

Papa Ola Lōkahi

E OLA MAU A MAU

THE NEXT GENERATION OF NATIVE HAWAIIAN HEALTH

WORKFORCE DEVELOPMENT REPORT

E OLA MAU A MAU – THE NEXT GENERATION OF NATIVE HAWAIIAN HEALTH

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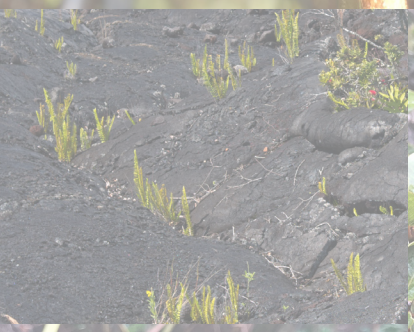
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Chapter Seven:
Workforce Development

Workforce Development

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Executive Summary

Increased Understanding

- There has been an increase in empirically based knowledge on workforce shortages, resulting in better data-driven decisions regarding a workforce for Native Hawaiian health.
- There has been greater acceptance of the broadening of the concept of the health care workforce for Native Hawaiians.
- Many socio-ecological factors impact the health care workforce in Hawai‘i.
- Interventions that improve career quality and economic security can enhance the health care workforce in Hawai‘i.

Effective and Promising Approaches

- Many different types of programs and organizations, including those with an emphasis on Native Hawaiian culture and identity, have helped to increase the Native Hawaiian health care workforce.
- Interventions that consider community and individual quality of life and economic realities will more likely increase workforce development for Native Hawaiian health.
- Community-academic collaborations increase the potential to improve workforce development for Native Hawaiian health.
- Student support programs are vital to increasing college graduation rates for Native Hawaiian students. Scholarship, STEM and pipeline programs abound and are increasing.

Gaps

- The workforce is insufficient to address Native Hawaiian health care needs.
- There is an insufficient tracking system for systematically collecting health care workforce data specific to Native Hawaiians.
- There is a lack of education and training programs and interventions to increase the workforce for Native Hawaiian health.
- There is a lack of culturally relevant efforts to increase the workforce for Native Hawaiian health.
- Current procedures, regulations, and policies do not fully support the workforce for Native Hawaiian health.
- There is concern over quality-of-life issues, especially in light of inadequate resources, to support the necessary workforce for Native Hawaiian health.
- An overall strategy and an organization to advocate for and advance the necessary workforce for Native Hawaiian health remain lacking.

Recommendations for Impact

- **Broaden and maintain a thriving workforce to address Native Hawaiian health care needs.**
- **Develop and maintain a comprehensive, centralized data-collection and tracking system of health care workforce data specific to Native Hawaiians.**
- **Support existing, effective education and training programs and develop and sustain new ones that will create a thriving workforce for Native Hawaiian health.**
- **Increase the quality and quantity of culturally relevant efforts to expand and improve the workforce for Native Hawaiian health.**
- **Advocate for existing and new procedures, regulations, and policies that support a thriving workforce for Native Hawaiian health.**

- **Improve the quality of life, financial security, and resources necessary for a thriving workforce for Native Hawaiian health.**
- **Assemble a group of dedicated stakeholders who will develop and implement an overall strategic plan to fulfill the recommendations of the Workforce Development Task Force, and subsequently modify the strategic plan as needed with the goal of a thriving workforce for Native Hawaiian health.**

Introduction

ʻAʻohe ʻulu e loaʻa i ka pōkole o ka lou.

No breadfruit can be reached when the picking stick is too short.

There is no success without preparation.

ʻŌlelo Noʻeau #213
(Pukui, 1983, p. 25)

E Ola Mau Revisited

The original *E Ola Mau* (1985) stated, "For effective community health, it is essential to have health care services delivered by members of that community. Native Hawaiians are under-represented in the health care professions. Development of Native Hawaiian health professionals and workers at all levels is an essential factor in improving the health status of Native Hawaiians" (p. 42). This continues to be true. Table 1 lists recommendations that remain applicable today.

Table 1
E Ola Mau (1985) *Workforce Recommendations Yet to Be Fulfilled*

Number	Description
1.2	That there be a systematic and continuous collection, tabulation and analysis of critical health data by Native Hawaiians.
1.4	That there be culturally-based health education programs developed and maintained by Native Hawaiians and targeted to Native Hawaiian families and communities.
1.5	That there be encouragement for learned Native Hawaiians to teach and instruct other Native Hawaiians in health-related areas.
1.6	That there be cultural awareness training for Native Hawaiian and non-Native Hawaiian health professionals.
1.8	That there be developed an integrated approach to health programs in the Native Hawaiian community…in conjunction with concerns relating to…self-determination, economic self-sufficiency, …[and] education.
2.3	That educational training programs to facilitate the entrance of Native Hawaiians into mental health professions…be developed.
2.4	That…health professionals rendering services to Native Hawaiians be certified in cultural knowledge, history and lifestyle.
2.5	That third-party payments for treatment services based on traditional Hawaiian orientation and practice be legitimized.
3.4	That Native Hawaiian parity in the health professions be targeted through scholarship programs and academic monitoring and support.
3.5	That a system of Native Hawaiian Community Health Workers be developed.
3.12	That cooperation be fostered between traditional Hawaiian healers and physicians.
3.19	That health care organizations serving Native Hawaiian communities develop programs which integrate Western and traditional Hawaiian approaches to health care.

Number	Description
3.28	That utilization data be systematically collected by all health programs and organizations in order to be able to determine the extent to which Native Hawaiians are receiving health services.

❖ **E Ola Mau a Mau**

Since *E Ola Mau* (1985) was released, there has been increased pressure on the health care industry to expand workforce recruitment, education, training and availability. An expanded workforce is required to meet the persistent health care needs of Native Hawaiians and the underrepresentation of Native Hawaiians among health care practitioners and professionals.

The topic of workforce development was embedded within each task force report in *E Ola Mau* (1985). Due to the evolution and urgency of the issues affecting workforce development today, *E Ola Mau a Mau* includes a separate chapter on workforce development. The goal of the Workforce Development Task Force is to support creating a Native Hawaiian health care system that is based on culture, kanaka maoli ola,[1] integrated, and self-sustaining. Health and well-being are founded on an ability to care for one's family, to have access to educational opportunities, and to be gainfully employed. As such, the goal is not only to increase the number of Native Hawaiian health and allied health professionals, but also to view education, gainful employment, and the ability to care for one's family as core components of Native Hawaiian health and kanaka maoli ola.

Increased Understanding

ʻAʻohe pau ka ʻike i ka hālau hoʻokahi.

All knowledge is not taught in just one school. One can learn from many sources.

ʻŌlelo Noʻeau #203
(Pukui, 1983, p. 24)

❖ **There has been an increase in empirically based knowledge on workforce shortages, resulting in better data-driven decisions regarding a workforce for Native Hawaiian health.**

Improvements have been noted in some systematic data collection and analysis of workforce issues (e.g., employment rates, number of job openings, average salaries) that impact Native Hawaiian health. For example, a review of the Health Resources and Services Administration (HRSA) Data Warehouse demonstrated that the majority of facilities across Hawaiʻi have shortages of primary, dental, and behavioral health professionals (HRSA, 2018). The Appendix presents information that is currently available regarding labor-force and related employment, labor market, training data, including the sources of this information, and the limitations and advantages of these sources.

❖ **There has been greater acceptance of the broadening of the concept of health care workforce for Native Hawaiians.**

E Ola Mau (1985) intended to more fully address the workforce demanded by the health care needs of Native Hawaiians by providing a more comprehensive, long-term vision of workforce development that focused on recruitment, educational opportunities, retention, economic realities, and long-term sustainability. In addition to the more traditional Western concept of health care workforce (e.g., nurses, physicians), there has been increased recognition and access to more culturally traditional approaches (e.g., kūpuna[2]-based laʻau lapaʻau,[3] lomilomi,[4] hoʻoponopono[5]). There has also been a broadening of recognized stakeholders (e.g., family members, community members, high school students, college students, post-bachelor graduates) who can contribute to the health care workforce to improve Native Hawaiian health.

❖ **Many socio-ecological factors impact the health care workforce in Hawaiʻi.**

These factors include: (1) complementary disciplines, including physicians, nurses, social workers, psychologists and other allied health professionals (e.g., community health workers, navigators, health administrators,

[1] Native Hawaiian "breath of life" or "power of healing"
[2] elder
[3] traditional Native Hawaiian medicine, utilizing natural remedies
[4] traditional Native Hawaiian massage
[5] Native Hawaiian practice of forgiveness and reconciliation

nutritionists/dietitians, nurse aides, medical assistants, laboratory technicians, dental hygienists, sonographers, medical technologists, physical therapists, radiographers, etc.), and other non-clinical health-related fields (e.g., electronic medical records [EMR], coding, cybersecurity); (2) development and nurturance of early interest (e.g., kindergarten-12th grade); (3) recruitment and retention (e.g., compensation, other opportunities); (4) education and training; (5) preference for different contractual models (e.g., private practice, salaried, locum tenens); (6) career development; (7) mentorship; (8) succession planning; and (9) balance between personal and professional life.

- **Interventions that improve career quality and economic security can enhance the health care workforce in Hawai‘i.**

Interventions can include quality of life (e.g., rewarding career, balance of career and personal life) and financial incentives (e.g., competitive income, stipend for practicing in under-served areas, loan repayment, pension, other employment benefits).

Effective and Promising Approaches

- **Many different types of programs and organizations, including those with an emphasis on Native Hawaiian culture and identity, have helped to increase the Native Hawaiian health care workforce.**

Over the past decades, there has been a clear emerging sense of self among Native Hawaiians. This sense of self has been an essential guide that has been needed to evolve the Native Hawaiian health care system in a direction that ensures cultural relevance, improves health outcomes for Native Hawaiians, and is sustainable. Culturally- based competence of the workforce is essential to improving the health and well-being of Native Hawaiians.

The following are just some of the current endeavors that have been successful in increasing the Native Hawaiian health workforce across the spectrum (e.g., scholarship, education, training, job placement, higher learning institution, community-based program):

- Traditional healing-practice opportunities – for example, la‘au lapa‘au,[6] lomilomi,[7] and ho‘oponopono[8] – have been created.
- The Native Hawaiian Health Scholarship Program at Papa Ola Lōkahi promotes Native Hawaiians in varying health care professions.
- The Native Hawaiian Scholarship Program at The Queen’s Medical Center has provided more than 160 scholarships for students in health care professions since 2007.
- The University of Hawai‘i has taken a system-wide approach to increasing the number of Native Hawaiian health care professionals.
- The Imi Ho‘ola Post-Baccalaureate Program at the Center on Native Hawaiian Excellence, Department of Native Hawaiian Health, John A. Burns School of Medicine, University of Hawai‘i at Mānoa, accepts 12 diverse students per year; graduates of the program enter into the John A. Burns School of Medicine (DeCambra & Lee, 2011; Judd, Sakamoto, Hishinuma, DeCambra, & Malate, 2007).
- Chaminade University – A designated Native Hawaiian-serving institution.
- Ho‘oulu STEM Scholarship, Chaminade University – Scholarship program for science, technology, engineering, and math (STEM) for Native Hawaiian practitioners and scientists.
- School of Osteopathic Medicine, A. T. Stills University – Based at the Waianae Coast Comprehensive Health Center.
- Wai‘anae Health Academy and the Youth Health Corp – Existing indigenous educational models of health care education and workforce development.
- Kama‘aina Come Home Program – Connects Maui residents who attend schools on the continental U.S. to job opportunities on their home island.
- I Ola Lāhui – Training and job placement model for behavioral health in rural Hawai‘i.
- Kula no na Po‘e Hawai‘i (Papakōlea) and Roosevelt High School – Partnership between a public high school and Native Hawaiian homestead community to provide greater exposure of the health professions to Native Hawaiian adolescents through:
  (1) College and Career Fair
  (2) Kulia Health Professions Program (with the long-term goal of promoting professional health care careers)

[6] traditional Native Hawaiian medicine, utilizing natural remedies

[7] traditional Native Hawaiian massage

[8] Native Hawaiian practice of forgiveness and reconciliation

I'm a very strong believer in education. I believe that education opens up doors, opens up opportunities, and I've seen that happen within families. Our Imi Ho'ola provides opportunities for students who come from disadvantaged backgrounds…It has offered so many opportunities. Many of [our graduates] are leaders in the community.

Nanette Judd, PhD
Former Director, Imi Ho'ola
University of Hawai'i
John A. Burns School of Medicine

There are also other indigenous models of workforce development:

- Māori Health Workforce Development Plan (Ministry of Health, 2005) – Indigenous workforce development initiative which aims to (1) provide practitioners and health workers who can effectively meet the needs of current and future Māori generations; (2) establish training and career pathways for traditional healers as well as community health workers; and (3) promote Māori models of training and education.
- South Australian Aboriginal and Torres Strait Islander Workforce Development (Australian Indigenous HealthInfoNet, 2018; South Australian Aboriginal Health Partnership, 2010) – Collaboration among Indigenous communities who (1) assert their right to control their health and well-being, and thus the services available to their region; (2) acknowledge physical, spiritual, behavioral, cultural, emotional, and social facets of wellness; (3) recognize social and environmental determinants of health; (4) enable indigenous health workers to work in public sector positions; and (5) establish competencies and qualifications (i.e., national education and training certifications and degrees specifically for indigenous health issues).

- **Interventions that consider community and individual quality of life and economic realities will more likely increase workforce development for Native Hawaiian health.**

Education and training interventions, such as the Native Hawaiian Health Scholarship Program and the Ho'oulu STEM Scholarship Program, recognize the need to financially support the future pipeline of Native Hawaiian health professionals. The Imi Ho'ola Post-Baccalaureate Program (DeCambra & Lee, 2011; Judd et al., 2007) also provides a stipend so that each student can focus all of his or her efforts on successful completion of the program and matriculation into the John A. Burns School of Medicine. There are also economic realities in recruitment and retention of the health care workforce (e.g., the need for financial incentives to provide health care in underserved areas).

- **Community-academic collaborations increase the potential to improve workforce development for Native Hawaiian health.**

The health care workforce has increased to the benefit of Native Hawaiian health through partnerships between community organizations (e.g., The Queen's Medical Center, Kamehameha Schools, the Office of Hawaiian Affairs) and institutions that recruit, educate, and train health professionals (e.g., University of Hawai'i, Chaminade University). Partnerships among health care organizations can also increase the quantity and quality of services for Native Hawaiians by more efficiently and effectively utilizing the workforce (e.g., through Papa Ola Lōkahi).

- **Student support programs are vital to increasing college graduation rates for Native Hawaiian students.**

The past year has shown record-setting Native Hawaiian, Filipino, and overall 4-year graduation rates for first-time freshmen at UH Manoa ("Record-setting Native Hawaiian," 2018). University programs designed to serve Native Hawaiian students have contributed significantly to this improved graduation rate.

Gaps

- **The workforce is insufficient to address Native Hawaiian health care needs.**

The health care workforce is insufficient not only for Native Hawaiians, but for Hawai'i overall, especially in federally designated underserved areas including all neighbor islands and part of O'ahu (Healthcare Association of Hawai'i, 2013). Table 2 presents Hawaii's most difficult occupations to fill by county based on the *Hawaii's Healthcare Workforce 20/20 Plan and Report* (Workforce Development Council, 2011).

Table 2
Hawaii's Most Difficult Occupations to Fill by County

County	Occupations
Honolulu	Primary Care Physicians, Registered Nurses (especially Critical Care), Health Information Technology Experts, Physician Assistants, Cardiovascular Technicians, Nurse Aides, Health Educators, Physical Therapists
Hawai‘i	Physicians, Medical Assistants, Certified Nurse Aides, Coders, Health Information Technology Experts (entry level, scanning medical records into electronic health records), Echo Techs, Speech Pathologists
Maui	Speech-Language Pathologists, Registered Nurses, Primary Care Physicians, Pharmacists, Occupational Therapists, Mental Health Counselors, Dietitians and Nutritionists
Kaua‘i	Radiology Technicians, Ultrasound Technicians, Mental Health and Substance Abuse Social Workers, Physical Therapists, Occupational Therapists

Based on a more recent analysis, Hawai‘i had shortages of primary care, dental, and behavioral health professionals (HRSA, 2018). Although O‘ahu had the majority of the health professionals, there continued to be a shortage of health professionals across the island (i.e., in community health clinics). On Hawai‘i Island, many of the community health clinics lacked all three types of professional providers. Moloka‘i, and Maui County in general, had shortages of primary care and mental health providers, while Kaua‘i had a shortage of mental health providers. Regarding physicians specifically, the *Report to the 2016 Legislature* (Withy, 2015) indicated that by 2020, the best-case scenario would be a shortage of 800 physicians, and the worst-case scenario would be a shortage of 1,500 physicians, with the greatest shortage in primary care. Table 3 presents the greatest physician specialty shortages by county.

Table 3
Greatest Physician Specialty Shortages by County

County	Occupations
Honolulu	Primary Care, General Surgery, Cardiology, Orthopedics
Hawai‘i	Primary Care, Orthopedics, Psychiatry, Obstetrics-Gynecology
Maui	Primary Care, Psychiatry, General Surgery, Emergency
Kauai	Primary Care, Orthopedics, Cardiology, Pathology

Table 4 presents the greatest physician shortages by percentage and numbers of providers for each county based on the *Hawai‘i Physician Workforce Assessment 2016* (Withy, Mapelli, Perez, Finberg, & Green, 2017).

Table 4
Greatest Physician Shortages by Percentages and Numbers of Providers by County

County	By Percentage or Number of Providers	Occupations
Honolulu	Specialties with greatest percentage shortages	Infectious Disease, Pathology, General Surgery
	Specialties with greatest shortage by full-time equivalents	Primary Care, General Surgery, Pathology
Hawai‘i	Specialties with greatest percentage shortages	Infectious Disease, Neonatology, Colorectal Surgery
	Specialties with greatest shortage by full-time equivalents	Primary Care, Anesthesiology, Cardiology, Orthopedic, Pathology
Maui	Specialties with greatest percentage shortages	Allergy, Colorectal, Neurosurgery
	Specialties with greatest shortage by full-time equivalents	Primary Care, Emergency Medicine, Psychiatry
Kaua‘i	Specialties with greatest percentage shortages	Endocrinology, Rheumatology, Infectious Disease, Critical Care, Neonatology, Neurology
	Specialties with greatest shortage by full-time equivalents	Primary Care, Obstetrics, Cardiology, Neurology

The current concept of workforce development for health care primarily entails the recruitment and training of, and service provision by, physicians and nurses. This restrictive framework of Western medicine lacks a broader, more inclusive definition of the health care workforce. Untapped individuals are excluded from contributing to the improvement of the health care workforce for Native Hawaiians.

❖ **There is an insufficient tracking system for systematically collecting health care workforce data specific to Native Hawaiians.**

In ancient times, Native Hawaiians were exceptionally skilled in the powers of observation, data-gathering and decision-making—often involving life-or-death decisions. Any chief with stewardship over an ahupua‘a[9] needed to know about the people and the resources within the ahupua‘a to make sound decisions and plan appropriately for the future.

Workforce development efforts in a Native Hawaiian health care system need to engage those same skills of observation and data-gathering to make informed decisions. A fair amount of data exists on Hawaii’s overall health care workforce. However, there remains a lack of health care professional workforce data on those who serve Native Hawaiians and on health care professionals who are Native Hawaiian by community, island and state. Further, there are no comprehensive and centralized means of collecting and tracking the necessary data for both Western and traditional cultural practitioners.

The data dimensions that are lacking regarding Native Hawaiian health workforce include entities that already serve to increase workforce, employment opportunities and characteristics (e.g., health care positions, salaries, certification requirements), recruitment approaches, number of trainees, job placement, retention and career development.

❖ **There is a lack of education and training programs and interventions to increase the workforce for Native Hawaiian health.**

We would need to double, double to triple everything, to actually train enough [physicians for Hawai‘i]. And you know that’s not going to happen…We actually don’t have the capacity to do that right now; we don’t have enough training sites.

Kelley Withy, MD, PhD
Executive Director
Hawaii/Pacific Basin AHEC Program Office
University of Hawai‘i
John A. Burns School of Medicine

In ancient times, a Native Hawaiian youth who might have a curiosity about fishing, farming, or healing and medicine knew exactly whom to seek out to gain expertise. The physical proximity of those

[9] land division

living in the ahupua‘a[10] made this kind of information readily available. In our contemporary Western society, Native Hawaiian youth and their support systems (whether ‘ohana,[11] educators, or social service agents) have neither understanding of, nor intimate access to, the pathways to education and training in health care.

There are several exemplary programs that directly increase the health care workforce to improve Native Hawaiian health. Yet, there remain significant gaps in those aspects of education and training programs that will grow and maintain the health care workforce to a level where all Native Hawaiians can be appropriately served. This can be said for nearly all health and health-related professions in Hawai‘i.

The following gaps are noted in education and training programs to increase the workforce for Native Hawaiian health: (1) comprehensive needs assessment, including necessary resources; (2) centralized hub of information on existing programs; (3) marketing, outreach and recruitment; (4) effective education and training programs for health care, allied health care and other non-clinical health-related support professions; (5) retention and graduation from education and training programs; (6) job opportunities, placement and retention; and (7) career development and mentorship.

- **There is a lack of culturally relevant efforts to increase the workforce for Native Hawaiian health.**

Despite the promising culturally-based approaches indicated above, there remain insufficient awareness, knowledge, and appropriate utilization of Native Hawaiian healing traditions (e.g., lomilomi,[12] la‘au lapa‘au,[13] ho‘oponopono[14]), as well as inadequate integration of Native Hawaiian healing traditions, Native Hawaiian culture (e.g., ‘ohana,[15] ahupua‘a[16]) and Western medicine. In the recent past, Native Hawaiians were trained as health professionals in the ways of Western medicine. If they desired to practice integrated healing, they sought out traditional Native Hawaiian healers to learn the Native Hawaiian way of Ola. Then, they individually integrated these practices. This individualistic method of integration is not an efficient way to utilize the best of different types of practices. Unfortunately, there are no systematic and structured opportunities for training and service provision that integrate traditional Native Hawaiian healing and culture with contemporary Western medicine.

- **Current procedures, regulations and policies do not fully support the workforce for Native Hawaiian health.**

There are procedures, regulations and policies (e.g., credentialing, service-reimbursement) that hinder a viable workforce for Native Hawaiian health. While this could be said of Hawaii’s health care workforce in general, this applies even more so for a Native Hawaiian health care workforce.

- **There is concern over quality-of-life issues, especially in light of inadequate resources to support the necessary workforce for Native Hawaiian health.**

In ancient times, Native Hawaiians’ motivations and incentives for work were a blend of day-to-day survival and sustainable practices that ensured long-term health and wellness for all. The social structures supporting ‘ohana[17] in the ahupua‘a[18] were holistic and not limited to economic or capitalistic incentives. There was a clear path based on stewardship or responsibility to the ‘aina[19] and ‘ohana[20] that provided motivation and purpose for engaging in work and living.

Currently, a more Western supply-and-demand society exists, in which the norm for “survival” is to have an occupation that provides a steady income; with this income, necessities are purchased (e.g., food, services) within a certain economic environment (i.e., cost of living and housing). Given that, at least to some degree, people have choices in what professions and jobs they will pursue and where they will reside, there are insufficient resources to provide a balanced quality of life (between one’s personal and professional lives) while expanding the workforce for Native Hawaiian health to the necessary level on multiple fronts: (1) health and health-related occupations; (2) data collection and tracking; (3) education and training programs (addressing program costs, tuition, stipends for trainees, etc.); and (4) cultural relevance.

[10] land division
[11] family, extended family
[12] traditional Hawaiian massage
[13] traditional Native Hawaiian medicine, utilizing natural remedies
[14] Native Hawaiian practice of forgiveness and reconciliation
[15] family, extended family
[16] land division
[17] family, extended family
[18] land division
[19] land, earth
[20] family, extended family

One prominent quality-of-life issue involves balancing the compensation a health care worker receives and the high cost of living in Hawai‘i. While the ideal workforce would be altruistically passionate about caring for others, to rely solely on this as the “incentive” for health care workers may lead to burnout and disillusionment. Ultimately, it may lead our best and brightest to look elsewhere to pursue their career goals and aspirations, either in other fields and/or other locations. It is essential that health care and allied health care professionals have a reasonable opportunity to enjoy a good quality of life and achieve some degree of financial security in Hawai‘i.

Unfortunately, there is inadequate direct and indirect compensation for the workforce for Native Hawaiian health. First, health care employees are typically required to have certain types of post-secondary credentials and/or degrees and practicums from professional schools and universities. While they pursue these qualifications, their income levels are low, and in some cases, student loans must be secured to pay for the training (e.g., medical students can end up with well over $100,000 in student loans). Second, even when entering the health care workforce, there are several complex issues related to compensation: (1) employment income (either fee-for-service or salaried); (2) stipends or other types of income for serving patients in underserved populations or locations; (3) loan-repayment incentives; and (4) other kinds of incentives, especially to serve Native Hawaiian communities.

In addition to compensation, the high cost of living in Hawai‘i must be factored into the equation of quality of life and some degree of economic security. Regardless of career or industry interest, today’s learners face the daunting reality of the high cost of living in Hawai‘i. The best and brightest, even in health care, regardless of origin or the location of their education and training, are being paid generally the same or sometimes less than their continental U.S. counterparts, while bearing the burden of one of the highest costs of living in the nation (Thompson, 2008). At present, there are few economic incentives either to keep high-performing Native Hawaiian talent in Hawai‘i or to attract home Native Hawaiian talent currently living away from Hawai‘i. Typically, among the higher-wage health care career pathways, it is difficult to place Native Hawaiians in Hawai‘i because of the discrepancy between generally below-average salary or wages and the high cost of living. Additionally, providers also have years of minimal, if any, income during training, and possible accumulation of student loans.

A specific example in the health care industry is the projected need for more physicians to serve in rural areas of Hawai‘i. Most graduates of medical schools and residency training programs will be able to begin their medical practices with a high level of certainty about their income being competitive and allowing for growth opportunities. However, Native Hawaiian medical doctors wanting to practice in Hawai‘i must face the daunting reality of (1) fewer career possibilities in Hawai‘i (e.g., there may be more opportunities in rural Hawai‘i; however, many physicians may not feel that this will provide an optimal environment in terms of community resources and career-building opportunities); (2) typically lower income as compared to opportunities elsewhere in the U.S.; (3) higher cost of living in Hawai‘i; and (4) for many, substantial student loan debt.

The application of technology in health care is also relevant to quality of life and financial security. Those who choose to practice in Hawai‘i are challenged not only economically, but by sometimes outdated systems for managing patient care and patient data, making the work more difficult. Being trained on more advanced and efficient systems, and then being asked to essentially go backwards technologically while in practice creates psychological challenges. Limited resources are available to maintain the support systems inherent in world-class health care systems. This may lead to lower levels of employee engagement and satisfaction, which, in turn, may lead to (1) lower levels of performance, and thus lower quality of service; and/or (2) health care professionals looking elsewhere for better opportunities, seeking not only financial security, but also an infrastructure that can equip them with high-quality tools and systems.

Finally, quality of life involves a balance between one’s personal and professional lives. If personal goals are impeded by inordinate professional obstacles, the Native Hawaiian health care workforce will be in jeopardy. Personal and social resources are less concrete than, for example, salary or wages, but are nonetheless significant. An example of a professional accommodation supporting personal choice may be a health care work environment that allows for a more flexible work schedule for a health care worker who would like to start a family. An example of a personal or social accommodation would be a significant other who accommodates the professional lifestyle of a health care worker (e.g., physicians being on call) or the location of the job opportunity (e.g., a couple or family moving to a neighbor island to serve a rural Native Hawaiian community).

You’re in for a rude awakening especially if you don’t have an existing support system to lean on to help you with those transitions, to talk with about rural health ethics, or better still take your partner with you, like a

spouse; that kind of isolation is one of the reasons we have health provider attrition in rural communities… [We need] those resources and supports in place for early health career professionals.

Aukahi Austin Seabury, PhD
Executive Director
I Ola Lāhui

- **An overall strategy and an organization to advocate for and advance the necessary workforce for Native Hawaiian health remain lacking.**

While there exist pockets of remarkable efforts to increase the Native Hawaiian health care workforce, and there is a greater awareness of the shortages in Hawaii's health care workforce (e.g., Withy, 2015; Withy et al., 2017; Workforce Development Council, 2011), there remains a gap in the overall strategic plan to address the needs of the workforce for Native Hawaiian health, as well as a designated organization that will advocate for and carry out such a strategic plan.

Recommendations for Impact

He mau makana nāu kēia
na kō mākou kupuna.

These are gifts for you from our elders.

Aha Kane Introduction
June 2012

The Workforce Development Task Force's recommendations presented herein are based on the cumulative knowledge and expertise, a Kanaka Maoli[21] mindset, and wisdom from kūpuna[22] on the principles of self-determination, self-sufficiency and sustainability. These recommendations are set forth with the purpose of establishing policies and actions that will achieve optimal Native Hawaiian health as kuleana[23] going forward, with an enduring positive influence in addressing the long-term effects of trauma experienced by Native Hawaiians.

- **Broaden and maintain a thriving workforce to address Native Hawaiian health care needs.**

Utilizing a multi-level approach, broaden and maintain a thriving workforce for Native Hawaiian health that targets the current and projected workforce shortage of professionals, particularly at specified locations. The latter may also include the continental U.S. where nearly half of the Native Hawaiians in the U.S. reside (Essoyan, 2012). There will need to be some extrapolation given the lack of empirical data on Native Hawaiian workforce shortages there (e.g., target communities with a high proportion of Native Hawaiians).

- **Develop and maintain a comprehensive, centralized data-collection and tracking system of health care workforce data specific to Native Hawaiians.**
  - Include aspects of both Western medicine and indigenous health care pathways, such as lomilomi,[24] laʻau lapaʻau,[25] and hoʻoponopono.[26]
    - Include elements such as (1) entities that already serve to increase workforce, (2) employment opportunities and characteristics (e.g., health care positions, salaries, certification requirements), (3) recruitment approaches, (4) number of trainees, (5) job placement, (6) retention, and (7) career development.
    - Index kumu,[27] kūpuna,[28] and kahuna lapaʻau[29] involved in education and training in Native Hawaiian health care practices.
  - Utilize, through identification and collaboration, existing data and organizations that will contribute to the comprehensive system.
  - Develop new data collection methods to fill the gaps of information in existing databases.
    - Based on the Department of Labor Research and Statistics' experiences in conducting surveys, a separate survey of health care employers is deemed the best option to capture information on Native Hawaiians employed in health care

[21] full-blooded Hawaiian person
[22] grandparent, ancestor
[23] right, privilege, concern, responsibility
[24] traditional Native Hawaiian massage
[25] traditional Native Hawaiian medicine, utilizing natural remedies
[26] Native Hawaiian practice of forgiveness and reconciliation
[27] teacher(s)
[28] grandparent(s), ancestor(s)
[29] healer

occupations. The Department of Labor Research and Statistics is not allowed to make modifications to the Bureau of Labor Statistics employer surveys that it conducts. Therefore, adding questions to existing surveys is not an option.

- The survey approach will allow targeting of specific employers with the largest number of health care jobs and will require extensive follow-ups with employers if the survey is not mandatory. Increasing awareness of the survey and its importance among organizations that are part of the industry would increase the response rate. Coordination among all stakeholders involved would produce better data by making everyone more aware of efforts and initiatives whose ultimate goal is to serve the Native Hawaiian population, the industry itself, and the development of Hawaii's health care workforce. This survey could be conducted either once or twice per year. Over time, this approach will also allow the examination of trends and projections into the future.

- Analyze the data to determine current and future shortages (e.g., early-warning system; Workforce Development Council, 2011) and, based on these results, develop and implement strategies to prevent such shortages.

- **Support existing effective education and training programs and develop and sustain new ones that will create a thriving workforce for Native Hawaiian health.**

E lawe i ke aʻo a mālama,
a e ʻoi mau ka naʻauao.

He who takes his teachings
and applies them increases his knowledge

ʻŌlelo Noʻeau #328
(Pukui, 1983, p. 40)

- Conduct periodic, comprehensive needs assessments of the Native Hawaiian health care workforce that will help to inform decisions on education and training programs.
- Address critical factors, such as (1) marketing, outreach, and recruitment (e.g., as early as kindergarten to high school); (2) effective education and training programs for health care, allied health care and other non-clinical health-related support professions; (3) retention and graduation from education and training programs; (4) job opportunities, placement, and retention (Workforce Development Council, 2011); and (5) career development and mentorship.

- Improvement must be made in identifying and supporting promising young Native Hawaiians who are interested in the health care professions, training them well, and then allowing them to return home by creating opportunities to live, work, and thrive here. There is a need to be creative in preparing Native Hawaiians for success from the beginning of the health care-career pipeline to the end, in which they are not just practicing health care but are thriving leaders in the community.

The ideal health professional would be someone who isn't in it to get rich...has lots of energy and has a passion for helping individuals and families and community and who is able to listen and empathize. Someone who can learn quickly and is flexible…They also have to like learning…They have to be curious. And have perseverance. You need a good sense of humor and the ability to kind of go with the flow.

Rachelle Enos, MPH
Research Coordinator
Waiʻanae Coast
Comprehensive Health Center

- Plan and coordinate the dissemination of information regarding available training and development programs to the next generation of Native Hawaiian health care workers in Hawaiʻi.
- Adapt the evolving system of care to reflect emerging perceptions of careers and means of employment that may impact career development and decisions (e.g., the "gig economy" of entrepreneurship and independent contracting).
- Better identify those of the rising Native Hawaiian generation who are interested in or have natural inclinations toward careers in health care, and effectively attract those who have not yet decided on a career pathway and/or who are not aware of possible health care career options. Direct and inspire them to explore the many resources listing

available education and training programs as well as the types of scholarships and other incentives available for the health care career pathways.

- ❖ Design and implement a "Messaging and Marketing" Health Professions Recruitment Program that includes exposure to both Native Hawaiian healing practices and Western approaches to health care.
- ❖ Design and implement a means to assist Native Hawaiians in accessing job training and job placement programs in Hawai'i and on the continental U.S.
- ❖ Develop and implement a retention program that encourages Native Hawaiians to stay in Hawai'i after graduation.
- ❖ Assist Native Hawaiians in Hawai'i, on the continental U.S., and elsewhere, to utilize programs that work collaboratively to expand educational access and excellence (e.g., Western Interstate Commission for Higher Education [WICHE]; Western Undergraduate Exchange [WUE]; Professional Student Exchange Program [PSEP]; Western Regional Graduate Program [WGRP]).
- ❖ Create a fellowship and work-exchange program partnership among the Association of Hawaiian Civic Clubs and other Native Hawaiian organizations in Hawai'i, and on the U.S. continent and other locations worldwide where significant numbers of Native Hawaiians reside.

The ideal candidate[s]…are local kids who are smart and altruistic. Who will stay in Hawai'i and serve the people with the most need?

Kelley Withy, MD, PhD
Executive Director
Hawai'i/Pacific Basin
AHEC Program Office
University of Hawai'i
John A. Burns School of Medicine

- ❖ **Increase the quality and quantity of culturally relevant efforts to expand and improve the workforce for Native Hawaiian health.**

Hawaiian health [providers] should be dually trained. In Western, yes; but there should be a whole new curriculum dual track on Hawaiian healing and concept – both – [for] ho'oponopono,[30] la'au lapa'au,[31] la'au kahea,[32] and lomilomi.[33] It should be done by Hawaiian faculty teaching one Hawaiian concept.

Kamana'opono Crabbe, PhD
Former Chief Executive Officer
(Ka Pouhana)
Office of Hawaiian Affairs

- ❖ In a more systematic manner, maintain and develop more culturally relevant efforts with a dedicated focus on Native Hawaiian traditional healing (e.g., la'au lapa'au,[34] ho'oponopono,[35] lomilomi[36]), and on an effective integration of Western medicine and Native Hawaiian culture (e.g., kūpuna as navigators to bridge the gaps in the health care system identified by Native Hawaiians).
- ❖ Recognize culturally-based competence as essential to improving the health and well-being of Native Hawaiians. As the Native Hawaiian health care system evolves for future generations, maintain its cultural context of Kanaka Maoli Ola.[37]
- ❖ Revisit, reorganize, integrate, and expand the Native Hawaiian Health systems to include existing Native Hawaiian-serving health care entities based in communities (i.e., Federally Qualified Health Centers and other Native Hawaiian-serving health care institutions) to offer cradle-to-grave services that are based in both traditional Native Hawaiian healing and Western methods, and are delivered in one's own community to the greatest extent possible.
- ❖ Maintain and build upon components of the community health center model which are consistent with more indigenous approaches to health care (e.g., incorporation of traditional health constructs and values, elimination of financial obstacles to service, provision of culturally competent and qualified health care providers, translation for effective communication, increased

[30] Native Hawaiian practice of forgiveness and reconciliation
[31] traditional Native Hawaiian medicine, utilizing natural remedies
[32] Native Hawaiian spiritual healing practice using "the Call"
[33] traditional Native Hawaiian massage
[34] traditional Native Hawaiian medicine, utilizing natural remedies
[35] Native Hawaiian practice of forgiveness and reconciliation
[36] traditional Native Hawaiian massage
[37] Native Hawaiian "breath of life" or "power of healing"

ownership on the part of patients and community members).

- ❖ Develop a credentialing system for the Native Hawaiian healing arts that ensures quality grounded in Native Hawaiian tradition and the context of ʻike Hawaiʻi.[38]
- ❖ Collaborate with existing efforts to build an independent Native Hawaiian Indigenous University to include schools of health care based on the Kauhale[39] system of education, in which the core approach is cultural learning to provide grounding and identity, establishing a sense of **pono**,[40] **ola**,[41] and **kuleana**.[42]

- ❖ **Advocate for existing and new procedures, regulations and policies that support a thriving workforce for Native Hawaiian health.**

  - ❖ Establish and implement policies that (1) support Native Hawaiian health professionals at all levels in remaining in Hawaiʻi; (2) mandate a comprehensive tracking system of training and employment in health, allied health professions, and non-clinical health-related fields; (3) support effective education and training programs; (4) foster culturally-relevant efforts related to the health care workforce; (5) provide resources to ensure a good quality of life and some degree of financial security for individuals in the workforce; and (6) foster the development and implementation of an overall strategic plan and organization to assure that there will be a thriving workforce for Native Hawaiian health.

- ❖ **Improve the quality of life, financial security and access to resources necessary for a thriving workforce for Native Hawaiian health.**

  - ❖ Provide the necessary resources (1) to continue current promising and effective approaches including the Native Hawaiian Health Scholars Program and other efforts that foster Native Hawaiian cultural relevance, and to expand the current programs to include non-clinical health degrees; (2) for a comprehensive data-collection and tracking system (e.g., once- or twice-a-year survey); (3) for technological advances that improve patient care, work efficiency, workforce morale and professional income; and (4) for the development of an overall strategic plan and organization to implement the plan.
  - ❖ Develop and implement a job and salary strategy that not only provides educational opportunities but supports successful completion and leads to job opportunities upon graduation.
  - ❖ Design and implement a system that incentivizes Native Hawaiian health care professionals to work in Hawaiʻi, including traditional Native Hawaiian healers.

    - ❖ This effort should include ways not only to increase direct and indirect compensation, but also to mitigate the high cost of living in Hawaiʻi (e.g., a housing plan for health care workers).

  - ❖ Create a hui[43] of health care practitioners and microenterprises to support those who would like to establish their own clinics, offices or small health care businesses.

    - ❖ This endeavor would leverage collective strengths and resources to allow for economies of scale for business management, networking, marketing, accountant services and other business operations assistance.

  - ❖ Develop a Native Hawaiian Loan Repayment program in partnership with the Department of Labor and Industrial Relations Health Care Workforce Advisory Board.

Loan repayment is a big one that we're doing…if they [professionals] come back [to the islands] and they work in an area that's designated as a health profession shortage area, …they can get loan repayment…that starts at $30,000 [and] goes up to 40,000 a year, paid to the lender…And it's not just for the doctors…It's not limitless, but it's existing.

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[38] Native Hawaiian knowledge, experience
[39] group of houses comprising a Hawaiian home
[40] wellness, prosperity
[41] health, well-being
[42] right, responsibility
[43] association

- ❖ Achieve sustainability by establishing a competitive Native Hawaiian health insurance company.
    - ❖ In addition to Western medical coverage, a health insurance company that offers coverage for both Western and traditional Native Hawaiian healing practices (i.e., laʻau lapaʻau,[44] hoʻoponopono,[45] lomilomi[46]) could have a competitive advantage in Hawaiʻi.
- ❖ Educate health care employers on the importance of personal quality-of-life issues (e.g., wellness) and assist health care workers to advocate for occupational accommodations that will enhance their personal quality of life and wellness.

❖ **Assemble a group of dedicated stakeholders who will develop and implement an overall strategy plan to fulfill the recommendations of the Workforce Development Task Force, and subsequently modify the strategic plan as needed with the goal of a thriving workforce for Native Hawaiian health.**

This dedicated group of individuals should be assembled from representatives who are stakeholders in the Native Hawaiian health care workforce. This may entail a partnership with existing Native Hawaiian entities, including organizations such as Papa Ola Lōkahi. The present recommendations may serve as a starting point with the ultimate goal of a thriving, culturally relevant Native Hawaiian health care system that meets the health needs of all Native Hawaiians and that serves as a model for all of Hawaii's people.

Conclusion

Central to improving Native Hawaiian health is the health care workforce that needs to thrive and serve Native Hawaiians. Since the 1985 *E Ola Mau Study*, there has been increased understanding of (1) empirical findings regarding workforce shortage, (2) a broader concept of health care workforce, and (3) interventions that improve career quality and economic security. Effective and promising approaches have included (1) the creation of Native Hawaiian-focused programs, (2) interventions that address quality of life and economic realities and (3) collaborations that increase the potential to improve workforce development. However, many gaps remain in the following areas: (1) the health care workforce to address Native Hawaiian needs; (2) data-collection and tracking systems; (3) education and training programs; (4) culturally relevant efforts; (5) procedures, regulations and policies regarding the Native Hawaiian health care workforce; (6) resources to support quality of life; and (7) an overall strategic plan and lead organization. To address each of these gaps, we offer the following recommendations: (1) broaden and maintain a thriving workforce; (2) develop and maintain a comprehensive data-collection and tracking system; (3) support existing education and training programs, and develop new ones; (4) increase the quality and quantity of culturally relevant efforts; (5) advocate for existing and new policies that support the Native Hawaiian health care workforce; (6) augment resources to support high quality of life; and (7) assemble an organization of stakeholders that will develop and implement an overall strategic plan.

[44] traditional Native Hawaiian medicine, utilizing natural remedies

[45] Native Hawaiian practice of forgiveness and reconciliation

[46] traditional Native Hawaiian massage

References

Australian Indigenous HealthInfoNet. (2018). *Workforce Development.* Retrieved from https://healthinfonet.ecu.edu.au/key-resources/health-professionals/health-workers/workforce-development/

DeCambra, C. C., & Lee, W. K. L. (2011). Imi Hoʻola Program: Producing primary care physicians for Hawaiʻi and the Pacific. *Hawaiʻi Medical Journal, 70*(11), Supplement 2, 25-26. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3254222/pdf/hmj7011_suppl2_0025.pdf

Essoyan, S. (2012, May 9). Native Hawaiian, Pacific Islander population swells: Census numbers show 1.2 million in the nation, a climb of 40 percent in 10 years. *Honolulu Star Advertiser*, pp. A1-A8.

Healthcare Association of Hawaiʻi. (2013). State of Hawaiʻi community health needs assessment. Retrieved from http://hah.org/wp-content/uploads/2013/12/2013_state_chna.pdf

Health Resources and Services Administration (HRSA). (2018). *Data warehouse.* Retrieved from https://datawarehouse.hrsa.gov/tools/analyzers/HpsaFindResults.aspx

Judd, N. L. K., Sakamoto, K. K., Hishinuma, E. S., DeCambra, C., & Malate, A. R. (2007). Imi Hoʻola: An educational model for disadvantaged students at the University of Hawaiʻi School of Medicine. *Pacific Health Dialog, 14*(1), 199-204.

Ministry of Health. (2005). *Raranga Tupuake: Māori Health Workforce Development Plan: Discussion document.* Wellington: Ministry of Health. Retrieved from http://www.moh.govt.nz/notebook/nbbooks.nsf/0/9a4cc7c464a46639cc2570130078b880/$FILE/rarangatupuake.pdf

Record-setting Native Hawaiian, Filipino and overall 4-year UH Mānoa graduation rates. (2018, December 3). *Hawaiʻi Free Press.* Retrieved from http://www.hawaiifreepress.com/ArticlesMain/tabid/56/ID/22704/UH-Record-setting-Native-Hawaiian-Filipino-and-overall-4-year-UH-Manoa-graduation-rates.aspx

South Australian Aboriginal Health Partnership. (2010). Aboriginal health – Everybody's business: Health workforce development. A South Australian strategy for aboriginal and Torres Strait Islander People, 2005-2010. South Australia: Department of Health. Retrieved from https://www.sahealth.sa.gov.au/wps/wcm/connect/5551fc80434bc22e9889deba9c78a5ba/health_workforce_devel.pdf?MOD=AJPERES&CACHEID=5551fc80434bc22e9889deba9c78a5ba

Thompson, R. (2008, December 17). Honolulu's cost of living ranks third in the U.S., report says. *Honolulu Star Bulletin*.

Withy, K. (2015). University of Hawaiʻi System Annual Report: Report to the 2016 Legislature, annual report on findings from the Hawaiʻi Physician Workforce Assessment Project. Retrieved from https://www.hawaii.edu/offices/eaur/govrel/reports/2016/act18-sslh2009_2016_physician-workforce_annual-report.pdf

Withy, K., Mapelli, P., Perez, J., Finberg, A., & Green, J. (2017). Hawaiʻi Physician Workforce Assessment 2016: Improvement in physician numbers but physician suicides of concern. *Hawaiʻi Journal of Medicine and Public Health, 76*(3), 3-9. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3347731/pdf/hjmph7104_suppl1_0006.pdf

Workforce Development Council. (2011). *Hawaiʻi's healthcare workforce 20/20 plan and report: Addendum to the Comprehensive State Plan for Workforce Development 2009-2014.* Retrieved from http://lrbhawaii.info/reports/legrpts/dlir/wdc/healthcare2020.pdf

Appendix
Resources on Labor Force and Related Employment

Resource & Description	Source	Limitations & Advantages
Career Kokua: A computerized system of localized, current career and related educational information for career decision-making. Information covers all occupations and all licensed and accredited training programs and training providers in the State.	https://careerkokua.hawaii.gov Career Kokua, the State's career information delivery system, is administered by Department of Labor and Industrial Relations' (DLIRs') Research & Statistics (R&S) Office.	• This is a comprehensive system of local occupations and training. • Neither data on individuals nor demographics collected. • Career Kokua has a small database of employers and organizations willing to provide work-based learning opportunities that should be expanded for health care occupations.
Current Employment Statistics (CES) Survey: A monthly survey of non-farm business establishments that collect data on wage and salary employment, worker hours, and payroll by industry and area. These data are used to compute current monthly employment, hours, and earnings estimates.	www.hiwi.org Click on Job Count under Quick Data Links. The Research & Statistics (R&S) Office of the Department of Labor and Industrial Relations (DLIR) collects these data through a Cooperative Agreement with the Bureau of Labor Statistics (BLS).	• No demographic data collected; no data on Native Hawaiians specifically. • Job counts are highlighted in the monthly Press Release from DLIR, along with the unemployment rates for Hawai'i and the counties.
Current Population Survey (CPS): A monthly household survey of the civilian non-institutional population of the United States. This survey provides the national unemployment rate and a variety of statistics on employment, unemployment, and earnings detailed by demographic characteristics, occupation, and industry.	https://www.bls.gov/cps/home.htm CPS is sponsored by Bureau of Labor Statistics (BLS). The Census Bureau conducts the survey and BLS analyzes and publishes the results.	• Demographic data are available; however, the CPS is based on a sample, and Hawaii's sample size is very small (around 800 households). • No breakout for Native Hawaiians; race characteristics are limited to Asian, Black/African American, Hispanic/Latino, and White.
Data eXchange Partnership (DXP): A Hawai'i-wide cross-agency longitudinal data system that links information from infancy through early learning, kindergarten-12th grade and postsecondary education, and into the workforce. Information from Hawai'i DXP can help guide decisions and policies to improve learner and workforce outcomes.	http://hawaiidxp.org/ DXP is administered by Hawai'i P-20 Partnerships for Education. Current partners are the Department of Education, Department of Labor and Industrial Relations (DLIR), and University of Hawai'i. Partnerships are pending with Early Childhood and the Department of Health and Human Services.	• Can provide cross-sector data for ad hoc data requests, data analysis and reports, interactive dashboards, and data for research projects. • Limited to University of Hawai'i system students. • DXP participates in a Western Interstate Commission for Higher Education (WICHE) Multi-State Longitudinal Data Exchange Project; therefore, it is possible to get some data from selected states. • Requests for data must be approved by all partners.

Resource & Description	Source	Limitations & Advantages
Employment Projections: A program that develops and maintains industry and occupational employment projections for Hawai‘i and counties. Projections are used to identify in-demand industries and occupations for career guidance; to plan employment, education and training, and economic development programs; and as supporting documentation to apply for federal grants and other purposes.	www.hiwi.org Click on Employment Projections under Quick Data Links to find tables and reports for Long-Term Projections (10-year) for Hawai‘i and the counties and the Short-Term Forecast (2-year) for Hawai‘i. The Research & Statistics (R&S) Office of the Department of Labor and Industrial Relations (DLIR) develops the Projections under a Workforce Information Grant funded by the Employment and Training Administration (ETA) of the U.S. Department of Labor.	• Does not include any demographic data; no data on Native Hawaiians specifically.
Eligible Training Providers List (ETPL): A database of training programs and training providers that can be funded by the Federal Workforce Innovation and Opportunity Act (WIOA).	http://dlir.state.hi.us/labor/etp/ The ETPL is a requirement of WIOA and the Employment and Training Administration (ETA).	• Training providers are required to provide performance information on all individuals participating in their programs for federal reporting purposes. • Performance measures include job placement rates, earnings, and credentials earned.
Employers: A database of employers in Hawai‘i.	www.hiwi.org Click on Services for Job Seekers, then click on Employers under Job Seeker Services. Provided to all states by the Employment and Training Administration (ETA).	• Able to search for employers by keyword, industry, or employer size (number of employees).
Hawai‘i State Data Center (HSDC): A local source that distributes census data; assists the public in the use of census data by providing technical advice; educates the public by providing guides and sponsoring training on census data, products, and tools; and maintains a network of affiliate organizations throughout Hawai‘i. http://census.hawaii.gov/	HSDC is a part of the Research and Economic Analysis Division (READ) of the Hawai‘i State Department of Business, Economic Development and Tourism (DBEDT).	• Demographic and census geography data are available.
Hawai‘i Workforce Development Programs Funding Summary 2016: Provides a summary of workforce and education funds, program types, and target populations.	Workforce Development Council (WDC).	• Not available online.

Resource & Description	Source	Limitations & Advantages
HireNetHawaii (HNH): Hawai‘i’s job matching system. Employers are able to post their job openings and individuals can register for job searches and job alerts.	www.hirenethawaii.com HNH is administered by the Workforce Development Council for Hawaii’s and counties’ workforce development and employment service programs.	• HNH also serves as a participant management information system and demographic data on workforce program participants are collected for federal reporting purposes. • Performance measures include job placement rates, earnings, employment retention, skill gains, and credentials earned. • There are numerous online job boards available; however, HNH “spiders” the web nightly for all Hawai‘i job postings, and therefore, provides one centralized database with all Hawai‘i online jobs.
Local Area Unemployment Statistics (LAUS): A program that produces employment, labor force, and unemployment estimates for states and local areas.	www.hiwi.org Click on Unemployment Rates under Quick Data Links. The Research & Statistics (R&S) Office of the Department of Labor and Industrial Relations (DLIR) collects these data through a Cooperative Agreement with the Bureau of Labor Statistics (BLS).	• No demographic data collected; no data on Native Hawaiians specifically. • Labor force and unemployment data are available by census tract.
Labor Market Analyzer: Analysis of online listings and job applicants.	Provided upon request by the Labor Market Research Team within the Research & Statistics (R&S) Office of the Department of Labor and Industrial Relations (DLIR).	• It may be possible to obtain aggregate demographic data on job applicants for specific occupations.
Local Employment Dynamics: Data analysis tools using data from the Bureau of Labor Statistics (BLS) and U.S. Census Bureau: (1) QWI (Quarterly Workforce Indicators) creates charts, maps, and interactive tables to compare, rank, and aggregate QWIs across time, geography, and/or firm and worker characteristics; (2) OnTheMap is a powerful mapping tool that can show where workers are employed and where they live; (3) Local Employment Dynamics (LED) Extraction Tool provides queries and extraction of raw data; and (4) Job-to-Job Flows Explorer analyzes hires by state and industries.	www.hiwi.org Click on Local Employment Dynamics under Quick Data Links. The Research & Statistics (R&S) Office of the Department of Labor and Industrial Relations (DLIR) provides these LED tools through a partnership with the U.S. Census Bureau.	• Depending on the tool, may be able to obtain breakdown of worker characteristics and may be able to filter data by age, earnings, industry, race, ethnicity, educational attainment, and gender.
Occupational Employment Statistics (OES): A program that collects and publishes detailed occupational and wage data by industry.	www.hiwi.org Click on Wages by Occupation under Quick Data Links. Department of Labor and Industrial Relations’ (DLIR)’s Research & Statistics (R&S) Office collects these data through a Cooperative Agreement with the Bureau of Labor Statistics (BLS).	• No demographic data collected; no data on Native Hawaiians specifically.

Resource & Description	Source	Limitations & Advantages
Professional and Vocational Licensing (PVL) Division: Responsible for 25 professional boards and commissions and 24 licensing programs. In total, the Division licenses 49 different professions and vocations.	http://cca.hawaii.gov/pvl/ Click on the specific licensing area. A division of the Hawai‘i Department of Commerce and Consumer Affairs.	• PVL allows one to build and download customized lists of licensees. By law, only public information may be disclosed, including license number, name, status, and initial date licensed. No address information is provided with the exception of business address information for entity licenses only. • Fees depend on the number of records, or the entire database can be purchased.
Quarterly Census of Employment and Wages (QCEW): A program that collects and compiles employment and wage data for workers covered by Hawai‘i unemployment insurance (UI) laws and federal civilian workers covered by Unemployment Compensation for Federal Employees (UCFE).	www.hiwi.org Click on Industry Employment and Pay under Quick Data Links. The Research & Statistics (R&S) Office of the Department of Labor and Industrial Relations (DLIR) collects these data through a Cooperative Agreement with the Bureau of Labor Statistics (BLS).	• No demographic data collected; no data on Native Hawaiians specifically. • No occupational data collected.



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