help individuals control their HTN. This approach consists of educating participants and encouraging behavioral changes, including taking antihypertensive medication, increasing physical activity, and following a healthier diet.

Guam's goal was to increase the number of patients in the health system with controlled HTN. Recognizing that policy change is a lever for sustainability, the team met with their health official to establish a sliding scale fee for doctor visits and lab testing, and medication discounts for patients engaged in their [Passport to HTN Services](#) program. Working with three clinical partners to use electronic health records to identify patients with uncontrolled HTN, patients were assessed and enrolled in the Passport to HTN Services program, which features educational information and workshops, physical activity sessions, nutrition classes, and a list of discount programs for lab testing and medication.

Palau's goal was to improve identification of newly diagnosed patients with HTN. The health agency's Noncommunicable Disease Unit focused on screening community members to identify patients recently diagnosed with HTN or those who missed a follow-up visit. To complement this, the team leveraged policy change to standardize clinical practice by working with 19 providers to adopt a protocol for identifying patients with high blood pressure. Patients faced transportation barriers and work commitments that impacted their ability to seek care, which ultimately prevented many people from being diagnosed. To adapt to this challenge, the team held screenings in the community. Over the course of five events, the team screened 170 individuals, 23 of whom were found to have abnormal blood pressure readings and were referred to community health centers for clinical services. For standardized tracking, the team developed a flow chart to guide data entry into the Chronic Disease Electronic Management System and used the system to track patients' HTN control progress.

Lastly, CNMI set a goal of increasing HTN control among participants enrolled in the HTN Identification Control (HIC) program. They partnered with their health agency's Family Care Clinic medical providers to identify and refer 20 patients recently diagnosed with HTN to the HIC program. Peer coaches supported patients through phone calls to answer questions and created a comfortable environment where patients learned about HTN, medication use, and self-monitoring. HIC covered initial and follow-up visits, medication, blood pressure cuffs, and lab testing to reduce the barrier of non-participation related to cost. To address the lack of adequate footwear necessary for participating in physical activity, the team partnered with a shoe store to provide athletic shoes to participants. Through the HIC program, 20 patients were enrolled, of which 70% improved HTN measures, and 45% of achieved HTN control.

## Considerations for New Initiatives

Jurisdictions in USAPI or elsewhere that are considering designing and implementing a heart disease and stroke prevention program can learn from the efforts and successes of Guam, Palau, and CNMI. Those wanting to get started can do this by conducting a needs assessment, building relationships with the community and partners, and preparing for sustainability.

**Needs Assessment:** A needs assessment helps to pinpoint gaps in the health system and determine the HTN burden and needs of the population. For example, Palau conducted a preliminary literature review to understand why patients miss their follow-up appointment and found that patients have competing priorities, such as family obligations. To address this, the team directed their outreach efforts toward community events to make screenings more readily accessible. The Palau team developed a flow chart for standardized data reporting to address data discrepancy, which is critical for program evaluation and improvement.

**Community Partnership:** Community partnership planning is key to identifying potential partners and to building relationships with organizations and the public. For organization partnerships, planning might include highlighting potential partners and drafting strategies to engage with them. Regarding public engagement, strategies include using local media to increase awareness and partnering with providers to promote and refer patients with HTN to the program. While needs assessments point to potential partners, planning determines how those relationships will be established. Developing a plan to engage existing or new community partners is vital for jurisdictions starting a new program.

**Long-Term Sustainability:** It is important to plan to sustain the program beyond the project period. Patients diagnosed with HTN after the project period need care, and developing a community-based service referral system will institutionalize linkages for that. Community partners can help to sustain the program long-term by providing valuable resources for patients to achieve HTN control and support lifestyle change, such as by providing blood pressure cuffs, educational classes, discounts for lab testing and medication, and athletic shoes. Another key to sustainability is to ensure enrolled patients continue to manage their HTN after the program ends, such as through self-monitoring and encouraging them to seek out clinical support to manage their HTN. Considering these options on the front-end of program development will help to build in policies and innovative partnerships that create sustainability.

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