AAPCHO
ASSOCIATION OF ASIAN PACIFIC COMMUNITY HEALTH ORGANIZATIONS

The Health of Asian Americans, Native Hawaiians, and Pacific Islanders Served at Health Centers: An Analysis of the 2020 Uniform Data System

SEPTEMBER 2022

About AAPCHO

The Association of Asian Pacific Community Health Organizations (AAPCHO) is a national association of community health organizations dedicated to promoting advocacy, collaboration, and leadership that improves the health status and access of Asian Americans (AAs) and Native Hawaiians/Pacific Islanders (NH/PIs) within the United States, its territories, and freely associated states.

AAPCHO supports all health centers that provide high quality health services to medically underserved communities, regardless of insurance status or ability to pay. By operating under governing boards primarily composed of patients and community members, health centers deliver culturally sensitive care that reflect the needs of the populations they serve. To learn more about the Health Center program, visit https://bphc.hrsa.gov/about/index.html.[1]

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Introduction

The Health of Asian Americans, Native Hawaiians, and Pacific Islanders Served at Health Centers: An Analysis of the 2020 Uniform Data System report examines health centers that serve Asian American, Native Hawaiian, and Pacific Islander patient populations across the continental U.S., Hawai'i, U.S. Territories, and the Compacts of Free Association (COFA) nations.

For the purposes of this report, AAPCHO formulated a specific methodology to create a profile of the Asian American, Native Hawaiian, and Pacific Islander-serving health centers, as well as Native Hawaiian and Pacific Islander-serving health centers, and their impactful work

2020 UDS Quality of Care Measures[2]

- Early Entry into Prenatal Care
- Childhood Immunization Status
- Cervical Cancer Screening
- Breast Cancer Screening
- Weight Assessment and Counseling for Nutrition and Physical Activity for Children and Adolescents
- Preventive Care and Screening: Body Mass Index (BMI) Screening and Follow-Up Plan
- Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention
- Statin Therapy for the Prevention and Treatment of Cardiovascular Disease
- Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antiplatelet
- Colorectal Cancer Screening
- HIV Linkage to Care
- HIV Screening
- Preventive Care and Screening: Screening for Depression and Follow-Up Plan
- Depression Remission at Twelve Months
- Dental Sealants for Children between 6–9 Years

across underserved communities. The methodology is outlined in detail on page 11 of this report.

Each year, health center grantees and look-alikes report on their performance using the measures defined in the Uniform Data System (UDS).[2] The UDS is a standardized reporting system by the Health Resources and Services Administration (HRSA), Bureau of Primary Health Care (BPHC) that provides consistent information, including health center patient population characteristics, workforce staffing and utilization (e.g. enabling services), quality of care measures, and selected infectious disease diagnoses (e.g., hepatitis B and tuberculosis).

This report covers the following quality of care measures and health outcomes and disparities:

- Breast Cancer Screening
- Childhood Immunization Status
- Cervical Cancer Screening
- Colorectal Cancer Screening
- Controlled Hypertension
- Preventive Care and Screening: Screening for Depression and Follow-Up Plan
- Tobacco Cessation

Some health measures that impact Asian American, Native Hawaiian, and Pacific Islander populations may not be disaggregated by race and ethnicity in the UDS dataset. The only health measures that are disaggregated by race and ethnicity in the UDS are low birth weight, controlled high blood pressure, and uncontrolled diabetes.

Additional analysis for this year's report

For the 2020 UDS dataset, HRSA updated its 2020 UDS Manual to include additional metrics on topics such as screening for depression, HIV, breast cancer, social determinants of health (SDOH), and the use of Prescription Drug Monitoring Programs.[3] With these revisions, AAPCHO has updated the 2020 UDS Report to include additional analysis for the following topics from the UDS:

- Cancer Screening Rates: Breast, Cervical, and Colorectal
- Tobacco Cessation

In addition to these new data from the UDS, AAPCHO identified additional health measures, such as gestational diabetes, as crucial

health topics for Asian American, Native Hawaiian, and Pacific Islander communities through community feedback. Therefore, this report examines these additional analyses through additional data from external sources that complement the 2020 UDS dataset.

Limitations: COVID-19 and Aggregated Racial/Ethnic Data

COVID-19

The World Health Organization (WHO) declared the COVID-19 outbreak as a global pandemic on March 11, 2020.[4] The Centers for Disease Control and Prevention (CDC) reported that by June 30, 2020, approximately 41% of adults in the U.S. delayed or avoided medical care because of COVID-19 related concerns.[5] Many underserved communities in particular, such as unpaid caregivers for adults, persons with underlying medical conditions, Black adults, Hispanic adults, young adults, and persons with disabilities avoided urgent or emergency care at a higher rate than their counterparts.[5] For Asian Americans, particularly those with less education, they experienced more job loss and were slower to regain employment compared to all other US racial groups during the height of the pandemic.[6] As for Native Hawaiian and Pacific Islanders, there is limited data that separates Native Hawaiian and Pacific Islander numbers from the general population, however the states and counties that are reporting this data show that Pacific Islanders are disproportionately affected by COVID-19, with some regions seeing rates of infection up to five times that of their white counterparts.[7] Since health centers serve many underserved communities, this may have impacted the data for the 2020 UDS dataset. In addition, the first COVID-19 vaccine deliveries occurred in December 2020 in the United States and were gradually available for all populations in the following months. Although HRSA provides data on COVID-19 in the 2020 UDS dataset, the data is limited. Vaccine delivery was not available until December 2020 and early 2021. Therefore, the COVID-19 data is not included in this report; however, testing and vaccine delivery data will be considered in future versions of the report.

Aggregated Racial/Ethnic Data

Asian American, Native Hawaiian, and Pacific Islander population-specific data have historically been published in aggregated form, which limits the ability to document the diversity of each group.[8] These limitations in the UDS and other national data sets do not always provide an accurate picture of Asian American, Native Hawaiian, and Pacific Islander health

disparities; therefore, no comprehensive analysis of health disparities is available nationally.

In the UDS dataset, there are limitations concerning racial/ethnic minority patients served by health centers. There is limited data to comprehensively analyze health disparities among Asian American, Native Hawaiian, and Pacific Islander patients served by health centers. For example, the UDS does not cross-tabulate specific demographic data across all Asian American, Native Hawaiian, and Pacific Islander subgroups. It does not collect data on specific infectious diseases, such as Hepatitis B and tuberculosis prevalence, by racial and ethnic groups.

While the 2020 UDS dataset provides detailed information on health center profiles, including patient population characteristics, Enabling Services staffing, and quality of care measures, it does not contain patient-level data. Regarding Enabling Services, the UDS report only captures data on Enabling Services staffing and general cost information on a limited number of Enabling Services categories. For example, some health centers provide up to 15+ major categories of Enabling Services that may not be reflected within the UDS categories.[9] Additionally, the UDS report does not capture the nature of Enabling Services (e.g., volume, time spent, language capacity of staff members), which is a missed opportunity for health centers to demonstrate comprehensive Enabling Services data and highlight diverse needs of the community and challenges for healthcare providers.

Even with these limitations, the UDS is still informative and serves as the only data source for standardized information collected by health centers nationally. AAPCHO anticipates improvements in the future reports as HRSA announced the UDS Patient-Level Submission (UDS+), which will include patient-level data in the 2023 dataset.[10]

Geographic Definitions

This report reviews the diverse geographic locations of health centers that serve Asian American, Native Hawaiian, and Pacific Islander patient populations, including the continental U.S., Hawai'i, U.S. Territories, and the Compacts of Free Association (COFA) nations.

Continental United States	The continental U.S. comprises the 48 States (including Alaska and excluding Hawai'i) located on the continent of North America, and the District of Columbia.
Hawai'i	A state of the U.S. comprising the northern Pacific islands of Hawai'i, Kaho'olawe, Kaua'i, Lāna'i, Maui, Moloka'i, Ni'ihau, and O'ahu. Hawai'i was a U.S. territory from 1900-1959 and was admitted to the Union and became the 50th U.S. state in 1959.
The U.S-Affliated Pacific Islands (USAPI)	USAPI includes American Samoa, Guam, Commonwealth of the Northern Mariana Islands, and three independent COFA nations (i.e., the Federated States of Micronesia, the Republic of the Marshall Islands, and the Republic of Palau).[11]
U.S. Territories	The U.S. Territories include American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands.
Compacts of Free Association (COFA) Nations	The Compacts of Free Association (COFA) nations, or sometimes known as freely associated states, are the three independent Pacific Island nations with COFA with the United States: the Federated States of Micronesia, Republic of the Marshall Islands, and Republic of Palau.

For more information about the U.S.-Affiliated Pacific Islands, visit https://www.pihoa.org/usapi-region/. For more information about COFA, visit https://www.doi.gov/oia/compacts-of-free-association.

Abbreviations and Readability

For the remainder of this report, Asian Americans will be abbreviated as "AAs"; Native Hawaiians/Pacific Islanders as "NH/PI"; Native Hawaiians as "NH"; and Pacific Islanders as "PI".

For easier readability, AA- and NH/PI-serving health centers will be addressed as AA&NHPI-serving health centers, whereas NH/PI-serving health centers will be addressed as NHPI-serving health centers.

In this report, AAs and NH/PIs will be referenced as racial and ethnic groups, and specific AA (e.g., Cambodian, Hmong, Indian) and NH/PI communities (e.g., Marshallese, Native Hawaiian, Samoan) will be referenced as racial and ethnic subgroups.[12]

Asian Americans and Native Hawaiians/ Pacific Islanders in the United States and U.S.-Affiliated Pacific Islands

Key Facts About AA and NH/PI Populations

AAs and NH/PIs are the fastest-growing racial or ethnic group with over 23 million residents living in the continental U.S., Hawai'i, U.S. Territories, and COFA nations in 2020.[13] AAs and NH/PIs represent more than 50 racial and ethnic groups and over 100 languages spoken. [14,15]

From 2010 to 2020, the AA population in the U.S. grew 31%, from roughly 18 million to 24 million people; whereas the NH/PI population grew 24%, from roughly 1.4 million to 1.7 people.[16] In terms of growth rates, North Dakota and South Dakota saw the fastest increases in their AA populations between 2000 and 2019.[17] Chinese Americans, Indian Americans, and Filipino Americans account for the largest Asian origin groups in the U.S., and nearly half of U.S. Asians live in the West, with nearly a third in California alone.[18]

U.S. Census 2020 Statistics

According to the latest U.S. census statistics, Asian Americans account for 5.9% of the nation's population and NH/PIs represent about 0.2%.[19]

In 2020, the following ten states had the largest AA populations: California, New York, Texas, New Jersey, Washington, Illinois, Hawai'i, Florida, Virginia, and Massachusetts. In 2020, ten states with the largest NH/PI populations were: Hawai'i, California, Washington, Utah, Texas,

HRSA's definitions for data reporting in the UDS:

Asian American (AA)	Persons having origins in any of the original peoples of Asia, Southeast Asia, or the Indian subcontinent including: Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Indonesia, Thailand, or Vietnam.[20]
Native Hawaiian (NH)	Persons having origins to any of the original peoples of Hawai'i.[20]
Pacific Islander (PI)	Persons having origins in any of the original peoples of Guam, Samoa, Tonga, Palau, Chuuk, Yap, Saipan, Kosrae, Ebeye, Pohnpei or other Pacific Islands in Micronesia, Melanesia, or Polynesia.[20]

Nevada, Florida, Arizona, Oregon, and Arkansas. Outside the continental U.S., Hawai'i has the highest AA and NH/PI population per capita of any state; and PIs are the majority populations in the USAPI. [21]

Population Specific and Emerging Issues for AAs and NH/PIs

The changing AA and NH/PI demographics are influenced by socioeconomic and geopolitical migration drivers such as education, healthcare, work, as well as family visits and climate change. [22] Some examples of emerging issues within this demographic include: The Dual Pandemic of COVID-19 and Anti-Asian Hate, Native Hawaiian Sovereignty, and Pacific Islanders and Migration Due to Climate Change.

The Dual Pandemic of COVID-19 and Anti-Asian Hate

The rise in anti-Asian hate is a significant issue for the AA communities. Experiencing the dual blow of COVID-19 disparities and misplaced blame for the pandemic, the health and safety of AA communities are at stake. The White House reported that anti-Asian hate crimes increased by 339% since 2021. [23] In a survey AAPCHO conducted in partnership with Kaiser Family Foundation (KFF) among four health center members, 33% of Asian patients indicated that they had personally felt more discrimination based on their racial/ethnic background since the COVID-19 pandemic began. [24] Asian patients indicated that they had experienced physical

It is important to note that communities and individuals may understand and identify with certain racial and ethnic groups differently and change over time. Below are definitions from Native Hawaiian and Pacific Islander community leaders from the National Association of Pasifika Organization's NH/PI Policy Council:

Native Hawaiian/ Pacific Islander (NH/PI)	The "Native Hawaiian or Other Pacific Islander" (NHOPI) category is defined as "[a] person having origins in any of the original peoples of Hawai'i, Guam, Samoa, or other Pacific Islands."[25] The term "Native Hawaiian'' does not include individuals who are native to the state of Hawai'i by virtue of being born there. In addition to Native Hawaiians, Chamorro/CHamoru, and Samoans, this category would include the following Pacific Islander groups reported in the 1990 census: Carolinian, Fijian, Kosraean, Melanesian, Micronesian, Northern Mariana Islander, Palauan, Papua New Guinean, Pohnpeian, Polynesian, Solomon Islander, Tahitian, Tarawa Islander, Tokelauan, Tuvaluan, Tongan, Chuukese, Indigenous Australian, Torres Strait Islanders, Maori, and Yapese. The National Association of Pasifika Organizations (NAOPO) NH/PI Policy Council reduced the NHOPI acronym to taking out the "other" in the middle and replacing it with a forward slash as in NH/PI.
Native Hawaiian (NH)	The term "Native Hawaiian'' is from the Native Hawaiian Health Care Improvement Act, which indicates that Native Hawaiians are a "distinct and unique indigenous people with a historical continuity to the original inhabitants of the Hawaiian archipelago whose society was organized as a Nation prior to the arrival of the first nonindigenous people in 1778."[26]

or verbal attacks, accused of spreading or causing COVID-19, criticized for wearing a mask and not wearing a mask, received poorer services at a store or other public place, been denied housing they could afford or a job they were qualified for, as well as being criticized for speaking their native language in public and told they should go back their home country. The implication of these fears may give reason to the low rate of COVID-19 testing and disproportionate rates of COVID-19 related death in AA and NH/PI communities.

Table 1. States with the Largest AA and NH/PI Populations	
Top 10 States with Largest AA Populations	**Top 10 States with Largest NH/PI Populations**
1. California	1. Hawai'i
2. New York	2. California
3. Texas	3. Washington
4. New Jersey	4. Utah
5. Washington	5. Texas
6. Illinois	6. Nevada
7. Hawai'i	7. Florida
8. Florida	8. Arizona
9. Virginia	9. Oregon
10. Massachusetts	10. Arkansas

Native Hawaiian Sovereignty

The social and political history of Hawai'i is complex. Since the illegal annexation of the Kingdom of Hawai'i by the U.S. in 1898, the political status of Native Hawaiians has been fiercely debated. There are two primary streams of a movement towards Hawaiian sovereignty. One seeks recognition as a sovereign political entity for Native Hawaiians, similar to the status of American Indians. Another stream strives for Hawaiian national independence.[27] For Native Hawaiian and indigenous peoples of Hawai'i, the COVID-19 pandemic reignited this political and cultural sovereignty debate. The CARES Act of 2020 allocated $8 billion to tribal governments and Indigenous communities, but left out Native Hawaiians.[28] NHPIs suffer from a number of conditions that increase their risk for COVID-19, including high rates of overweight status, obesity,

hypertension, and high rates of asthma and cancer mortality. It is critical to understand that high mortality rates and low life expectancies are attributed to colonization and historical trauma that prohibited the transmission of language, culture, and traditional practices, resulting in significant damage to health, education, and social well-being for NHPIs.[29] Following the effects of historical and ongoing colonization of the Hawaiian Islands that brought the spread of diseases such as smallpox, tuberculosis, and measles, the Native Hawaiian population continues to be at risk. [30] This is exacerbated without equitable health access, technical resources, and funding. Therefore, political status greatly informs the health outcome of the Native Hawaiians and indigenous peoples of Hawai'i.

Pacific Islanders and Migration Due to Climate Change

PIs are relocating to the continental U.S. because of their circumstances and not necessarily by choice. Climate change has impacted the PI region to potentially become uninhabitable and governments anticipate higher instances of permanent relocation.[31] For example, COFA prohibits the Marshallese to take legal action against nuclear testing from the U.S. but permits them to travel between the Republic of Marshall Islands (RMI) and U.S. [32] As a result, Marshallese have relocated to metropolitan cities like Los Angeles, but a majority reside in the Midwest where the cost of living is more affordable.[32] In Springdale, Arkansas, 30% of Tyson Foods' workforce are Marshallese. During the initial outbreak of the COVID-19 in 2020, Tyson Foods accounted for 30% of the COVID-19 cases in Arkansas' workforce and was found to have insufficient safety measures.[33] The CDC also found that Marshallese accounted for 38% of reported COVID-19 deaths in Northwest Arkansas. [33] The history of the Marshallese people is just one example of one PI community migrating away from their island nation and homeland to make a living elsewhere, including the continental U.S.

In general, as AA and NH/PI population specific issues emerge along with their numbers and representation in different regions of the U.S., it is important to continue focusing on the health and wellbeing of this diverse community from multiple factors.

Defining *AA&NHPI*-Serving Health Centers and *NHPI*-Serving Health Centers in the UDS

In this report, AAPCHO analyzes the 2020 UDS dataset to observe the growth and diversity of AA and NH/PI populations served by AA&NHPI-serving and NHPI-serving health centers.

In 2020, a total of 1,375 health centers in the continental U.S., Hawai'i, U.S. Territories, and COFA nations reported to the UDS.[2]

AAPCHO defines "***AA&NHPI***-serving health centers" as health centers that served the highest number of AA and NH/PI patients, as reported in the 2020 UDS dataset (i.e., the top 10% of the 1,375 health centers reported in the UDS).

AAPCHO defines "***NHPI***-serving health centers" as health centers that served greater or equal to 1,000 NH/PI patients, as reported in the 2020 UDS dataset.

Based on these definitions, AAPCHO identified and analyzed a total of 138 ***AA&NHPI***-serving health centers and 38 ***NHPI***-serving health centers from the 2020 UDS dataset. All of the identified ***NHPI***-serving health centers are included in the 138 identified ***AA&NHPI***-serving health centers. It is important to keep in mind that NH/PI populations may overlap in both ***AA&NHPI***-serving health center and ***NHPI***-serving health center groups, although the two categories were separated to highlight NH/PI communities.

The 138 ***AA&NHPI***-serving health centers served a total of 8,149,068 patients, among which 871,470 (10.7%) were AA and NH/PI patients. ***AA&NHPI***-serving health centers served 71.3% of all AA and NH/PI patients in the health center program (Table 2).

The 38 ***NHPI***-serving health centers served a total of 2,662,004 patients, among which 152,738 (5.7%) were NH/PI patients. ***NHPI***-serving health centers served 53.9% of all NH/PI patients in the health center program (Table 2).

Map of Pacific Islands Region and Hawai'i

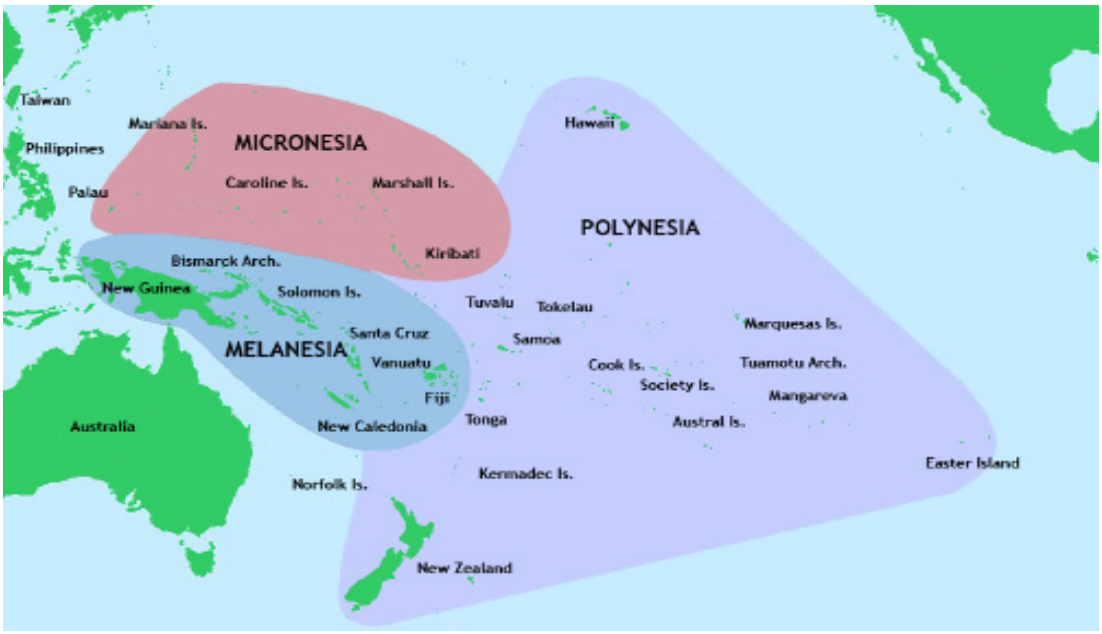


Photo courtesy of Wikimedia Commons

Disclaimer: Based on this map, the USAPI is geographically diverse and spread out. Nine of the 44 NHPI-serving health centers are from the USAPI, and their health insurance infrastructure is different from the U.S. This may impact some of the data findings regarding insured and uninsured rates of AA and NH/PI populations.

Methodology and Limitations on Health Center Definitions

Methodology

The ***AA&NHPI***-serving health center definition was revised to simplify a complicated formula that included both a threshold number and percentage cutoff of AA and NH/PI patients served at a health center. Through community feedback, AAPCHO formulated a simpler ***AA&NHPI***-serving health center definition to offer a clearer translation of the analyzed UDS data.

For the ***NHPI***-serving health center definition, 1,000 patients was determined as the threshold number for the health centers serving NH/PIs. Through community feedback, AAPCHO learned that health centers often increase their workforce capacity when patient population counts of new racial and ethnic subgroups and their language needs exceed 1,000.

AAPCHO intentionally did not use 1,000 patients as the threshold number for the ***AA&NHPI***-serving health center definition. If that definition were to be applied, then the number of health centers that serve AA and NH/PIs would expand from 138 to 231 health centers. This would represent 16.8% of health centers nationally. The larger overlap with the health centers nationally would mask some unique characteristics of AA and NH/PI populations, preventing the opportunity to identify population-specific health trends.

Lastly, AAPCHO did not identify a separate group of AA-serving health centers because this health center group would have a large overlap with the ***AA&NHPI***-serving health centers, thus making the report findings repetitive.

AAPCHO acknowledges that the current ***AA&NHPI***-serving health center and NHPI-serving health center definitions have some limitations and may update its methodology in future iterations of this report based on community feedback and research best practices (e.g., natural cutoff points based on means and standard deviations).

Limitations

Firstly, the current definitions may unintentionally exclude smaller health centers that serve a large proportion of AA and NH/PI patients or NH/PI patients from the analysis. Since the total number of patients are lower at smaller health centers, these health centers would not be included based on the aforementioned definitions.

Secondly, the currently structured tabular data in the UDS make it difficult to directly and accurately assess health trends and disparities by racial and ethnic groups (i.e., the inability to cross-tabulate data by racial/ethnic groups), which leads to individual interpretation to disaggregate and analyze racial and ethnic data from its aggregate form.

Although the UDS data has its limitations, AAPCHO formulated a methodology to highlight minoritized AA and NH/PI populations. AAPCHO continues to utilize this specific methodology to create a profile of the ***AA&NHPI***-serving and the ***NHPI***-serving health centers and their impactful work across underserved communities. With improvements in the UDS data structure, and better understanding of the ***AA&NHPI***-serving and ***NHPI***-serving health centers and the populations they serve, AAPCHO is committed to refining its definitions to equitably represent AAs and NH/PIs in future reports.

Key Highlights

This report examines health centers that serve AA and NH/PI patient populations based on health center reported data through the Uniform Data System (UDS).[2] The UDS provides detailed information on health center profiles, including patient population characteristics, Enabling Services staffing, and quality of care measures. As mentioned previously, the COVID-19 pandemic presented unique challenges that may have impacted these highlights.

The 2020 UDS dataset reveals similarities and differences between ***AA&NHPI***-serving health centers, ***NHPI***-serving health centers, and health centers nationally in the United States and U.S.-Affiliated Pacific Islands (USAPI). Key observations include:

- ***Patient Population:***
  - ***AA&NHPI***-serving and ***NHPI***-serving health centers serve a ***higher*** proportion of patients with ***limited English proficiency, low-income, Medicaid, and public insurance*** compared to health centers nationally.
- **Disease Disparities:**
  - ***AA and NH/PI*** patients demonstrate ***chronic disease disparities*** (uncontrolled diabetes and uncontrolled hypertension) compared to other racial and ethnic groups.
  - ***AA&NHPI***-serving and NHPI-serving health centers demonstrate ***higher*** rates of ***hepatitis B*** compared to health centers nationally.
  - ***NHPI***-serving health centers demonstrate higher rates of ***tuberculosis*** compared to health centers nationally.
- **Quality of Care:**
  - ***AA&NHPI***-serving health centers demonstrate ***higher*** rates in breast cancer screening, childhood immunizations, cervical cancer screening, and tobacco cessation than health centers nationally.
  - ***AA&NHPI***-serving health centers and health centers nationally demonstrate ***equivalent*** rates of colorectal cancer screening.
  - ***AA&NHPI***-serving health centers demonstrate ***lower*** rates of patients with controlled hypertension and screening and follow-up plans for depression than health centers nationally.
  - ***NHPI***-serving health centers demonstrate ***higher*** rates of

childhood immunization than health centers nationally.
- ***NHPI***-serving health centers and health centers nationally demonstrate ***equivalent*** rates of patients with controlled hypertension and tobacco cessation.
- ***NHPI***-serving health centers demonstrate ***lower*** rates of breast cancer screening, cervical cancer screening, colorectal cancer screening, and screening and follow-up plans for depression than health centers nationally.
- ***AA&NHPI***-serving and ***NHPI***-serving health centers have ***more*** full-time equivalent (FTE) Enabling Services staff than health centers nationally. Higher quality of care results are in part attributable to the health centers' higher full-time equivalent (FTE) rates of Enabling Services staff.

Upon review of the UDS 2020 findings, AAPCHO recommends health centers:

- Increase collection of social risk data and disaggregated race and ethnicity data,
- Tailor health and social services that reflect the needs of AA and NH/PI patients,
- Hire, train, and sustain AA and NH/PI non-clinical healthcare workforce, and
- Cultivate and sustain local, state, regional, and national partnerships to drive community health equity.

***AANHPI*-serving health centers:** The top 10% of health centers in terms of the number of AA and NH/PI patients served at the health center in 2019.

***NHPI*-serving health centers:** Health centers that served greater or equal to 1,000 NH/PI patients combined in 2019.

AANHPI-Serving and NHPI-Serving Health Centers

In 2020, a total of 1,375 health centers in the continental U.S., Hawai'i, U.S. Territories, and COFA nations reported their data to the UDS. Based on AAPCHO's definition (previously mentioned in the **"Defining *AA&NHPI*-Serving Health Centers *NHPI*-Serving Health Centers"** section on page 11), there were **138 *AA&NHPI***-serving health centers

and **38 *NHPI***-serving health centers. The following table provides a breakdown of the total number of ***AA&NHPI***-serving and ***NHPI***-serving health centers and their locations.In 2020, a total of 1,375 health centers in the continental U.S., Hawai'i, U.S. Territories, and COFA nations reported their data to the UDS. Based on AAPCHO's definition (previously mentioned in the "**Defining *AA&NHPI*-Serving Health Centers *NHPI*-Serving Health Centers**" section on page 11), there were 138 ***AA&NHPI***-serving health centers and 38 ***NHPI***-serving health centers. The following table provides a breakdown of the total number of ***AA&NHPI***-serving and ***NHPI***-serving health centers and their locations.

Table 2. Total Number of *AANHPI*-Serving and *NHPI*-Serving Health Centers

	# of Health Centers in 2020	# of *AANHPI*-serving Health Centers in 2020	# of *NHPI*-serving Health Centers in 2020
Continental U.S.	1,328	121	22
Hawai'i	14	9	8
U.S. Territories (American Samoa, Guam, Northern Mariana Islands, Puerto Rico, U.S. Virgin Islands)	27	2	2
COFA nations (Republic of the Marshall Islands, Federated States of Micronesia, Republic of Palau)	6	6	6
Total	**1,375**	**138**	**38**

The table on the next page provides a breakdown of the total number of ***AA&NHPI***-serving and ***NHPI***-serving health centers across the U.S. Territories and COFA nations.

Table 2. Total Number of *AANHPI*-Serving and *NHPI*-Serving Health Centers

	Geographic Location	# of Health Centers	# of *AANHPI*-serving Health Centers	# of *NHPI*-serving Health Centers
American Samoa (AS)	U.S. Territory	1	1	1
Guam (GU)	U.S. Territory	1	1	1
Commonwealth of the Northern Mariana Islands (MP)**	U.S. Territory	1	0	0
U.S. Virgin Islands (VI)***	U.S. Territory	2	0	0
Puerto Rico (PR)***	U.S. Territory	22	0	0
Republic of the Marshall Islands (MH)	COFA Nation	1	1	1
Federated States of Micronesia (FM)	COFA Nation	4	4	4
Republic of Palau (PW)	COFA Nation	1	1	1
	Total	**33**	**8**	**8**

**Commonwealth of the Northern Mariana Islands (MP) does not have an *AA&NHPI*-serving nor *NHPI*-serving health center designation. The number of total *NH/PI* patients served at MP health center was over 960, which is just shy of our designation requiring that more than 1,000 NH/PI patients are served.
***Although the U.S. Virgin Islands and Puerto Rico are U.S. territories, they are not part of the USAPI designation.

As seen in table 2, ***AA&NHPI***-serving health centers decreased by **one (1)** and ***NHPI***-serving health centers decreased by **six (6)** health centers in 2020. ***AA&NHPI***-serving health centers are located in **26** states and **five (5)** U.S. Territories and COFA Nations, and ***NHPI***-serving health centers are located in **nine (9)** states and **five (5)** U.S. Territories and COFA Nations. As a limitation, it is important to keep in mind that ***NH/PI*** populations may overlap in both ***AA&NHPI***-serving health center and ***NHPI***-serving health center groups.

Health Centers and AA and NH/PI Patient Population

In 2020, **1,375** health centers served a total of **28,590,897** patients. **1,222,427** (or **5.1%**) of the total, were AA and NH/PI patients; **247,872** (or **1.0%**) of the total, were NH/PI patients in the health center program.

Over ***1.2 million patients in the Health Center*** program identified as Asian American, Native Hawaiian, and/or Pacific Islander; and ***over 247,000 patients*** identified as Native Hawaiian and/or Pacific Islander.

The **138** ***AA&NHPI***-serving health centers served a total of **8,149,068** patients, among which **871,470** (**13.5%**) were AA and NH/PI patients. ***AA&NHPI***-serving health centers served **71.3%** of all AA and NH/PI patients.

The **38** ***NHPI***-serving health centers served a total of **2,662,004** patients among which **152,738** (**5.7%**) were NH/PI patients. ***NHPI***-serving health centers served **7.1%** of all NH/PI patients.

AA and NH/PI Patient Locations

AA and NH/PI populations reside in diverse parts of the continental U.S., Hawai'i, U.S. Territories, and COFA nations. The top five states and USAPI jurisdictions with the highest number of AA and NH/PI patients served by ***AA&NHPI***-serving health centers are California, New York, Washington, Hawai'i, and Massachusetts. This trend has remained the same since 2017.[15]

When observing population growth by raw numbers from 2019 to 2020, ***AA&NHPI***-serving health centers experienced the largest growth of AA and NH/PI patients in **Florida**, **Kentucky**, **Virginia**, **Federated States of Micronesia, and Rhode Island**. When observing population growth by percent change from 2019 to 2020 the largest growth occurred in **Rhode Island**, **Florida**, **Arkansas**, **Federated States of Micronesia, and Alaska**. Since the total number of patients are lower at smaller health centers, these health centers would not be included based on the

aforementioned definitions.

The tables below summarizes AA and NH/PI population growth by raw numbers and percent change.

Table 3. Five States and USAPI Jurisdictions that Experienced New Growth of AA and NH/PI Patients Served by AA&NHPI-Serving Health Centers from 2019 to 2020 (Raw Numbers)[34]

State/USAPI Jurisdiction	Patient Growth by Raw Numbers (↑)	# of AA&NHPI-Serving Health Centers in 2019	# of AA&NHPI-Serving Health Centers in 2020
Florida	↑2,036	2	3
Kentucky	↑1,926	0	1
Virginia	↑1,907	0	1
Federated States of Micronesia	↑1,875	4	4
Rhode Island	↑1,642	1	2

Table 3. Top Five States and USAPI Jurisdictions that Experienced New Growth of AA and NH/PI Patients Served by AA&NHPI-Serving Health Centers from 2019 to 2020 (Growth by Percent Change) [34]

State/USAPI Jurisdiction	Patient Growth by Percent Change (Δ)	# of AA&NHPI-Serving Health Centers in 2019	# of AA&NHPI-Serving Health Centers in 2020
Rhode Island	Δ 68.8%	1	2
Florida	Δ 42.9%	2	3
Arkansas	Δ 9.7%	1	1
Federated States of Micronesia	Δ 7.4%	4	4
Alaska	Δ 7.6%	1	1

Compared to previous years, the latest population growth trends suggest that medically underserved AA and NH/PI patients are residing in new geographic areas beyond where the majority are served and for a myriad of potential reasons (e.g. economic reasons, employment opportunities, immigration purposes, displacement from gentrification, etc.).[35] This is an opportunity for health centers to provide culturally and linguistically appropriate services for growing AA and NH/PI populations in their surrounding communities; and collect disaggregated racial/ethnic data to better identify specific health and social needs of AA and NH/PI subgroups.

NH/PI Patient Locations

The top five states and USAPI jurisdictions with the highest number of NH/PI patients served by ***NHPI***-serving health centers are **Hawai'i, the Federated States of Micronesia, American Samoa, Washington, and Republic of Palau**. For the 2020 UDS dataset, only the Federated States of Micronesia and Arkansas experienced a noticeable growth in the number of NH/PIs served. The table on the next page summarizes the growth by raw numbers and percent change.

Table 4. Top two states and USAPI jurisdictions that experienced new growth of NH/PI patients served by NHPI-serving health centers from 2019 to 2020 [34]

State/USAPI Jurisdiction	Patient Growth by Raw Numbers (↑)	# of AA&NHPI-Serving Health Centers in 2019	# of AA&NHPI-Serving Health Centers in 2020
Federated States of Micronesia	↑1,809	4	4
Arkansas	↑291	1	1

Table 5. Top two states and USAPI jurisdictions that experienced new growth of NH/PI patients served by NHPI-serving health centers from 2019 to 2020

State/USAPI Jurisdiction	Patient Growth by Percent Change (Δ)	# of AA&NHPI-Serving Health Centers in 2019	# of AA&NHPI-Serving Health Centers in 2020
Arkansas	Δ 8.8%	1	1
Federated States of Micronesia	Δ 7.1%	4	4

Social Determinants of Health and the Complex Health Needs of AA and NH/PI Patients

Social determinants of health (SDOH) are conditions in the places where people live, learn, work, and play that affect a wide range of health and quality-of-life-risks and outcomes.[36] According to Healthy People 2030, there are five domains of SDOHs: 1) economic stability; 2) education and access; 3) health care access and quality; 4) neighborhood and built environment; and 5) social and community context.[37] SDOH factors include income, food security, social norms, segregation, language and literacy, and much more. SDOHs have a major impact on the quality of life for a person, directly affecting health disparities and inequities.[37] Health systems typically spend about 90% of their budget for medical care, but 80% of health outcomes are attributable to SDOH factors. [38,39] For example, one study demonstrates that individuals with lower income are two to four times more likely to develop Type 2 diabetes, even after adjusting for other factors such as body mass index (BMI) or physical activity.[40]

Assessing SDOH needs of individuals through standardized data collection can inform and support patient and population health needs through tailored social interventions. The 2020 UDS findings indicate that **68.9%** of health centers collect data on social risk factors. For example, AAPCHO, the National Association of Community Health Centers, and the Oregon Primary Care Association co-developed the Protocol for Responding to and Assessing Patients' Assets, Risks and Experiences, or also known as PRAPARE. While not all health centers may implement PRAPARE, there are some that assess social risk factors through other ways. According to the UDS 2020, health centers that are collecting social risk data nationally are using the following screening tools: PRAPARE (52%), Recommended Social and Behavioral Domains for EHRs (9%); Accountable Health Communities Screening Tools (8%); WE CARE (7%); and another tool (23%). For the health centers that do not implement a standardized social risk screening tool, they may ask their patients about their social risk factors through other means (e.g., intake and registration forms). Additionally, the 2020 UDS Dataset includes the number of patients who screened positive for SDOH measures such as food insecurity, housing insecurity, transportation, and financial strain. It is also the first time that the UDS Dataset collects information related

to human trafficking and intimate partner violence. However, all health centers were not collecting this data since these questions were not a requirement. Therefore, this report omits analysis of the limited data regarding SDOH needs and will revisit the analysis for the next iteration of the report.

Social Determinants of Health (SDOH): Conditions in the places where people live, learn, work, and play that affect a wide range of health and quality-of life-risks and outcomes.[37]

AAs and NH/PIs face unique social risk factors that serve as barriers to accessing quality healthcare. In 2020, 10.6% of AAs and 16.8% of NH/PIs lived below the federal poverty level, compared to 9.3% of non-Hispanic whites. Additionally, 6.4% of AAs and 10.8% of NH/PIs were uninsured, compared to 5.9% of non-Hispanic whites.[41] 87% of AAs and 83% of NH/PIs reported that they have a full-time worker in the family, however many remain uninsured or underinsured due to the lack of employer-based coverage.[42] As a limitation, the data does not represent residents of the USAPI jurisdictions. In the USAPI, it is important to note that health coverage is disparate and not all residents are beneficiaries under a government system. For example, a significant portion of Guam's population is covered through employer-sponsored private health insurance.

In terms of educational attainment, studies that disaggregate AA and NH/PI groups have found lower rates of educational attainment compared to other racial groups. For example, 47% of NH/PI students attended college, compared to 54.9% of students overall in the United States.[43] Disaggregation of AA and NH/PI groups show that Micronesians, Bhutanese, Fijians, Samoans, and Tongans have a bachelor's degree attainment rate of under 15%, compared to the 69.4% rate when aggregated for all AAs and NH/PIs. [44] Although many publications do not convey inequalities in education for AA and NH/PIs, those with disaggregated data analysis show otherwise.

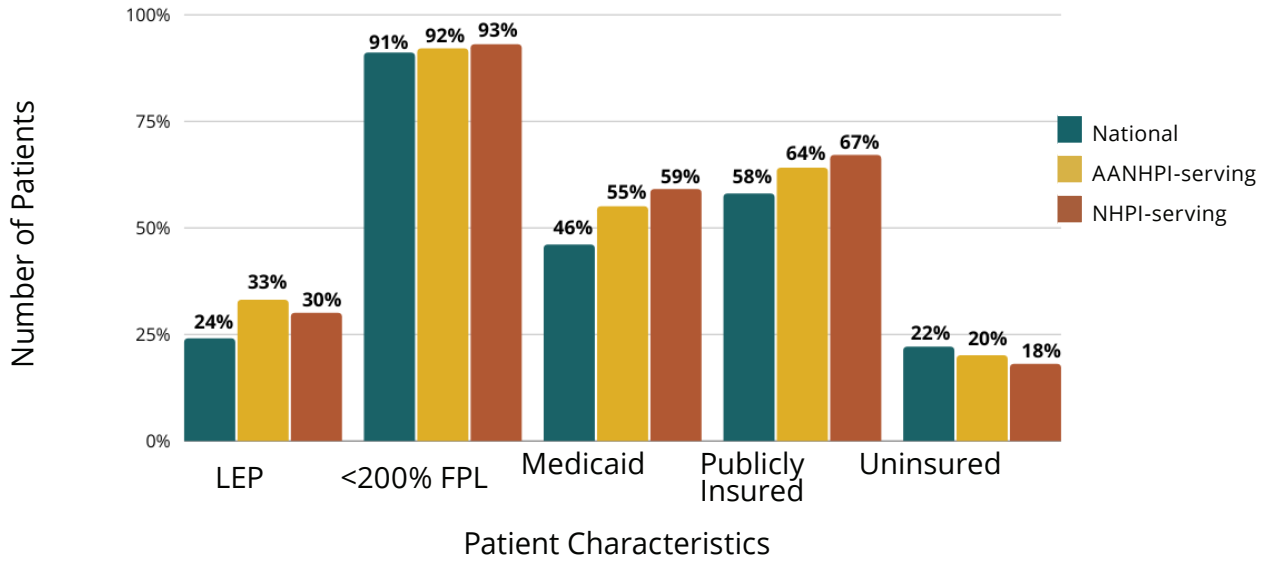
Health Center Patient Characteristics

Health centers nationally serve a high proportion of patients with one or

more social risk factors,[45] and this is even more evident at health centers that serve a high proportion of AA and NH/PI patients. For example, compared to the health centers nationally, both ***AA&NHPI***-serving and ***NHPI***-serving health centers report a ***higher proportion*** of patients with limited English proficiency (**33%** and **30%**, respectively), incomes below 200% the federal poverty level (**92%** and **93%**, respectively), Medicaid (**55%** and **59%**, respectively), and public insurance (**64%** and **67%**, respectively).[46]

AA&NHPI-serving and ***NHPI***-serving health centers both reported a lower rate of uninsured patients (**20%** and **18%**, respectively) and this may be attributed to Medicaid expansion and insurance marketplace enrollment efforts under the 2010 Affordable Care Act.[15,47] The lower rate of uninsured patients may also be attributed to the higher rates of Enabling Services FTEs (e.g., eligibility assistance workers, transportation staff) at ***AA&NHPI***-serving and ***NHPI***-serving health centers.

Average Health Center Patient Characteristics



It is important to note that the UDS provides data on health insurance status for both U.S. Territories and COFA nations. However, it does not provide a reflection on the various health coverage eligibility factors for COFA nations based on immigration status and their relationship to the United States. For example, Medicaid and Medicare statistics are unavailable for FSM, RMI, and ROP in the UDS data. There is a need to uncover details of health insurance coverage and policies across COFA nations, since they do not have a uniform health insurance system

the way it is designed for the continental U.S., Hawai'i, and the U.S. Territories. The overall rate of uninsured patients among PI communities may not be accurately reflected as indicated in the graph on the previous page.

Enabling Services Staff and Quality of Care at *AA&NHPI*-serving and *NHPI*-serving Health Centers

Enabling Services

Enabling Services (ES) provide non-clinical services and social services that increase access to care and improve health outcomes, such as case management, referrals, translation/interpretation, transportation, eligibility assistance, health education, and outreach.[48] According to AAPCHO's Enabling Services Accountability Project study, uninsured patients and patients with public health insurance were more likely to utilize ES, and patients utilizing ES were more likely to have their HbA1c levels under control, compared to non-ES users.[49]

UDS Enabling Workforce Services Categories

Enabling Services Staffing

Compared to health centers nationally, ***AA&NHPI***-serving and ***NHPI***-serving health centers have more full-time equivalent (FTE) Enabling Services staff. For example, ***AA&NHPI***-serving and ***NHPI***-serving health centers have **2.5** and **1.5** times more interpretation staff, respectively, compared to health centers nationally. The higher number of Enabling Services staff in ***AA&NHPI***-serving and ***NHPI***-serving health centers may likely correlate with and reflect patient population health and social needs.

The number of Enabling Services staff may be undercounted because the UDS does not document the intensity and volume of interpretation services at health centers. It is likely there are more staff that provide interpretations, including clinical services that are directly in-language due to multilingual abilities and multicultural backgrounds of staff commonly employed by ***AA&NHPI***-serving and ***NHPI***-serving health centers. Some ***AA&NHPI***-serving and ***NHPI***-serving health centers through AAPCHO's network provide services in over 15 languages. However, this data may not be necessarily documented in their everyday job setting.

According to the UDS, **five (5) out of 138 *AA&NHPI***-serving (**3.6%**) and **five (5) out of 38 (13.2%) *NHPI***-serving health centers serve 99-100% limited English proficient (LEP) patients. Nationally, **20** health centers out of 1,375 health centers (1.4%) serve 99-100% LEP patients. As a limitation, the UDS does not report disaggregated data on preferred languages by patients, which serves as an opportunity for health centers to adopt and/or expand data collection in this area. AAPCHO's Enabling Services Data Collection template provides an opportunity for health centers to document services provided in-language other than English. Health centers can access this template at http://enablingservices.aapcho.org/.[50]

AA&NHPI-serving and ***NHPI***-serving health centers have higher FTEs of all Enabling Services staff categories including Case Managers, Community Education Specialists, Outreach Workers, Transportation Staff, Eligibility Assistance Workers, and Community Health Workers. NHPI-serving health centers employ more Enabling Services staffing than AA&NHPI-serving health centers combined in all categories except for Interpretation staff. As mentioned previously, the number of Interpretation staff may be undercounted. Table 6 on the next page compares ***AA&NHPI***-serving and ***NHPI***-serving health centers' Enabling Services FTE staff to health centers nationally.

Average Health Center Full-time Enabling Services Staff

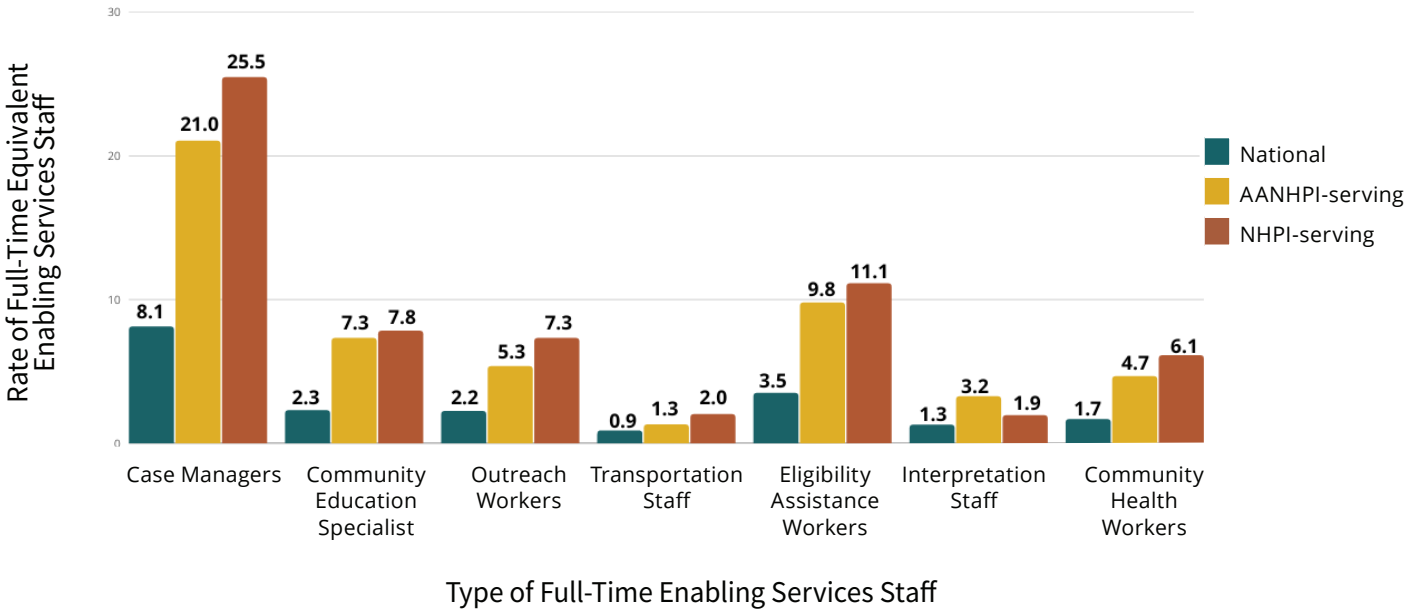


Table 6. Enabling Services Staff Ratio Compared to Health Centers Nationally

Staff	*AANHPI*-Serving Health Center	*NHPI*-Serving Health Center
Case Managers	2.6x	3.1x
Patient and Community Education Specialists	3.2x	3.4x
Outreach Workers	2.4x	3.3x
Transportation Staff	1.5x	2.3x
Eligibility Assistance Workers	2.8x	3.2x
Interpretation Staff	2.5x	1.5x
Community Health Workers	2.8x	3.6x

High Quality Care

AA&NHPI-serving and ***NHPI***-serving health centers have a higher quality of care for certain screening rates and health outcomes. ***AA&NHPI***-serving and ***NHPI***-serving health centers are trusted providers of care in the communities they serve. Providers from these health centers address community member needs by meeting them where they are at. As SDOHs impact healthcare access, ***AA&NHPI***-serving and ***NHPI***-serving health centers provide services to address those needs. For example, ***AA&NHPI***-serving (44%) and ***NHPI***-serving (43%) health centers demonstrate higher rates of childhood immunizations than health centers nationally (40%).[51] Community members are more likely to trust their local neighborhood health center and seek out services like vaccinations. ***AA&NHPI***-serving health centers also demonstrate higher rates in breast cancer screening (47% vs. 45%), cervical cancer screening (54% vs. 51%), and tobacco cessation (85% vs. 84%) than health centers nationally. All of these results may be attributed to the higher rates of Enabling Services staff, which are associated with higher quality health outcomes.[52]

AA&NHPI-serving (40%) health centers demonstrate equivalent rates of colorectal cancer screening with health centers nationally (40%). Colorectal cancer is the second most common cause of cancer for AA populations, as compared to the third most common in the U.S.; and is the common cause of cancer death among AAs as compared to the second most common in the U.S.[53] However, challenges remain for all AA populations to get screened and tested due to language barriers, inadequate communication with providers (regardless of insurance status), and personal factors (fear and embarrassment).[53]

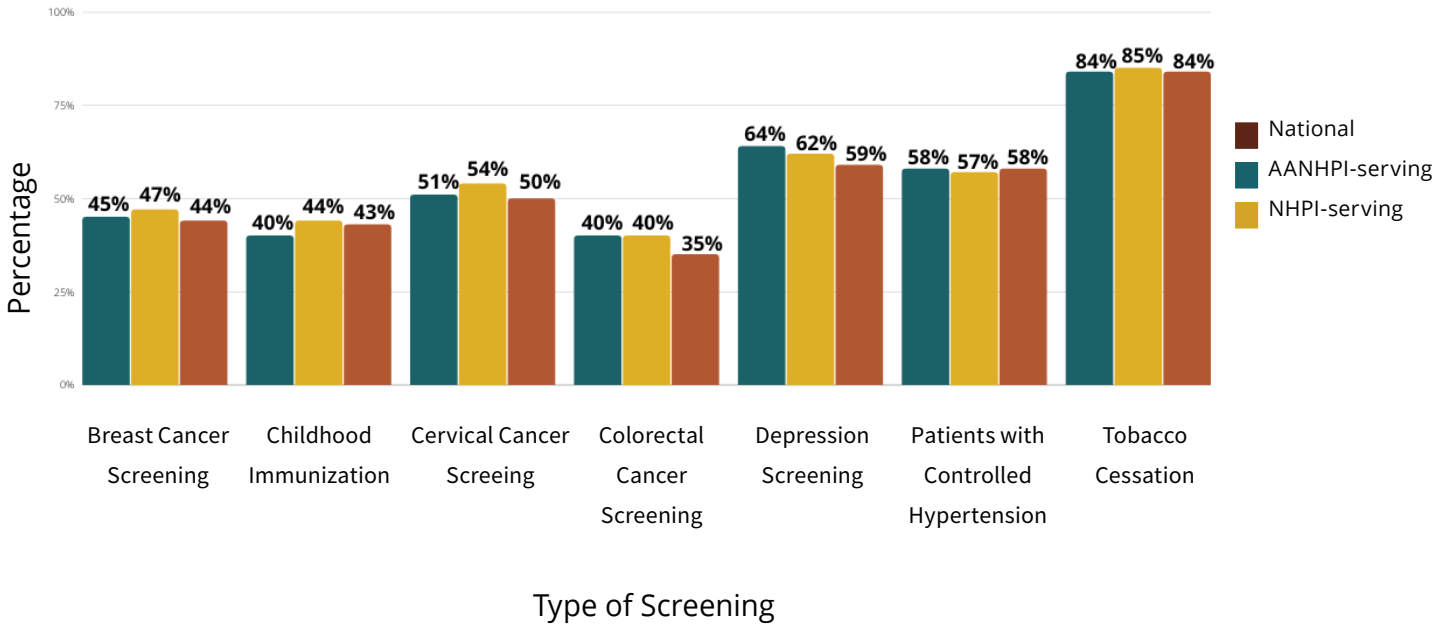
NHPI-serving health centers demonstrate equivalent rates of patients with controlled hypertension and tobacco cessation with health centers nationally. ***NHPI***-serving health centers also demonstrate lower rates of breast cancer screening, cervical cancer screening, and colorectal cancer screening than health centers nationally. This may be attributed to barriers to access screening and treatment, especially for populations residing in rural and/or remote island areas.[54] Cancer rates in the USAPI could be higher as screening and treatment are limited and less accessible. This serves as an opportunity for health centers to work with established partnerships with the community and organizations to identify what key strategies are needed to increase screening methods and remove barriers for treatment based on their environment. This can also work to build capacity at the organizational level based on what the

communities' needs and social barriers are.

Finally, ***AA&NHPI***-serving and ***NHPI***-serving health centers demonstrate lower rates of screening and follow-up plans for depression than health centers nationally (59%, 62%, and 64%, respectively). Research finds that white U.S. citizens are three times more likely to seek mental health services than AAs and NH/PIs.[55] Depression is a complex and multifaceted disorder, and cultural nuances in the different groups influence patient experience with mental health. With suicide being a leading cause of death for AA and NH/PI youth,[56] addressing mental health is a crucial aspect of AA and NH/PI health equity.

Every ten years, the Office of Disease Prevention and Health Promotion standardizes the Healthy People objectives to meet national quality standards.[57] Even though Enabling Services have shown to improve health outcomes, health center quality outcomes in 2020 did not meet the Healthy People 2030 goals, with the exception of controlled hypertension and tobacco cessation. [57, 58] As Healthy People 2030 has launched, there is an opportunity to establish new benchmarks and innovate care to improve health outcomes for AA and NH/PI patients and address other contributing factors to health disparities.

Average Health Center Quality of Care



Chronic Disease and Infectious Disease Disparities

Diabetes and Hypertension

According to the 2020 UDS dataset, **36%** of adults were diagnosed with uncontrolled diabetes and **21%** of adults had hypertension at health centers nationally. The table on the next page shows the average health center patient with uncontrolled diabetes and hypertension by race and ethnicity:

Uncontrolled diabetes: Hemoglobin A1c greater than 9%.[59]
Uncontrolled hypertension: Systolic blood pressure greater than 140mmHg and diastolic blood pressure greater than 90mmHg). [59]

Average National Health Center Patient Chronic Disease Rates by Race and Ethnicity

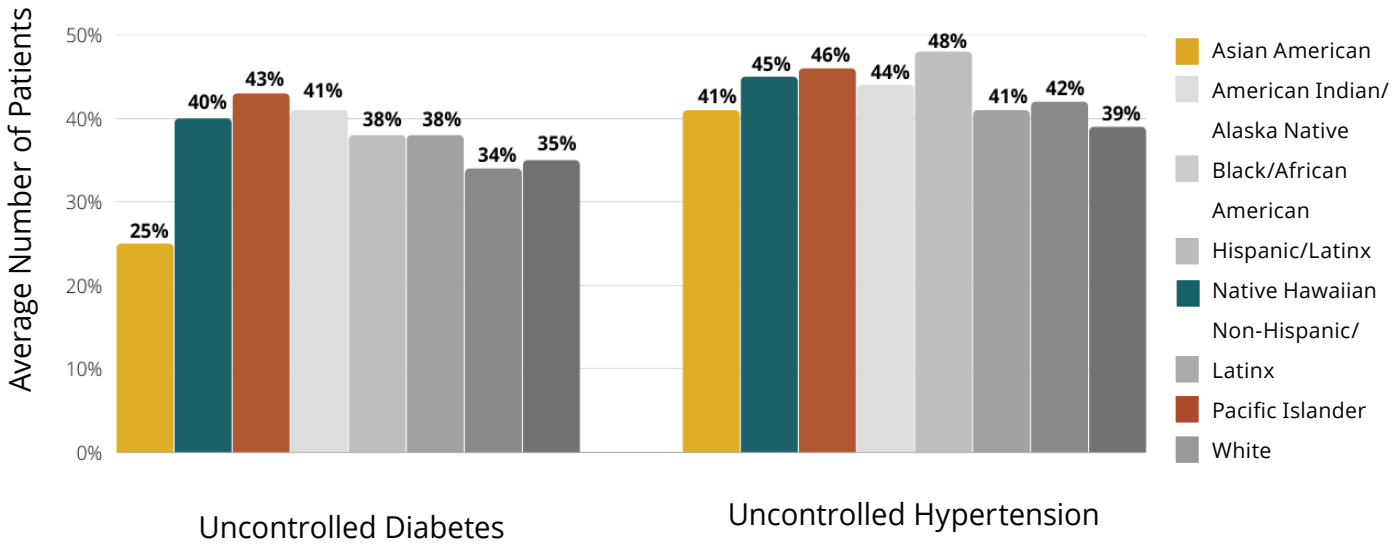


Table 7. Average National Health Center Patient Chronic Disease Rates by Race and Ethnicity

Uncontrolled Diabetes		Uncontrolled Hypertension	
Race/Ethnicity	**Percent**	**Race/Ethnicity**	**Percent**
Pacific Islander	43%	Black/African American	48%
American Indian/ Alaska Native	41%	Pacific Islander	46%
Native Hawaiian	40%	Native Hawaiian	45%
Black/African American	38%	American Indian/ Alaska Native	44%
Hispanic/Latinx	38%	Non-Hispanic/La-tinx	42%
White	35%	Asian American	41%
Non-Hispanic/Latinx	34%	Hispanic/Latinx	41%
Asian American	25%	White	39%

According to the analysis, **40%** of NH patients and **43%** of PI patients have uncontrolled diabetes, whereas **45%** of NH patients and **46%** of PI patients have uncontrolled hypertension. Comparing across all races and ethnicities, PI patients have the highest rates of uncontrolled diabetes and NH patients have the third highest rates. PI patients have the second highest rates of uncontrolled hypertension and NH patients have the third highest rates. The high rates of chronic diseases in NH/PI patients could be attributed to socioeconomic disparities, structural discrimination, and pre-existing conditions.[60,61,62]

Increasing capacity for health centers to develop chronic disease management programs that are culturally and linguistically tailored to each racial and ethnic group is an opportunity to improve the efficacy of management programs. While there are limited management programs that do this, culturally and linguistically response prevention programs are successful. For example, the Pacific Islander Diabetes Prevention Program (PI-DPP) serves as a preventive program model to build the infrastructure of local organizations to deliver PI-tailored and

CDC-recognized lifestyle change programs to PI communities.[63] PI-DPP collects nuanced qualitative and quantitative data of its participants to illuminate the complexities of chronic diseases. For example, PI-DPP identified that 8.3% of AA and NH/PI participants have gestational diabetes, and identified that over 22.1% of those with gestational diabetes are in Hawai'i and 13.4% are in the continental US. Through these data collection methods, PI-DPP has strategically improved funding for activities such as sponsored zumba sessions, nutrition classes, and program transportation.

As of June 2022, PI-DPP has impacted more than 3,250 individuals with prediabetes, 36% of which successfully lost at least 5% of their body weight (i.e., collectively losing a total of 23,704 lbs.), reducing their risk of diabetes and other chronic disease. PI-DPP is a successful example of the benefits of community based and health system partnerships and the impact culturally tailored curriculum and motivational strategies can have in reducing diabetes and the onset of other chronic diseases. Given the effectiveness of the PI-DPP model for diabetes prevention, it's worthwhile for health centers to consider a similar model for chronic disease management as a way of reducing uncontrolled diabetes rates.

AAs have the lowest rate of diabetes and second lowest rate of uncontrolled hypertension. However, the lower rate of uncontrolled diabetes among AA patients may be attributed to potentially high rates of missed diagnoses, since AAs are at risk for Type 2 diabetes at a lower body mass index (BMI) of 23 compared to the standard screening guidelines of BMI of 25.[64]

Additionally, the lower uncontrolled diabetes rates could be attributed to aggregating AA patients as one racial/ethnic group. Several studies

Photos courtesy of Chuuk Community Health Center

Voices from the Field: Chuuk Community Health Center

Chuuk State is one of four states that make up the Federated States of Micronesia (FSM). FSM has a unique relationship with the United States as a sovereign state under the Compact of Free Association. This enables FSM to receive direct economic support from the U.S. and to participate in many, but not all, rights and benefits of a U.S. citizen, including the (330e) Community Health Centers Program. For example, the Affordable Care Act does not apply in Chuuk and 69% of its residents are uninsured. In addition to the policy barriers, Chuuk State also faces physical barriers from the vast waters separating the islands. Chuuk State has 250 islands, of which 40 are inhabited. The only hospital is located on the main island of Weno, and residents in the other 39 inhabited islands have to be transported by boats to get to the hospital. The 2010 FSM census shows that even on the main island, 60% of households do not own a car. In 2010, Chuuk State issued a noncommunicable disease state of emergency due to the health disparities for diseases like diabetes, cancer, and heart disease.

To address these disparities in the community, Chuuk Community Health Center (Chuuk CHC) opened its three clinics in 2017. Chuuk CHC provides screening, prevention, treatment, and counseling services for the community. Chuuk CHC also has a variety of programming to address NCDs, such as Waseoch for diabetes and Chuuk Goes Red Program for hypertension. Waseoch is the Pacific Islander Diabetes Prevention Program (PI-DPP) funded by AAPCHO that works with participants to decrease their blood sugar or HbA1c levels through physical activity and nutrition education. The program continues to expand through partnerships with faith-based communities and the secondary school workforce. The Chuuk Goes Red Program focuses on the busiest workforces in the State, such as the public safety, the department of education, utility corporation, and the seaport. Chuuk CHC staff provide hypertension prevention services with patients at their place of work since they have limited time for traveling to appointments.

Although our target population is for the 14,000 residents on the main island of Weno, Chuuk CHC services reach people from all over the State. With the belief that we cannot return any patients with or without any means of payment, Chuuk CHC welcomes all patients who show up on our doorstep. We had projected to serve 3,000 patients from our first year, but have seen tremendous increase in our intake to 9,000 patients per year. Community members continue to get referrals to Chuuk CHC for important treatment and counseling as a critical location for advancing health equity. During the height of the COVID-19 pandemic, Chuuk CHC has played a major role in administering COVID-19 vaccines and ordering vaccines to share with Chuuk State's public health department. 2022 is the beginning of our fifth year in service and we still hope to add more services to better the health of our people.

For more information, visit Chuuk CHC' website at https://pacificislandspca.org/chuuk/.

Photos courtesy of Hāmākua-Kohala Health Centers

demonstrate subgroups such as Filipinos, Hmongs, and South Asians have higher rates of diabetes compared to other AA subgroups and white persons.[65,66,67] By aggregating AAs, the health disparities within the racial group are hidden.

Tuberculosis and Hepatitis B

According to the CDC, **7,174** cases of Tuberculosis (TB) were reported in the United States in 2020, AA populations continue to be impacted by TB at a greater rate compared to other racial and ethnic groups and accounted for **35.8%** of all people with TB nationally at **2,568** cases.[68] NH/PI populations have the highest TB incidence rate of **18.7** cases per 100,000 persons, and AA populations have the second highest TB incidence rate of **13.3** cases per 100,000 persons.[69] Incidence rates for Marshallese are the highest among non-U.S.-born persons, with an incidence rate of **164.2** cases per 100,000 persons.[70] Countries with highest TB burden among non-U.S.-born AAs include the Marshall Islands, Myanmar, Bhutan, Nepal, and the Federated States of Micronesia.[70]

According to the 2020 UDS data set, **2.2** in 100,000 persons live with TB in the United States and its territories,[71] but ***AA&NHPI***-serving health centers, ***NHPI***-serving health centers, and health centers nationally have higher TB rates (**3.0**, **5.0**, and **3.0** cases per 100,000 persons, respectively). This provides an opportunity for health centers to collect standardized data on TB, and disaggregate collected data by racial and ethnic groups.

Regarding Hepatitis B, Asian Americans make up **6%** of the total population in the United States, but account for **58%** of the **862,000** people living with chronic hepatitis B.[72]

Voices from the Field: Hāmākua-Kohala Health Centers

Hamakua Health Center, Inc. dba Hāmākua-Kohala Health (HKH) is a community-based, Federally Qualified Health Center (FQHC) that provides comprehensive primary and preventive healthcare to persons of all ages, regardless of their health insurance status or ability to pay. HKH is rooted in the rich history of the sugar plantations, initially established as Hamakua Infirmary in 1966.

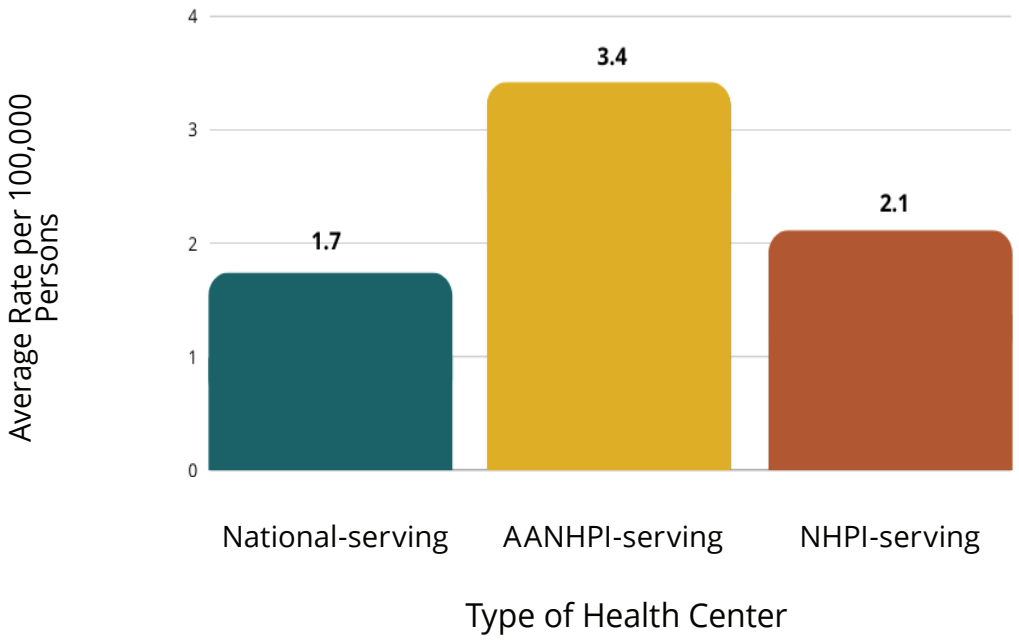
With the mission of providing quality healthcare that is responsive to our patients' and communities' needs, HKH serves over 10,500 residents annually, and acquired over 5,500 new patients in 2021. This represents over 25,000 patient visits at four locations throughout North Hawai'i Island, including Honoka□a, Kohala, Laupāhoehoe, and Waimea.
HKH patients experience health disparities and come from communities that are predominantly rural, ethnically diverse, and are generally underserved by healthcare providers. Our services not only include primary medical care, but also encompass behavioral health, patient and family education, family planning, women's health, support groups, and transition services. HKH is the only provider of primary care services in three of the nine county districts we serve. For individuals and families with no other healthcare option, HKH serves as a safety net, providing healthcare access for those who would otherwise forgo care or seek treatment episodically through emergency rooms.
HKH is a FQHC that is committed to providing comprehensive, culturally competent, quality primary healthcare to medically underserved communities and vulnerable populations.
We promote access to healthcare and help our target population overcome these barriers by offering supportive services, such as health education, translation services, and transportation.

Our care enabling services include: Care Management, Referrals and Coordination, Assistance with Insurance and Benefits, Free and Low-Cost Prescription Programs, Culturally Responsive Health Services, Translation and Culturally Sensitive Services, Tobacco Treatment Program, and Transportation.

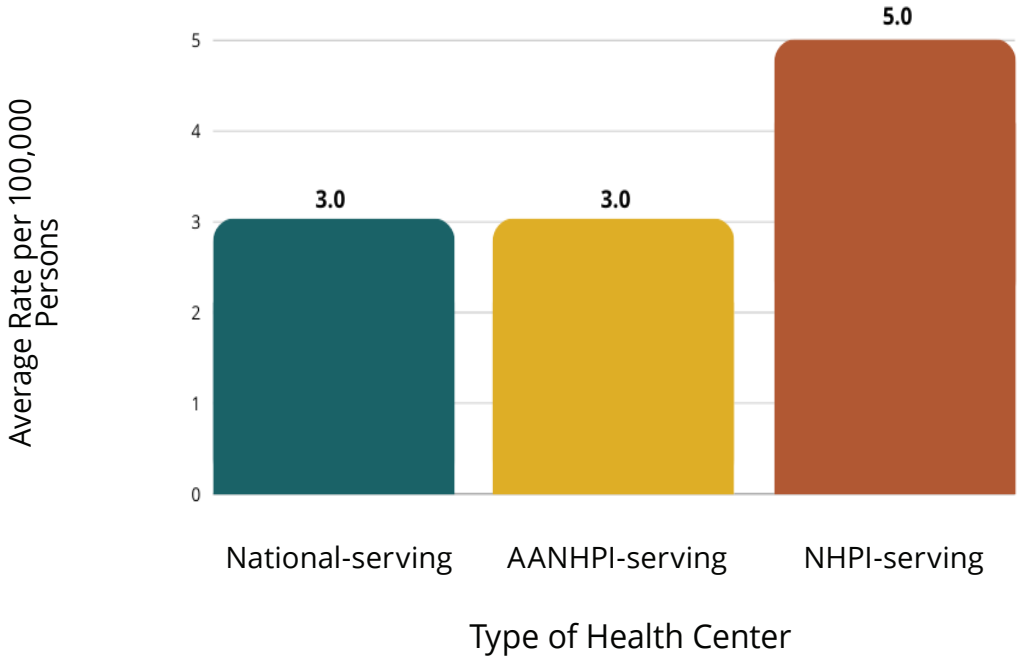
For more information, visit Hāmākua-Kohala Health website at www.Hāmākua-health.org

AA&NHPI-serving and ***NHPI***-serving health centers serve a higher rate of Hepatitis B patients than the national average (**3.4 AA&NHPI, 2.1 NHPI,** and **1.7 national** cases per 100,000 persons, respectively). The following table shows the average rates of Hepatitis B per 100,000 persons.

Average Health Center Hepatitis B Rates Per 100,000 Persons



Average Health Center Tuberculosis Rates Per 100,000 Persons



Photos courtesy of Centers for Pan Asian Community Services

COVID-19

As previously mentioned, the 2020 UDS dataset provides limited information on COVID-19 and race/ethnicity. However, other data sources also demonstrate that AA and NH/PI populations are disproportionately impacted by the COVID-19 pandemic. Specific AA and NH/PI subgroups and NH/PIs overall have some of the highest rates of COVID-19 cases and deaths in many states.[73] The following are some examples which highlight the hidden disparities:

- PIs make up only 4% of Hawai'i's population, yet accounted for 24% of COVID-19 cases by January 2022.[74]
- A study that reviewed COVID-19 diagnosis and hospitalization rates through disaggregated data found that South Asian patients had the highest rates of diagnosis and hospitalization among AA groups, and second to Hispanic patients in diagnosis and second to non-Hispanic Black patients in hospitalization.[75]
- A nationwide survey found that Chinese, Korean, Japanese, Vietnamese, and other Asian Pacific Islanders (API) had 3.9 times increased odds of racial/ethnic discrimination based on retrospective self-report due to COVID-19.[76]
- 18 of the 20 U.S. states that recorded COVID-19 data for NH/PIs reported NH/PIs as having the highest per capita death rates.[77]

Disaggregated data will help further capture the impact of chronic and infectious disease amongst AA and NH/PI subgroups so that health centers can appropriately diagnose, support, and treat patients in an equitable way. Researchers must also investigate if current intervention or prevention measures for COVID-19 are applicable or cost-effective for AA and NH/PI patients.

Voices from the Field: Center for Pan Asian Community Services

The Center for Pan Asian Community Services, Inc. (CPACS)–founded in 1980 on the belief that people need people–is the first, largest, and longest standing organization in the Southeast focused on issues concerning Asian Americans. Since its inception, CPACS' goal has been to deliver a broad continuum of comprehensive, family-centered health, and social services in Metro Atlanta, Georgia. CPACS recognizes that health, education, employment, citizenship, and community are interrelated, interdependent, and integral to individual success, as well as the ability to contribute to the society in which we live. In response to community needs, CPACS opened its own Federally Qualified Health Center (FQHC) in 2014. As a FQHC, CPACS expanded services such as clinical primary care and treatment, dental, behavioral health, and preventive health screenings.

Although CPACS has a unique capacity to serve Asian Americans and continues to provide essential services that benefit this community, it has evolved to provide services that benefit the entire community, especially members with Limited-English Proficiency (LEP), regardless of racial or ethnic makeup such as Latino Americans, African Americans, and African refugees.

CPACS provides over 70,000 direct services every year, with a 15% increase in intake annually. During the past 42 years, CPACS has evolved from a volunteer-run organization into a multi-service organization with racially and ethnically diverse staff, whose in-house linguistic ability covers over 19 different languages. Our main office is located in an area of Atlanta (the Buford Corridor) that is inhabited primarily by immigrant and refugee communities. The diversity of both CPACS' services and clients provides an extra element of privacy for our immigrant and refugee clients from all different groups.

During the height of the pandemic, we adapted existing services based on our community needs. For example, we innovatively combined HIV and COVID-19 testing in a drive-thru layout to continue providing our HIV services. At the peak of the pandemic in 2020, we provided 1,227 COVID-19 and rapid HIV tests. From the year 2020 to present, we have administered an additional 2,014 rapid HIV tests to our targeted community through outreach and educational sessions. CPACS was one out of the 125 organizations in 2021 that the Health Resources and Services Administration (HRSA) awarded to provide service aimed at COVID-19 outreach and vaccine hesitancy. Since the project started in July 2021, CPACS has reached over 257,700 community members through COVID outreach and education. In total, over 1,300 community members have been vaccinated with their first and second dose through CPACS' community vaccine initiative. Despite Georgia having one of the lowest vaccination rates nationally, our in-language efforts are continuing to expand to ensure equitable access for the immigrant and refugee communities.

For more information, visit CPACS' website at https://cpacs.org/

Recommendations

Based on the 2019 UDS data findings, AAPCHO recommends the following priority areas to build a health center's capacity to serve all patients, and equitably improve the AA and NH/PI patient experience:

1. Increase Collection of Social Risk Data and Disaggregated Race and Ethnicity Data.

a. **Screening For and Collecting Data on Social Risk Factors**: The 2020 UDS findings indicate that **68.9%** of health centers collect data on social risk factors. AAPCHO recommends that 100% of health centers move towards the adoption of social risk factor screening and implementation of appropriate social interventions. Integration and equitable access to electronic health record (EHR) systems capable of incorporating these screenings is further recommended. Without this critical data, AA and NH/PI patients' unique health and social needs that impact their ability to access healthcare and improve health outcomes will continue to be hidden and overlooked. Implementing social risk screening processes and procedures along with documentation of health centers' most commonly offered Enabling Services to measure effective social interventions, demonstrate the value of Enabling Services staff and services, and prepare for value-based healthcare transformation.[77,78] It is also recommended to collect standardized data on health center patients' social risk factors to proactively address systemic barriers that otherwise inhibit access to care for AAs and NH/PIs.

b. **Disaggregate Race and Ethnicity Data**: AAs and NH/PIs are representative of over 50 racial/ethnic groups and more than 100 languages spoken. Each subgroup is diverse in culture, health beliefs, language, and socioeconomic background. It is recommended for health centers to receive expanded training and technical assistance on the collection of detailed racial/ethnic data to identify unique health characteristics that exist within broader racial/ethnic categorization subgroups. For example, research shows that PI subgroups like Micronesians experience

health disparities related to prenatal care.[79] Health centers can leverage disaggregated data to cultivate new and/or expand existing programs and services that are culturally and linguistically appropriate for AAs and NH/PIs.

2. Tailor Health and Social Services That Reflect the Needs of AA and NH/PI Patients.

a. **Invest In Programs and Care Delivery Models Geared Specifically Towards AA and NH/PI patients**: AA and NH/PI patients have a diverse array of health and social needs, and a necessity for culturally and linguistically appropriate services by healthcare providers. Investing in programs and care delivery models tailored for specific AA, and NH/PI communities can help improve patient-centered care and address disproportionate rates of disease (e.g., diabetes, hepatitis B, tuberculosis). Below are a few examples of culturally responsive programs and care delivery models that address specific chronic and infectious diseases that disproportionately impact AA and NH/PI patients:

i. Hep B United: https://www.hepbunited.org/
ii. The Pacific Islander Diabetes Prevention Program: https://pacificislanderdpp.org/
iii. The Pacific Islander Center of Primary Care Excellence: https://pi-copce.org/
iv. The Tuberculosis Elimination Alliance: https://tbeliminationalliance.org/

b. **Hire, Train, and Sustain AA and NH/PI Non-Clinical Healthcare Workforce**: ***AA&NHPI***-serving and ***NHPI***-serving health centers have historically invested in non-clinical staffing (Enabling Services) to ensure availability of in-language, culturally relevant support and critical navigation services that have been shown to increase health center visits and patient satisfaction.[80] Critical services including eligibility assistance to ensure patients keep and retain their health coverage are necessary to supporting continuity of care. It is known that health insurance coverage increases access to preventative care services to prevent and/or manage chronic and infectious diseases, including diabetes, hypertension, and hepatitis B amongst AA and NH/PI patients.[81] Health insurance coverage and retention are a multifaceted

process, impacted by upstream policy level decisions to the downstream provider level decisions; these Enabling Services staff play a key role for patients to navigate the complex insurance system and must be factored into value based care contracts and payment reform efforts to ensure long-term sustainability of the health center program.

It is also recommended that health centers offer workforce skills-based training on the principles and concepts of cultural humility to help staff and providers navigate multicultural communities more effectively. It is recommended for health centers to re-examine and reorient health centers to nationally recognized frameworks such as the National Standards for Culturally and Linguistically Appropriate Services (CLAS) in Health and healthcare which have served as foundational guidelines to increase health equity and decrease health disparities.[82]

3. Cultivate and Sustain Community and National Partnerships.

a. **Promote Cross-Sector Community Partnerships**: Health centers may not be able to provide comprehensive in-house services that address all social needs among vulnerable AA and NH/PI populations. It is recommended that health centers cultivate existing and/or explore new community partnerships with local social service agencies, faith-based organizations, and/or community-based organizations to address social needs that are unique to AA and NH/PI populations. Cross-sector community partnerships allow health centers to be better equipped with resources aimed to improve health outcomes for AA and NH/PI patients.

b. **Leverage State and National Networks, Resources, and Expertise**: HRSA funds a diverse array of state and national organizations that directly support the health center program. It is recommended that all health centers access and partner with their state and/or regional Primary Care Associations (PCAs), Health Center Controlled Networks (HCCNs), and National Health Center Training & Technical Assistance Partners (NTTAPs) that focus on

addressing AA and NH/PI health disparities. Through these cross-sector and multi-level partnerships, health centers can strengthen existing programs and policies that may result in increased funding and resources to address health disparities for AA and NH/PI patients living throughout the United States and USAPI jurisdictions. For PCAs and HCCNs, AAPCHO serves as an NTTAP to support new initiatives and special projects focused on Enabling Services Data Collection and SDOH screening training for health centers.

Summary

The 2020 UDS analysis shows that ***AA&NHPI***-serving and ***NHPI***-serving health centers serve a higher proportion of patients with unique social risk factors. Additionally, the UDS demonstrates that AA and NH/PI populations are growing at a fast rate and are geographically diverse. The following are key takeaways about ***AA&NHPI***-serving and ***NHPI***-serving health centers and their AA and NH/PI patients:

1. **AA and NH/PI populations are diverse and growing.** AA and NH/PI populations represent more than 50 ethnic groups and over 100 languages spoken. Locations not previously recognized for large AA and NH/PI communities, such as Indiana and Arkansas, have a growing population of AA and NH/PI patients.

2. **AA&NHPI-serving and NHPI-serving health centers serve a significant number of AA and NH/PI patients.** ***AA&NHPI***-serving health centers serve **71.3%** of AA and NH/PI patients and ***NHPI***-serving health centers serve **53.9%** of NH/PI patients.

3. **AA&NHPI-serving and NHPI-serving health centers serve a higher proportion of patients with social risk factors than health centers nationally.** Compared to health centers nationally,***AA&NHPI***-serving and ***NHPI***-serving health centers serve a higher proportion of limited English proficient, low-income, Medicaid, and publicly insured patients.

4. ***AA&NHPI*-serving and *NHPI*-serving health centers have a higher number of Enabling Services staff.** ***AA&NHPI***-serving and ***NHPI***-serving health centers have a higher number of Enabling Services FTEs compared to the national health center average.

5. ***AA&NHPI*-serving and *NHPI*-serving health centers have a higher quality of care for certain screening rates and health outcomes.** The higher quality of care may be attributed to the higher number of Enabling Services staff.

6. **Aggregating AA and NH/PI populations can conceal health disparities across each subpopulation.** NH/PIs have higher

rates of uncontrolled diabetes and uncontrolled hypertension on average when compared to AAs and white Americans. Health disparities may be masked among AAs because AA subgroups are often aggregated into one racial/ethnic group.

7. **AA&NHPI-serving and NHPI-serving health centers serve a higher proportion of patients with Hepatitis B, and NHPI-serving health centers serve a higher proportion of patients with tuberculosis than health centers nationally.** AA and NH/PI populations account for the majority of the general population living with chronic hepatitis, as well as tuberculosis. ***AA&NHPI***-serving and ***NHPI***-serving health centers serve as key frontline providers to outreach, test, and treat AA and NH/PI communities impacted by these particular infectious diseases.

8. **Based on these findings, AAPCHO has recommendations for health centers in key priority areas.** AAPCHO recommends health centers increase collection of social risk data and disaggregated race and ethnicity data; tailor health and social services that reflect the needs of AA and NH/PI patients; and cultivate and sustain community and national partnerships to drive health equity.

Definitions

1. **Asian American:** According to the UDS, having origins in any of the original peoples of Asia, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Indonesia, Thailand, or Vietnam.[83]

2. **Native Hawaiian/Pacific Islander:** According to the National Association of Pasifika Organization's (NAOPO) NH/PI Council, The "Native Hawaiian or Other Pacific Islander" (NHOPI) category is defined as "[a] person having origins in any of the original peoples of Hawai'i, Guam, Samoa, or other Pacific Islands."[25] The term "Native Hawaiian'' does not include individuals who are native to the State of Hawai'i by virtue of being born there. In addition to Native Hawaiians, Chamorro/CHamoru, and Samoans, this category would include the following Pacific Islander groups reported in the 1990 census: Carolinian, Fijian, Kosraean, Melanesian, Micronesian, Northern Mariana Islander, Palauan, Papua New Guinean, Pohnpeian, Polynesian, Solomon Islander, Tahitian, Tarawa Islander, Tokelauan, Tuvaluan, Tongan, Chuukese, Indigenous Australian, Torres Strait Islanders, Maori and Yapese. The National Association of Pasifika Organizations NH/PI Policy Council has reduced NHOPI to taking out the "other" in the middle and replacing it with a forward slash as in NH/PI.

3. **Native Hawaiian:**
    - According to the NAOPO NH/PI Council, The term "Native Hawaiian'' is from the Native Hawaiian Health Care Improvement Act, which indicates that Native Hawaiians are a "distinct and unique indigenous people with a historical continuity to the original inhabitants of the Hawaiian archipelago whose society was organized as a Nation prior to the arrival of the first nonindigenous people in 1778."[26]
    - According to the UDS, persons having origins to any of the original peoples of Hawai'i.[25]

4. **Pacific Islander:**
    - According to the NAOPO NH/PI Council, Pacific Islanders are the distinct and unique indigenous peoples descended from the original inhabitants of the nations within Oceania.
    - According to the UDS, persons having origins in any of the original peoples of Guam, Samoa, Tonga, Palau, Chuuk, Yap, Saipan, Kosrae, Ebeye, Pohnpei or other Pacific Islands in Micronesia, Melanesia, or Polynesia.[25]

5. ***AANHPI*-serving health centers:** The top 10% of health centers in terms of the number of AA and NHPI patients served at the health center in 2020.

6. ***NHPI*-serving health centers:** Served greater or equal to 1,000 NH/PI patients combined in 2020.

7. **Social determinants of health:** Conditions in the places where people live, learn, work, and play that affect a wide range of health and quality-of life-risks and outcomes.[84]

8. **Uncontrolled diabetes:** Hemoglobin A1c greater than 9%.[59]

9. **Uncontrolled hypertension:** Systolic blood pressure greater than 140 mmHg and diastolic blood pressure greater than 90mmHg).[59]

Acknowledgements

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Disclaimer

This publication was supported by the Health Resources and Services Administration HRSA of the U.S. Department of Health and Human Services HHS as part of an award totaling $550,000.00 with 0 percent financed with non-governmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the U.S. Government. For more information, please visit HRSA.gov.

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