



Assessment and Priorities for the Health and Well-Being in Native Hawaiians and Pacific Islanders



2020



Department of Native Hawaiian Health
John A. Burns School of Medicine
University of Hawai'i at Mānoa





*Assessment and Priorities for the Health and Well-Being
in Native Hawaiians and Pacific Islanders, 2020*

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E ALA Ē

E ala ē, ka lā i ka hikina

I ka moana, ka moana hōhonu

Pī'i i ka lewa, ka lewa nu'u

I ka hikina, aia ka lā, e ala ē!

AWAKEN

Awaken, the sun in the east

From the ocean, the ocean deep

Climbing (to) the heaven, the heaven highest

In the east, there is the sun, Awaken!



PREFACE



This report is an update of the well-received *Assessment and Priorities for Health and Well-Being of Native Hawaiians and Pacific Peoples* published in 2013. We, at the University of Hawai'i, John A. Burns School of Medicine, Department of Native Hawaiian Health, together with the Queen's Health Systems, have collaborated once again to provide an updated broad summary of the health status and priorities of our Native Hawaiian and Pacific Islander communities to enable community leaders, policymakers, academic institutions, and other stakeholders make meaningful decisions and take informed actions.

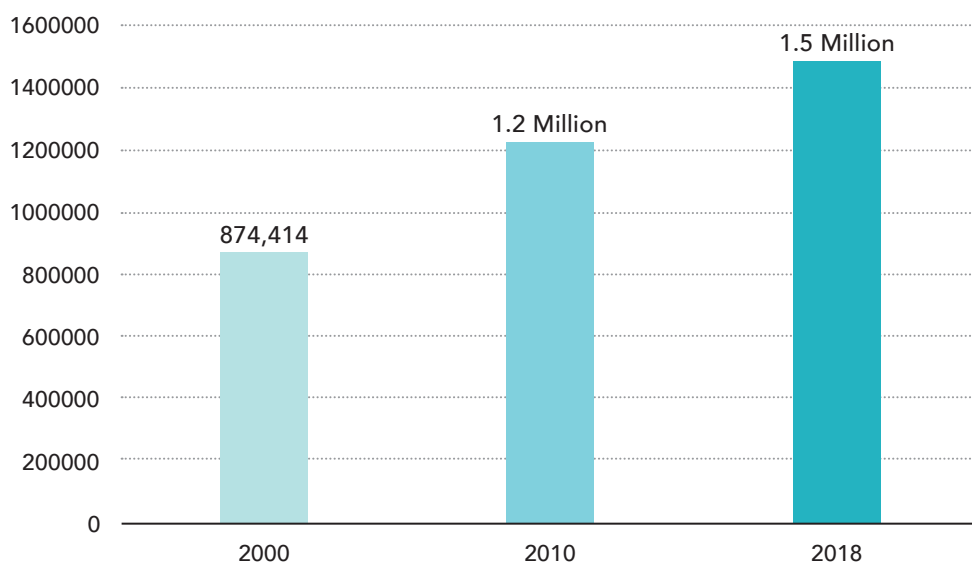
Community leaders and organizations serving Native Hawaiians and Pacific Islanders (NHPI) have shared with us that the 2013 report was particularly useful in explaining the causes and solutions to health disparities to funders, researchers, clinicians, policymakers, and the leadership of our healthcare systems. They specifically requested the addition of historical background information to deepen the understanding of the root causes of health inequities. In addition to providing a historical background in this report, we also assess the present health and well-being of NHPI and describe current health inequities from the most current scientific papers and data sources. We also share leading-edge, evidence-based solutions found in culturally-responsive programs and approaches with a demonstrated appeal to NHPI communities, families, and individuals. In conclusion, we offer recommendations and best practices for continuing work toward health equity.

INTRODUCTION

Native Hawaiians remain an intelligent, vibrant, resilient, and united people, despite 127 years of occupation by the United States.^{1,2} Throughout the Pacific, Island nations have endured and thrived in face of colonization, and environmental destruction from foreign countries. But how has United States (U.S.) and other foreign intrusion affected health? And how are Native Hawaiians and Pacific Islanders (NHPI) defined for health-related data collection, analysis, and reporting?

Federal agencies frequently combine NHPI for the reporting and tracking of health-related data. Native Hawaiians continually are the largest part of this group in the U.S. at 43 percent.³ NHPI is the fastest-growing racial/ethnic group in the nation.

Figure 1: NHPI Population Changes, 2000-2018



Source: Hixson, Hepler, & Kim, 2012; U.S. Census 2018.

KEY POINTS

► THE PEOPLE

The population groups included as Native Hawaiians and Pacific Islanders are all from the Pacific Basin and include the three main subregions of Polynesia, Micronesia, and Melanesia.

► THE HISTORY

Since the arrival of Westerners to the Hawaiian Islands two centuries ago, there have been great disparities in health status between Native Hawaiians and the U.S. population.

► THE SITUATION TODAY

Scientists, clinicians, and scholars trace the inequitable health status to several complex and interconnected social determinants of health, including historical trauma, discrimination, and lifestyle changes.



Ho‘o moe wai kahi ke kao‘o

Let all travel together like water flowing in one direction



The population groups included as NHPI are all from the Pacific Basin and include the three main subregions of Polynesia, Micronesia, and Melanesia. The largest Polynesian groups are Native Hawaiians, Samoans, and Tongans. The main groups from the Micronesian region include Marshallese, Palauans, Chamorro, and Guamanians. Fijians are among the Melanesians included as NHPI. Although they share similar deep ancestry, each of these Pacific Islander groups is culturally distinct in language, histories, customs, and relationships with the United States.

This report focus is on Native Hawaiians, the Indigenous people of Hawai‘i, who continue to bear a disproportionate health burden than overall racial and ethnic populations.⁴

We acknowledge Hawaiians as their own race/ethnicity and use the racial/ethnic label of “Native Hawaiian” and “Hawaiian” interchangeably in this report. When available, information for other Pacific Islanders is included either as combined or separate categories.

Since the arrival of Westerners to the Hawaiian Islands two centuries ago, there have been great disparities in health status between Native Hawaiians and the U.S. population. Historically, initial disparities arose from infectious disease epidemics, such as smallpox, measles, and cholera. In contemporary times the burden of health disparities comes from chronic diseases, such as obesity, diabetes, and cardiovascular disease,⁴ and higher mortality rates due to cancer, stroke, and diabetes.^{6,7}

As with other racial and ethnic groups in the U.S. (e.g., American Indians and Alaska Natives, African Americans, and Hispanics), and despite decades of federal and state initiatives to achieve health equity,^{7,8} Native Hawaiians still experience substantial health disparities.

What is the cause of these relentless disparities? Scientists, clinicians, and other scholars trace the inequitable health status to several complex and interconnected social determinants of health, including historical trauma, discrimination, and lifestyle changes.^{9,10}

What is historical trauma? Researchers have suggested that Indigenous populations, particularly when they become a minority population in their homeland, suffer and endure long-term negative effects from past blatant attempts to eradicate their ancestors and way of life, remove them from their ancestral lands, and enact compulsory and discriminatory assimilation policies and strategies. Many of the past transgressions and discriminatory practices have been institutionalized as structural racism in our current systems. Not to mention the interpersonal racism that many Indigenous communities endure regularly. Thus, historical trauma is essentially a type of psychological wounding that can be transmitted from one generation to the next and relived by Indigenous peoples in both narrative forms and the lived experiences of racism.^{11,12} The problems associated with historical trauma are made worse by socioeconomic (e.g., housing, educational, and occupational disadvantages) and socio-cultural challenges (i.e., ability to preserve cultural practices and protect cultural and natural resources).¹³

To understand Native Hawaiian health, it is important to understand the broader historical and sociopolitical events and contexts that have led to them. We first provide a post-Western contact historical overview of Native Hawaiians, because this story is often overlooked in U.S. history and is thus unfamiliar to many, especially as it relates to achieving health equity. ◀



THE BEGINNINGS OF INEQUITY

CHAPTER 1

KEY POINTS

► FOREIGN DISEASES

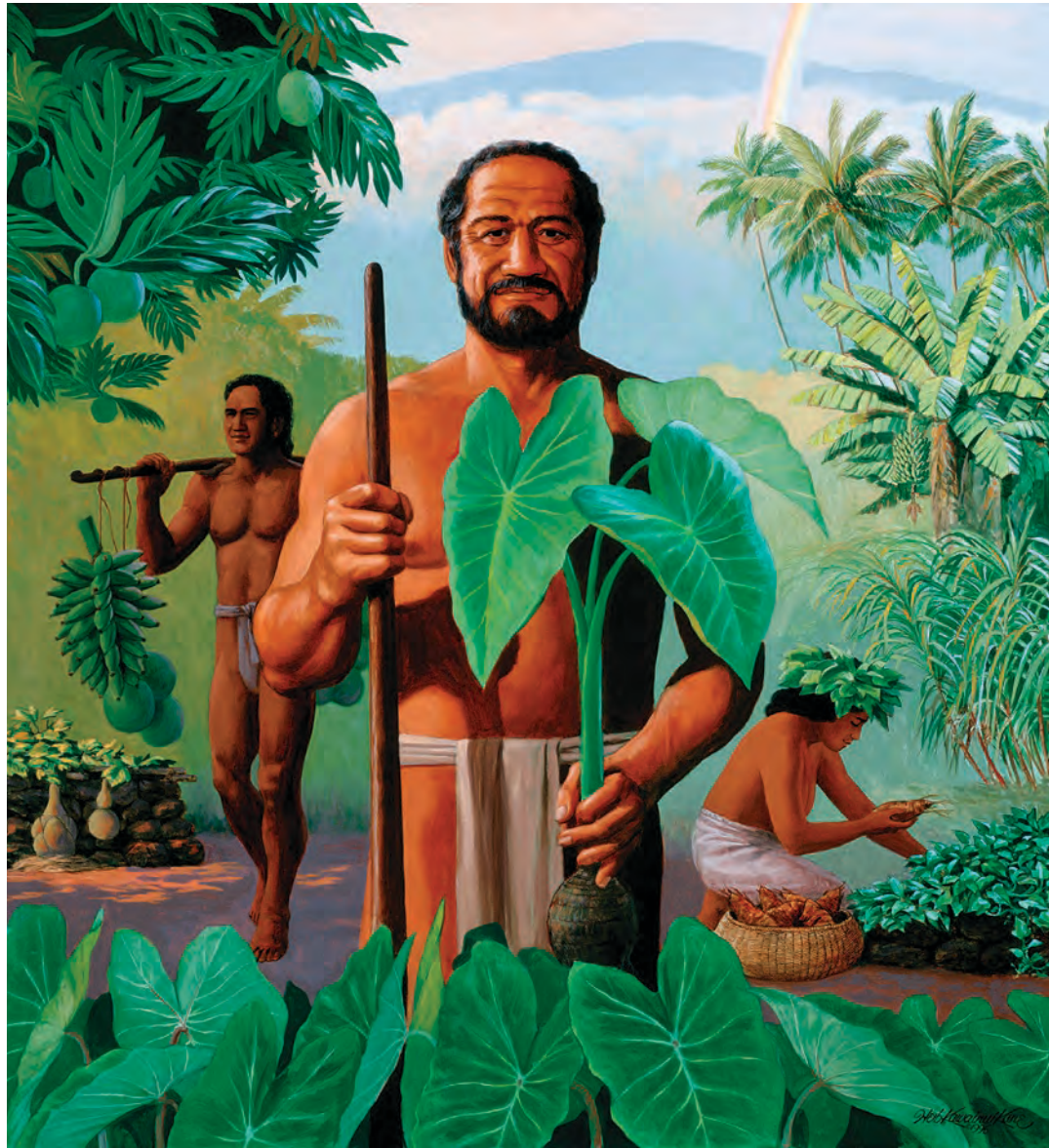
The influx of European, American, and Asian foreigners to the islands resulted in a wave of infectious disease epidemics. Throughout most of the 1800s, Hawai'i was hit hard by cholera, influenza, mumps, measles, whooping cough, and smallpox.

► THE OVERTHROW OF THE MONARCHY

In 1893, a group of American businessmen and missionary descendants, forcefully removed the reigning monarch Queen Lili'uokalani with the backing of U.S. military.

► NATIVE HAWAIIAN HEALTH CARE IMPROVEMENT ACT OF 1988

The Native Hawaiian Health Care Improvement Act of 1988 was enacted after nearly two decades of advocacy and research documenting the significant health inequities experienced by Native Hawaiians.



It is estimated that when the British explorer Captain James Cook first arrived in Hawai'i in 1778, the native population size was between 300,000 to 700,000.¹⁴⁻¹⁶ Writings by Cook and his officers, which marked the start of sustained Western contact with Hawai'i, describe a vibrant and robust people who were physically, emotionally, and spiritually healthy.¹⁷

Pilikia ho'i kau a lohe mai

Troubles that [do not] hear



Everyday life in Hawai'i up to this point was governed by a system based on the notions of *kapu* (people, places, and things held under strict regulation) and *noa* (people, places, and things free of restriction). It was essentially a resource management and public health system that governed how land and ocean resources were accessed and used as well as how people behaved, lived, and treated others. A system that allowed for a well-ordered communal society; a well-balanced, nutritious diet; and an active lifestyle for holistic wellness and disease prevention.^{18,19} All that contributed to the overall health and well-being of the native population as a people.

FOREIGN DISEASES

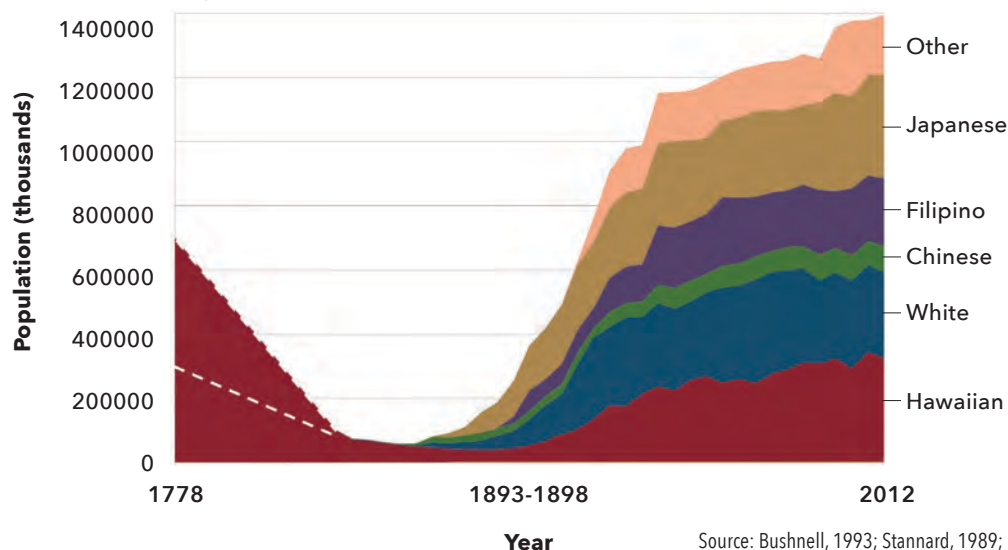
This system and the overall health and well-being of the native population drastically changed following their contact with Westerner settlers. Over the ensuing decades, the influx of European, American, and Asian foreigners to the islands brought with them waves of infectious disease epidemics.¹⁸ Throughout most of the 1800s, Hawai'i was hit hard by cholera, influenza, mumps, measles, whooping cough, and smallpox to name a few. Most affected were the native population who had no natural immunity to ward off these diseases. These epidemics decimated the Hawaiian popula-

tion such that by the late-1800s, the native population had plummeted to about 30,000.^{14,18}

LOSS OF LAND

While these epidemics were happening, Native Hawaiians and their *ali'i* (governing body) were beginning to lose control over their government, lands, and businesses to foreign influence and interests. The Great Māhele of 1848 is an example of the loss of control over land when an alien concept of land privatization was introduced.¹⁸ This system, pushed by foreign settlers, was entirely at odds with the traditional and ancestral relationship Native Hawaiians have with the land, which left many Native Hawaiians landless.²⁰ Policies, such as The Great Māhele, were more about American interests and the means to disenfranchise Native Hawaiians from their ancestral lands, customary practices, and traditional economic systems.¹⁸ All of which have had deep and lasting repercussions. Native political and economic control was undermined as American culture and social policies based on the preferences of conservative Puritan Christian missionaries moved to the forefront. Also foundational to the traumatization was that Hawaiian language and Hawaiian cultural practices were deemed "primitive," and often "immoral" and the English language increasingly and officially replaced the Hawaiian language.^{21,22}

Figure 2: Population estimates in Hawai'i, 1778-2012



Source: Bushnell, 1993; Stannard, 1989; Nordyke, 1989; Hawai'i DOH, 2020; Soong 2020



INFLUX IN IMMIGRATION

From the mid-1800s to the early 1900s, foreign laborers from China, Japan, Korea, and the Philippines were hired to work in the plantation industries that dominated the islands. Foreign laborers were needed because of the significant native population decline, but also because of Native Hawaiians' disapproval of working on sugar plantations built upon sacred ancestral lands. By the beginning of the 1900s, American and European foreigners and Asian laborers had overtaken the native population, reducing them to minority status in their homeland.¹⁸

THE OVERTHROW

The illegal overthrow of the Hawaiian nation in 1893 was the culmination of the aforementioned events. In 1893, a group of American businessmen and missionary descendants forcefully removed the reigning monarch Queen Lili'uokalani with the backing of the U.S. military. The U.S. government's initial concern over its involvement gave way to political and military interests in the strategic position of the islands and extending U.S. influence into the Pacific. The U.S. ignored and suppressed the expressed opposition of the Hawaiian nation's citizens to the loss of independence. In fact, a petition signed by 95 percent of the Native Hawaiian population rejected annexation to the U.S.²³ With the annexation to the U.S. in 1898, the U.S. took without compensation 1.8 million acres of the Hawaiian government and crown lands of the monarchy.¹⁸ Hawai'i was designated a territory and by 1959, the 50th state in the U.S.

THE HAWAIIAN RE-AWAKENING

The 1960s and 1970s saw a period of cultural awakening and the revitalization of Hawaiian identity often referred to as the "Hawaiian Renaissance." It was a momentous and vital

chapter of modern Hawaiian history, which included a revival of traditional Hawaiian music, dance, language, and ocean canoe voyaging, as well as political activism that sought to bring about the re-evaluation of land use policies, sovereignty, social justice and equity.²⁴ One momentous achievement from the period was grassroots activism that brought an end to U.S. military bombing and control of Kaho'olawe, the eighth largest island of Hawai'i.²⁵ Notable Native Hawaiian physician and health researcher, Dr. Emmett Noa Aluli, was one of these early activists. He began his involvement in protecting Native Hawaiian environmental and health rights during his medical training on the rural island of Moloka'i in the 1970's and it solidified as a lifelong commitment. When describing Native Hawaiian health equity, he is often quoted as saying:



The health of the land is the health of the people.

—Dr. Emmett Noa Aluli

HEALTHCARE IMPROVEMENTS

There were significant policy milestones during this period to move toward equity between Native Hawaiians and other populations, particularly in the areas of health, education, and political self-determination. Of considerable importance is the Native Hawaiian Health Care Improvement Act of 1988, which was enacted after nearly two decades of advocacy and research documenting the significant health inequities experienced by Native Hawaiians.



A seminal report, *E Ola Mau: The Native Hawaiian Needs Study* identified four key findings:

- 1) Significant disparity in rates of chronic disease.
- 2) Poor access to health services.
- 3) Shortage of Hawaiians as health professionals.
- 4) Preferences for culturally relevant programs and services.^{26,27}

The Native Hawaiian Health Care Systems on the islands of Hawai'i, Maui, Moloka'i, O'ahu, and Kaua'i, and their organizing entity Papa Ola Lokahi, were established under the federal Act, as was a health professional scholarship program for Native Hawaiians.^{26,27} At approximately the same time, after inequities in Native Hawaiian education achievements were documented, federal legislation established the Native Hawaiian Education Council, which provided funding for various education-related endeavors, including Hawaiian language immersion schools and culturally relevant educational curriculum.

APOLOGY RESOLUTION

In 1993, 100 years after its illegal action, the U.S. Congress passed a resolution that acknowledged and apologized for the U.S. involvement of the unlawful overthrow of the rightful government of the Kingdom of Hawai'i, the resolution also acknowledged the devastating effects Hawai'i's historical experiences had on the Hawaiian people. As noted by Mokuau et al.²²:

Although the overthrow of the Kingdom of Hawai'i occurred more than a century ago, historical loss of population, land, culture, and self-identity have shaped the economic and psychosocial landscapes of Hawai'i's people, and limits their ability to actualize optimal health.

ACCESS TO EDUCATION AND ECONOMIC OPPORTUNITY

Similar to the Kingdom of Hawai'i, other Pacific Island nations came under control of foreign powers in the 1800s and 1900s.²⁸ To access educational and economic opportunities, Pacific Islanders from these nations began emigrating to Hawai'i and the continental U.S. Samoans, for example, emigrated from Sāmoa and American Sāmoa (an incorporated territory of the U.S. since 1900) for agricultural and factory work. Chamorro people/Guamanians emigrated from the Northern Mariana Islands and Guam (a territory of the U.S. since 1898).

MILITARY DESTRUCTION

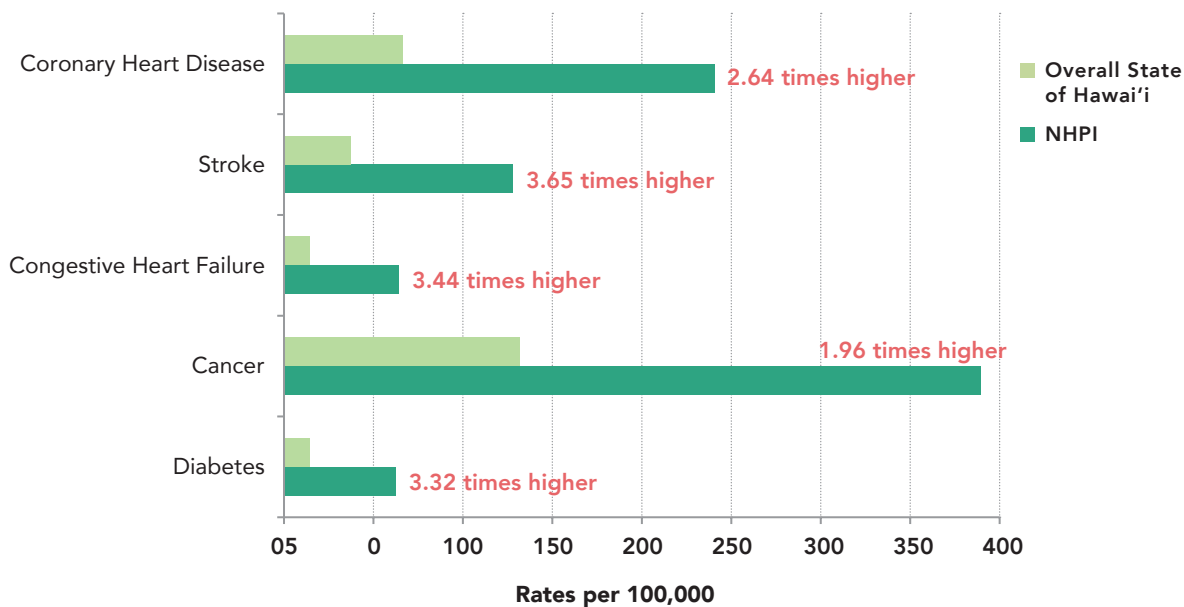
From 1946 to 1958, the U.S. issued numerous destructive nuclear weapons tests in the Pacific, specifically the Marshall Islands and Bikini and Enewetak Atolls, causing loss of life, health, land, and resources.²⁹ As a result of this devastation, the U.S. attempted to “compensate” these Pacific Island nations for killing their people and land through the Compact of Free Association Act of 1985 (COFA). COFA, a series of treaties between the U.S., the Federated States of Micronesia, the Republic of Palau, and the Republic of the Marshall Islands, allowed the U.S. exclusive military access to these Pacific Island nations in exchange for providing them with health and education opportunities. The U.S. government, however, has often not lived up to their agreements under COFA. Medicaid coverage for many of these Pacific Islanders has been revoked³⁰, and military occupation and damage from radiation, continues to disrupt Micronesia's traditional lifestyle leading to detrimental chronic diseases.^{31,32} ◀



HEALTH INEQUITIES AND DISPARITIES CHAPTER 2

As with other Indigenous U.S. populations, Native Hawaiians have a disturbingly higher rate of chronic diseases than many other ethnic groups and the general population in Hawai'i and the larger U.S.^{8,33} While the leading causes of death are generally the same, the rates of Native Hawaiians afflicted with chronic diseases are greater and occur a decade earlier. These rates are disturbingly three times greater than for the general population of Hawai'i.³³ This is reflected in the differences in racial and ethnic longevity evident in past decades, a trend that persists. Compared to other racial and ethnic groups in Hawai'i, Native Hawaiians have the shortest life expectancy.^{4,34} Presented here are the leading causes of death among NHPI and health conditions with dire disparity.

Figure 3. Leading Causes of Death for NHPI, 2015



Data Source: Hawai'i DOH, 2020; Soong, 2020

KEY POINTS

► **CHRONIC DISEASES**

Native Hawaiians continue to see the onset of those chronic diseases a decade earlier with rates that are disturbingly three times higher than overall Hawai'i State rates.

► **DIABETES**

In 2015, NHPI were 3.32 times more likely to die from diabetes than the overall Hawai'i population.

► **WEIGHT-RELATED DISEASE**

Being overweight or obese are major risk factors for cardiovascular disease, hypertension, diabetes, cancer, high blood cholesterol, and sleep apnea.

► **EDUCATION PROGRAMS**

Diabetes education programs have been one successful approach to address diabetes disparities and important accomplishments have been made in reaching Hawaiians.



Chronic Diseases

CORONARY HEART DISEASE

Coronary heart disease is the most common type of cardiovascular disease and is the leading cause of death in the U.S., Hawai'i, and among NHPI.^{6,33,35}

Among ethnic and racial groups in Hawai'i, the NHPI coronary heart disease death rate was the highest (240.4 per 100,000 pop.), 2.64 times higher than the overall population (66.1 per 100,000).³³

The NHPI mortality rate for congestive heart failure was also the highest (63.9 per 100,000), 3.44 times higher than the overall State of Hawai'i population (14.4 per 100,000).³³

In Hawai'i, compared to all other groups, Native Hawaiians have the highest rates of the major behavioral risk factors for heart disease, including unhealthy diet, physical inactivity, alcohol abuse, and tobacco use.³⁶

CANCER

Cancer is also a leading cause of death for Hawaiians. NHPI have higher overall cancer death rates at 389.2 per 100,000, more than any other group in Hawai'i, and 1.96 times higher than the overall population (131.4 per 100,000 pop.).³³

More NHPI die of specific cancer than any other racial or ethnic group in the state; these cancers include colon, lung, prostate, liver or bile duct, oropharyngeal, and breast cancer.³³

Hawai'i's breast cancer death rate for NHPI women was 2.90 times higher than the overall population, the highest than any other group (72.9 per 100,000 pop.), and Native Hawaiian women have the lowest five-year cancer survivorship than the overall Hawai'i population.³³

NHPI also have significantly higher secondary admission rates for endometrial cancer following hysterectomy compared to other racial/ethnic groups.³⁷

What accounts for these cancer disparities? Health care scientists and scholars identify many reasons for Native Hawaiian health disparities including lack of culturally appropriate interventions, late detection, diagnoses at more advanced stages, genetic markers of tumor aggressiveness, and a high prevalence of tobacco use.^{38,39}

CEREBROVASCULAR DISEASE (STROKE)

Stroke is another leading cause of death for Native Hawaiians. The stroke mortality rate for NHPI in 2015 (127.5 per 100,000 pop.) was higher than any other group in Hawai'i, and 3.65 times higher than the overall population (37.4 per 100,000 pop.).³³ At stroke onset, NHPI are younger—by approximately 10 years, and have a higher prevalence of stroke risk factors such as diabetes, obesity, and hypertension, than Whites.³⁴

DIABETES

Another perilous area of large disparity is diabetes. In 2015, NHPI were 3.32 times more likely to die from diabetes than the overall Hawai'i population.

In an age-adjusted comparison, approximately 62 NHPI per 100,000 pop. die from diabetes, compared to 8 Whites, 13 Asians, and 14 people in the State overall.³³

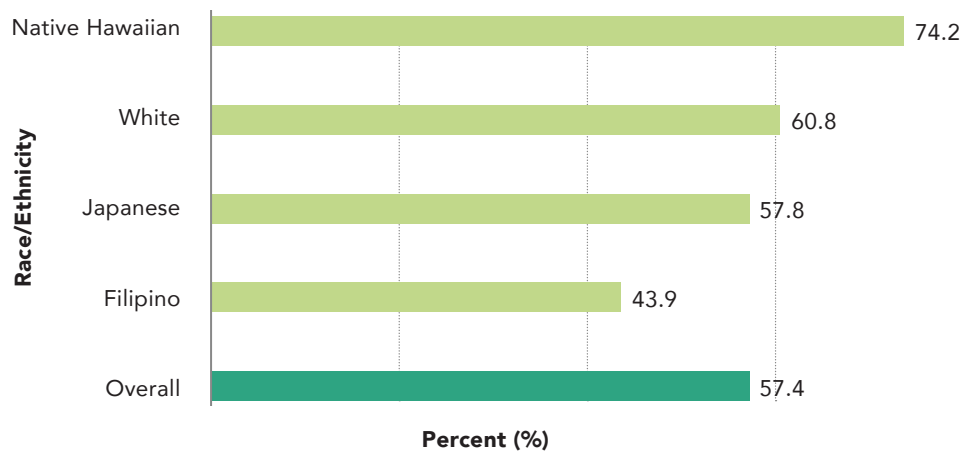
The most common diabetes is Type 2 diabetes, and in Hawai'i, Hawaiians have a higher prevalence of Type 2 diabetes compared to Whites and Japanese.⁴⁰

NHPI also have more complications related to diabetes. For example, compared to other groups, NHPI have the highest occurrence of chronic kidney disease⁴¹ and are most likely to have end-stage renal disease induced by diabetes.⁴²

Native Hawaiians discharged with a diabetes diagnosis had the second-highest number of lower-extremity amputations, with amputations occurring at a younger age.⁴³ Preventable hospitalization rates due to diabetes are also significantly higher for Hawaiian males as compared to White males, even after adjusting for ethnicity-related rates of diabetes and other demographic factors.⁴⁴

Diabetes education programs have been one successful approach to address diabetes disparities and important accomplishments have been made in reaching Hawaiians. Native Hawaiians are more likely to receive formal diabetes education (74%) than the overall population (57%).³³

Figure 4. People with Diabetes who Received Diabetes Education by Race/Ethnicity in Hawaii, 2016



People with diabetes who receive formal diabetes education

Source: Hawai'i DOH, 2020

Other Chronic Diseases

OBESITY

Being overweight or obese are major risk factors for cardiovascular disease, hypertension, diabetes, cancer, high blood cholesterol, and sleep apnea.^{5,45} These diseases, which often come on before age 60, are widespread among the Native Hawaiian population.^{5,45}

Native Hawaiians (43%) and other Pacific Islanders (54%) have the highest prevalence of obesity (defined as BMI ≥ 30) in Hawai'i compared to White (21%), Chinese (13%), Filipino (19%), and Japanese (19%).³³

NHPI teens and young adults in Hawai'i also follow this trend in obesity disparities. Teens who are Native Hawaiian (19%) or another Pacific Islander (44%) have the highest prevalence of obesity compared to Japanese (5%), White (7%), Filipino (15%), and the overall Hawai'i teen population (14%).³³

A 2012 study that examined obesity among 18- to 24-year-olds in rural Hawai'i determined 30% of NHPI young adults were obese, compared to just 10% of Asians and 9% of Whites.⁴⁶

ASTHMA

More Native Hawaiians, both men and women, have asthma than any other group in the state.³⁶ In 2009, about one in four Hawaiian children had asthma (25%), compared to the state-wide average of 17%.⁴⁷ Smoking is a risk factor for asthma, and more Native Hawaiian males are current smokers (21%) than overall males throughout the state (17%).³⁶

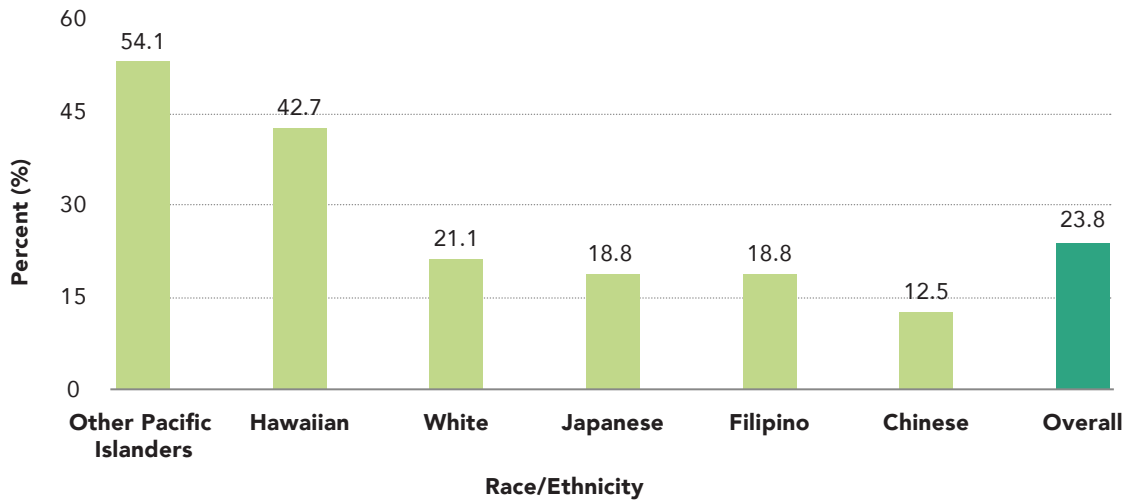
Behavioral Health

Native Hawaiians have among the highest incidences of behavioral health problems of all racial and ethnic groups in the U.S. These behavioral health problems include depression,⁴⁸ anxiety,⁴⁹ suicide,⁵⁰ substance use,⁵¹ family adversity (e.g., family disruption, family criminality, and poor family health),⁵² adverse childhood experiences,⁵³ and serious psychological distress.⁸

Native Hawaiians also report more trauma (such as depression, anxiety, post-traumatic stress disorder, and sleep disturbances) resulting from accidents and abuse throughout their life than do other racial/ethnic groups in the state.⁵⁴

Native Hawaiians living in Hawai'i have a higher prevalence of depression (13%) than the state's overall population (8%).⁴⁸ Suicide,⁵⁵ substance use,⁵⁶ and aggression⁵⁷ are associated with

Figure 5. Adults Who Are Obese (BMI ≥ 30) in Hawai'i by Race/Ethnicity, 2015



Source: Hawai'i DOH, 2020

depression in Native Hawaiians. The overall suicide rate among Native Hawaiians ages 15–44 is the highest compared to all of Hawai'i's major ethnic groups.⁴⁷

Social Determinate of Health

Social determinants of health are the conditions in which people are born, grow, live, play, work, and age.⁵⁸ Social determinants of health include factors like socioeconomic status, education level, neighborhood and physical environment, employment, social support, access to health care. Among the most challenging social determinants of health for Native Hawaiians are education, economic well-being, and crime/incarceration.

Education

In 2017, the Office of Hawaiian Affairs (OHA) reported that fewer Native Hawaiian students (compared to non-Hawaiian students) were proficient in reading, math, and science on the Hawai'i Department of Education's Standardized Educational Achievement Test.³⁶ According to a 2014 report by Kamehameha Schools, Hawaiians in the public school system had the lowest rates of timely graduation of all major ethnic groups in Hawai'i.⁴⁷ In the same year, they also reported that,

compared to other groups in Hawai'i, Native Hawaiians were the least likely to be enrolled in college and attain a bachelor's degree.⁴⁷

Economic Well-Being

Native Hawaiians had the highest rates of using public assistance and homeless services, and the highest rate of poverty among Hawai'i's major ethnic groups.⁴⁷ Also, Native Hawaiians had the highest unemployment rate among major ethnic groups in the state,⁴⁷ and had lower average annual earnings than statewide averages for both males and females.⁵⁹

Crime Incarceration

Native Hawaiians' arrest rates for violent crime, aggravated assault, robbery, and drug manufacturing or sales are higher than statewide averages.⁴⁷ Native Hawaiians are also overrepresented in Hawai'i's prison population. For example, in 2012, when Native Hawaiians made up only about 18% of Hawai'i's total adult population, they accounted for 43% of the state's female prison population and 36% of the state's male prison population.⁵⁹

COVID-19 Pandemic

The COVID-19 pandemic has brought another layer of health inequities for NHPI. The effects of COVID-19 on the health of NHPI is still emerging; however, current data suggest a disproportionate burden of illness among NHPI residing on the continent compared to other racial and ethnic groups.

High rates of pre-existing chronic diseases (e.g., cardiovascular disease, cancer, diabetes) make NHPI especially vulnerable in public health emergencies like the current COVID-19 outbreak. Because of these existing health disparities, NHPI are faced with a higher chance of severe symptoms and hospitalization due to COVID-19 than other racial and ethnic groups.

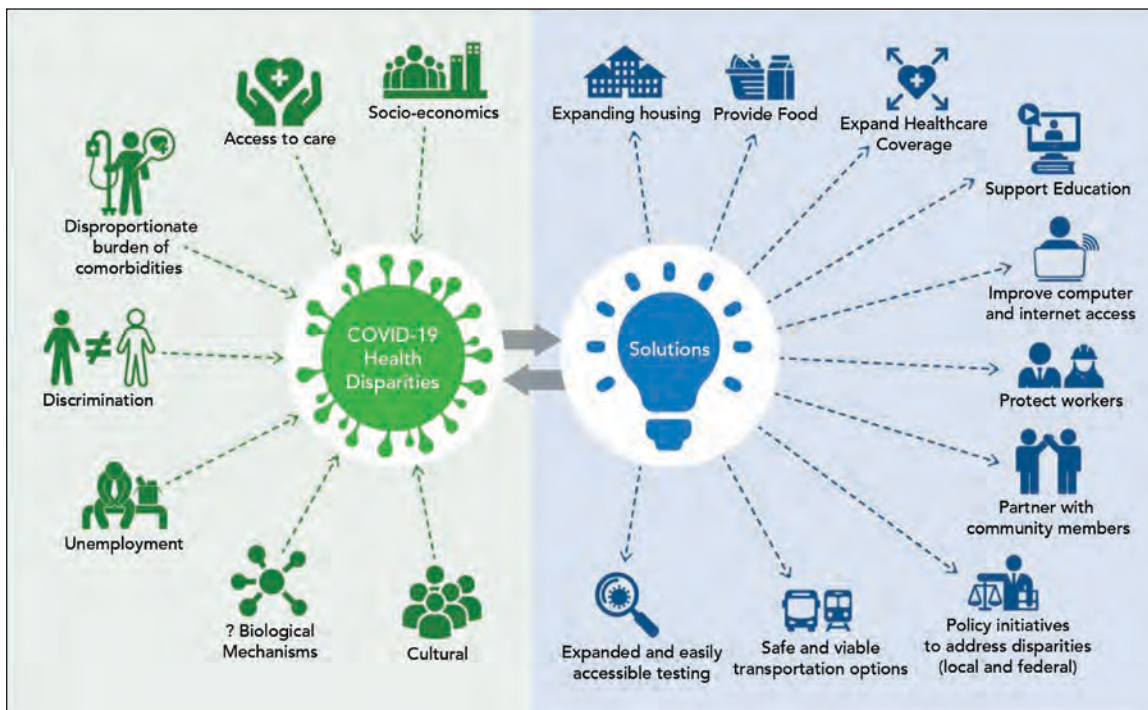
Behavioral health issues among NHPI due to COVID-19 has also become an increasing concern. The negative psychosocial effects of shelter in place and social distancing measures adds to the preexisting behavioral health issues among NHPI. These effects include depression, anxiety, stress, and

an increase in harmful behavior to self and others (e.g., suicidal behaviors and interpersonal violence).

Health differences between NHPI and other racial and ethnic groups are often attributed to socioeconomic-related vulnerabilities that are more common among NHPI than other racial and ethnic groups. In public health emergencies such as COVID-19, these vulnerabilities can also create a barrier for NHPI to access the resources they need to prepare for and respond to such a pandemic.⁶⁰ For example, NHPI are more likely than other racial and ethnic groups in Hawai'i to live in large multi-generational households and densely populated neighborhoods. Also, almost 1 in 4 Native Hawaiians work in essential jobs (e.g., service-related industry, healthcare, security, military).

The best way to prevent COVID-19 infection is to avoid being exposed to the virus, however, these factors places NHPI in direct and frequent face-to-face contact with many other people, and increases chance of exposure to COVID-19. ◀

Figure 6. Coronavirus (COVID-19) Health Disparities and Solutions,⁶⁰ 2020



Source: Haynes et al. *Circulation*. At the Heart of the Matter, Volume: 142, Issue: 2, Pages: 105-107, DOI: (10.1161/CIRCULATIONAHA.120.048126). © 2020 American Heart Association, Inc.



STRIVING FOR HEALTH EQUITY

CHAPTER 3

Because Native Hawaiians, as a group, experience significant health disparities, it is imperative that we work expeditiously toward health equity. From a Western lens, “health equity” is often understood as simply the absence of systematic disparities in health between different racial/ethnic groups.⁶¹ A Native Hawaiian way of thinking about health equity is quite different.⁶²

The Hawaiian worldview of individual health is inclusive of physical, spiritual, emotional, and mental spheres.^{63,64} On a macro-level, community health is closely associated with the important Hawaiian values of *lōkahi* (harmony) and *pono* (equity) in the relationship between *kānaka* (mankind, both self and others), *‘āina* (land), and *nā akua* (gods, spirits).^{18,64}

Historical trauma, the psychological distress and associated issues resulting from loss, oppression, and cultural disruption for Hawaiians have been described by Native Hawaiian psychologist-researchers in various ways. Rezendes identifies the *Kaumaha* (heavy, sad, depressed) Syndrome.⁶⁵ Crabbe discusses, that in contemporary times Hawaiians share a “collective sadness and moral outrage” and *hō‘ino‘ino* (abuse, inure) or broken-spirit.⁶⁶ These psychologists point to continuous oppression, and cultural discord from traditional Hawaiian values, practices and beliefs. To achieve health equity for Native Hawaiians, the Hawaiian community and their knowledge, both cultural and ancestral, must be

prioritized.⁶⁷ The ability of Hawaiians to adhere to their ancestral knowledge is central to their identity and social relations, and is intimately tied to their physical and emotional well-being.⁶²

Also crucial is spirituality, which in *kāhiko* (ancient) times was not a second thought but a way of life. Research shows that spiritual and social well-being are important to the overall well-being of Native Hawaiians living with chronic disease, despite any physical limitations caused by the disease.⁶⁸



KEY POINTS

▶ INTEGRATED HEALTH

The Hawaiian worldview of individual health is inclusive of physical, spiritual, emotional, and mental spheres.

▶ ACHIEVING HEALTH EQUITY

To achieve health equity for the Hawaiian community, knowledge, both cultural and ancestral, must be prioritized.

▶ COLLECTIVISM AND CULTURE

Studies with NHPI often identify the importance of extended family systems, values of cooperation and collectivism, pride in cultural heritage and traditions, and spirituality.



Mai kapae i ke a’o a ka mākua, aia he ola malaila

Do not set aside the teachings of one’s parents for there is life there



NĀ POU KIHI - The Corner Posts

A Hawaiian Framework for Achieving Social and Health Equity

Systemic change in political, educational, economic, and social systems is required to realize improvements in Native Hawaiian health. What Hawaiian scientist-scholar Kaholokula proposes, is a framework for Native Hawaiian well-being that synthesizes cultural values, health equity research, Indigenous scholarship, and social determinants. Like the corner posts in a solid house, each of the elements are fundamental, and it is their integrated strength that establishes the structure. It should be noted that the examples provided in the descriptions below often seek to address more than a single *pou kihi* (corner post).^{69,70}



KE AO 'ŌIWI – Indigenous Cultural Space

This corner post seeks to firmly establish Indigenous cultural spaces for Native Hawaiians to exercise prerogatives and aspirations, and express cultural identity without discrimination or prejudice. Specifically, the goal would be to revitalize: *ōlelo Hawai'i* (Hawaiian language), cultural practices, protocol, beliefs, values, and traditions and cultural-based education.

Examples include: Hawaiian language immersion schools, Maoli Arts Month (MAMo), Nā 'Ōiwi Television, and Kānehūnamoku Voyaging Academy. Cultural revitalization, cultural safety and a supportive environment that uplifts a strong positive Hawaiian identity will help mend the cross-generational trauma and lessen the stressors associated with chronic physical and mental diseases.

KA WAI OLA – Social Justice

This corner post is about ensuring fair treatment and equitable share of the benefits as well as burdens of society. Ka Wai Ola recognizes that education, political power, social-economic status all influence health and well-being. Examples include: Partners in Development, MA'O Farms, Ho'okua'āina's Kūkuluhou Mentorship, and Ma Ka Hana Ka 'Ike (hanabuild.org), and the newly formed Aloha 'Āina party.

KA MĀLAMA ĀINA – Environmental Stewardship

Concepts of *aloha 'āina* (love for the land) and *mālama 'āina* (caring for the land) are fundamental to Hawaiian view of personal health. Further, Hawaiians believe personal health is intimately and reciprocally linked to the wellbeing of their *'ohana* (family, friends, and community) and *'āina* (land).

Goals for this corner post include: access to nature/natural environment, food sovereignty, restoration of Native flora and fauna, and protection of spiritual sites. Examples include: Waipā, Kaho'olawe, Kauluakalana, Kū Maoli Ola, Limu Hui, KUA, and Kū Kī'ai Mauna (Maunakea protectors) movement.

KA 'AI PONO – Healthy Consumption

The term *'ai pono* refers to eating healthy and healthy lifestyle choices, it includes moderating consumption of food, as well as natural and manufactured resources, technology, and other conveniences of daily living.

What might Ka 'Ai Pono look like? *Poi* would commonly be a baby's first food and on the dinner table every night along with fresh fish and produce grown in Hawai'i. Examples include: Lunalilo Home, Kōkua Foundation, Kōkua Kalihi Valley's Ho'oulu 'Āina, Waianu Farm and Ka'ala Farm.



Creating Solutions

Health intervention programs designed to prevent and manage illnesses is one approach to begin to address health inequities and disparities. When health programs are aligned with the cultural values, perspectives, and preferred modes of living of a specific population, they are known as culturally responsive programs.^{71,72} The landmark *E Ola Mau Report* and subsequent research, has called for culturally relevant and responsive programs as one meaningful approach to achieve health equity for Native Hawaiians. It has taken decades to create, develop, implement, and evaluate health programs that have cultural relevance. They include evidence-based culturally-adapted programs; culturally-grounded programs; as well as promising programs.

1 CULTURALLY-ADAPTED PROGRAMS

As part of a national movement to improve health disparities and overall quality and accountability of health care services, the U.S. government has called for implementing evidence-based programs to promote health.^{73,74} Programs must show evidence, through an accepted research process, that distinct health improvements were achieved. An increasing reliance on such proven programs, though, leaves Indigenous communities at a disadvantage because there are very limited numbers of such programs and interventions designed by or for Indigenous peoples.⁷⁵⁻⁷⁸ Community researchers and educators have, therefore, relied on culturally adapting evidence-based programs for Pacific populations.⁷⁸⁻⁸¹

Adapting an evidence-based program means carefully considering cultural factors that may, directly or indirectly, be associated with health-related behaviors and how (or whether) a community accepts and adopts the program. Studies with Native Hawaiians and Pacific Islanders, for

instance, often identify the importance of extended family systems, values of cooperation and collectivism, pride in cultural heritage and traditions, and spirituality.^{68,82}

Pacific peoples also frequently mention an insensitivity to the nuances of different Pacific populations. For example, Micronesians are a fast-growing Pacific Islander group made up of individuals from multiple island nations, each with a distinct language and its family structures and traditions. For programs and materials to be culturally appropriate and successful, program planners must understand these various cultures and subcultures within the Pacific.

When adapting an evidence-based program, recognizing community agency and adapting health interventions for the specific, targeted community can improve both the efficacy and sustainability of positive health outcomes.^{80,83}



Ke Ku'una Na'au Program

BEHAVIORAL HEALTH



"I love having the opportunity of working 1-on-1, having a connection, and building a trusting relationship. I provide support and care with the intentions to create a healthier and enhanced quality of life for our patients. Simply providing the resources they need, like helping patients obtain food stamps is very rewarding for me. It makes me happy that I can make them happy. My approach is simple: I am present with open arms, humble heart, open mind, caring thoughts and prayers, honesty, and consistency."

–Anthony Hereari'i Negrillo, Patient Community Navigator.⁸⁴

OVERVIEW

- ▶ Navigators understand the key pathways to community-clinical linkages and help patients to obtain essential resources. They support patients with a safe transition after discharge, and also assist patients in obtaining resources to support their ongoing recovery and healing.
- ▶ Navigators understand that for their Hawaiian patients, *lōkahi* (harmony) between the spiritual realm, mankind, and the environment is critical to recovery and health and that the Hawaiian view of creating individual health and well-being is inclusive of all realms: body, mind, and spirit.
- ▶ Ke Ku'una Na'au Program is innovative, meaningful, and unique to Hawai'i as QMC was Hawai'i's first acute care hospital to implement the use of community health workers into its health delivery system in this way.

In 2016, recognizing the need to reduce unnecessary hospital readmissions among Native Hawaiians, The Queen's Medical Center, Hawai'i's largest tertiary care hospital which was founded by Hawaiian royalty over 160 years ago, implemented the Ke Ku'una Na'au Program (KKN), a culturally-adapted patient navigation behavioral health program focused on reducing hospital readmissions for socially and economically vulnerable Native Hawaiian adults.⁸⁵

The program name, Ke Ku'una Na'au, is translated as "to put one's mind and heart at ease," which is a key goal for the program's Patient Community Navigators.⁸⁵

KKN offers culturally-relevant and sensitive care to target the social needs of Native Hawaiians employing highly effective non-clinical community health workers as Patient Community Navigators.

These Navigators are included as members of a patient's direct clinical care team, and their role is to serve as the patient's liaisons between the hospital and community services.⁸⁴ Navigators understand the key pathways to community-clinical linkages and help patients to obtain essential resources. They support patients with a safe transition after discharge, and also assist patients in obtaining resources to support their ongoing recovery and healing.⁸⁴ Every Navigator has deep community and Hawaiian cultural knowledge that facilitates their caseload of 10–12 patients, and often requires daily contact with each patient.

Key Hawaiian values and practices are foundational to the KKN program. These values include: *kōkua* which translates as, to help, care for, aid, assistance, relief, to be a helper, counselor, and comforter and *pilina* which means relationship, union, connection and is central to the development of trust. Navigators understand that for their Hawaiian patients, *lōkahi* between the spiritual realm, mankind, and the envi

kōkua ▶ **pilina** ▶ **lōkahi**
help *union* *harmony*

ronment is critical to recovery and health and that the Hawaiian view of creating individual health and well-being is inclusive of all realms: body, mind, and spirit.^{64,84}

Similar to traditional patient navigator services, the KKN program provides support through the entire hospitalization, and post-discharge for a minimum of 30 days. KKN Navigators often build a deep relationship with their patients that goes far beyond the official program.⁸⁴ It is this type of pilina that has been important to impacting avoidable re-hospitalizations. As shared by Patient Community Navigator, Kehau Pu'ou, navigators take pride in their *kuleana* (responsibility) to serve their *kūpuna* (elders) and the Native Hawaiian community.⁸⁴

“Being chosen to carry this kuleana is truly a privilege. It is an honor to represent my kūpuna and the mission and vision they set forth. It is an honor to represent my kūpuna and the mission and vision they set forth. That alone is truly something our team holds at the forefront. We, as Navigators, are mission-driven and grounded in our kūpuna. This kuleana allows us to aloha our patients at the bedside. It is the first contact we have with them to form a relationship. From there, the journey begins.”

KKN is innovative, meaningful, and unique to Hawai'i. The Queen's Medical Center was Hawai'i's first acute care hospital to implement the use of community health workers into its health delivery system in this way.⁸⁴ KKN has successfully met community needs by reducing readmission rates among Native Hawaiian adults, improving their quality of life, and making positive impactful changes to the persistent, unmet healthcare needs in the Native Hawaiian community.⁸⁵

The program's success has been attributed to:

- 1) Removing barriers to community resources.
- 2) Building trusting relationships.
- 3) Using Native Hawaiian values in practice.⁸⁵

The program emphasizes collaboration across clinical and non-clinical workforces, and focuses on the importance of cultural adaptations and relevance.⁸⁴ As shared by Patient Community Navigator, Damien Hanakeawe:⁸⁴

“Because of the cultural trauma that has happened to Hawaiians, a lot of the kūpuna have a difficult time trusting Western institutions, especially when it involves health and healing. For Hawaiians, hospitals are often viewed as places devoid of culture and life, where people come to die, sterile institutions filled with people that don't look like them or talk like them. All they see are medical staff with an agenda, whether it is taking vitals or checking a pain scale. For us as navigators, in the beginning, it is very important that we skip all that. It is more beneficial that we create a connection that is rooted in our Hawaiianness.”

The KKN program now serves as a model and began expanding to other populations and locations. ◀





PILI 'Ohana, Healthy Lifestyle Program

WEIGHT-LOSS AND MAINTENANCE

OVERVIEW

- ▶ PILI does not only focus on weight management but also teaches lifestyle changes, such as spending more quality time with one's family and community. The program aims to change how participants view their health.
- ▶ The program is designed to reflect traditional Hawaiian beliefs about health and well-being. Healthcare is no longer just between a patient and physician but is also between an individual's family, neighbors, and community members.

The Partnership for Improving Lifestyle Intervention (PILI) 'Ohana Program is a weight-loss maintenance program that offers culturally-adapted and community-placed program lessons designed to improve diet, physical activity, time, and stress management for Native Hawaiians and Pacific Islanders. PILI does not only focus on weight management but also teaches lifestyle changes, such as spending more quality time with one's family and community. The program aims to change how participants view their health.

Gatherings take place in a group setting, which provides a safety net for participants supporting one another while learning the benefits of healthy lifestyle choices. That fosters a supportive environment that allows participants to engage in actively improving their health.⁸⁶ Both scientists and community members strongly endorse the program. As shared by Cappy A. Solatorio, PILI 'Ohana program facilitator:



"PILI 'Ohana was really wonderful. What was so wonderful was the camaraderie. All of us together, encouraging one another, and the stories everyone shared. I still see a lot of the people, and a lot of them have kept the weight off. It was such a success. Very rewarding."

—Cappy A. Solatorio, PILI 'Ohana program facilitator

This evidence-based program was built upon a strong community collaborations and used a scientifically tested community-based research partnership framework in all phases from development through implementation. It was adapted from a landmark study, the National Diabetes Prevention Program,⁸⁷ as a weight-loss maintenance program specifically for Pacific populations.

A partnership of seven community, academic, and state organizations developed and tested the program to integrate community wisdom and expertise as well as scientific methods to provide a viable option to address the risk of chronic diseases in Native Hawaiians and other Pacific people. More than just a health intervention, PILI also aims to increase community capacity by empowering communities to engage with academic science researchers in meaningful ways about issues that affect them. Community members served alongside academic researchers as co-investigators, and play an active role in planning, decision-making, and carrying out all research activities.

In addition to being efficacious through rigorous scientific testing, PILI's cultural-congruence and effectiveness have also been demonstrated and evaluated in real-world settings by community peer educators from other partnering community-based organizations.⁸⁰

PILI 'Ohana is designed to reflect traditional Hawaiian beliefs about health and well-being. Community members and leaders are not only researchers but also individuals addressing their health, as healthcare traditionally begins in one's own home and



community. Healthcare is no longer just between a patient and physician but is also between an individual's family, neighbors, and community members.

A key element of the program is facilitating the relationships and connections between participants. These connections are fundamental to Hawaiian cultural values and also facilitate engagement and retention. As participants described, "We looked forward to meeting each other week after week," said one participant. "We couldn't get enough of each other." Not only do the program participants build trust and accountability, but they share personal and relatable accounts of their changing lifestyle habits. Ultimately, participants realize they are not alone in improving their lifestyle. By looking at and returning to traditional wisdom, PILI puts health back into the hands of a community by helping its members learn to be accountable to each other. ◀



"Losing weight together and participating in the [eight-mile] Great Aloha Run together was my most memorable memory of PILI."

—PILI 'Ohana participant

"Everyone ended the class with a great sense of camaraderie from helping and encouraging each other to lose weight."

—PILI 'Ohana participant





2 CULTURALLY-GROUNDED PROGRAMS

For over 30 years, it has been well documented that Native Hawaiians prefer, and experts have recommended, culturally-relevant health programs and services to address health needs and issues. Although more is needed, many culturally-adapted health programs for Native Hawaiians have been put place in community and institutional settings. Culturally-grounded programs are rarer.

Grounding a program in the culture, and focusing on culture-centeredness, means using agency, power, and language to draw from a culture's strengths and promote healthy changes in its communities.⁸⁸ For Native Hawaiians, an individual's health and well-being are related to the health of family, community, and environment.⁸⁹ To improve Hawaiian health, then, health interventions must promote loyalty, unity, and reciprocity within Hawaiian communities, and they must emphasize family and family-like support.⁸⁶

One way to develop a culturally-grounded health program is for it to be based on a cultural practice, and to build, weave, and emphasize aspects that can have specific health benefits. In this way, the strengths of cultural and western medical knowledge can be brought together.



Ola Hou i ka Hula, Heart Health Program

RESTORING HEART HEALTH



“I don’t want to say I would be dead, but I would have probably had a heart attack or stroke by now, because I know exactly what I didn’t do. I didn’t exercise until I came to the program. I didn’t think I could.”

—Arma Oana, Ola Hou i ka Hula participant

OVERVIEW

- ▶ The Hawaiian community asked the scientists not to only focus on disease, but to find ways to restore heart health before people got really sick.
- ▶ Hula experts explain that this cultural dance incorporates the integrated Hawaiian view of health where aspects of physical, mental, and spiritual development are involved.
- ▶ So far, 53 kumu hula and others have been trained and more than 16 organizations including community health centers, now offer the Ola Hou program, either specifically for hypertension management or general heart health and disease prevention.

from heart bypass surgery.^{90,91} Then the Hawaiian community asked the scientists not to only focus on disease, but to find ways to restore heart health before people got really sick. It was decided to begin with hypertension, a risk factor that too often leads to heart disease and stroke. The collaboration of



Building on ten years of ground-breaking research conducted through the University of Hawai‘i at Mānoa John A. Burns School of Medicine’s, Department of Native Hawaiian Health found that implementing a health intervention based in the iconic dance of hula significantly improved hypertension in Native Hawaiian participants.

Working closely with many *kumu hula* (hula experts and educators) and Native Hawaiian community leaders, the medical school’s scientists developed and implemented the Ola Hou i ka Hula (Restore Health Through Hula) program, initially as cardiac rehabilitation for individuals recovering

Restore Health Through Hula



scientists, and kumu hula, worked on how indigenous and medical knowledge could be brought together.

To develop and test this innovative and leading-edge solution, medical school researchers worked with six community-based organizations serving Native Hawaiians to identify 263 Hawaiians who were under their doctor's care for hypertension, chronic high blood pressure, and were still unable to make health improvements. Hawaiians from eight communities on three islands participated in a research effort to evaluate how the *Ola Hou i ka Hula* program could improve hypertension management. During the six-month program, participants received three hours of culturally relevant heart health education, which included information on diet, exercise, and the use of medications.

Those attending the hour-long hula classes went twice a week for three months, followed by one lesson per month for three additional months and self-directed hula practice. They also participated in activities that reinforced hypertension education and healthy behaviors. All participants continued their usual medical treatment during the study.⁹²

The results were quite positive. What had been poorly managed hypertension improved considerably, lowering down two levels of risk through participation in the program.^{92,93} This is even more remarkable given that the best proven non-medication treatments of hypertension, such as diet, sodium reduction, physical activity are shown at comparable or lesser amounts of improvement.

Traditional hula training incorporates Hawaiian values such as familial relationships, cooperation, and aloha—ongoing kindness and acceptance of others. Hula experts explain that this cultural dance incorporates the integrated Hawaiian view of health where aspects of physical, mental, and spiritual development are involved.^{63,94} Researchers and kumu hula believe traditional *hālau hula* (hula school) training incorporates important components that go beyond just physical activity, including social support, and stress management, to

improve blood pressure. On Hawai'i Island, rural Hilo resident Mari Martin described her joy and success with the program:

"I have always told my family that I would like to go back to dancing hula, as that was a passion of mine when I was growing up, and I later had to stop, not by my choice. I have hypertension and Type 2 diabetes, and have been having the worst time trying to incorporate physical activity into my lifestyle. Having the chance to dance hula again has been so awesome. I look forward to the hula class where I am surrounded by other women who want to learn hula, learn how to take care of their hypertension, have fitness, but most of all fellowship with each other. I can honestly say this program has helped with getting me back into physical activity that I was lacking and has also helped me to take care of me."

The decade long collaboration of the kumu hula, medical school scientists, and Hawaiian leaders also committed themselves to build capacity for the *Ola Hou* program to be widely offered. So far, 53 kumu hula and others have been trained and more than 16 organizations including community health centers, now offer the *Ola Hou* program, either specifically for hypertension management or general heart health and disease prevention. The popularity of the program is evident. At Kōkua Kalihi Valley Comprehensive Family Services, a community health center, clinician Sheryl Yoshimura exclaimed:

"Our patients love it! It has become a "super-support group." They not only help each other, they want to share the hula at our clinic community events, at family celebrations, and holiday gatherings. Our doctors are even writing in-house prescriptions that say the patient should join the *Ola Hou* hula class."

The collaboration of scientists, and kumu hula, worked on how indigenous and medical knowledge could be brought together.



Results of this successful, largest-ever health treatment study involving Native Hawaiians were presented at the 2019 National American Heart Association meeting. As shared by Eduardo Sanchez, the American Heart Association's Chief Medical Officer for Prevention:

"This study is a great example of how interventions can be more effective when they are tailored for cultural relevance to participants. Not only are individuals achieving health-promoting levels of physical activity, they are also having fun, engaging in a valued cultural practice, and connecting with their community in the group classes—all important for well-being." ◀





3 PROMISING PROGRAMS

Culturally-grounded health programs can and have been successfully grown from the community through commitment, enthusiasm, and resolve. In Hawaiian communities, there is great interest in programs related to aloha ʻāina and mālama ʻāina.^{95,96} Native Hawaiian scientists and scholars continue to advocate that cultural knowledge and practices are a critical component to addressing Hawaiian health equity.^{22,96} They emphasize the need for place-based strategies, and those rooted in the Hawaiian integrated world view of health and wellness.^{9,22,38,96}

While grassroots community efforts have developed an array of promising health promotion intervention programs, they have not yet been tested in a scientific evaluation, so they do not presently qualify as “evidence-based.” However, they draw wide interest and support and represent the potential for a wide contribution to establishing health equity.



Board and Stone Program

WELLNESS AND FAMILY UNITY



“It brought us together as a family. We took turns. Where she [my wife] struggled, she left it for me; and if I struggled, I left it for my son. We all shared and took turns. It was a family project. Even carving the pōhaku [stone], it was wonderful. It really brought us closer as a family.”

– Board and Stone participant in Kalihi Valley⁹⁹

OVERVIEW

- ▶ By standards of a health-related program, the Board and Stone Program is phenomenally popular with over 9,000 people having completed the program over the past 10 years.
- ▶ The program leads with Hawaiian cultural training to empower families to perpetuate and connect with their culture as well as improving overall health and well-being.
- ▶ Consistently, the program found that cultural grounding was intrinsic to participants’ empowerment to make improvements in their lives and families.
- ▶ “The class helped me to come to a realization that I gotta do something now to help myself to live longer.”



The Keiki O Ka ‘Āina Family Learning Centers established the Board and Stone Program under the direction of cultural practitioner Earl Kawa‘a.^{97,98} A place-based, family-centered cultural practice class, “Board and Stone” is a promising program that promotes health equity through encouraging wellness and family unity.⁹⁹ Emphasizing cultural traditions, language, and values, families together learn how to make poi, the primary Hawaiian food staple, using very traditional practices, including making traditional, hand-carved Hawaiian implements *pa wili ‘ai* (board)

and *pōhaku* (stone pounder), which are used to pound cooked *kalo* (taro root) into poi.

Kalo has a deep spiritual significance to Native Hawaiians for many reasons, one explanation is found in a Hawaiian origin story, that explains the first kalo plant was an elder sibling to man. This ties to key Hawaiian values and practices that require older siblings to care for those younger. In turn, younger siblings must honor, care for, respect, and abide by their elders. Embedded in this cultural belief and practice is the understanding that when Hawaiians care for kalo and the *‘āina* (land), in turn, they will provide food, shelter, and everything necessary to sustain health and well-being.²⁰

By standards of a health-related program, the Board and Stone program is phenomenally popular with over 9,000 people that have completed the program over the past 10 years. Even more unprecedented is it is primarily promoted only by word-of-mouth, and continues to have wait-lists at sites.

The Board and Stone has grown from being a program into a movement and has created an increased desire to have the healthy complex carbohydrate of kalo and poi as a regular part of the family’s diet.⁹⁹

Culminating *ho'ike*

When Board and Stone began monthly poi pounding events, they used 200 lbs. of kalo per month. Demand increased, and Board and Stone now orders up to four to five times more kalo, 800–1,000 lbs. each month, thereby encouraging the farming of kalo. Along with increased access to this traditional practice and food, there is also an increase in the number of Board and Stone *alaka'i* (leaders) with the knowledge, skills, and passion to lead and train others.⁹⁹

The program leads with Hawaiian cultural training to empower families to perpetuate and connect with their culture as well as improving overall health and well-being. This approach to family strengthening, shifts personal perspectives, and helps individuals as well as the family unit to redefine themselves.⁹⁹ Dynamically, the simplistic process of making tools to pound a traditional food becomes for many participants dramatic, rewarding, and life-changing.

The program culminates in a *ho'ike*, a tradition of sharing and showcasing knowledge and skills learned. A pivotal part of the *ho'ike* is when each family shows their board and stone, and uses the cultural protocol and knowledge they learned to share a story of their accomplishment and lessons learned. A woman from O'ahu who attended the class described the deep transformation she saw in her husband as a father and partner:⁹⁷

"In the past, my husband would go to the beach or forest alone every chance he had. After taking the board and stone class, he took [lead instructor] Kawa'a's teaching to heart willingly; and the light within him began to turn on. My husband began taking our three girls and me to the mountains and beach, and now we go all the time. I fell in love with him all over again."

Consistently, the program found that cultural grounding was intrinsic to participants' empowerment to make improvements in their lives and families. A man from O'ahu shared his new awareness and resolve this way:⁹⁹

"The class helped me to come to a realization that I gotta do something now to help myself to live longer. Even just the kalo, it tells me that we have good things coming from our culture that was helpful to our ancestors, and if I can change to be more healthy for my family, then I can help them. We can do something now by taking care of our health now." ◀





Health inequities continue to exist for Native Hawaiians and Pacific Islanders. Because culture is such a significant part of what distinguishes a population, especially Indigenous communities, disease prevention, treatment, and management programs must be culturally-responsive at their core and the cornerstone of health promotion.



The case studies described previously can serve as templates for developing culturally relevant health programs for Native Hawaiian communities and Pacific Island peoples. Developing new culturally relevant evidence-based programs or other promising programs is needed. Health equity will be achieved in part with effective, sustainable, and culturally responsive health intervention programs—which, as a bonus, also help to

revitalize cultural practices and empowers communities.

SYSTEMATIC CHANGE

Systematic change in political, educational, economic, and social systems is required to realize improvements in Native Hawaiian health. What Hawaiian scientist-scholar Kaholokula proposes, is a framework for Native Hawaiian well-being that synthesizes cultural values, health equity research, Indigenous scholarship, and social determinants. Application of this Hawaiian framework “Nā Pou Kihī” has the potential to address health disparities and increase health and well-being among Native Hawaiians through effective programs implemented in the community.

COLLABORATION

To establish these programs, health scientists, communities, and cultural practitioners must come together. It is through the collaboration and the integration of knowledge and experiences that breakthroughs can be made. For example, it’s important to know that Hawaiians seek, evaluate,



and accept or reject a program based on whether they believe aloha exists in the program, not just staff behavior but intrinsically within the theory, approach, and materials. While people outside the Hawaiian culture may understand the term “aloha” as merely a greeting, it also refers to love, affection, compassion, mercy, sympathy, pity, kindness, sentiment, grace, and charity.¹⁰⁰ To Hawaiians, the values of aloha, ‘ohana, and ‘āina are complex foundations of life.⁶⁵

CULTURALLY GROUNDED HEALTH PROGRAMS

It is essential to correctly interpret the meaning and understand a group’s values, practices, and beliefs when creating culturally responsive and grounded health programs for Native Hawaiians. This is important with Pacific Islander communities, too, who generally prefer a face-to-face or similar type of direct interaction. When adopting or developing interventions, groups should use methods and evaluations that not only promote good health but are also grounded in cultural values and practices significant to the community. It is important to consider and measure factors

important to the community when developing a program’s evaluation methods, as well.⁷²

THE IMPORTANCE OF FAMILY

Families and their extended households of Pacific peoples must be able to participate together for culturally responsive programs to have positive outcomes. Families have their networks of interpersonal relationships, which are strong sources of support and identity and help shape self-determination and decision-making for Native Hawaiian and Pacific Islanders.¹⁰¹

Organizations do exist that are dedicated to providing education, research, and health services for Hawaiians, but we must continue building capacity in how we understand and perpetuate Pacific history, languages, practices, and beliefs. ◀





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Kūlia i ka nu'u. *Strive for Excellence.*

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