

2019 HAWAI'I'S NURSING WORKFORCE SUPPLY



HAWAI'I STATE
CENTER FOR
NURSING

Connecting Nurses.
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Hawai'i's Nursing Workforce Supply

2019

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The Hawai'i State Center for Nursing monitors the state of the nursing workforce in Hawai'i through the collection and reporting of workforce supply, education capacity, and employer demand data. These three research activities assist entities in the public and private sectors with the development and implementation of initiatives intended to develop a robust nursing workforce that meets the needs of Hawai'i's residents now and in the future.

Report Citation Information: Hawai'i State Center for Nursing (2019). *Hawai'i's Nursing Workforce Supply 2019*.

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Acknowledgements

The Hawai'i State Center for Nursing wishes to express its gratitude to the following individuals and organizations for their invaluable contributions to survey development, data collection, content review, editing, and graphic design. Without their partnership and support, this study would not have been possible.

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Table of Contents

Acknowledgements.....	iii
List of Tables.....	vi
List of Figures.....	viii
List of Abbreviations.....	x
Definitions of Settings.....	xi
Executive Summary.....	xii
Key Conclusions.....	xii
Notable Findings.....	xiv
Introduction.....	16
Purpose and Background of Report.....	16
New in 2019.....	16
Important Notes.....	17
Hawai'i's LPN Nursing Workforce.....	20
State of the LPN Workforce.....	20
Licenses.....	22
LPN Survey Response Rate.....	23
Geographic Distribution of Employed LPNs.....	23
LPN Demographic Characteristics.....	25
LPN Employment & Primary Practice Characteristics.....	27
LPN Education.....	31
LPN Workforce Retention.....	33
Hawai'i's RN Nursing Workforce.....	35
State of the RN Workforce.....	35
RN Licenses.....	37
RN Survey Response Rate.....	37
Geographic Distribution of Employed RNs.....	38
RN Demographic Characteristics.....	40

RN Employment & Primary Practice Characteristics	42
RN Certifications.....	46
RN Education	48
RN Workforce Retention	51
Hawai‘i’s APRN Nursing Workforce.....	53
State of the APRN Workforce	53
APRN Licenses, 2009-2019	55
APRN Survey Response Rate.....	55
Geographic Distribution of Employed APRNs.....	56
APRN Demographic Characteristics.....	58
APRN Employment & Primary Practice Characteristics	60
APRN Certifications.....	64
APRN Education.....	66
APRN Workforce Retention	68
References	70
Appendix – Statewide Data Tables	72

List of Tables

Table 1. Hawai'i LPN Sample Size, Response Rate, and Margin of Error by County.	23
Table 2. Employment Status of Hawai'i LPNs.	23
Table 3. Geographic Distribution of the Residential Population and the LPN Workforce by County	23
Table 4. Demographic Characteristics of the State's Residential Population and LPNs.....	26
Table 5. Employment Characteristics of LPNs.	27
Table 6. Primary Practice Setting of LPNs.	29
Table 7. Primary Practice Specialty, Job Title, Job Function, and Patient Population of LPNs.	30
Table 8. Educational Characteristics of LPNs.....	32
Table 9. Factors Related to the Retention of LPNs.	34
Table 10. RN Sample Size, Response Rate, and Margin of Error by County.	38
Table 11. Employment Status of Hawai'i RNs.....	38
Table 12. Geographic Distribution of the Residential Population and the RN Workforce by County.....	38
Table 13. Demographic Characteristics of the State's Residential Population and RNs.....	41
Table 14. Employment Characteristics of RNs.....	42
Table 15. Primary Practice Setting of RNs.....	44
Table 16. Primary Practice Specialty, Job Title, Job Function, and Patient Population of RNs.....	45
Table 17. National Registered Nurse Certifications Held by RNs.	46
Table 18. Top Primary Practice Specialties of RNs Holding Each of the Top Five RN Certifications.	47
Table 19. Educational Characteristics of RNs.....	49
Table 20. Educational Characteristics of RNs, Continued	50
Table 21. Factors Related to the Retention of RNs.	52
Table 22. APRN Sample Size, Response Rate, and Margin of Error by County.	56
Table 23. Employment Status of APRNs.....	56
Table 24. Geographic Distribution of the Residential Population and the APRN Workforce by County.....	56
Table 25. Demographic Characteristics of the State's Residential Population and APRNs.	59
Table 26. Employment Characteristics of APRNs.....	60
Table 27. Primary Practice Setting of APRNs.....	62
Table 28. Primary Practice Specialty, Job Title, Job Function, and Patient Population of APRNs.....	63
Table 29. Types of Certifications Held by APRNs.	65
Table 30. Primary Care Certified APRNs Working as Primary Care Providers	65
Table 31. Educational Characteristics of APRNs.	66
Table 32. Educational Characteristics of APRNs, Continued	67
Table 33. Factors Related to the Retention of APRNs.....	69
Table 34. Sample Size and Margin of Error by License.	72

Table 35. Employment Status of Hawai'i Nurses.	72
Table 36. Demographic Characteristics of the State's Residential Population and Nurses.	72
Table 37. Employment Characteristics of Nurses.	73
Table 38. Primary Practice Settings of Nurses.....	73
Table 39. Primary Practice Characteristics of Nurses Employed in All Settings.	74
Table 40. Primary Practice Characteristics of Nurses Employed in Acute Care Hospitals.	75
Table 41. Primary Practice Characteristics of Nurses Employed in Post-Acute/Long-Term Care Settings. .	76
Table 42. Primary Practice Characteristics of Nurses Employed in Ambulatory Care Settings.....	77
Table 43. Primary Practice Characteristics of Nurses Employed in Home Health/Hospice.	78
Table 44. Primary Practice Characteristics of Nurses Employed in All Other Settings.....	79
Table 45. Educational Characteristics of Nurses.	80
Table 46. Factors Related to the Retention of Nurses.	81

List of Figures

Figure 1. Total Hawai'i LPN Licenses, 2009-2019.....	22
Figure 2. In-State Hawai'i LPN Licenses and Biennial Rate of Change, 2009-2019.	22
Figure 3. Location of LPN Employment versus Residential Population for the County of Honolulu.	24
Figure 4. Location of LPN Employment versus Residential Population for the County of Maui.	24
Figure 5. Location of LPN Employment versus Residential Population for the County of Hawai'i.	24
Figure 6. Location of LPN Employment versus Residential Population for the County of Kaua'i.	24
Figure 7. Distribution of the LPNs' Birth Generation by County.	25
Figure 8. Distribution of the State's Residential Population and LPNs' Race/Ethnicity.....	25
Figure 9. Distribution of LPNs' Primary Employment Setting Type.	28
Figure 10. Distribution of LPNs' Primary Job Function.....	28
Figure 11. Percentage of LPNs in Each County Currently Enrolled in a Degree-Leading Nurse Education Program	31
Figure 12. Percentage of LPNs in Each County Who Intend to Leave their Current Position within 12 Months.....	33
Figure 13. Percentage of LPNs in Each County Who Plan to Leave the Nursing Workforce within 5 Years	33
Figure 14. Total Hawai'i RN Licenses, 2009-2019.....	37
Figure 15. In-State Hawai'i RN Licenses and Biennial Rate of Change, 2009-2019.	37
Figure 16. Location of RN Employment versus Residential Population for the County of Honolulu.	39
Figure 17. Location of RN Employment versus Residential Population for the County of Maui.	39
Figure 18. Location of RN Employment versus Residential Population for the County of Hawai'i.....	39
Figure 19. Location of RN Employment versus Residential Population for the County of Kaua'i.	39
Figure 20. Distribution of the RNs' Birth Generation by County.	40
Figure 21. Distribution of the State's Residential Population and RNs' Race/Ethnicity.....	40
Figure 22. Distribution of RNs' Primary Employment Setting Type.	43
Figure 23. Distribution of RNs' Primary Job Function.....	43
Figure 24. Distribution of RNs' Highest Nursing Education Completed by County.....	48
Figure 25. Distribution of Length of Time RNs Have Been in their Current Positions.	51
Figure 26. Distribution of RNs' Likelihood of Leaving their Current Position within the Next 12 Months..	51
Figure 27. Total Hawai'i APRN Licenses, 2009-2019.	55
Figure 28. In-State Hawai'i APRN Licenses and Biennial Rate of Change, 2009-2019.	55
Figure 29. Location of APRN Employment versus Residential Population for the County of Honolulu.	57
Figure 30. Location of RN Employment versus Residential Population for the County of Maui.	57
Figure 31. Location of APRN Employment versus Residential Population for the County of Hawai'i.....	57

Figure 32. Location of RN Employment versus Residential Population for the County of Kaua‘i.	57
Figure 33. Distribution of APRNs’ Birth Generation by County.....	58
Figure 34. Distribution State’s Residential Population and APRNs’ Race/Ethnicity	58
Figure 35. Distribution of APRNs’ Primary Employment Setting Type.	61
Figure 36. Distribution of APRNs’ Primary Job Function.....	61
Figure 37. Distribution of APRN Certifications.....	64
Figure 38. Percent of FNPs, Primary Care PNs, and Primary Care AGNPs Who Provide Primary Care in Each County.....	64
Figure 39. Distribution of APRNs’ Likelihood of Leaving their Current Position within the Next 12 Months.....	68
Figure 40. APRNs’ Reasons for Leaving their Current Position within 12 Months.....	68

List of Abbreviations

Abbreviation	Definition
AACN	American Association of Colleges of Nursing
ACS	American Community Survey Program of the US Census Bureau
ADN	associate degree program in nursing
AGPCNP	adult-gerontology primary care nurse practitioner
APRN	advanced practice registered nurse
AY	academic year
BLS	US Bureau of Labor Statistics
BSN	baccalaureate degree program in nursing
CNM	certified nurse midwife
CNS	clinical nurse specialist
CRNA	certified registered nurse anesthetist
DLIR	Hawai'i Department of Labor and Industrial Relations
DNP	Doctor of Nursing Practice
FNP	family nurse practitioner
GEPN	graduate entry program in nursing
HAH	Healthcare Association of Hawai'i
HBON	Hawai'i Board of Nursing
HSCN or The Center	Hawai'i State Center for Nursing
HWI	Healthcare Workforce Initiative
IOM	Institute of Medicine
LPN	licensed practical nurse
MSN	master's degree program in nursing
NCSBN	National Council of State Boards of Nursing
NP	nurse practitioner
PNP	pediatric primary care nurse practitioner
RN	registered nurse
The Forum	National Forum of State Boards of Nursing

Definitions of Settings

Setting	Definition
Acute care hospital	Any facility that provides care to patients experiencing the acute onset of one or more severe conditions.
Ambulatory	Any setting in which a person receives care for health conditions on an outpatient basis.
Community-based	Any setting in which a person receives primary care or care for chronic conditions in their place of residence or at an ambulatory facility within the community in which they live.
Home health/hospice	<p>Home health is health care delivered to a patient in the patients' residential location provided that the patient does not reside at a long-term care facility.</p> <p>Hospice is care provided to a patient at end of life and has the primary goal of preserving the patient's comfort. Hospice care may be delivered in an inpatient facility or in the patient's residence.</p> <p>Home health/hospice are combined into a single setting as most hospice care is delivered in patients' residences.</p>
Other/All Other	<p>All settings not accounted for under the definitions of acute care hospital, ambulatory, post-acute/long-term care, and home/health hospice. Includes some clinical settings such clinics or health rooms at schools and any other clinical settings not specifically accounted for on the survey. Also includes non-clinical settings including academia, government agencies, and insurance companies.</p>
Post-acute/Long-term care	<p>Post-acute care is care that a person receives upon discharge from an acute care hospital. The specific setting in which post-acute care is delivered depends on the severity (acuity) of the patient's condition, special care needs that the patient has, and other factors.</p> <p>Long-term care refers to a setting in which a patient is admitted for an extended length of stay for the treatment of one or more conditions that require care beyond what is feasible in a typical residential setting.</p> <p>Throughout this report we combine post-acute and long-term care settings together as "post-acute/long-term care." We felt that referring to the combination of settings was most appropriate because it reflects the environment in Hawai'i in which some post-acute facilities are also long-term residential care facilities for patients with debilitating chronic conditions. Because there are very few cases in which a facility can be discretely categorized as either post-acute or long-term care, our terminology reflects both settings.</p>

Executive Summary

KEY CONCLUSIONS

Regarding LPNs

Hawai'i has lost 17% of its LPN workforce since 2015 which has resulted in an LPN shortage. This shortage predominantly affects community-based healthcare delivery settings in which 83% of vacant LPN positions exist. The loss of the LPN workforce is attributable in part to the transition of LPNs into RN practice. There is a very high return on investment for the cost of entry-to-practice RN education for LPNs in terms of compensation, practice autonomy, and opportunities for professional advancement. Vacancies created by LPNs to who transition to the RN workforce add to vacancies left by LPNs who leave the workforce for retirement, relocation, or other reasons.

Schools of nursing cannot produce new LPNs that match the rate at which LPNs are leaving the workforce. Enrollment demand for LPN certificate programs exceeds schools' capacity to admit all interested students. Schools cannot increase admissions cohort sizes because of an insufficient supply of clinical placements and a full-time faculty shortage. Available data do not suggest that the clinical placement and faculty shortages are likely to improve in the foreseeable future. In turn, there is no data suggest that the LPN shortage is likely to reverse. As such, community-based healthcare employers must adapt to the LPN shortage in order to accommodate the growing number of persons who receive care in community-based settings.

Regarding RNs

There is equilibrium between the overall supply of and employer demand for RNs. In-state schools of nursing produce approximately the same number of new graduate RNs as the number of RN positions that DLIR projects will open annually through 2026. Though the supply of new RNs approximately matches the number of existing and anticipated vacancies, employers report difficulty hiring specialty (e.g., emergency/trauma and critical care) RNs.

Specialty RN positions are more difficult to fill because there is no pipeline for the continual production of specialty nurses in the same way that entry-to-practice RN education programs create a pipeline for generalist nurses. Most schools of nursing cannot make a business case to their institutional administrations for the feasibility of offering specialty certificate programs. As a result, the onus for developing a specialty RN workforce, which is resource intensive, falls on employers.

Developing a specialty RN pipeline would help reduce the time that elapses between the creation of a specialty RN vacancy and the time that the RN who fills that vacancy is competent in the specialty. Such a pipeline may be created through a consortium of multiple employers and schools who collectively provide resources to develop specialty RNs who are ready and available as employers need them.

Regarding APRNs

Hawai'i's APRN workforce has increased by 82% over the last decade. APRNs have full scope of practice authority in Hawai'i and are, thus, available to fill the primary care provider shortage that exists in the state. Though they are educated, trained, certified, and legally able to be independent practitioners in Hawai'i, 93% of APRNs report working for someone else rather than being self-employed, and the majority of APRNs do not describe their primary nursing role as "independent provider." Further, though they are all educated, trained, and certified to do so, approximately 40% of FNPs and PNP's, and about 60% of AGPCNPs indicate that they do not provide primary care. Though the overall size of the workforce has and will likely continue to increase, APRNs – especially primary care NPs – could play a more direct role in reducing the primary care provider shortage than they currently do.

Optimizing the APRN workforce requires systematic investigation into the barriers that impact APRNs' willingness and ability to establish independent practices. We know that there are environmental factors such as payment transformation, reimbursement disparity, and an inhospitable small business landscape, that make establishing and maintaining an independent practice difficult. We do not know, however, the extent to which these environmental challenges drive APRNs' decisions to become employed rather than establish independent practices. Further, there may be other factors (e.g., uncertainty about how to operate a small business, family obligations, etc.) that have an impact on APRNs' practice decisions that will not be resolved by addressing systemic, environmental barriers. Investigating the factors that motivate APRNs' professional decision-making is a vital first step in channeling the growing APRN workforce into the populations where they are most needed.

NOTABLE FINDINGS

Demographics

- ✎ RNs are younger than LPNs and APRNs in terms of median age and generational distribution.
- ✎ In all license categories, the proportion of multiracial nurses approximately matches that of the statewide residential population. However,
 - individuals of Caucasian ancestry are substantially overrepresented among APRNs,
 - persons of Filipinx ancestry are substantially overrepresented among LPNs,
 - and persons of Native Hawaiian ancestry are substantially underrepresented in all nursing licenses.

Employment

- ✎ 8% of LPNs reported that their current position does not require their license. This is a slightly higher proportion than either RNs (4%) or APRNs (2%) whose positions do not require a license.
- ✎ APRNs are more likely than LPNs and RNs to hold multiple nursing jobs and report working more than 40 hours per average work week across all of their nursing positions.
- ✎ Top Employment Setting Type by License:
 - LPN – Ambulatory Care (35%)
 - RN – Acute Care Hospital (52%)
 - APRN – Ambulatory Care (41%)

Patient Populations Treated in a Typical Week

- ✎ More than half of all nurses report that they treat persons with disabilities or persons who are houseless in a typical week.
- ✎ 40% of all nurses report that they treat patients suffering from opioid addition or dependency.
- ✎ 12% of all nurses report providing nursing care via telehealth, but there is substantial variation in the extent to which nurses deliver care by telehealth depending on setting and specialty.

Education

- ▼ The largest proportion of LPNs and APRNs report that their highest education is the minimum education required for licensure (LPN certificate and Master's degree, respectively). In contrast, only about 1 in 4 RNs report that their highest education is an RN diploma or ADN. The RN diploma is the minimum education necessary for RN licensure but there are no RN diploma programs in Hawai'i, making the ADN is the lowest level of entry-to-practice RN education available in the state.
- ▼ APRNs are less likely than LPNs or RNs to have completed their initial nurse education program in Hawai'i.
- ▼ APRNs are less likely than LPNs or RNs to have completed their highest nurse education program in Hawai'i.
- ▼ LPNs are more likely than RNs or APRNs to be enrolled in a degree-leading nurse education. Of enrolled LPNs, 100% are enrolled in RN programs and more than half are enrolled at an in-state school.
- ▼ Among RNs and APRNs currently enrolled in school, the majority (RNs = 69%, APRNs = 58%) are enrolled in out-of-state programs.

Workforce Retention

- ▼ LPNs report the longest duration of employment with their current employer and in their current position. APRNs report the shortest.
- ▼ LPNs are slightly more likely to have plans to leave their current position within the next year as compared to RNs and APRNs.
- ▼ A similar proportion of nurses in all licenses (~10%) report intending to be retired within the next 5 years despite RNs being about 3 years younger on average than LPNs or APRNs.

Introduction

PURPOSE AND BACKGROUND OF REPORT

Since 2007, the Hawai'i State Center for Nursing has published the Hawai'i Nursing Workforce report. Data in the report are collected from nurses renewing their Hawai'i licenses during HBON's biennial license renewal period. The report contains demographic, employment, and educational characteristics of nurses employed in Hawai'i.

This report serves as an important workforce monitoring tool. By total positions, nurses represent the largest subset of the healthcare workforce in the state (Healthcare Association of Hawai'i, 2019). As a result, nurses are often the first and most common type of healthcare professional that patients encounter. Hawai'i-residents' access to high-quality health care relies on the existence of a nursing workforce that can competently deliver the various types of care that patients need. The data from the biennial supply survey is the best information we have about the demographic characteristics, educational preparation, practice specialties, and practice locations of Hawai'i's nurses. These data help us to identify gaps in the workforce and provide guidance about where we should focus our workforce development efforts.

NEW IN 2019

To improve the usability of our supply data, the Center implemented two major changes to our 2019 report. First, LPNs, RNs, and APRNs

each have their own section of the report. Within each license section, data tables are tabulated by county. In contrast, our prior reports have been organized by workforce attribute and the data tables were tabulated by license. We made this revision for two reasons. First, each license is a unique workforce with different scopes of practice, educational requirements, and workforce development challenges that warrant their own thorough discussions. Second, by tabulating data by county within each license section, the counties are better integrated into the report and comparisons that highlight disparities between the counties become clearer.

The second major change in the 2019 report is a stronger emphasis on data tables than in prior reports. Users of the Center's data frequently want to know how the workforce is distributed on specific characteristics. To provide greater access to the data that our partners most commonly request, we provided distributions for more variables than in our previous reports. To help users who prefer to read text or graphs, accompanying each data table is a subsection called "Key Findings At-a-Glance." These summaries provide brief, narrative descriptions of key or notable findings presented as bulleted lists and figures. We hope that this change will give our readers better access to more data and help draw their attention to what we think are the most important findings for each segment of the nursing workforce.

IMPORTANT NOTES ABOUT THE STUDY AND THIS REPORT

Regarding the Study Sample

The Center conducts the Nursing Workforce Supply Survey biennially in odd-numbered years in conjunction with Hawai'i's nursing license renewal period. The 2019 license renewal period began on April 22 and ended on June 30. The study is intended to be a population study of all nurses licensed in Hawai'i so all LPNs, RNs, and APRNs were encouraged to participate. Nurses participated on a volunteer basis. They were not incentivized to participate, and completion of the survey was not a condition of eligibility to renew their licenses.

During the license renewal period, 26,519 nurses renewed their Hawai'i licenses (Hawai'i Board of Nursing, 2019). Of these, 13,308 nurses completed the survey resulting in an overall study response rate of 46%. At the start of each section of the report, you will find tables that provide the study response rate by license and estimates of the response rate by county.

Regarding the Survey Instrument

The survey instrument used in this study was designed by the Hawai'i State Center for Nursing but was based largely on the [Nursing Supply Minimum Dataset Survey](#) (National Forum of State Nursing Workforce Centers, 2016). The Forum makes minimum dataset surveys available for the study of nursing workforce supply, demand, and education with the aim of permitting nationwide comparisons and aggregations from

data collected by individual states (see the Forum's [national map as an example](#)).

The Center's 2019 instrument was revised and re-approved in 2018 by the Institutional Review Board at the University of Hawai'i at Mānoa under an existing study protocol. Among the revisions to the 2019 instrument were modifications to the skip logic in the survey which were necessary to improve data quality.

The full 2019 survey instrument is available from the Center's researcher upon request to hscndata@hawaii.edu.

Regarding Data Collection

Nurses completed the survey online via the web-based survey platform SurveyMonkey. At the beginning of the online license renewal process, nurses saw a notice about the survey which encouraged them to participate and indicated that that participation was not required for license renewal. The paragraph also included a link that allowed nurses to take the survey prior to starting the license renewal application. A link to the survey also appeared after the submission of the application, thereby providing two opportunities for relicensing nurses to complete the survey.

Regarding Data Weighting and Analysis

Prior to the computation of all frequency distributions, the data were weighted to the total number of nurses in each license category that renewed a license in 2019. As HBON's report of license renewals contained no information other than license (e.g. county of residence, practice

location, etc.), the data were weighted only on the distribution of licenses.

The Center's researcher filtered the weighted data file so that only nurses who met specific criteria were included in the analysis. Nurses who did not meet all of the inclusion criteria or did not provide enough information on the survey to determine whether they met the inclusion criteria, were filtered out of the data set prior to analysis. The inclusion criteria were:

- ▼ current residence is in Hawai'i,
- ▼ employed in a license-relevant role (including any employment position that requires, prefers, or is enhanced by a nurse's license), and
- ▼ primary employment location within Hawai'i.

The survey, per the recommendation of the Forum's MDS, asked nurses to report on their primary nursing position and, if they have one, their secondary position. This report contains the analysis of data from only nurses' primary position.

Regarding the Structure of the Report

As we indicated previously, this report has three major content sections, each one corresponding to a nursing license. Each license-specific section follows the same basic structure, though some sections have different or additional tables as appropriate for that license. Each section begins with a brief overview of the current state of the workforce, then provides the relevant data tables and associated summaries.

Because each section follows the same structure, some content does repeat from section to section (e.g., descriptions of how to interpret maps). We made the decision to include redundant language in each section because we expect that readers will treat this report as a reference document rather than read it in its entirety from cover to cover. In order to ensure that all readers are properly able to interpret the data regardless of what section they happen to read, we felt that we were safer to err on the side of redundancy.

Regarding the Presentation of Data

The counties' formal names are the City & County of Honolulu, the County of Hawai'i, the County of Maui, and the County of Kaua'i. For the sake of brevity and consistency, they are referred to throughout this report as Honolulu County, Hawai'i County, Maui County, and Kaua'i County. When all four counties appear in lists or tables, they are always presented in descending order of residential population size.

Occasionally, the term "Neighbor Island(s)" appears in the report. In keeping with colloquial usage of this term, it refers to the collective of all of the islands in Hawai'i, Maui, and Kaua'i Counties. We recognize this term as O'ahu-centric and use it only in cases when our intention is specifically to draw attention to the fact that Honolulu County is systematically different from the other counties in some substantively meaningful way, particularly when that difference adversely impacts access to care in Hawai'i, Maui, and Kaua'i Counties.

The Center is fully committed to protecting the identity of all respondents. Though respondents did not provide identifying information, a respondent might be identifiable from presentations of aggregated data when cell sizes are very small. To minimize the possibility of respondents' loss of privacy, this report contains only weighted frequencies and no raw counts except for the total number of respondents in each license category. In tables containing demographic data, weighted frequencies are only provided when the raw cell count was larger than four. These cells contain a double asterisk (**) to indicate that the unweighted cell size was too small to report.

To avoid biasing the presentation of data tables in favor of the largest subset of nurses (Honolulu in the case of counties and RNs in the case of licenses), all levels (i.e., rows) within a variable are presented in alphabetical order. Exceptions to this rule are cases in which the variable levels:

- ▼ have a natural chronological or hierarchal order (e.g., age, academic degrees), or
- ▼ match the order presented in another data source (e.g., US Census Bureau).

For all variables in which “Other” was a response option, the variable order adheres to the rules specified previously with the exception that “Other” is always presented last.

We recognize that for some tables, especially those containing data about nurses' practice specialty, the use of alphabetical order may make it difficult to identify the most commonly occurring responses. To assist with this, we have inserted a superscript on the top five most frequently reported specialties in each column. The most frequently occurring specialty is marked with a superscript of “1” and is also in bold type.

Regarding Inclusion and Accessibility

This report uses the term Filipinx to describe persons of any gender who have ethnic ancestry originating in the Philippine Islands. The term Latinx refers to persons of any gender with ethnic ancestry originating in Latin America.

The Center has made a concerted effort to make this document compliant with guidelines for producing accessible electronic documents as provided by the US Department of Health and Human Services. There are, however, several graphs and maps in the report that cannot be summarized well in brief alternative text. If you have difficulty accessing any of the content of this report, please contact the Hawai'i State Center for Nursing at hscndata@hawaii.edu to request the content of this report in an alternate format.

Hawai'i's LPN Nursing Workforce

STATE OF THE LPN WORKFORCE

Hawai'i Has a Shortage of LPNs

As of the end of 2019, there were an estimated 144 vacant LPN positions at facilities across the state resulting in a statewide LPN vacancy rate of 20% (Healthcare Association of Hawai'i, 2019). The majority (83%) of these vacancies are not in acute care hospitals, but rather in a variety of community-based settings. As a result, the LPN shortage disproportionally and overwhelmingly impacts outpatient settings where patients receive primary care.

The high vacancy rate for LPN positions is associated with a steady and rapid decline in the number of LPNs in Hawai'i. Since 2015, the number of LPNs residing in Hawai'i has decreased by nearly 400 individuals. This represents a loss of 17% of the state's LPN workforce over just the last four years (State of Hawai'i Professional and Vocational Licensing Division, 2019). The shortage of LPNs stems from two primary sources: LPNs' pursuit of RN practice and in-state schools' lack of capacity to meet existing and future demand for LPNs.

LPNs Leave the Workforce for RN Practice

Of the LPNs working in Hawai'i, 27% have completed an RN education program (see Table 8). These LPNs, along with the 10% of LPNs who are currently enrolled in degree-leading RN

education programs, represent as many as 500 individuals¹ who could potentially leave the LPN workforce to become RNs.

There is good financial motivation for LPNs to leave their positions to pursue RN practice. According to the Bureau of Labor Statistics (2019), RNs in Hawai'i earned an average of \$98,080 in 2018 while LPNs earned an average of \$50,930 during the same year. In Hawai'i, the additional year of education that LPNs must complete to earn an ADN costs about \$6,000. If an LPN making the average LPN salary completed the one year of additional education required for RN licensure, became licensed, and got a job as an RN making the average annual RN salary, the increase in compensation over one year would pay for that nurse's RN education nearly eight times. The increase in compensation plus a broader scope of practice, the ability to practice more autonomously, and better and more varied opportunities for professional advancement yield a compelling return on investment for the cost of RN education.

Schools Lack Capacity to Produce More LPNs

LPNs who pursue RN practice, along with those nurses who leave the workforce for retirement or other reasons, create vacancies in the

¹ Represents 37% of the 1,350 LPNs estimated to be employed in Hawai'i (Hawai'i Department of Labor and Industrial Relations, 2018).

workforce. These vacancies may take employers as many as 12 months to fill (Healthcare Association of Hawai'i, 2019) because Hawai'i's schools of nursing, the predominant producers of Hawai'i's LPN workforce, cannot graduate enough LPNs at a fast enough rate to meet employer demand.

During academic year 2017-2018, Hawai'i's schools of nursing graduated 51 new LPNs (Hawai'i State Center for Nursing, 2019b). If schools' enrollment and graduation numbers remained constant through academic year 2018-2019, about 50 new LPNs graduated in May of this year and, by the end of 2019, will enter a job market that eagerly awaits them. This small group of new LPNs will fill about 35% of existing vacancies, leaving more than 90 LPN positions vacant until the next LPN cohort graduates in 2020. Meanwhile, an estimated 20 new LPN positions will be added to the workforce and 50 LPNs will leave the workforce, resulting in the addition of 70 new LPN vacancies over the next year (Hawai'i Department of Labor and Industrial Relations, 2019). This means that in 2020, after approximately 50 new graduate LPNs enter the workforce, an estimated 115 vacancies will remain.

In-state schools' low production of LPNs is not due to a lack of demand among individuals interested in pursuing the LPN profession. In fact, during AY 2017-2018, enrollment demand for in-state LPN programs exceeded schools' capacity to admit new students by an average of 1.7 applications per opening (Hawai'i State Center for Nursing, 2019b). Though there is demand for entry

into LPN education programs, in-state schools lack capacity to increase their enrollment cohort sizes. The two primary contributors to schools' limited enrollment capacity are a shortage of full-time faculty and an insufficient supply of clinical placements (see Hawai'i State Center for Nursing, 2019 for a more thorough discussion on these issues). These are complex challenges with no easy solutions, and if they persist, the supply of LPNs will continue to lag substantially behind employer demand.

Implications for LPN Workforce Development

The majority (72%) of LPNs in Hawai'i work in a variety of community-based settings such as provider's offices, outpatient clinics, nursing homes, assisted living facilities, hospice, and home health (see Table 6). These are the settings in which the residential population receives primary care, including the coordination of specialty health services and management of chronic conditions which helps mitigate the onset of preventable acute conditions that require hospitalization.

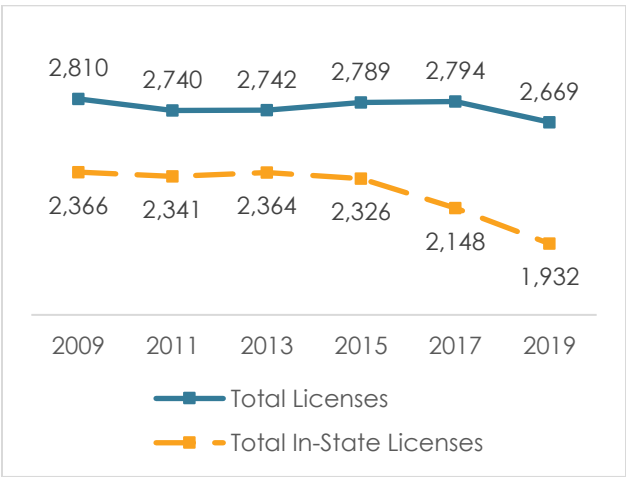
Removing the barriers to schools' ability to admit more LPN students is a complicated challenge that requires time, creativity, and collaboration. Until we can address those challenges, employers will have to continue to identify cost-effective ways to compensate for the lack of LPNs in the workforce to ensure patients' ongoing access to quality care in the communities where they live.

LICENSES

As of July 2019, 2,669 individuals held Hawai'i LPN licenses (State of Hawai'i Professional and Vocational Licensing Division, 2019). Of these, 72% reported a primary residential address in the state. As compared to 10 years ago, the number of LPNs residing in Hawai'i has decreased by 18% at an average rate of -4% per biennium.

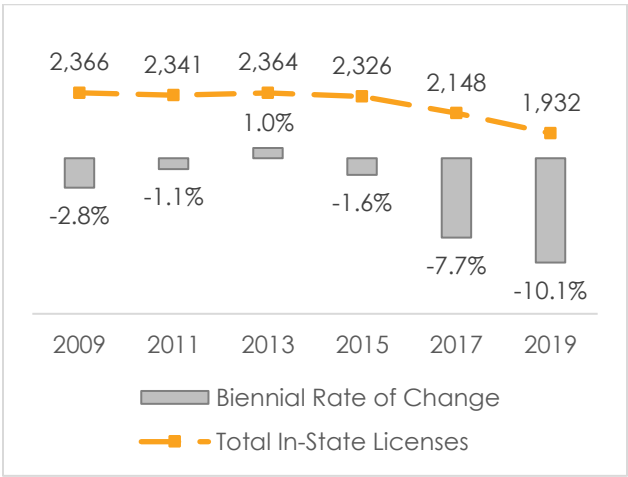
The rate of change in the size of the LPN workforce has not been constant, however. Between 2009 and 2015, the LPN workforce shrank by less than 3%. In contrast, between 2015 and 2019, Hawai'i lost 17% of its LPN workforce.

Figure 1. Total Hawai'i LPN Licenses, 2009-2019.



Over the last two years, the statewide LPN workforce shrank by 10%. The four counties experienced a decrease in their respective LPN workforces by an average of 9%. Maui County lost the largest proportion of LPNs (14%) since 2017 while Honolulu County experienced the smallest (9%) loss. Hawai'i and Kaua'i Counties lost 10% and 11% of their respective LPN workforces over the same time frame.

Figure 2. In-State Hawai'i LPN Licenses and Biennial Rate of Change, 2009-2019.



LPN SURVEY RESPONSE RATE

In 2019, 1,841 LPNs renewed their licenses. Of these, 784 completed the supply survey resulting an overall LPN response rate of 43%. HBON does not report license renewals by county, so to estimate the response rate and margin of error for LPNs by county, the Center applied the geographic distribution of total licenses as of July 2019 (State of Hawai'i Professional and Vocational Licensing Division, 2019) to license renewals. By applying the proportion of all LPN licenses held by

Hawai'i residents (72%), to LPN license renewals, we estimate that 1,330 residents renewed an LPN license in 2019.

The response rate and margin of error for LPNs in the state and each county are presented in Table 1. Table 2 provides the proportion LPNs who responded to the supply survey and who met the inclusion criteria for analysis which are described in detail in the [introduction of this report](#).

Table 1. Hawai'i LPN Sample Size, Response Rate, and Margin of Error by County.

	Statewide	Honolulu	Hawai'i	Maui	Kaua'i
Estimated Renewing LPNs Residing in Each County ¹	1,330	786	219	228	99
LPNs Who Participated in the 2019 Workforce Supply Survey	613	376	120	85	32
LPN Response Rate for 2019 Workforce Supply Survey	46.0%	47.8%	54.7%	37.3%	32.2%
Minimum ² Margin of Error for All Reported Frequencies (+/-)	2.91%	3.65%	6.03%	8.44%	14.32%

¹In total 1,841 LPN licenses were renewed in 2019. This and all subsequent tables include the subset of nurses who reside in Hawai'i. The distribution of licenses by county was estimated based on the geographic distribution provided in PVL's July 29, 2019 Geographic Report of Current Licenses.

²Margin of error will vary depending on the number of respondents who answered each question.

Table 2. Employment Status of Hawai'i LPNs.

	Statewide	Honolulu	Hawai'i	Maui	Kaua'i
Working in a Nursing License-Relevant Position	87.1%	87.0%	85.8%	89.4%	87.5%
Unemployed or Not Working in a License-Relevant Position	12.9%	13.0%	14.2%	10.6%	12.5%

Note. 99.2% of LPNs who reside in Hawai'i and who work in a license-relevant role report a primary practice location in Hawai'i. Nurses practicing in Hawai'i comprise the subset of nurses who are included in subsequent tables.

GEOGRAPHIC DISTRIBUTION OF EMPLOYED LPNS

The approximately 1,330 LPNs who work in the state are dispersed somewhat disproportionally across the counties. Though it is home to approximately 70% of the state's population, only 60% of the state's LPNs work in Honolulu County. Conversely, both Hawai'i and Maui Counties have a larger proportion of the LPN workforce than they have of the state's population.

Table 3. Geographic Distribution of the Residential Population and the LPN Workforce by County

County	% of State's Residential Population	% of LPN Workforce
Honolulu	69.6%	60.4%
Hawai'i	13.8%	18.4%
Maui	11.5%	15.1%
Kaua'i	5.0%	6.1%

The maps below display the distribution of the LPN workforce within each county relative to the distribution of the counties' residential populations. The distribution of employed nurses is represented by the dots. The largest dot in each county represents the zip code within that county in which the largest number of nurses work. The population distribution is represented by the variation of the shading of each county's map. The darkest area in each county's map indicates the zip code within that county with the largest residential population.

Within each county, LPNs work in the highest concentrations within zip codes with the highest residential populations. High concentrations of LPN employment in the county's population centers is consistent with the fact that 72% of all LPNs statewide work in community-based settings. Though LPNs are more likely to work in population centers, they do not serve all areas of each county, as there are multiple zip codes in each county in which no LPNs reported being employed.

Figure 3. Location of LPN Employment versus Residential Population for the County of Honolulu.

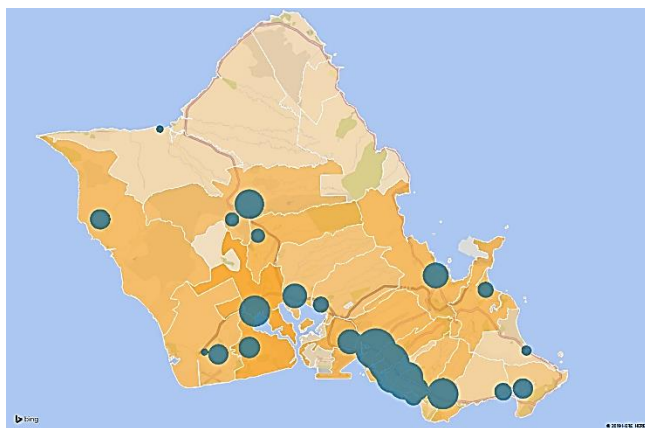


Figure 4. Location of LPN Employment versus Residential Population for the County of Maui.

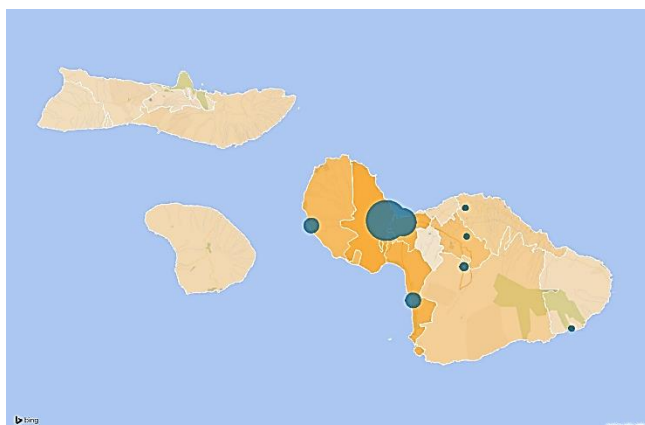


Figure 5. Location of LPN Employment versus Residential Population for the County of Hawai'i.

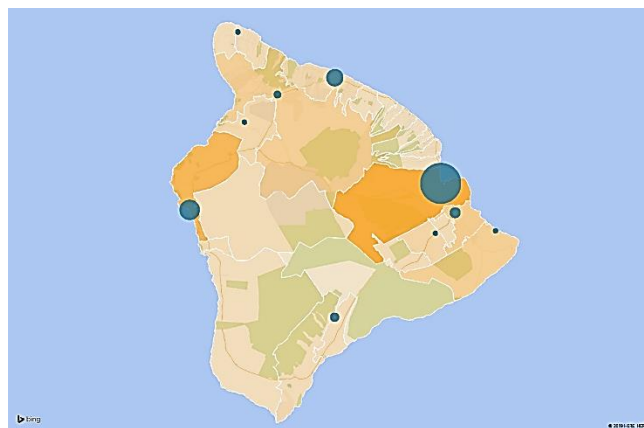
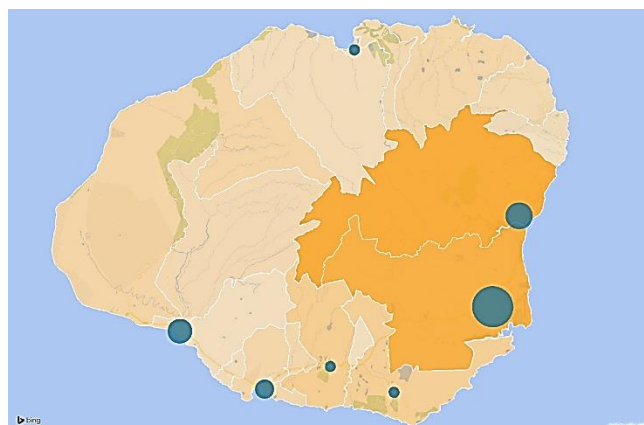


Figure 6. Location of LPN Employment versus Residential Population for the County of Kaua'i.



LPN DEMOGRAPHIC CHARACTERISTICS

LPN Demographics Key Findings At-a-Glance

- ✎ Men account for 11% of the statewide LPN workforce. Honolulu County has the highest proportion of male LPNs (12%) and Maui County has the lowest (3%).
- ✎ Maui County has the youngest LPN workforce of all the counties (median age=45 years, Baby Boomers=18%). Kaua'i County's LPNs are oldest (median age =56 years, Baby Boomers = 52%).
- ✎ There is a similar proportion of multiracial persons in both the state's residential population (24%) and the LPN workforce (23%).
- ✎ Among LPNs, Filipinx persons are substantially overrepresented (population=16%, LPNs=45%) while Native Hawaiian persons are substantially underrepresented (population=24%, LPNs=13%).

Figure 7. Distribution of the LPNs' Birth Generation by County.

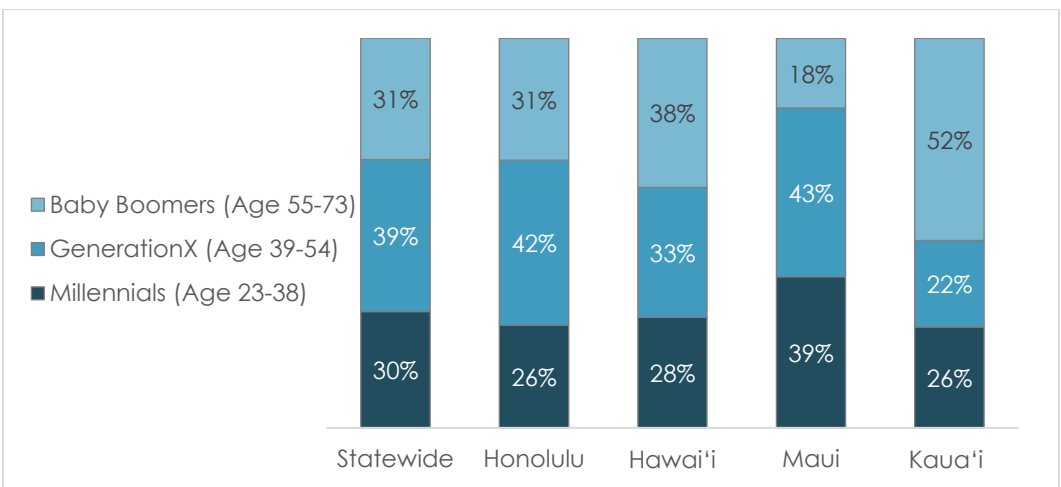


Figure 8. Distribution of the State's Residential Population and LPNs' Race/Ethnicity.

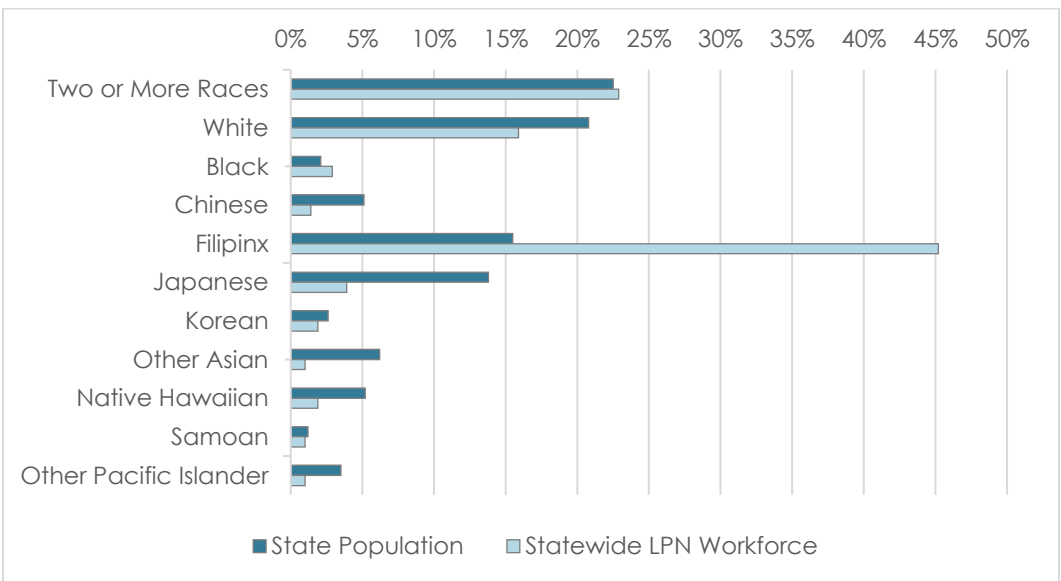


Table 4. Demographic Characteristics of the State's Residential Population and LPNs.

<u>Gender</u>	<u>Population</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Males	50.0%	10.7%	12.1%	6.5%	2.6%	25.8%
Females	50.0%	88.0%	87.0%	92.5%	96.1%	74.2%
Other/Prefer Not to Say	--	1.3%	**	**	**	0.0%
<u>Age</u>	<u>Population</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Median Age in Years	39.3	47.0	48.0	47.0	45.0	55.5
20-24 Years	6.4%	1.3%	**	**	**	0.0%
25-34 Years	14.2%	22.2%	20.1%	21.0%	26.9%	25.0%
35-44 Years	12.8%	19.2%	19.3%	19.8%	20.9%	**
45-54 Years	12.1%	25.6%	27.9%	19.8%	32.8%	**
55-59 Years	6.1%	12.2%	12.3%	14.8%	7.5%	21.4%
60-64 Years	6.6%	13.7%	12.6%	21.0%	10.4%	17.9%
65-74 Years	10.5%	5.3%	6.3%	**	0.0%	**
75 and Older Years	7.9%	**	**	0.0%	0.0%	**
<u>Generation</u>	<u>Population</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Millennials (Age 23-38)	--	29.9%	26.4%	28.4%	38.8%	25.9%
Generation X (Age 39-54)	--	39.0%	42.3%	33.3%	43.3%	22.2%
Baby Boomers (Age 55-73)	--	31.2%	31.3%	38.3%	17.9%	51.9%
<u>Race</u>	<u>Population</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Two or More Races	24.3%	22.9%	19.4%	32.5%	27.9%	21.4%
White	24.3%	15.9%	13.7%	21.7%	20.6%	**
Black	2.0%	2.9%	4.2%	**	0.0%	0.0%
American Indian/Alaska Native	0.2%	**	0.0%	**	0.0%	0.0%
Chinese	4.0%	1.4%	2.5%	0.0%	0.0%	0.0%
Filipinx	15.5%	45.2%	48.2%	33.7%	44.1%	53.6%
Japanese	11.5%	3.9%	4.2%	**	0.0%	**
Korean	1.7%	1.9%	2.5%	**	**	0.0%
Other Asian	5.0%	1.0%	1.8%	0.0%	0.0%	0.0%
Native Hawaiian	6.4%	1.9%	**	6.0%	**	**
Samoan	0.8%	1.0%	1.8%	0.0%	0.0%	0.0%
Other Pacific Islander	3.0%	1.0%	**	0.0%	**	**
Some Other Race	1.3%	**	**	0.0%	**	**
<u>Native Hawaiian Ancestry</u>	<u>Population</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Any Part Native Hawaiian Ancestry ¹	27.0%	12.6%	8.5%	24.2%	17.1%	**
<u>Hispanic/Latinx Ancestry</u>	<u>Population</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Hispanic/Latinx of Any Race	10.7%	9.8%	7.8%	12.9%	10.7%	20.0%

Note. Population data for the State of Hawai'i are from the American Community Survey Program of the US Census Bureau (United States Census Bureau, 2018).

¹Represents the proportion of individuals of Native Hawaiian ancestry in combination with any other ethnic or racial group. Census data also include persons of Other Pacific Islander ancestry.

LPN EMPLOYMENT & PRIMARY PRACTICE CHARACTERISTICS

LPN Employment Key Findings At-a-Glance

- ✔ 90% are employed in a position that requires their nursing license. 8% report that their license is relevant to their position (i.e., position prefers or is enhanced by their license but does not require it).
- ✔ 18% hold multiple license-relevant positions.
 - Maui County has the highest proportion (86%) of LPNs employed in one license-relevant position.
 - Honolulu County has the highest proportion (19%) of LPNs employed in multiple positions.
- ✔ LPNs work for an average of 39 hours in a typical week across all positions.
 - LPNs in Kaua'i County report working fewer (36) total hours per week than LPNs in other counties.
 - Nearly 1 in 4 LPNs in Maui County report working more than 40 hours in a typical week across all their positions.
- ✔ 17% report that they are employed through a nursing or healthcare staffing agency.

Table 5. Employment Characteristics of LPNs.

<u>Relation of License to Primary Position</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
License is Required	89.6%	90.3%	91.5%	87.0%	93.5%
License is Preferred or Enhances Job Performance	7.5%	6.8%	6.4%	11.7%	6.5%
Not Reported	2.9%	2.9%	2.1%	1.3%	0.0%
<u>Number of License-Related Positions Held</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
1 Position	81.6%	80.8%	83.0%	85.7%	83.9%
2 Positions	14.4%	14.3%	12.8%	11.7%	16.1%
3+ Positions	4.0%	4.9%	4.3%	2.6%	0.0%
<u>Full-Time Equivalent Employment</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
At Least 1 Full-Time Position	77.7%	76.6%	81.7%	76.3%	80.6%
Part-Time or Per Diem Employment Only	22.3%	23.4%	18.3%	23.7%	19.4%
<u>Total Hours Worked in a Typical Week in All Positions</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Average Hours Worked per Week	39.1	38.7	40.0	39.6	36.2
19 Hours or Less	6.3%	6.3%	5.4%	4.0%	12.9%
20-40 Hours	73.2%	74.1%	72.8%	72.0%	80.6%
41 Hours or More	20.5%	19.6%	21.7%	24.0%	6.5%
<u>Total Hours Worked in a Typical Week in Primary Position Only</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Average Hours Worked per Week	37.0	36.0	38.0	37.0	35.0
19 Hours or Less	6.9%	6.6%	6.5%	4.0%	12.9%
20-40 Hours	82.2%	84.1%	78.3%	80.0%	87.1%
41 Hours or More	10.9%	9.3%	15.2%	16.0%	0.0%
<u>Travel Nurses</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Employed as a Travel Nurse	2.1%	2.0%	1.1%	2.7%	0.0%
<u>Agency Nurses</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Employed through Nursing Staffing Agency	17.1%	18.6%	13.0%	16.4%	22.6%

LPN Primary Practice Key Findings At-a-Glance

- ▼ 72% work in community-based settings. The most common employment setting of LPNs varied by county:
 - Honolulu County: Other
 - Hawai'i County: Post-acute/long-term care
 - Maui County: Ambulatory settings
 - Kaua'i County: Hospitals
- ▼ LPNs' top five practice specialties:
 - Adult-Gerontology (30%)
 - Family Health (9%)
 - Pediatrics (7%)
 - Administration/Management (4%)
 - Other (29%)
- ▼ 78% of LPNs' primary job function is to provide direct patient care and education.
- ▼ Higher percentages of LPNs in Maui (41%) and Kaua'i (44%) Counties report treating patients who are houseless in a typical week than LPNs in Honolulu (28%) or Hawai'i (22%) Counties.

Figure 9. Distribution of LPNs' Primary Employment Setting Type.

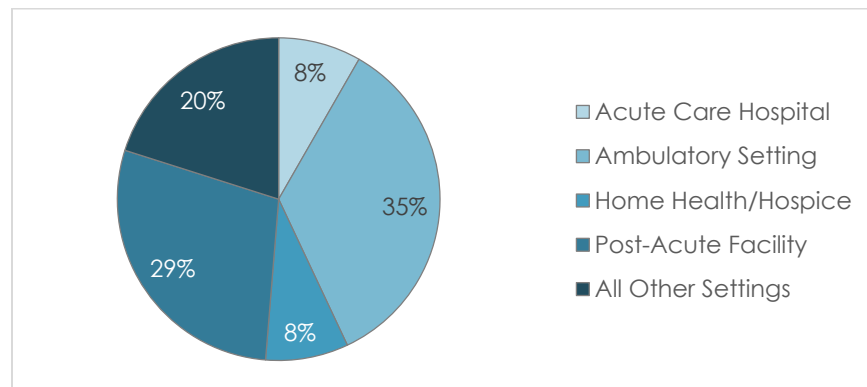


Figure 10. Distribution of LPNs' Primary Job Function

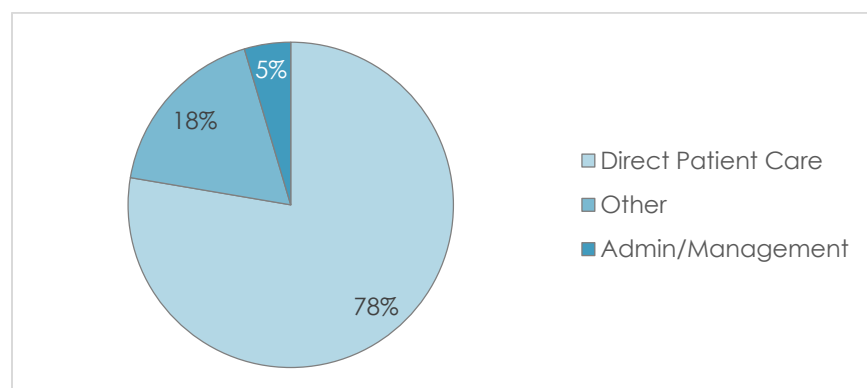


Table 6. Primary Practice Setting of LPNs.

Primary Practice Setting	Statewide	Honolulu	Hawai'i	Maui	Kaua'i
Acute Care Hospital	8.3%	8.3%	7.5%	5.6%	19.4%
Ambulatory Setting	34.7%	29.6%	33.3%	56.9%	35.5%
Community Health Center	16.1%	14.6%	29.0%	9.8%	18.2%
Dialysis Clinic	8.9%	14.6%	0.0%	4.9%	0.0%
Outpatient Clinic/Urgent Care	51.1%	59.6%	25.8%	46.3%	63.6%
Provider's Office	22.8%	11.2%	41.9%	36.6%	18.2%
Same-Day Surgery Center	1.1%	0.0%	3.2%	2.4%	0.0%
Home Health/Hospice	8.3%	8.3%	9.7%	6.9%	9.7%
Home Health	65.1%	56.0%	88.9%	60.0%	100.0%
Hospice	34.9%	44.0%	11.1%	40.0%	0.0%
Post-Acute/Long-Term Care	28.6%	29.2%	36.6%	18.1%	16.1%
Assisted Living Facility	21.6%	31.8%	0.0%	23.1%	0.0%
Nursing Home/Extended Care Facility	70.3%	56.8%	97.1%	76.9%	100.0%
Rehabilitation Hospital	8.1%	11.4%	2.9%	0.0%	0.0%
All Other Settings	20.1%	24.6%	12.9%	12.5%	19.4%
Correctional Facility	1.9%	2.7%	0.0%	0.0%	0.0%
Government/Regulatory Agency	19.2%	18.9%	33.3%	11.1%	16.7%
Insurance Company	4.8%	6.8%	0.0%	0.0%	0.0%
Public Health	3.8%	5.4%	0.0%	0.0%	0.0%
School Health Room/Clinic	8.7%	9.5%	0.0%	11.1%	0.0%
Other, Non-Clinical	17.3%	13.5%	33.3%	22.2%	16.7%
Other, Clinical	44.2%	43.2%	33.3%	55.6%	66.7%

Note. Distributions of individual settings sum to 100% within a given setting type.

Table 7. Primary Practice Specialty, Job Title, Job Function, and Patient Population of LPNs.

Primary Practice Specialty	Statewide	Honolulu	Hawai'i	Maui	Kaua'i
Administration/Management	3.8% ⁵	4.8%	3.4% ⁵	1.4%	3.2%
Adult-Gerontology	30.4%¹	27.0% ²	42.5%¹	25.7% ²	29.0%¹
Cardiac	0.2%	0.0%	1.1%	0.0%	0.0%
Critical Care	0.2%	0.0%	0.0%	1.4%	0.0%
Emergency/Trauma	0.2%	0.3%	0.0%	0.0%	0.0%
Family Health	9.3% ³	7.5% ⁴	11.5% ³	12.9% ³	12.9% ³
Gastroenterology	0.8%	0.7%	2.3%	0.0%	0.0%
Maternal-Child/Obstetrics	1.2%	0.7%	0.0%	4.3%	3.2%
Medical-Surgical	2.6%	1.4%	2.3%	5.7% ⁵	9.7% ⁴
Nephrology-Dialysis	3.0%	3.8%	0.0%	4.3%	0.0%
Nurse Education	0.2%	0.0%	0.0%	1.4%	0.0%
Oncology	0.8%	0.7%	1.1%	1.4%	0.0%
Palliative Care/Hospice	2.8%	3.4%	2.3%	2.9%	0.0%
Pediatrics	6.8% ⁴	7.8% ³	4.6% ⁴	5.7% ⁴	9.7% ⁴
Perioperative/Surgical	0.6%	0.7%	0.0%	1.4%	0.0%
Psychiatric/Mental Health	3.6%	5.1% ⁵	2.3%	0.0%	3.2%
Public/Population Health	0.8%	1.4%	0.0%	0.0%	0.0%
Rehabilitation	2.2%	3.4%	0.0%	0.0%	0.0%
School/Student Health	0.6%	1.0%	0.0%	0.0%	0.0%
Women's Health	0.8%	0.7%	0.0%	2.9%	0.0%
Other	29.0% ²	29.7%¹	26.4% ²	28.6%¹	29.0% ¹
Primary Practice Position Title	Statewide	Honolulu	Hawai'i	Maui	Kaua'i
Staff Nurse	71.6%	70.7%	71.7%	72.2%	74.2%
Nurse Manager	3.3%	2.7%	7.6%	1.4%	3.2%
Nurse Faculty/Educator	0.4%	0.3%	0.0%	1.4%	0.0%
Case Manager	1.8%	1.7%	3.3%	0.0%	3.2%
Other	23.0%	24.7%	17.4%	25.0%	19.4%
Primary Practice Job Function	Statewide	Honolulu	Hawai'i	Maui	Kaua'i
Direct Patient Care & Education	77.6%	78.4%	76.3%	78.4%	80.6%
Teaching/Training Nursing Students or Staff	0.7%	0.3%	1.1%	2.7%	0.0%
Administration/Management	4.6%	5.2%	5.4%	4.1%	3.2%
Quality/Practice Improvement	0.7%	0.7%	0.0%	0.0%	0.0%
Case Management	1.1%	0.7%	2.2%	1.4%	0.0%
Care Coordination	2.8%	2.0%	5.4%	1.4%	3.2%
Other	12.4%	12.7%	9.7%	12.2%	12.9%
Types of Patients Treated in Primary Practice¹	Statewide	Honolulu	Hawai'i	Maui	Kaua'i
Disabled	47.0%	46.1%	44.8%	56.9%	52.0%
Houseless	29.6%	28.4%	22.4%	41.2%	44.0%
Medicare or Medicaid	76.9%	72.0%	86.6%	84.3%	84.0%
Opioid Addiction/Dependency	22.3%	20.7%	23.9%	27.5%	32.0%
Telehealth	27.5%	26.7%	22.4%	35.3%	44.0%
Transgender	11.4%	10.8%	10.4%	15.7%	16.0%

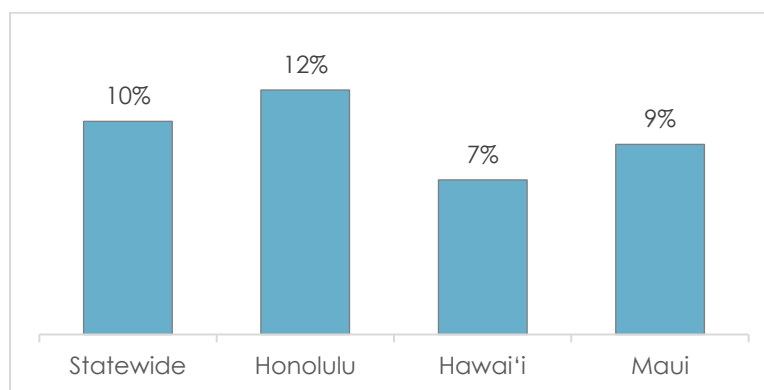
¹Indicates the percentage of nurses with a primary job function of direct patient care & education who reported that they treat each of the listed patient types in their primary nursing position.

LPN EDUCATION

LPN Education Key Findings At-a-Glance

- ▼ 81% were initially prepared for practice in an LPN certificate program.
- ▼ 54% obtained their initial education from an in-state institution.
 - LPNs in Honolulu County were less likely to have been educated in-state (43%) and more likely to have been educated in a foreign country (24%) than LPNs in other counties.
 - Hawai'i County has the highest percentage (75%) of LPNs who were initially educated at an in-state school.
- ▼ 24% report that their highest nursing education is an ADN or BSN.
 - In both Honolulu and Maui Counties, 27% of LPNs have an ADN or BSN.
 - Hawai'i County has the highest percentage of LPNs (85%) whose highest nursing education is an LPN certificate.
- ▼ 8% have completed some nursing education beyond their entry-into-practice program.
 - Maui County has the highest percentage (20%) of LPNs who have made academic progression in nursing.
 - In all other counties, 10% of LPNs or less have completed additional nursing education.
- ▼ 32% have a degree in a non-nursing field. Of these, 49% have a baccalaureate or graduate degree.
- ▼ 1 in 10 are currently enrolled in a degree-leading nurse education program. Of these:
 - 100% are enrolled in an ADN or BSN program.
 - 52% are enrolled in an in-state program.
 - 42% report that face-to-face is the primary mode of instructional delivery.

Figure 11. Percentage of LPNs in Each County Currently Enrolled in a Degree-Leading Nurse Education Program



Note. Kaua'i County had no LPNs who reported being currently enrolled in a degree-leading nurse education program.

Table 8. Educational Characteristics of LPNs.

<u>Initial Nurse Education</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
LPN Certificate	80.8%	75.6%	90.4%	85.7%	83.9%
RN Diploma	2.2%	2.3%	2.1%	2.6%	3.2%
ADN	2.7%	2.6%	3.2%	2.6%	3.2%
BSN	14.2%	19.5%	4.3%	9.1%	9.7%
<u>Location of Initial Nurse Education Program</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Hawai'i	53.8%	43.2%	74.5%	64.9%	71.0%
Other US State or Territory	28.5%	33.1%	19.1%	22.1%	19.4%
Foreign Country	17.7%	23.7%	6.4%	13.0%	9.7%
<u>Highest Nurse Education Completed</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
LPN Certificate	72.6%	69.2%	85.1%	66.2%	74.2%
RN Diploma	3.6%	3.6%	1.1%	6.5%	6.5%
ADN	6.9%	5.8%	6.4%	13.0%	6.5%
BSN	16.8%	21.4%	7.4%	14.3%	12.9%
<u>Location of Highest Nurse Education Program</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Hawai'i	53.8%	43.2%	74.5%	63.6%	74.2%
Other US State or Territory	28.1%	32.5%	19.1%	23.4%	16.1%
Foreign Country	18.1%	24.4%	6.4%	13.0%	9.7%
<u>Academic Progression in Nursing</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Obtained Degree beyond Initial Nurse Education	8.4%	6.5%	6.4%	19.5%	9.7%
<u>Non-Nursing Education</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Has a Degree in Any Non-Nursing Field	32.3%	35.4%	26.6%	26.0%	25.8%
<u>Highest Degree in a Non-Nursing Field</u>					
Associate Degree	50.8%	48.6%	56.0%	70.0%	37.5%
Baccalaureate Degree	44.1%	45.9%	40.0%	25.0%	62.5%
Master's Degree	4.0%	4.6%	4.0%	0.0%	0.0%
Practice Doctorate	1.1%	0.9%	0.0%	5.0%	0.0%
<u>Current Enrollment in Nurse Education Program</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Enrolled in Degree-Leading Nurse Education Program	10.2%	11.7%	7.4%	9.1%	0.0%
<u>Program Type</u>					
ADN	61.5%	55.9%	85.7%	57.1%	--
BSN	38.5%	44.1%	14.3%	42.9%	--
<u>Program Location</u>					
Hawai'i	51.9%	44.4%	85.7%	57.1%	--
Out of State	48.1%	55.6%	14.3%	42.9%	--
<u>Program Mode of Delivery</u>					
Face-to-Face	42.3%	38.2%	71.4%	28.6%	--
Distance Education	30.8%	44.1%	0.0%	0.0%	--
Hybrid Face-to-Face & Distance	26.9%	17.6%	28.6%	71.4%	--

Note. Indented rows indicate the distribution within the subset of nurses represented in the preceding unindented row.

LPN WORKFORCE RETENTION

LPN Retention Key Findings At-a-Glance

- ▼ 34% have been with their current employer for 10 years or longer.
- ▼ 31% have been working in their current position for 10 years or longer.
- ▼ Less than 15% of LPNs in each county are planning to leave their current position within the next 12 months.
 - Kaua'i County has the least stable LPN workforce of all the counties. It has the highest proportion of LPNs planning to leave their current position in the next year and the highest proportion of LPNs who are not sure whether they will leave or stay their current position.
 - Maui County has the most stable LPN workforce of the counties. It has the highest proportion of LPNs planning to stay in their positions for the next year and the lowest proportion of LPNs planning to leave their positions. However, 1 in 4 LPNs in Maui County is unsure of their plans for the next 12 months.
- ▼ Of the LPNs who are likely to leave their current position within the next year, 32% plan to leave the Hawai'i nursing workforce to move to another state, pursue a career in another field, or retire.

Figure 12. Percentage of LPNs in Each County Who Intend to Leave their Current Position within 12 Months

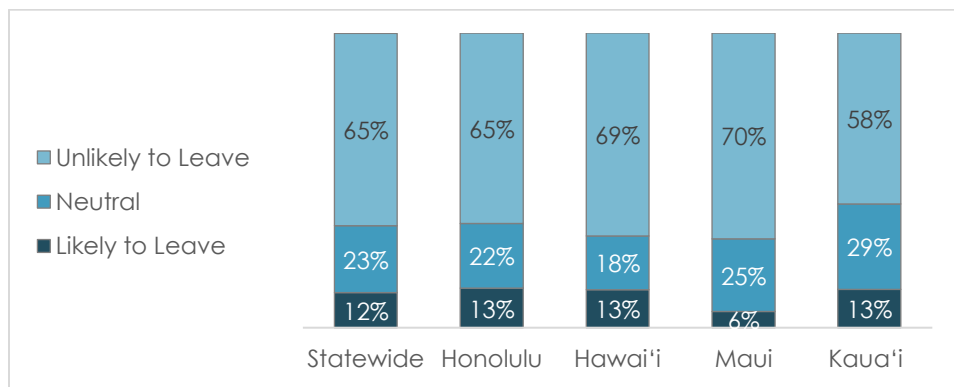


Figure 13. Percentage of LPNs in Each County Who Plan to Leave the Nursing Workforce within 5 Years

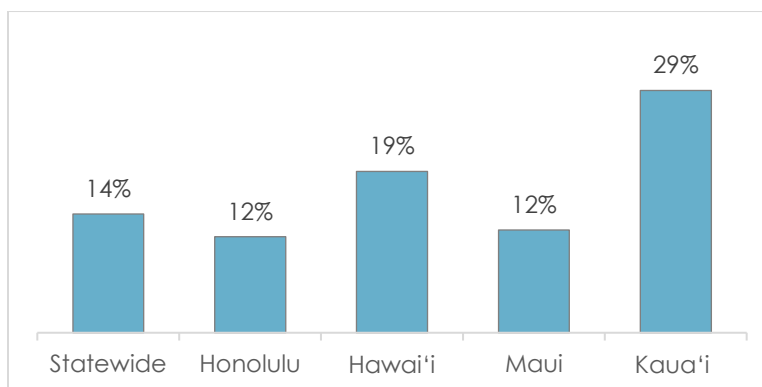


Table 9. Factors Related to the Retention of LPNs.

<u>Length of Time with Current Employer</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Less than 1 Year	16.0%	15.4%	13.6%	20.3%	10.3%
1 Year to Less than 3 Years	21.9%	24.2%	19.3%	16.2%	17.2%
3 Years to Less than 5 Years	12.6%	13.0%	11.4%	12.2%	13.8%
5 Years to Less than 10 Years	15.2%	17.1%	17.0%	8.1%	13.8%
10 Years or Longer	34.2%	30.4%	38.6%	43.2%	44.8%
<u>Length of Time in Current Position</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Less than 1 Year	19.1%	19.1%	16.9%	18.9%	13.8%
1 Year to Less than 3 Years	22.8%	24.2%	24.7%	17.6%	13.8%
3 Years to Less than 5 Years	12.2%	11.9%	12.4%	12.2%	13.8%
5 Years to Less than 10 Years	14.7%	16.7%	11.2%	13.5%	13.8%
10 Years or Longer	31.2%	28.0%	34.8%	37.8%	44.8%
<u>Intention to Leave Current Position within 12 Months</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Very Likely	8.4%	9.8%	9.7%	4.1%	6.5%
Likely	3.5%	3.6%	3.2%	1.4%	6.5%
Neutral	22.7%	22.0%	18.3%	24.7%	29.0%
Unlikely	12.8%	12.5%	10.8%	16.4%	16.1%
Very Unlikely	52.5%	52.1%	58.1%	53.4%	41.9%
<u>Reason for Intention to Leave Current Position within 12 Months¹</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Want a different position with current employer	8.5%	7.5%	20.0%	0.0%	0.0%
Want a different employer	28.8%	27.5%	20.0%	33.3%	50.0%
Want/plan to retire	15.3%	12.5%	20.0%	0.0%	25.0%
Want/plan to move out of state	10.2%	12.5%	10.0%	0.0%	0.0%
Want/plan to leave nursing for another field	6.8%	10.0%	0.0%	0.0%	0.0%
Other reason	30.5%	30.0%	30.0%	66.7%	25.0%
<u>Anticipated Career Plan 5 Years from Now</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Working in current position	38.4%	38.0%	41.9%	42.5%	35.5%
Working in a different specialty	18.9%	22.4%	14.0%	15.1%	12.9%
Working as a nurse manager	2.6%	2.3%	4.3%	1.4%	3.2%
Working as a nursing/healthcare administrator/executive	2.4%	2.6%	1.1%	4.1%	3.2%
Working as nurse faculty	1.5%	1.0%	1.1%	2.7%	0.0%
Working in a non-nursing field	2.8%	2.3%	3.2%	2.7%	3.2%
Retired	11.4%	9.2%	16.1%	9.6%	25.8%
Unsure	12.2%	12.9%	11.8%	11.0%	6.5%
Other plans	9.7%	9.2%	6.5%	11.0%	9.7%

¹Includes only those nurses who reported being likely or very likely to leave their positions within the next 12 months.

Hawai'i's RN Nursing Workforce

STATE OF THE RN WORKFORCE

Overall, the RN Workforce is in Approximate Equilibrium

As of 2019, there were approximately 460 vacant RN positions at healthcare facilities throughout the state (Healthcare Association of Hawai'i, 2019). These data align with DLIR's long-term occupational projections which estimate that 500 RNs will need to fill an average of 150 new positions plus 350 vacancies each year through 2026 (Hawai'i Department of Labor and Industrial Relations, 2019). Existing vacancies, plus anticipated vacancies, plus addition of new positions represent employer demand for RNs.

These positions will be filled by the supply of approximately 400 graduates from Hawai'i's entry-to-practice RN programs (Hawai'i State Center for Nursing, 2019b) and in-migration of RNs from other states². The approximate equality between employment demand and RN supply indicates Hawai'i's RN workforce is in equilibrium rather than a state of either shortage or surplus.

There is No Pipeline for the Preparation of Specialty RNs

Although the RN workforce is in equilibrium, employers report difficulty in finding RNs to fill specialty nursing roles (e.g.,

emergency/trauma, critical care, perioperative, etc.). Specialty RN roles account for 56% of RN vacancies (Healthcare Association of Hawai'i, 2019). Specialty RN positions are not well-suited to the competency level of new graduate RNs who, by virtue of HBON and accreditation requirements, are specifically prepared to enter practice as generalists.

Because schools of nursing enroll new students and graduate new prospective nurses at least once per calendar year, there is a steady stream of RNs available for employers who need to hire generalists.

There does not exist, however, a similar pipeline for specialty nurses because there is no coverage of specialty content in entry-to-practice RN curriculum. The exclusion of specialty content from the entry-to-practice RN curriculum stems from the fact that schools are required to teach students core RN competencies³. Students' mastery of core competencies is evaluated by the NCLEX-RN, the first-time pass rate for which has its own influence on schools' ongoing HBON approval and accreditation.

It is also important to note that schools of nursing cannot simply add two- or three-course

²15% of RNs who currently live out of state indicate an intention to move to Hawai'i within the next year. The survey did not ask these nurses the strength of their intention to relocate, but it is safe to assume that far less than 100% of the RNs who plan to relocate to Hawai'i will actually do so. As such, 15% of out of state RNs represents a very high theoretical upper-limit of the size of the potential workforce that may in-migrate from out of state.

³ AACN publishes a document called *The Essentials of Baccalaureate Education for Professional Nursing Practice*. These essentials form the foundation of baccalaureate nurse education curricula. However, the essentials were written specifically for BSN curriculum. Regardless of whether a nurse completes an ADN or a BSN program, they are taught the same foundational RN competencies. Because we have 4 ADN programs in Hawai'i, we are intentionally opting to use the more inclusive and general term of "core RN competencies."

specialty modules to the existing core RN curriculum. Such a curricular modification would likely exceed the limited number of credit hours allocated by the academic institution to major programs. Further, schools' lack the faculty and clinical placement resources to develop and offer specialty courses.

Because schools cannot produce a pipeline of specialty RNs ready to fill vacancies as they become available, employers bear the responsibility for developing their own specialty RNs. In hospitals, this usually involves the transition of existing staff RNs from generalist medical-surgical positions to vacant specialty positions. New specialty RNs are not immediately able to practice independently, however. Rather, nurses require a transition period during which they receive the training, orientation, and mentorship necessary to develop the competence to practice autonomously in their new role.

During this period of practice transition, experienced RNs support new specialty nurses in learning everything from unit protocols to the specialized clinical knowledge associated with a specific specialty practice. As a result, both the new RN and the experienced RN perform at lower levels of productivity until the new RN is

competent and comfortable enough to practice autonomously. The loss of productivity translates to increased costs to employers.

Implications for RN Workforce Development

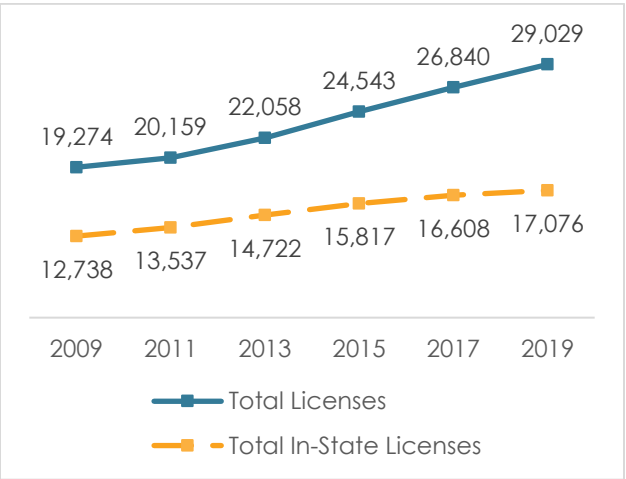
There does not exist any data to suggest that employer demand for specialty RNs will decrease over time. To satisfy the need for specialty nurses, we must work to identify a means to create a pipeline to produce specialty RNs. A pipeline would improve the time it takes for an RN to become proficient in a new role, reduce the productivity cost to employers for preparing new specialty RNs, and reduce pressure on schools of nursing to develop specialty RN education programs that they do not have the resources to support.

At least one state is piloting a consortium model of specialty RN development. The consortium comprises multiple schools and employers. A multi-organization academic-practice partnership distributes the resource burden for developing curriculum, providing instruction, and offering clinical placements across multiple schools and employers. While data demonstrating the efficacy of the pilot are not yet available, the model fits well into the already very collaborative environment that exists in Hawai'i.

RN LICENSES

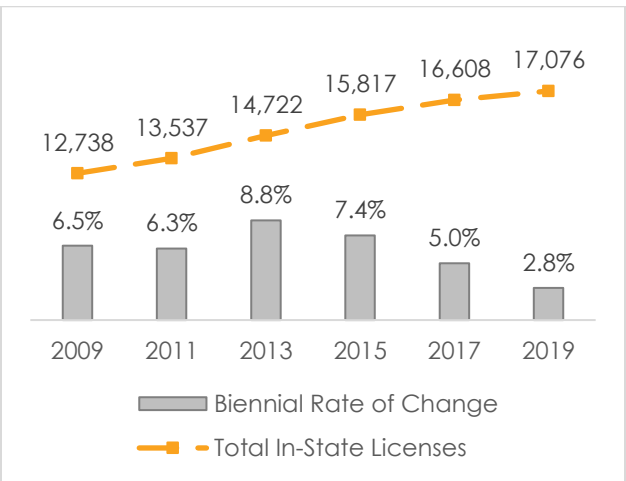
As of July 2019, 29,029 individuals held Hawai'i RN licenses (State of Hawai'i Professional and Vocational Licensing Division, 2019). Of these, 59% were Hawai'i residents. The size of the in-state RN workforce has increased every license renewal year since at least 2009, though the rate of increase has slowed since 2015. The number of Hawai'i RNs increased by 3% between 2017 and 2019 and by 34% since 2009.

Figure 14. Total Hawai'i RN Licenses, 2009-2019.



Between 2017 and 2019, all four counties experienced an increase in the size of their RN workforce by an average of 4%. Maui County's RN workforce increased by 5% which was the largest increase of all the counties. Honolulu County's 2% increase was the smallest of the counties.

Figure 15. In-State Hawai'i RN Licenses and Biennial Rate of Change, 2009-2019.



RN SURVEY RESPONSE RATE

In 2019, 23,130 RNs renewed their licenses (Hawai'i Board of Nursing, 2019). Of these, 10,723 completed the supply survey resulting in an overall RN response rate of 46%. HBON does not report license renewals by county, so to estimate the response rate and margin of error for RNs by county, the Center applied the geographic distribution of total licenses as of July 2019 (State of Hawai'i Professional and Vocational Licensing Division, 2019) to license renewals.

As indicated above, Hawai'i residents hold 59% of all RN licenses. Applying that same proportion of Hawai'i residents license renewals, we estimate that 13,606 residents renewed an RN license in 2019. The response rate and margin of error for resident RNs in the state and each county are presented in Table 10. Table 11 provides the proportion RNs who responded to the supply survey and who met the inclusion criteria for analysis which are described in detail in the [introduction of this report](#).

Table 10. RN Sample Size, Response Rate, and Margin of Error by County.

	Statewide	Honolulu	Hawai'i	Maui	Kaua'i
Estimated Renewing RNs Residing in Each County ¹	13,606	9,968	1,654	1,356	628
RNs Who Participated in the 2019 Workforce Supply Survey	7,153	5,182	902	701	368
RN Response Rate for 2019 Workforce Supply Survey	52.6%	52.0%	54.5%	51.7%	58.6%
Minimum ² Margin of Error for All Reported Frequencies (+/-)	0.80%	0.94%	2.20%	2.57%	3.29%

¹In total 23,130 RN licenses were renewed in 2019. HBON did not report renewals by location. This and all subsequent tables include the subset of nurses who reside in Hawai'i. The distribution of licenses by county was estimated based on the geographic distribution provided in PVL's July 29, 2019 Geographic Report of Current Licenses. ²Margin of error will vary depending on the number of respondents who answered each question.

Table 11. Employment Status of Hawai'i RNs.

	Statewide	Honolulu	Hawai'i	Maui	Kaua'i
Working in a Nursing License-Relevant Position	90.8%	91.9%	87.5%	86.7%	91.6%
Unemployed or Not Working in a License-Relevant Position	9.2%	8.1%	12.5%	13.3%	8.4%

Note. 98.8% of RNs who reside in Hawai'i and who work in a license-relevant role report a primary practice location in Hawai'i. Nurses practicing in Hawai'i comprise the subset of nurses who are included in subsequent tables.

GEOGRAPHIC DISTRIBUTION OF EMPLOYED RNS

RNs in Hawai'i are disproportionately more likely to work in Honolulu County than on the Neighbor Islands. Accounting for Honolulu's disproportional share of RNs is that 52% of all RNs in Hawai'i are employed at acute care hospitals, and Honolulu County has more hospitals than any other county. As a result of Honolulu's disproportionately higher share of employed RNs, Hawai'i and Maui Counties have a slightly lower proportion of RNs as compared to their respective shares of the state's population. Kaua'i County has an approximately equal proportion of the state's residential population and RN workforce.

Table 12. Geographic Distribution of the Residential Population and the RN Workforce by County.

County	% of State's Residential Population	% of RN Workforce
Honolulu	69.6%	73.5%
Hawai'i	13.8%	11.8%
Maui	11.5%	9.4%
Kaua'i	5.0%	5.2%

The maps below display the distribution of the RN workforce within each county relative to the distribution of the counties' residential populations. The distribution of employed nurses is represented by the dots. The largest dot in each county represents the zip code within that county in which the largest number of nurses work. The population distribution is represented by the variation of the shading of each county's map. The darkest area in each county's map indicates the zip code within that county with the largest residential population.

RNs work in nearly every zip code in every county. Though, they work in the highest concentrations in or near hospitals, the 31% of RNs who work in post-acute/long-term care, ambulatory, and home health settings are dispersed to even the most rural and remote to parts of each county.

Figure 16. Location of RN Employment versus Residential Population for the County of Honolulu.

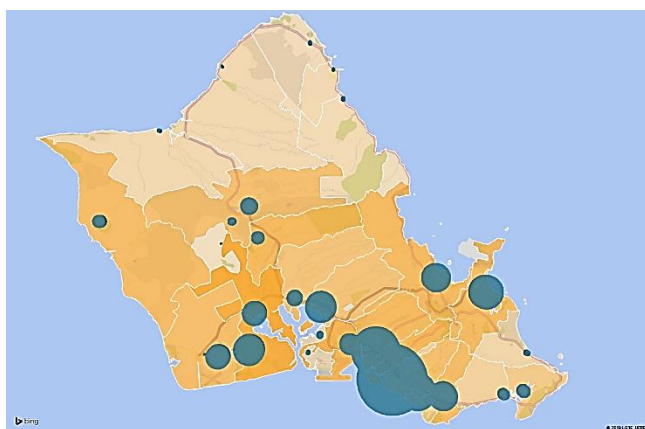


Figure 17. Location of RN Employment versus Residential Population for the County of Maui.



Figure 18. Location of RN Employment versus Residential Population for the County of Hawai'i.

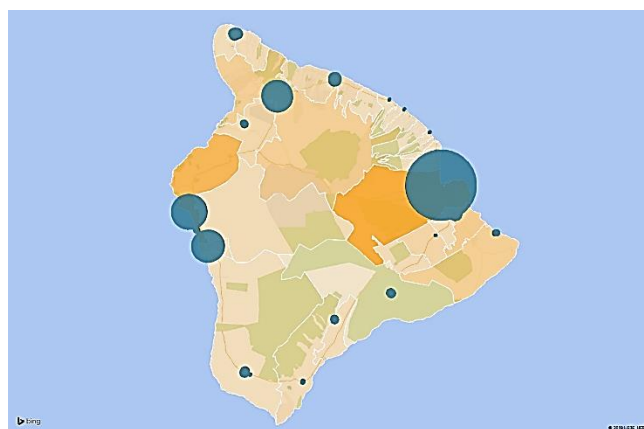
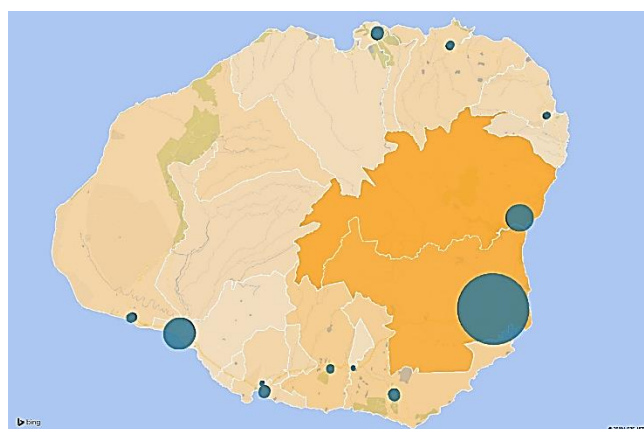


Figure 19. Location of RN Employment versus Residential Population for the County of Kaua'i.



RN DEMOGRAPHIC CHARACTERISTICS

RN Demographics Key Findings At-a-Glance

- ▼ 13% of the statewide RN workforce is male.
- ▼ The median age of RNs in the state is 44 years old. Honolulu County has the highest proportion of millennials (38%) and lowest proportion of Baby Boomers (23%), making it the youngest RN workforce of all the counties.
- ▼ The ethnic/racial distribution of the statewide RN workforce, overall, is not representative of the ethnic/racial distribution of the state's residential population.
 - Persons who are multi-racial, Black, Native Hawaiian, Other Asian, and Other Pacific Islander are all underrepresented in the RN workforce.
 - Persons who are Caucasian and Filipinx are overrepresented.

Figure 20. Distribution of the RNs' Birth Generation by County.

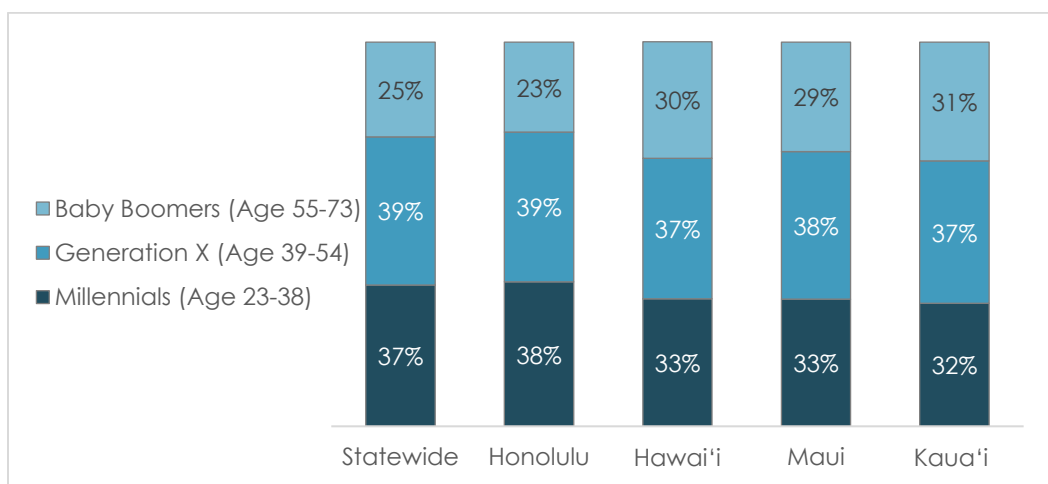


Figure 21. Distribution of the State's Residential Population and RNs' Race/Ethnicity.

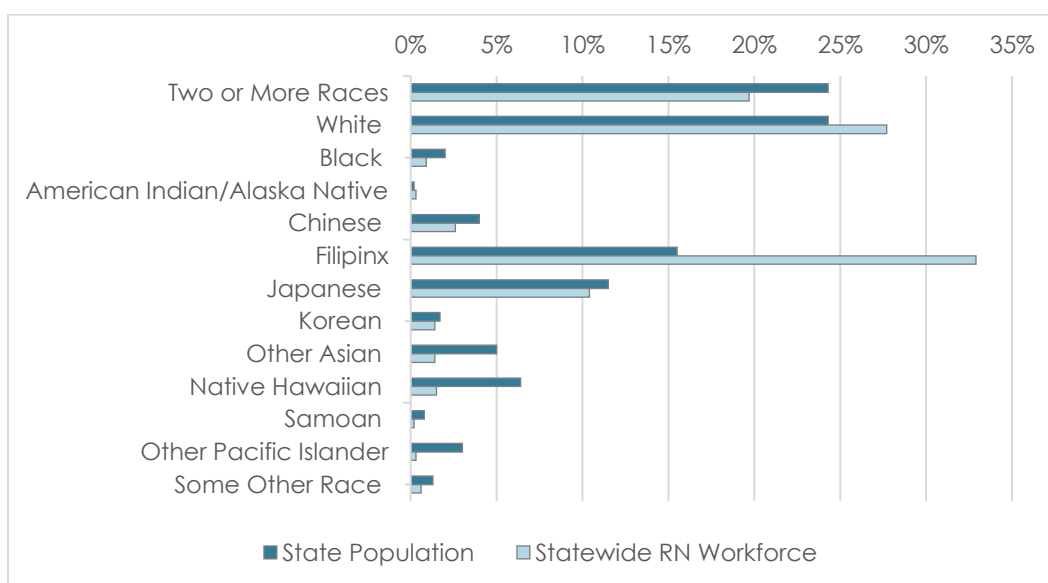


Table 13. Demographic Characteristics of the State's Residential Population and RNs.

<u>Gender</u>	<u>Population</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Males	49.7%	13.2%	13.9%	11.5%	11.8%	8.2%
Females	50.3%	86.2%	85.6%	88.0%	88.0%	91.2%
Other/Prefer Not to Say	--	0.6%	0.5%	**	**	**
<u>Age</u>	<u>Population</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Median Age in Years	39.2	44.0	44.0	46.0	45.0	45.0
20-24 Years	7.2%	1.5%	1.4%	1.3%	2.2%	1.5%
25-34 Years	15.4%	23.8%	24.3%	21.2%	20.8%	21.2%
35-44 Years	12.6%	25.9%	26.3%	23.6%	25.5%	25.9%
45-54 Years	12.2%	23.6%	24.1%	23.1%	22.6%	20.1%
55-59 Years	6.3%	9.0%	8.7%	10.4%	10.4%	10.4%
60-64 Years	5.5%	9.6%	8.9%	11.7%	12.4%	11.6%
65-74 Years	9.4%	6.1%	5.6%	8.2%	5.8%	8.5%
75 and Older Years	10.8%	0.5%	0.5%	**	**	**
<u>Generation</u>	<u>Population</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Millennials (Age 23-38)	--	36.8%	37.6%	33.2%	33.1%	32.0%
Generation X (Age 39-54)	--	38.5%	39.0%	36.6%	38.4%	37.1%
Baby Boomers (Age 55-73)	--	24.7%	23.4%	30.3%	28.5%	30.9%
<u>Race</u>	<u>Population</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Two or More Races	22.5%	19.7%	18.8%	25.6%	20.7%	19.5%
White	20.8%	27.7%	22.7%	42.6%	41.1%	38.0%
Black	2.1%	0.9%	0.9%	**	**	0.0%
American Indian/Alaska Native	0.1%	0.3%	0.2%	**	0.0%	**
Chinese	5.1%	2.6%	3.4%	**	**	0.0%
Filipinx	15.5%	32.9%	36.2%	18.0%	27.1%	33.6%
Japanese	13.8%	10.4%	12.0%	7.3%	5.3%	5.1%
Korean	2.6%	1.4%	1.7%	**	**	0.0%
Other Asian	6.2%	1.4%	1.6%	0.9%	**	**
Native Hawaiian	5.2%	1.5%	1.3%	2.2%	2.4%	**
Samoan	1.2%	0.2%	0.3%	0.0%	0.0%	0.0%
Other Pacific Islander	3.5%	0.3%	0.5%	0.0%	**	0.0%
Some Other Race	1.4%	0.6%	0.5%	1.0%	0.9%	**
<u>Native Hawaiian Ancestry</u>	<u>Population</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Any Part Native Hawaiian Ancestry ¹	24.4%	10.6%	9.9%	16.2%	13.1%	7.3%
<u>Hispanic/Latinx Ancestry</u>	<u>Population</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Hispanic/Latinx of Any Race	9.9%	7.7%	7.3%	10.1%	7.1%	8.9%

Note. Population data for the State of Hawai'i are from the American Community Survey Program of the US Census Bureau (United States Census Bureau, 2018).

¹Represents the proportion of individuals of Native Hawaiian ancestry in combination with any other ethnic or racial group. Census data also include persons of Other Pacific Islander ancestry.

RN EMPLOYMENT & PRIMARY PRACTICE CHARACTERISTICS

RN Employment Key Findings At-a-Glance

- ✔ 94% are employed in a position that requires their nursing license. 4% report that their primary position prefers or is enhanced by their RN license but does not require it.
- ✔ 82% hold one license-relevant position. Honolulu County has the highest proportion (19%) of RNs employed in multiple positions.
- ✔ 22% hold no full-time nursing positions and work on a part-time or per diem basis only. In Maui and Kaua'i Counties, 30% of RNs hold no full-time RN positions.
- ✔ RNs work for an average of 39 hours across all of their positions in a typical week. They work an average of 37 hours in a typical week in their primary position.
- ✔ 2% report that they work as travel nurses.
- ✔ 9% of the state's RNs are employed by nursing staffing agencies. Hawai'i County has the lowest proportion (7%) of agency RNs in the workforce while Kaua'i County has the highest (11%).

Table 14. Employment Characteristics of RNs.

<u>Relation of License to Primary Position</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
License is Required	94.3%	94.3%	95.0%	96.5%	94.0%
License is Preferred or Enhances Job Performance	4.4%	4.5%	4.3%	2.8%	4.4%
Not Reported	1.3%	1.2%	0.7%	0.7%	1.6%
<u>Number of License-Related Positions Held</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
1 Position	82.1%	81.5%	84.5%	83.5%	83.4%
2 Positions	14.5%	14.9%	12.9%	13.0%	14.7%
3+ Positions	3.5%	3.6%	2.6%	3.5%	1.9%
<u>Full-Time Equivalent Employment</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
At Least 1 Full-Time Position	78.1%	80.1%	78.3%	70.3%	70.1%
Part-Time or Per Diem Employment Only	21.9%	19.9%	21.7%	29.7%	29.9%
<u>Total Hours Worked in a Typical Week in All Positions</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Average Hours Worked per Week	39.0	39.3	38.9	39.1	37.7
19 Hours or Less	4.4%	4.0%	5.0%	4.2%	8.0%
20-40 Hours	70.0%	70.2%	67.8%	69.4%	68.4%
41 Hours or More	25.6%	25.8%	27.2%	26.4%	23.6%
<u>Total Hours Worked in a Typical Week in Primary Position Only</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Average Hours Worked per Week	37.0	37.0	37.0	37.0	36.0
19 Hours or Less	4.9%	4.5%	6.3%	4.6%	8.3%
20-40 Hours	79.2%	80.2%	73.6%	77.9%	78.0%
41 Hours or More	15.9%	15.4%	20.1%	17.5%	13.7%
<u>Travel Nurses</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Employed as a Travel Nurse	1.7%	1.3%	2.8%	2.4%	2.8%
<u>Agency Nurses</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Employed through Nursing Staffing Agency	9.2%	9.3%	6.7%	9.8%	10.5%

RN Primary Practice Key Findings At-a-Glance

- ▼ 52% of RNs statewide work in acute care hospitals. Hospitals are the most common employment setting for RNs in all four counties.
- ▼ RNs' top five practice specialties:
 - Adult-Gerontology (13%)
 - Medical-Surgical (11%)
 - Emergency/Trauma (6%)
 - Critical Care (6%)
 - Administration/Management (6%)
 - Other (17%)
- ▼ 67% report being staff nurses.
- ▼ 68% report that their primary job function involves providing direct patient care and education.
 - 11% report that their primary job function is administrative/managerial.
 - 12% report a primary job function of case management (4%) or care coordination (6%).
- ▼ 10% report providing care to telehealth patients in a typical week.
- ▼ 54% deliver care to houseless patients in a typical week.

Figure 22. Distribution of RNs' Primary Employment Setting Type.

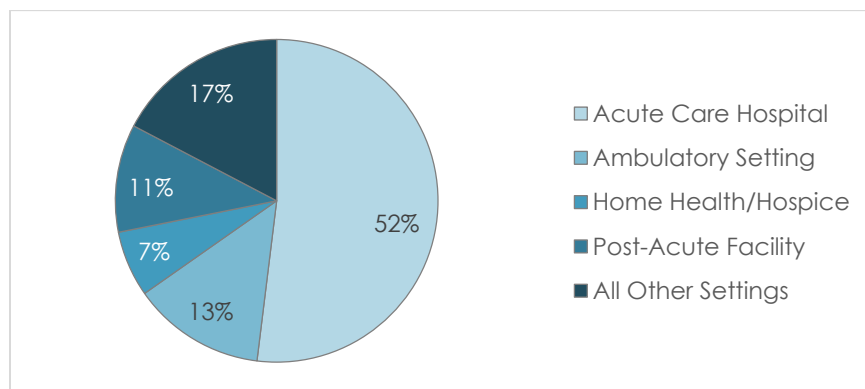


Figure 23. Distribution of RNs' Primary Job Function.

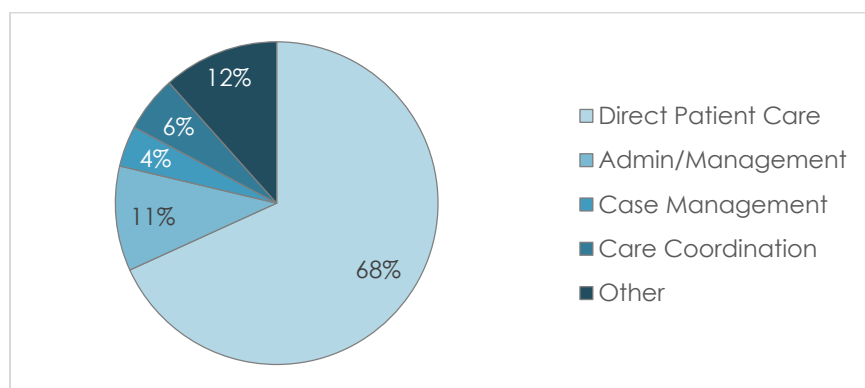


Table 15. Primary Practice Setting of RNs.

Primary Practice Setting	Statewide	Honolulu	Hawai'i	Mau	Kaua'i
Acute Care Hospital	51.9%	52.9%	49.1%	45.8%	46.5%
Ambulatory Setting	13.3%	12.3%	14.5%	19.9%	16.7%
Community Health Center	13.9%	11.6%	25.0%	15.9%	13.5%
Dialysis Clinic	20.5%	20.5%	19.2%	23.0%	15.4%
Outpatient Clinic/Urgent Care	39.5%	41.3%	28.8%	35.4%	53.8%
Provider's Office	10.7%	10.0%	15.4%	11.5%	3.8%
Same-Day Surgery Center	15.4%	16.6%	11.5%	14.2%	13.5%
Home Health/Hospice	6.6%	5.9%	8.3%	11.3%	6.4%
Home Health	59.8%	60.2%	55.9%	62.5%	70.0%
Hospice	40.2%	39.8%	44.1%	37.5%	30.0%
Post-Acute/Long-Term Care	10.8%	11.5%	9.5%	8.1%	10.3%
Assisted Living Facility	15.2%	17.3%	4.4%	6.5%	15.6%
Nursing Home/Extended Care Facility	72.9%	68.4%	92.6%	93.5%	71.9%
Rehabilitation Hospital	11.9%	14.3%	2.9%	0.0%	12.5%
All Other Settings	17.3%	17.4%	18.6%	15.0%	20.2%
College/University	6.3%	6.9%	3.8%	7.1%	6.3%
Correctional Facility	3.5%	3.6%	3.0%	3.5%	3.2%
Government/Regulatory Agency	9.6%	11.7%	6.0%	3.5%	1.6%
Insurance Company	21.0%	21.1%	27.1%	16.5%	14.3%
Public Health	6.5%	6.2%	6.8%	9.4%	7.9%
School Health Room/Clinic	8.4%	7.9%	6.8%	11.8%	11.1%
Other, Non-Clinical	13.7%	12.1%	16.5%	12.9%	19.0%
Other, Clinical	31.0%	30.5%	30.1%	35.3%	36.5%

Note. Distributions of individual settings sum to 100% within a given setting type.

Table 16. Primary Practice Specialty, Job Title, Job Function, and Patient Population of RNs.

Primary Practice Specialty	Statewide	Honolulu	Hawai'i	Maui	Kaua'i
Administration/Management	6.0%	5.7% ⁵	7.8% ⁵	7.7% ⁴	5.2%
Adult-Gerontology	12.8% ²	12.8% ²	13.5% ²	13.0% ²	12.3% ³
Cardiac	3.6%	4.3%	1.3%	2.3%	0.6%
Critical Care	6.3% ⁵	6.4% ⁴	5.6%	7.4% ⁵	3.9%
Emergency/Trauma	6.6% ⁴	5.6%	10.5% ³	7.0%	6.5% ⁴
Family Health	1.2%	0.9%	2.7%	1.6%	1.6%
Gastroenterology	1.1%	1.1%	0.6%	1.1%	1.3%
Maternal-Child/Obstetrics	4.7%	4.5%	6.0%	4.7%	5.8%
Medical-Surgical	11.2% ³	10.7% ³	10.4% ⁴	12.6% ³	13.5% ²
Neonatal	1.9%	2.3%	0.3%	0.0%	0.0%
Nephrology/Dialysis	2.8%	2.7%	2.2%	4.5%	2.3%
Nurse Education	1.2%	1.1%	1.4%	1.8%	2.3%
Oncology	2.1%	2.2%	1.7%	1.3%	2.6%
Palliative Care/Hospice	2.1%	1.9%	3.2%	3.1%	2.3%
Pediatrics	4.6%	5.1%	2.4%	3.1%	4.8%
Perioperative/Surgical	5.4%	5.6%	4.6%	5.6%	6.5% ⁵
Psychiatric/Mental Health	3.7%	3.8%	3.9%	3.2%	1.9%
Public/Population Health	2.0%	1.9%	2.7%	2.7%	2.3%
Rehabilitation	1.7%	2.2%	0.4%	0.2%	1.3%
School/Student Health	1.1%	1.0%	1.3%	1.4%	1.0%
Women's Health	1.0%	0.9%	1.2%	0.9%	1.9%
Other	16.9% ¹	17.3% ¹	16.3% ¹	14.8% ¹	20.3% ¹
Primary Practice Position Title	Statewide	Honolulu	Hawai'i	Maui	Kaua'i
Staff Nurse	67.0%	66.9%	63.1%	67.0%	64.7%
Nurse Manager	8.6%	7.9%	9.9%	12.6%	9.9%
Nurse Executive	2.0%	1.9%	2.9%	1.7%	2.2%
Nurse Faculty/Educator	2.2%	2.2%	2.4%	3.1%	2.6%
Case Manager	8.0%	8.3%	9.4%	7.0%	5.8%
Other	12.2%	12.8%	12.3%	8.6%	14.7%
Primary Practice Job Function	Statewide	Honolulu	Hawai'i	Maui	Kaua'i
Direct Patient Care & Education	68.2%	68.3%	63.7%	67.6%	68.2%
Teaching/Training of Nursing Students or Staff	3.3%	3.4%	3.6%	3.7%	4.1%
Administration/Management	10.5%	10.4%	11.2%	12.0%	11.3%
Quality/Practice Improvement	2.4%	2.5%	2.5%	2.3%	3.8%
Case Management	4.1%	4.1%	5.1%	4.5%	2.8%
Care Coordination	5.6%	5.7%	7.9%	4.4%	3.8%
Other	5.9%	5.6%	5.8%	5.6%	6.0%
Types of Patients Treated in Primary Practice¹	Statewide	Honolulu	Hawai'i	Maui	Kaua'i
Disabled	53.8%	51.8%	59.7%	59.8%	56.0%
Houseless	53.5%	52.5%	56.1%	59.3%	51.2%
Medicare or Medicaid	79.4%	77.8%	86.0%	85.4%	81.2%
Opioid Addiction/Dependency	43.4%	41.2%	50.9%	52.0%	40.6%
Telehealth	28.9%	29.1%	30.6%	28.8%	23.2%
Transgender	11.9%	10.4%	24.3%	9.2%	10.6%

¹Indicates the percentage of nurses with a primary job function of direct patient care and education who reported that they treat each of the listed patient categories in their primary nursing position.

RN CERTIFICATIONS

RN Certification Key Findings At-a-Glance

- ▼ 32% of RNs statewide hold a national certification in an RN specialization. The proportion of certified RNs does not vary substantively by county.
- ▼ The five most common RN specialties statewide are:
 - Acute/Critical Care (19%)
 - Medical-Surgical (14%)
 - Emergency/Trauma (13%)
 - Obstetric/Maternal-Newborn/Neonatal (8%)
 - Other (21%)
- ▼ Among the counties, the top 5 certifications are the same except in two counties in which Obstetric/Maternal-Newborn/Neonatal is not in the top 5:
 - In Honolulu County, fifth most common certification is Perioperative.
 - In Maui County, the fifth most common certification is Nurse Manager/Leader/Executive.

Table 17. National Registered Nurse Certifications Held by RNs.

Nationally Certified RNs	State	Honolulu	Hawai'i	Maui	Kaua'i
RNs with a National RN Certification	32.1%	32.8%	30.4%	30.8%	30.4%
Type of RN National Certification Held	State	Honolulu	Hawai'i	Maui	Kaua'i
Acute/Critical Care	18.7% ²	19.7% ²	13.2% ³	20.2%¹	14.4% ⁴
Ambulatory Care	3.4%	3.8%	1.8%	2.8%	1.0%
Care Coordination or Case Management	6.8%	7.1%	5.9%	5.6%	9.3%
Emergency/Trauma	12.8% ⁴	10.2% ⁴	19.6% ¹	15.2% ³	20.6% ²
Gerontology	3.3%	3.3%	3.2%	4.5%	2.1%
Hospice/Palliative Care	2.6%	2.3%	3.7%	3.4%	4.1%
Medical-Surgical	14.3% ³	14.9% ³	11.4% ⁵	11.8% ⁴	16.5% ³
Nephrology/Dialysis	4.4%	4.6%	3.7%	5.1%	3.1%
Nurse Education	2.4%	2.0%	2.7%	3.9%	4.1%
Nurse Manager/Leader/Executive	5.2%	4.5%	8.7%	9.0% ⁵	6.2%
Obstetric/Maternal-Newborn/Neonatal	7.8% ⁵	7.2%	12.8% ⁴	6.7%	10.3% ⁵
Orthopedic	1.2%	1.4%	0.9%	0.0%	1.0%
Pediatric	4.2%	4.7%	2.3%	2.8%	3.1%
Perioperative	6.6%	7.3% ⁵	4.1%	7.3%	5.2%
Psychiatric/Mental Health	2.8%	3.5%	1.8%	1.1%	0.0%
Rehabilitation	2.8%	3.5%	0.5%	1.1%	0.0%
Research	0.3%	0.3%	0.0%	0.0%	0.0%
Wound Care/Ostomy/Continence	3.0%	2.8%	4.6%	2.8%	3.1%
Other	20.6%¹	21.0%¹	19.6%¹	16.3% ²	27.8%¹

RN Employment by Certification Key Findings At-a-Glance

- ▼ For each of the five most common certifications, the majority of RNs report a practice specialty that is related to their certification.
 - 51% of critical care certified RNs report a specialty of critical care.
 - 64% of emergency/trauma certified RNs report a specialty of emergency/trauma.
 - 66% of medical-surgical certified RNs report a specialty of medical-surgical.
- ▼ Though most RNs work in a certification-relevant specialty, 20% to 30% (the proportion varies by certification) of RNs work in a specialty that is different from the area in which they are certified.

Table 18. Top Primary Practice Specialties of RNs Holding Each of the Top Five RN Certifications.

<u>Acute/Critical Care Certified RNs' Top 3 Specialties</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Critical Care	50.7%	49.1%	63.0%	52.8%	42.9%
Cardiology	11.6%	13.7%	3.7%	5.6%	0.0%
Other	8.4%	8.1%	11.1%	8.3%	21.4%
<i>Total in Top 3 Specialties</i>	<i>70.7%</i>	<i>70.9%</i>	<i>77.8%</i>	<i>66.7%</i>	<i>64.3%</i>
<u>Emergency/Trauma Certified RNs' Top 3 Specialties</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Emergency/Trauma	63.5%	61.9%	66.7%	66.7%	45.0%
Critical Care	11.0%	11.6%	9.5%	11.1%	15.0%
Other	6.7%	6.1%	9.5%	3.7%	15.0%
<i>Total in Top 3 Specialties</i>	<i>81.2%</i>	<i>79.6%</i>	<i>85.7%</i>	<i>81.5%</i>	<i>75.0%</i>
<u>Medical-Surgical Certified RNs Top Specialties</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Medical-Surgical	66.2%	63.7%	68.0%	81.0%	75.0%
Cardiology	3.8%	4.7%	0.0%	0.0%	0.0%
Other	7.2%	8.4%	4.0%	4.8%	6.2%
<i>Total in Top 3 Specialties</i>	<i>77.2%</i>	<i>76.8%</i>	<i>72.0%</i>	<i>85.8%</i>	<i>81.2%</i>
<u>Obstetric/Maternal-Child/Newborn Certified RNs' Top 3 Specialties</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Maternal-Child/Obstetrics	65.8%	61.3%	78.6%	72.7%	60.0%
Neonatal	12.4%	17.9%	0.0%	0.0%	0.0%
Women's Health	6.2%	4.7%	7.1%	18.2%	10.0%
<i>Total in Top 3 Specialties</i>	<i>84.4%</i>	<i>83.9%</i>	<i>85.7%</i>	<i>90.9%</i>	<i>70.0%</i>
<u>Other Certified RNs' Top 3 Specialties</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Oncology	12.6%	12.1%	14.3%	7.1%	19.2%
Administration/Management	7.6%	6.9%	14.3%	17.9%	0.0%
Other	23.1%	23.2%	21.4%	25.0%	30.8%
<i>Total in Top 3 Specialties</i>	<i>43.3%</i>	<i>42.2%</i>	<i>50.0%</i>	<i>50.0%</i>	<i>50.0%</i>

RN EDUCATION

RN Education Key Findings At-a-Glance

- ▼ 61% of RNs statewide entered practice with a BSN or higher. The proportion of RNs who were initially educated at the BSN or graduate level varies substantially by county. The proportion of RNs who were initially educated in BSN or graduate programs in each county is:
 - Honolulu County: 68%
 - Hawai'i County: 46%
 - Maui County: 38%
 - Kaua'i County: 38%
- ▼ 54% of RNs employed in Hawai'i were initially educated at an in-state nurse education program.
 - Honolulu County has the highest proportion (56%) of RNs initially educated in-state.
 - Hawai'i and Kaua'i Counties have the lowest proportion (50%) of RNs who were prepared for entry to practice in local nurse education programs.
- ▼ 19% have progressed academically since their initial nurse education.
- ▼ 33% have a degree in a non-nursing field. Of them, 66% report that their highest non-nursing degree is a baccalaureate or graduate degree.
- ▼ 6% of RNs are currently enrolled in a degree-leading nurse education program.
 - There are no substantial differences in the percentage of currently enrolled RNs by county.
 - Among the 6% of RNs currently enrolled in a degree-leading program:
 - 63% are enrolled in a graduate program in nursing.
 - 69% are enrolled in an out-of-state degree program.
 - 68% of currently enrolled RNs receive instruction entirely via distance education.

Figure 24. Distribution of RNs' Highest Nursing Education Completed by County

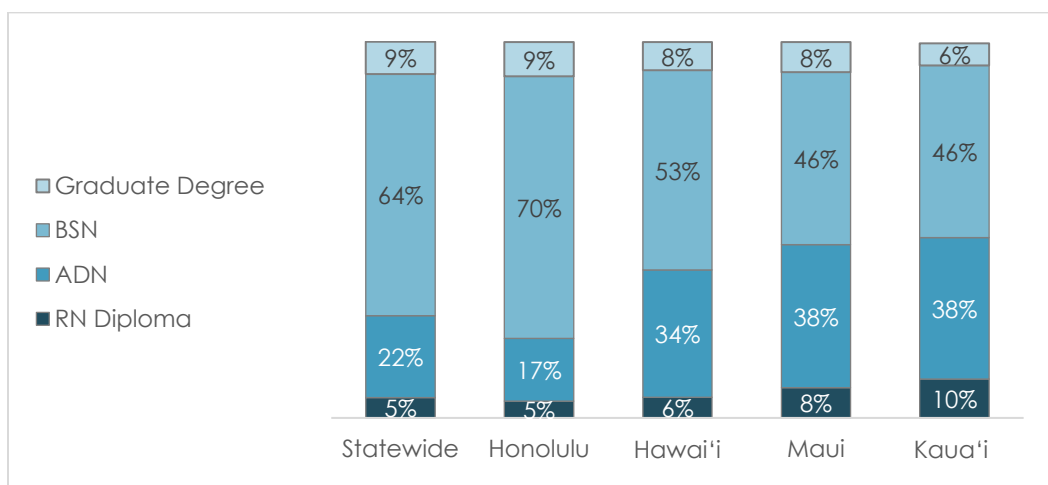


Table 19. Educational Characteristics of RNs.

<u>Initial Nurse Education</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
LPN Certificate	5.8%	4.8%	5.0%	12.0%	11.9%
RN Diploma	6.7%	5.9%	6.7%	9.5%	11.3%
ADN	26.8%	21.8%	42.6%	40.9%	38.9%
BSN	58.3%	65.2%	43.6%	34.8%	36.1%
GEPN Leading to MSN	2.0%	2.0%	1.9%	2.6%	1.9%
GEPN Leading to DNP	0.3%	0.4%	0.3%	0.2%	0.0%
GEPN Leading to PhD	0.0%	0.1%	0.0%	0.0%	0.0%
<u>Location of Initial Nurse Education Program</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Hawai'i	54.3%	56.2%	50.1%	52.2%	50.2%
Other US State or Territory	31.1%	27.5%	42.7%	36.4%	37.6%
Foreign Country	14.6%	16.3%	7.2%	11.4%	12.2%
<u>Highest Nurse Education Completed</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
LPN Certificate ¹	0.0%	0.0%	0.0%	0.2%	0.3%
RN Diploma	5.4%	4.5%	5.5%	8.0%	10.3%
ADN	21.8%	16.6%	33.8%	38.1%	37.6%
BSN	64.2%	69.7%	53.1%	45.8%	45.8%
MSN	7.4%	7.7%	6.4%	7.5%	5.6%
DNP	0.7%	0.8%	0.8%	0.5%	0.0%
PhD	0.5%	0.6%	0.3%	0.0%	0.3%
<u>Location of Highest Nurse Education Program</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Hawai'i	54.2%	56.6%	48.5%	51.1%	48.0%
Other US State or Territory	31.8%	27.9%	44.4%	37.6%	39.8%
Foreign Country	14.0%	15.5%	7.1%	11.3%	12.2%
<u>Highest Nurse Education is a BSN or Graduate Degree</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Has a BSN or Graduate Degree in Nursing	72.7%	78.9%	60.6%	53.7%	51.7%
<u>Academic Progression in Nursing</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Obtained Degree beyond Initial Nurse Education	18.9%	17.8%	19.7%	25.0%	26.3%

¹The completion of an RN diploma program, associate's degree in nursing, baccalaureate degree in nursing, or the baccalaureate-equivalent portion of a graduate entry program is required for RN licensure in the state of Hawai'i. Any fraction of a percentage point of nurses reporting that their highest nursing education as an LPN certificate is most likely the result of participant response error.

Table 20. Educational Characteristics of RNs, Continued

<u>Non-Nursing Education</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Has a Degree in Any Non-Nursing Field	33.1%	33.4%	30.8%	37.8%	29.5%
<u>Highest Degree in a Non-Nursing Field</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Associate Degree	34.2%	32.1%	36.9%	41.3%	47.9%
Baccalaureate Degree	50.9%	51.3%	52.3%	46.8%	44.7%
Master's Degree	12.5%	14.0%	9.0%	9.2%	6.4%
Practice Doctorate	2.2%	2.3%	1.4%	2.8%	1.1%
PhD	0.2%	0.3%	0.5%	0.0%	0.0%
<u>Current Enrollment in Nurse Education Program</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Currently Enrolled in Degree-Leading Nurse Education Program	5.9%	5.5%	5.7%	7.8%	7.2%
<u>Current Degree Program Type</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
ADN	0.3%	0.4%	0.0%	0.0%	0.0%
BSN	36.4%	32.1%	50.0%	51.2%	42.9%
MSN	45.5%	48.3%	32.5%	32.6%	47.6%
DNP	16.7%	17.5%	17.5%	16.3%	9.5%
PhD	1.1%	1.7%	0.0%	0.0%	0.0%
<u>Current Degree Program Location</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Hawai'i	30.7%	35.4%	27.5%	20.5%	4.5%
Out of State	69.3%	64.6%	72.5%	79.5%	95.5%
<u>Current Degree Program Mode of Delivery</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Face-to-Face	6.6%	9.2%	2.5%	0.0%	0.0%
Distance Education	67.6%	63.3%	85.0%	79.5%	77.3%
Hybrid Face-to-Face & Distance	25.8%	27.5%	12.5%	20.5%	22.7%

Note. Indented rows indicate the distribution within the subset of nurses represented in the preceding unindented row.

RN WORKFORCE RETENTION

RN Retention Key Findings At-a-Glance

- ▼ 35% have been with their current employer for 10 years or longer.
- ▼ 26% have been in their current position for 10 years or longer.
- ▼ 70% indicate that they are unlikely to leave their current position within the next 12 months.
 - Kaua'i County RNs are less likely than RNs in other counties to leave their current positions within the next year.
 - Of the 13% of RNs statewide who are likely or very likely to leave their current positions within the next year, 37% plan to leave the workforce for retirement, relocation out of state, or a career change to a non-nursing field.
- ▼ Within the next 5 years:
 - 12% of RNs plan to leave the nursing workforce for retirement or a non-nursing field.
 - 43% plan to be working in their current position.

Figure 25. Distribution of Length of Time RNs Have Been in their Current Positions.

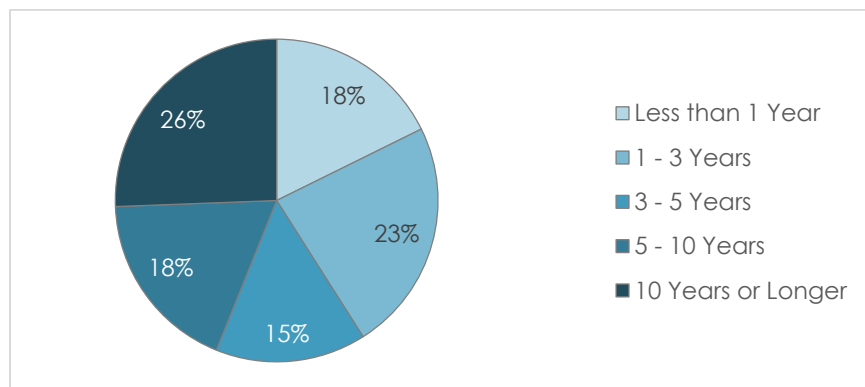


Figure 26. Distribution of RNs' Likelihood of Leaving their Current Position within the Next 12 Months.

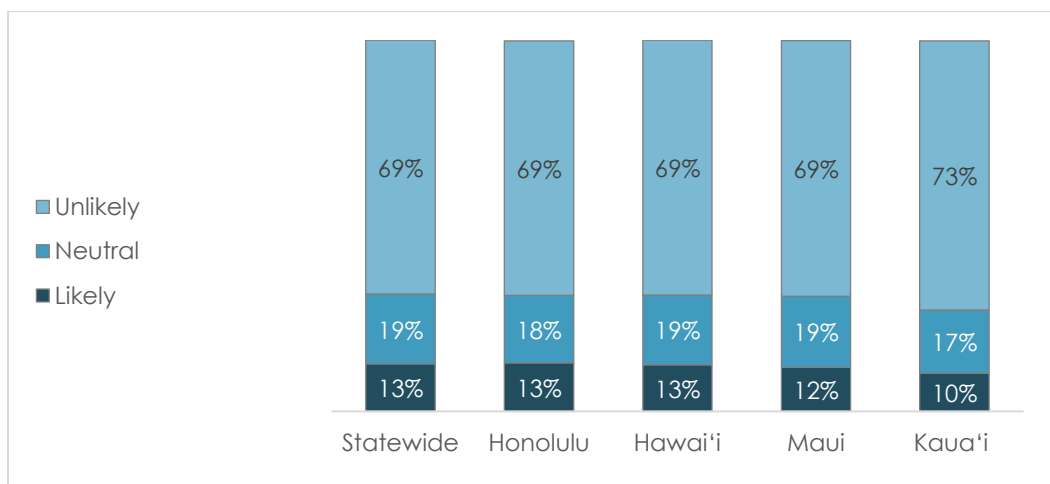


Table 21. Factors Related to the Retention of RNs.

<u>Length of Time with Current Employer</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Less than 1 Year	14.0%	13.2%	17.6%	13.9%	12.9%
1 Year to Less than 3 Years	18.9%	17.5%	22.5%	22.3%	21.9%
3 Years to Less than 5 Years	13.5%	13.4%	13.7%	13.7%	11.9%
5 Years to Less than 10 Years	19.0%	19.3%	18.5%	18.6%	17.7%
10 Years or Longer	34.7%	36.7%	27.7%	31.6%	35.5%
<u>Length of Time in Current Position</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Less than 1 Year	17.7%	16.9%	19.9%	18.0%	16.1%
1 Year to Less than 3 Years	23.3%	22.0%	27.6%	26.5%	25.5%
3 Years to Less than 5 Years	15.1%	15.1%	15.2%	16.2%	13.9%
5 Years to Less than 10 Years	18.3%	18.8%	18.9%	17.8%	15.5%
10 Years or Longer	25.6%	27.2%	18.5%	21.5%	29.0%
<u>Intention to Leave Current Position within 12 Months</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Very Likely	8.4%	8.7%	7.4%	7.9%	7.2%
Likely	4.4%	4.4%	5.2%	4.0%	3.1%
Neutral	18.8%	18.2%	18.8%	19.1%	17.0%
Unlikely	13.5%	13.5%	13.1%	14.3%	13.2%
Very Unlikely	55.0%	55.1%	55.6%	54.7%	59.4%
<u>Reason for Intention to Leave Current Position within 12 Months¹</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Want a different position with current employer	17.4%	18.7%	11.1%	16.4%	17.6%
Want a different employer	23.6%	23.6%	23.3%	20.9%	23.5%
Want/plan to retire	16.7%	16.5%	20.0%	14.9%	23.5%
Want/plan to move out of state	16.6%	17.3%	18.9%	11.9%	8.8%
Want/plan to leave nursing for another field	3.6%	3.9%	3.3%	1.5%	0.0%
Other reason	22.1%	20.0%	23.3%	34.3%	26.5%
<u>Anticipated Career Plan 5 Years from Now</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Working in current position	43.3%	43.6%	42.5%	43.9%	40.7%
Working in a different specialty	17.2%	17.7%	14.1%	16.5%	18.0%
Working as a nurse manager	3.1%	3.2%	2.9%	2.6%	5.0%
Working as a nursing/healthcare administrator/executive	3.7%	4.0%	2.8%	4.2%	2.2%
Working as nurse faculty	1.5%	1.5%	1.8%	1.8%	0.9%
Working in a non-nursing field	1.7%	1.4%	3.1%	0.9%	2.2%
Retired	10.3%	9.8%	12.8%	11.2%	14.5%
Unsure	13.7%	13.4%	13.4%	13.9%	11.7%
Other plans	5.6%	5.3%	6.6%	5.1%	4.7%

¹Includes only those nurses who reported being likely or very likely to leave their positions within the next 12 months.

Hawai'i's APRN Nursing Workforce

STATE OF THE APRN WORKFORCE

Hawai'i's APRN Workforce Continues to Grow

In 2010, the IOM indicated that practice transformation can only occur when “States and insurance companies . . . follow through with specific . . . changes that give patients the freedom to choose from a range of providers, including APRNs . . .” (p. 29). The IOM’s point was that the provider base to which patients have access increases when APRNs are allowed to practice to their full scope. However, data also suggest that reduction in barriers to APRNs’ scope of practice may have a small positive impact on overall APRN supply (Westat, 2015; Graves, et al., 2016), which may further improve access to care.

In Hawai'i, rapid increase in the statewide supply of APRNs coincides with the initiation of legislation intended to remove barriers to APRN scope of practice. In 2009, the Hawai'i state legislature passed Act 169, SLH 2009 which established APRNs as primary care providers for the purposes of insurance and recognized APRNs as having Global signature authority⁴ (Hawai'i State Center for Nursing, 2019a). Since then, the Hawai'i legislature has passed more than 20 acts that have further clarified or expanded APRN scope of practice. Concurrently, the number of APRNs in Hawai'i has increased by an average of 12.5% biennially. The cumulative effect of biennial

increases in the APRN workforce is that Hawai'i now has 82% more APRNs than we did 10 years ago (State of Hawai'i Professional and Vocational Licensing Division, 2019).

Increased Supply Does Not Equal Better Access to Care

Despite the addition of more than 550 APRNs to the workforce over the last decade, Hawai'i continues to have a shortage of APRNs (Hawai'i/Pacific Basin Area Health Education Center, 2019) and primary care providers (Hawai'i/Pacific Basin Area Health Education Center, 2018). The shortage of providers results in the continued existence of underserved populations (Health Resources & Services Administration, 2019b) and primary care health provider shortage areas (Health Resources & Services Administration, 2019a) in every county.

These data demonstrate that increasing the size of the APRN workforce is insufficient to remediate a provider shortage. We must also have a plan for leveraging a larger workforce by identifying and addressing barriers to APRNs' ability or willingness to work, especially as primary care providers, in underserved communities.

Having full scope of practice means that APRNs may work as independent practitioners without collaborative or supervisory practice

⁴ An exception to signature authority was that APRNs could not sign or endorse certificates of disability to allow disabled persons to obtain disabled parking privileges.

arrangements with physicians. Despite not being bound to work near or with physicians, APRNs are more likely to:

- ✦ work in Honolulu County than on the Neighbor Islands (see Table 24);
- ✦ work in counties' population centers rather than rural areas (see Figures 31 through 34);
- ✦ be employed (93%) than operate their own practices (7%); and
- ✦ report their primary position titles as being "staff APRN" (54%) than "independent provider" (21%).

As a result of their high employment rate in ambulatory settings and hospitals, APRNs are more likely to provide care in areas that already have a high concentration of providers rather than areas with the worst provider shortages. In turn, underserved areas continue to have access to an insufficient number of health providers.

Addressing barriers to APRNs willingness or ability to work in underserved areas may improve the maldistribution of a growing workforce. However, it is a separate challenge to improve the rate at which Hawai'i's primary care-certified NPs become primary care providers.

In the country, 87% of NPs are certified in a primary care focus area⁵ and 73% of all NPs report providing primary care. Hawai'i has the same proportion of primary care certified NPs (87%) as the country, but only 54% of Hawai'i NPs

are primary care providers. Our data do not make clear why qualified NPs do not provide primary care. Without information about what NPs identify as real or perceived barriers to primary care practice, we will continue to underutilize our primary care workforce.

Implications for APRN Workforce Development

In order to optimize the APRN workforce to the benefit of our most underserved populations, we must take a systematic approach to learning about the reasons that APRNs choose to be employed staff providers rather than self-employed independent practitioners. We know that environmental factors such as payment transformation⁶, reimbursement disparity, and a challenging small business environment⁷ have an impact on the financial viability of small practices. What we do not know, however, is the extent to which these environmental factors actually influence APRNs' decision to establish practices.

Further, we do not know the extent to which APRNs lack the small business management skills or knowledge of billing and coding that are vital to running successful practices. Without knowing the variables that influence our states' APRNs' practice decisions, we can neither formulate plans to address barriers to independent practice, nor devise strategies for improving the distribution of the APRN workforce to the areas in the state that need them the most.

⁵ Primary care focus areas include family, adult, adult-gerontology primary care, pediatric primary care, women's health, and gerontology (American Association of Nurse Practitioners, 2019).

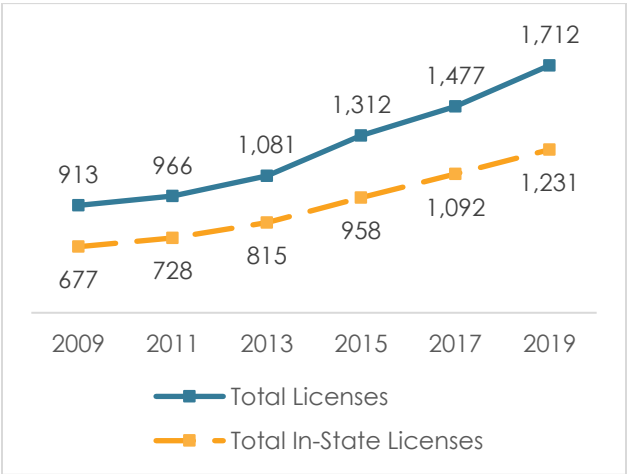
⁶ See (Hiraishi, 2019) for opinion and comment.

⁷ See (Peterkin, 2019) for opinion and comment.

APRN LICENSES, 2009-2019

The number of APRNs licensed to practice in Hawai'i has increased by an average of 3% per biennium since 2005. In 2019, 1,712 individuals were licensed to practice as APRNs in the state, of which 72% are residents (State of Hawai'i Professional and Vocational Licensing Division, 2019). Between 2009 and 2019, the number of Hawai'i residents holding APRN licenses increased by 82%. Between 2017 and 2019 the number of residents holding APRN licenses increased by 13%.

Figure 27. Total Hawai'i APRN Licenses, 2009-2019.

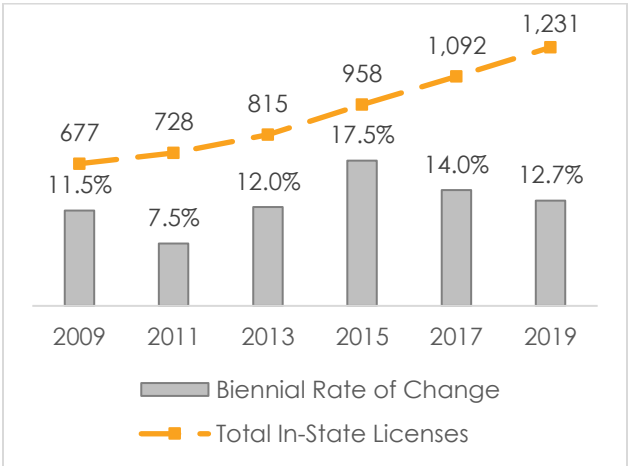


APRN SURVEY RESPONSE RATE

In 2019, 1,548 APRNs renewed their licenses (Hawai'i Board of Nursing, 2019). Of these, 801 completed the supply survey representing an overall APRN response rate of 52%. HBON does not report license renewals by county, so to estimate the response rate and margin

Between 2017 and 2019, the counties' APRN workforces increased by an average of 11%, but there was substantial variation how the counties' APRN workforces changed over the last two years. Maui County's APRN workforce increased by 27% which was the largest change in any county. Honolulu and Hawai'i Counties' APRN workforces increased by close to the county average (Honolulu=13%, Hawai'i=10%). Kaua'i County was the only county in which the number of APRNs decreased between 2017 and 2019 during which the county lost 6% of its APRN workforce.

Figure 28. In-State Hawai'i APRN Licenses and Biennial Rate of Change, 2009-2019.



of error for APRNs by county, the Center applied the geographic distribution of total licenses as of July 2019 (State of Hawai'i Professional and Vocational Licensing Division, 2019) to license renewals.

As indicated above, Hawai'i residents hold 72% of all APRN licenses. Applying that same proportion of Hawai'i residents to license renewals, we estimate that 1,113 residents renewed an APRN license in 2019. The response rate and margin of error for resident APRNs in the state and

each county are presented in Table 22. Table 23 provides the proportion APRNs who responded to the supply survey and who met the inclusion criteria for analysis which is described in detail in the [introduction of this report](#).

Table 22. APRN Sample Size, Response Rate, and Margin of Error by County.

	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Estimated Renewing APRNs Residing in Each County ¹	1,113	848	135	86	44
APRNs Who Participated in the 2019 Workforce Supply Survey	486	375	73	35	13
APRN Response Rate for 2019 Workforce Supply Survey	44.6%	44.2%	54.2%	40.7%	29.3%
Minimum ² Margin of Error for All Reported Frequencies (+/-)	3.28%	3.65%	3.78%	12.83%	23.08%

¹In total 1,548 APRN licenses were renewed in 2019. This and all subsequent tables include the subset of nurses who reside in Hawai'i. The distribution of licenses by county was estimated based on the geographic distribution provided in PVL's July 29, 2019 Geographic Report of Current Licenses.

²Margin of error will vary depending on the number of respondents who answered each question.

Table 23. Employment Status of APRNs.

	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Working in a Nursing License-Relevant Position	93.8%	94.1%	93.2%	88.6%	100.0%
Unemployed or Not Working in a License-Relevant Position	6.3%	5.9%	6.8%	11.4%	0.0%

Note. 97.6% of APRNs who reside in Hawai'i and who work in a license-relevant role report a primary practice location in Hawai'i. Nurses practicing in Hawai'i comprise the subset of nurses who are included in subsequent tables.

GEOGRAPHIC DISTRIBUTION OF EMPLOYED APRNS

APRNs are disproportionately distributed across the counties when compared to the distribution of the population. Despite being home to 70% of the residential population, Honolulu County is where nearly 80% of the APRN workforce works.

Table 24. Geographic Distribution of the Residential Population and the APRN Workforce by County

<u>County</u>	<u>% of State's Residential Population</u>	<u>% of APRN Workforce</u>
Honolulu	69.6%	78.3%
Hawai'i	13.8%	12.9%
Maui	11.5%	6.3%
Kaua'i	5.0%	2.5%

The maps below display the distribution of the APRN workforce within each county relative to the distribution of the counties' residential populations. The distribution of employed nurses

is represented by the dots. The largest dot in each county represents the zip code within that county in which the largest number of nurses work. The population distribution is represented by the variation of the shading of each county's map. The darkest area in each county's map indicates the zip code within that county with the largest residential population.

Within each county, APRNs work in the highest concentrations in population centers. They are more likely to work in ambulatory settings (41%) rather than hospitals (27%). Although APRNs work in community-based settings, they do not do so in high enough numbers to meet the needs of the entire population. In fact, there are several zip codes in each county in which no APRNs reported being employed.

Figure 29. Location of APRN Employment versus Residential Population for the County of Honolulu.

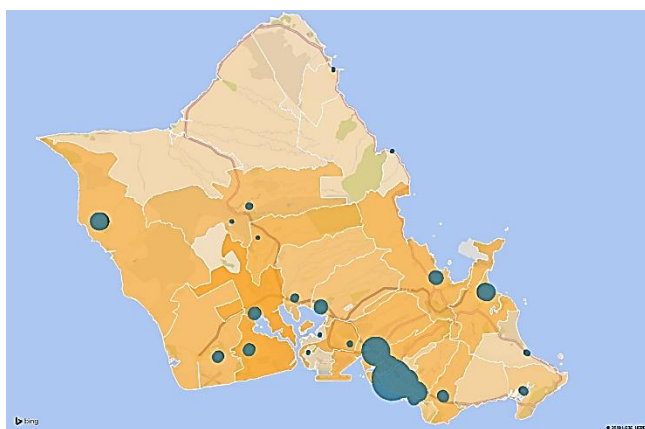


Figure 30. Location of RN Employment versus Residential Population for the County of Maui.

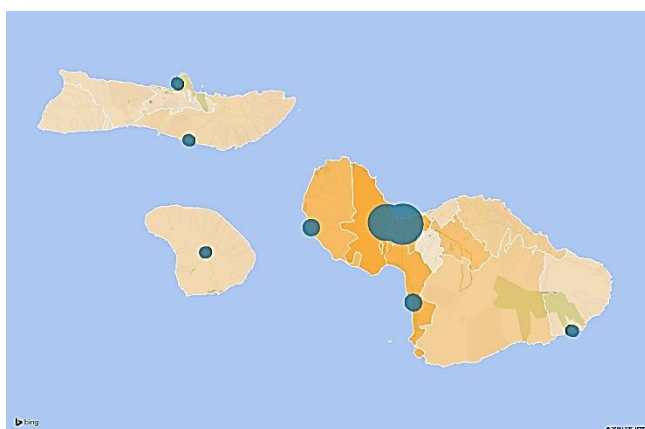


Figure 31. Location of APRN Employment versus Residential Population for the County of Hawai'i.

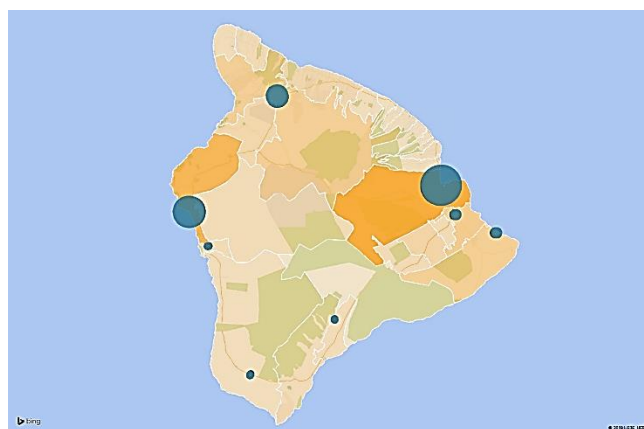
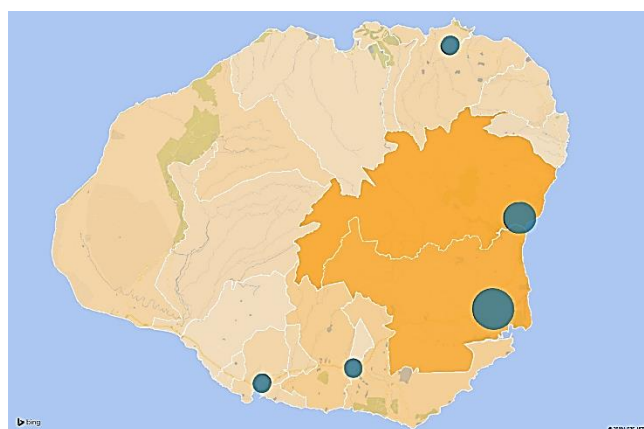


Figure 32. Location of RN Employment versus Residential Population for the County of Kaua'i.



APRN DEMOGRAPHIC CHARACTERISTICS

APRN Demographics Key Findings At-a-Glance

- ▼ 15% of APRNs statewide are male.
- ▼ The median age of APRNs in the state is 47 years old. On average, APRNs in Honolulu County are youngest (median age=46 years) and APRNs in Hawai'i County are oldest (median age=50 years).
- ▼ The statewide APRN workforce is not ethnically/racially representative of the state's residential population.
 - Caucasian persons are substantially overrepresented.
 - Native Hawaiian persons are substantially underrepresented.

Figure 33. Distribution of APRNs' Birth Generation by County.

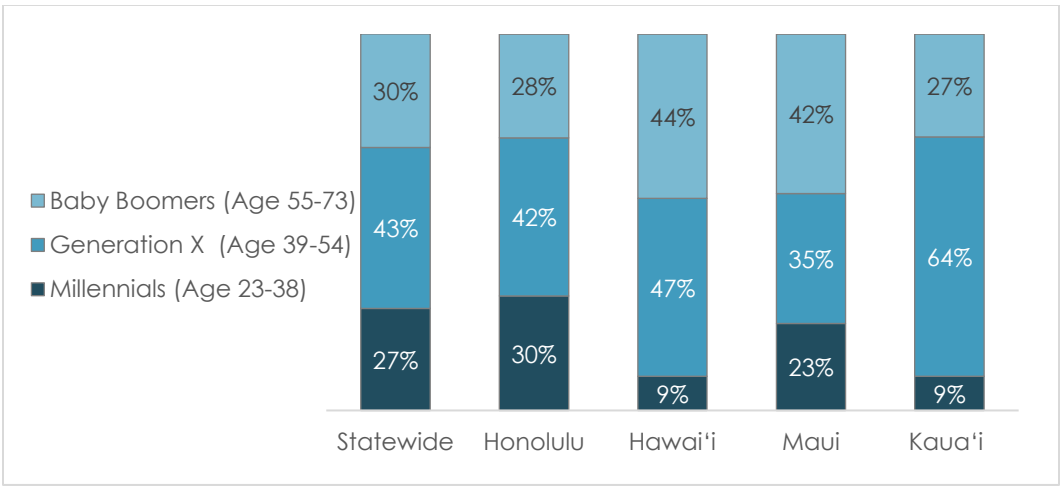


Figure 34. Distribution State's Residential Population and APRNs' Race/Ethnicity



Note. American Indian/Alaska Native, Samoan, and Other Race are omitted as the raw number of respondents is too small to report. Other Race is omitted as no respondents selected "Other Race" on the survey.

Table 25. Demographic Characteristics of the State's Residential Population and APRNs.

<u>Gender</u>	<u>Population</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Males	49.7%	15.4%	15.5%	12.3%	21.4%	0.0%
Females	50.3%	84.2%	83.9%	87.7%	78.6%	100.0%
Other/Prefer Not to Say	--	**	**	0.0%	0.0%	0.0%
<u>Age</u>	<u>Population</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Median Age in Years	39.2	46.5	46.0	52.0	46.5	50.0
20-24 Years	7.2%	0.2%	0.3%	0.0%	0.0%	0.0%
25-34 Years	15.4%	14.2%	15.8%	**	**	**
35-44 Years	12.6%	30.6%	31.2%	23.6%	30.8%	**
45-54 Years	12.2%	24.6%	24.9%	27.3%	**	54.5%
55-59 Years	6.3%	12.6%	13.6%	10.9%	**	0.0%
60-64 Years	5.5%	10.4%	9.1%	18.2%	**	**
65-74 Years	9.4%	7.1%	4.7%	14.5%	**	**
75 and Older Years	10.8%	**	**	0.0%	0.0%	0.0%
<u>Generation</u>	<u>Population</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Millennials (Age 23-38)	--	27.1%	30.4%	9.1%	23.1%	9.1%
Generation X (Age 39-54)	--	42.8%	42.1%	47.3%	34.6%	63.6%
Baby Boomers (Age 55-73)	--	30.2%	27.5%	43.6%	42.3%	27.3%
<u>Race</u>	<u>Population</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Two or More Races	22.5%	19.2%	18.3%	24.1%	20.8%	30.0%
White	20.8%	44.2%	41.3%	55.6%	62.5%	**
Black	2.1%	1.5%	**	**	0.0%	0.0%
American Indian/Alaska Native	0.1%	**	0.0%	**	0.0%	0.0%
Chinese	5.1%	5.3%	6.4%	**	0.0%	0.0%
Filipinx	15.5%	12.1%	13.1%	**	**	**
Japanese	13.8%	9.5%	11.2%	**	**	**
Korean	2.6%	2.9%	3.8%	0.0%	0.0%	0.0%
Other Asian	6.2%	1.7%	1.6%	**	0.0%	0.0%
Native Hawaiian	5.2%	1.9%	1.6%	**	**	0.0%
Samoa	1.2%	**	**	0.0%	0.0%	0.0%
Other Pacific Islander	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Some Other Race	1.4%	**	**	0.0%	**	**
<u>Native Hawaiian Ancestry</u>	<u>Population</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Any Part Native Hawaiian Ancestry ¹	24.4%	9.5%	9.1%	8.8%	**	**
<u>Hispanic/Latinx Ancestry</u>	<u>Population</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Hispanic/Latinx of Any Race	9.9%	6.8%	6.7%	**	**	**

Note. Population data for the State of Hawai'i are from the American Community Survey Program of the US Census Bureau (United States Census Bureau, 2018).

¹Represents the proportion of individuals of Native Hawaiian ancestry in combination with any other ethnic or racial group. Census data also include persons of Other Pacific Islander ancestry.

APRN EMPLOYMENT & PRIMARY PRACTICE CHARACTERISTICS

APRN Employment Key Findings At-a-Glance

- ▼ 97% are working in a position that requires their APRN license.
- ▼ 30% of APRNs statewide hold two or more license-relevant positions.
 - Kaua'i County has the lowest proportion (19%) of APRNs who hold multiple nursing positions.
 - Hawai'i County has the highest proportion (39%) of APRNs with multiple positions.
- ▼ 18% work on a part-time or per diem basis only.
 - APRNs in Kaua'i County (36%) are less likely than APRNs in other counties to have a full-time APRN position.
 - Maui County has the highest proportion (86%) of APRNs who practice on a full-time basis.
- ▼ APRNs work an average of 43 hours per week across all positions. Hawai'i County APRNs have the longest average work week (45 hours) and Kaua'i County APRNs have the shortest (39 hours).
- ▼ 4% of APRNs statewide indicate that they are employed through a nursing staffing agency.

Table 26. Employment Characteristics of APRNs.

<u>Relation of License to Primary Position</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
License is Required	97.4%	97.4%	100.0%	96.4%	90.9%
License is Preferred or Enhances Job Performance	1.7%	1.4%	0.0%	3.6%	9.1%
Not Reported	0.9%	1.2%	0.0%	0.0%	0.0%
<u>Number of License-Related Positions Held</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
1 Position	69.7%	69.7%	61.4%	75.0%	81.8%
2 Positions	23.0%	22.3%	33.3%	21.4%	9.1%
3+ Positions	7.3%	8.1%	5.3%	3.6%	9.1%
<u>Full-Time Equivalent Employment</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
At Least 1 Full-Time Position	82.0%	83.2%	78.6%	85.7%	63.6%
Part-Time or Per Diem Employment Only	18.0%	16.8%	21.4%	14.3%	36.4%
<u>Total Hours Worked in a Typical Week in All Positions</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Average Hours Worked per Week	42.5	42.5	45.3	42.1	39.4
19 Hours or Less	2.8%	2.3%	3.5%	0.0%	18.2%
20-40 Hours	56.7%	56.7%	47.4%	67.9%	45.5%
41 Hours or More	40.5%	41.0%	49.1%	32.1%	36.4%
<u>Total Hours Worked in a Typical Week in Primary Position Only</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Average Hours Worked per Week	42.5	42.5	45.3	42.1	39.4
19 Hours or Less	3.7%	3.2%	5.3%	0.0%	18.2%
20-40 Hours	71.6%	72.1%	66.7%	75.0%	54.5%
41 Hours or More	24.7%	24.7%	28.1%	25.0%	27.3%
<u>Travel Nurses</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Employed as a Travel Nurse	1.1%	0.9%	1.8%	3.6%	0.0%
<u>Agency Nurses</u>	<u>Statewide</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Employed through Nursing Staffing Agency	3.7%	3.8%	1.8%	10.7%	0.0%

APRN Primary Practice Key Findings At-a-Glance

- ▼ In all counties, the largest proportions of APRNs work in ambulatory settings and “other” settings.
 - Within ambulatory settings, 44% of APRNs work in outpatient or urgent care clinics.
 - The largest proportion (41%) of APRNs work in a variety of unspecified clinical environments.
 - The next largest proportion (24%) work in academic settings.
- ▼ The five most common practice specialties of APRNs statewide are:
 - Adult-Gerontology: 17%
 - Family Health: 16%
 - Pediatrics: 7%
 - Psychiatric/Mental Health: 7%
 - Other: 20%
- ▼ 23% of APRNs report that they work as independent practitioners.
- ▼ 80% of APRNs’ primary job function is to provide direct patient care and education.
- ▼ In a typical week:
 - 60% of APRNs provide care to patients who are houseless.
 - 42% of APRNs provide care to patients with opioid dependency.

Figure 35. Distribution of APRNs' Primary Employment Setting Type.

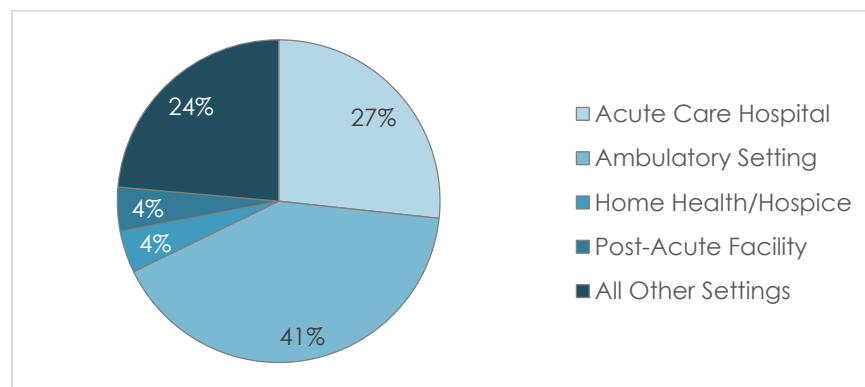


Figure 36. Distribution of APRNs' Primary Job Function.

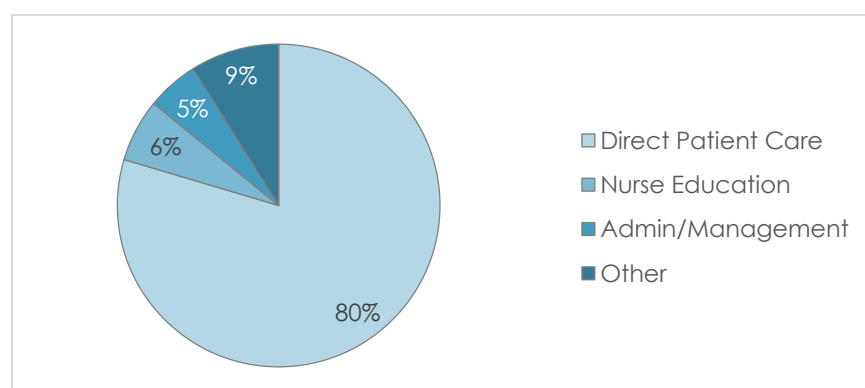


Table 27. Primary Practice Setting of APRNs.

Primary Practice Setting¹	State	Honolulu	Hawai'i	Maui	Kaua'i
Acute Care Hospital	26.7%	31.4%	8.8%	14.3%	0.0%
Ambulatory Setting	41.1%	38.8%	61.4%	32.1%	27.3%
Community Health Center	28.1%	26.7%	34.3%	33.3%	33.3%
Dialysis Clinic	1.6%	2.3%	0.0%	0.0%	0.0%
Outpatient Clinic/Urgent Care	43.8%	48.1%	28.6%	22.2%	66.7%
Provider's Office	24.3%	20.6%	37.1%	44.4%	0.0%
Same-Day Surgery Center	2.2%	2.3%	0.0%	0.0%	0.0%
Home Health/Hospice	4.2%	4.1%	1.8%	7.1%	9.1%
Home Health	63.2%	64.3%	0.0%	100.0%	0.0%
Hospice	36.8%	35.7%	100.0%	0.0%	100.0%
Post-Acute/Long-Term Care	4.4%	3.6%	1.8%	14.3%	27.3%
Nursing Home/Extended Care Facility	85.0%	75.0%	100.0%	100.0%	100.0%
Rehabilitation Hospital	15.0%	25.0%	0.0%	0.0%	0.0%
All Other Settings	23.6%	22.2%	26.3%	32.1%	36.4%
College/University	23.6%	20.0%	33.3%	33.3%	50.0%
Correctional Facility	2.8%	4.0%	0.0%	0.0%	0.0%
Government/Regulatory Agency	13.2%	17.3%	6.7%	0.0%	0.0%
Insurance Company	3.8%	5.3%	0.0%	0.0%	0.0%
Public Health	2.8%	1.3%	6.7%	11.1%	0.0%
School Health Room/Clinic	9.4%	9.3%	6.7%	22.2%	0.0%
Other, Non-Clinical	3.8%	2.7%	0.0%	0.0%	25.0%
Other, Clinical	40.6%	40.0%	46.7%	33.3%	25.0%

¹Distributions of individual settings sum to 100% within a given setting type.

Table 28. Primary Practice Specialty, Job Title, Job Function, and Patient Population of APRNs

<u>Primary Practice Specialty</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Administration/Management	2.5%	3.0%	0.0%	3.6%	0.0%
Adult-Gerontology	16.6% ²	16.9% ²	12.5% ³	17.9% ²	27.3%¹
Cardiac	2.9%	3.0%	5.4%	0.0%	0.0%
Critical Care	2.0%	1.8%	1.8%	7.1% ³	0.0%
Emergency/Trauma	2.0%	1.8%	1.8%	7.1% ³	0.0%
Family Health	16.1% ³	13.0% ³	28.6%¹	25.0%¹	9.1% ³
Maternal-Child/Obstetrics	2.9%	2.4%	5.4%	7.1% ³	0.0%
Medical-Surgical	1.6%	1.5%	0.0%	7.1% ³	0.0%
Neonatal	1.3%	1.8%	0.0%	0.0%	0.0%
Nephrology/Dialysis	1.1%	1.5%	0.0%	0.0%	0.0%
Nurse Education	2.2%	2.1%	5.4%	0.0%	0.0%
Oncology	2.5%	2.4%	3.6%	0.0%	9.1% ³
Palliative Care/Hospice	2.0%	2.4%	0.0%	0.0%	9.1% ³
Pediatrics	7.4% ⁴	8.0% ⁴	7.1% ⁵	3.6%	9.1% ³
Perioperative/Surgical	1.6%	2.1%	0.0%	0.0%	0.0%
Psychiatric/Mental Health	7.4% ⁴	6.8%	8.9% ⁴	7.1% ³	9.1% ³
Public/Population Health	0.7%	0.6%	0.0%	3.6%	0.0%
Rehabilitation	0.4%	0.6%	0.0%	0.0%	0.0%
School/Student Health	0.7%	0.3%	1.8%	3.6%	0.0%
Women's Health	6.3%	7.7% ⁵	0.0%	3.6%	9.1% ³
Other	19.9%¹	20.7%¹	17.9% ²	3.6%	18.2% ²
<u>Primary Practice Position Title</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Independent Practitioner	22.5%	18.9%	33.3%	33.3%	30.0%
Staff Nurse	61.9%	64.7%	59.3%	40.7%	60.0%
Nurse Manager	2.3%	2.5%	0.0%	7.4%	0.0%
Nurse Executive	2.3%	2.8%	0.0%	3.7%	0.0%
Nurse Faculty/Educator	7.4%	6.8%	7.4%	14.8%	10.0%
Case Manager	0.9%	1.2%	0.0%	0.0%	0.0%
Other	2.6%	3.1%	0.0%	0.0%	0.0%
<u>Primary Practice Job Function</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Direct Patient Care & Education	79.6%	78.8%	89.5%	75.0%	72.7%
Teaching/Training of Nursing Students or Staff	6.3%	6.1%	8.8%	10.7%	0.0%
Administration/Management	5.2%	5.8%	0.0%	7.1%	9.1%
Quality/Practice Improvement	2.4%	2.6%	0.0%	0.0%	9.1%
Case Management	0.2%	0.3%	0.0%	0.0%	0.0%
Care Coordination	2.4%	2.6%	0.0%	7.1%	0.0%
Other	3.9%	3.8%	1.8%	0.0%	9.1%
<u>Types of Patients Treated in Primary Practice¹</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Disabled	64.8%	64.1%	70.6%	65.0%	75.0%
Houseless	59.6%	58.7%	66.7%	55.0%	62.5%
Medicare or Medicaid	88.3%	87.3%	94.1%	95.0%	75.0%
Opioid Addiction/Dependency	42.1%	40.5%	49.0%	40.0%	50.0%
Telehealth	41.5%	42.1%	45.1%	35.0%	25.0%
Transgender	16.6%	15.4%	19.6%	15.0%	12.5%

¹Indicates the percentage of nurses with a primary job function of direct patient care and education who reported that they treat each of the listed patient categories in their primary nursing position.

APRN CERTIFICATIONS

APRN Certification Key Findings At-a-Glance

- ▼ 79% of APRNs in Hawai'i are certified as NPs.
 - Of these, the majority (65%) hold an FNP certification.
 - 62% of FNPs report that they are primary care providers. Among the counties, Hawai'i County has the highest proportion (77%) of FNPs who provide primary care.
- ▼ 2% of APRNs in Hawai'i hold multiple APRN certifications. Of these 100% hold at least one NP certification.
- ▼ Certified Nurse Midwives comprise the smallest subset (4%) of all APRNs in the state.

Figure 37. Distribution of APRN Certifications.

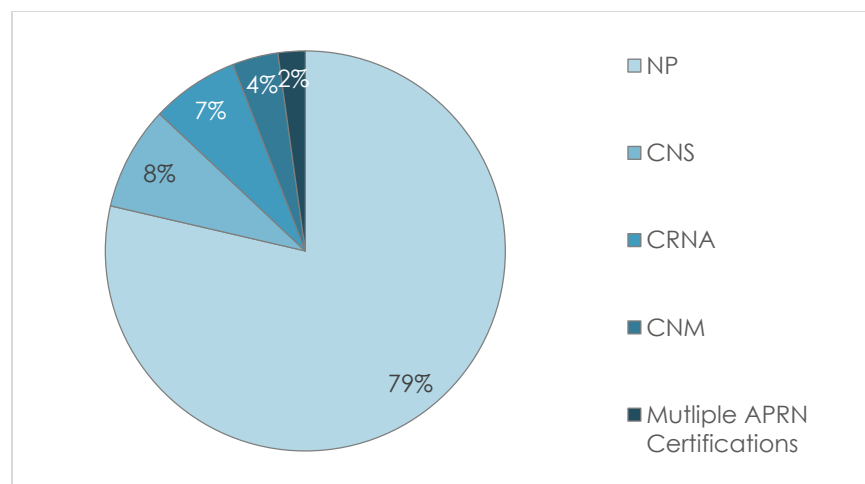


Figure 38. Percent of FNPs, Primary Care PNP, and Primary Care AGNPs Who Provide Primary Care in Each County.

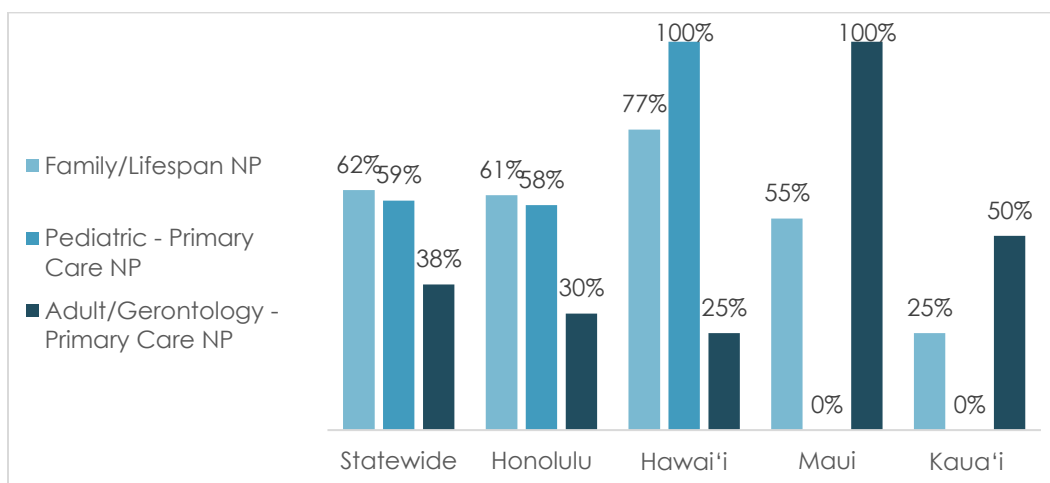


Table 29. Types of Certifications Held by APRNs.

	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Nurse Practitioner	78.7%	77.7%	82.5%	85.7%	81.8%
Family/Lifespan NP	64.5%	62.5%	80.9%	58.3%	44.4%
Adult/Gerontology - Primary Care NP	13.9%	14.5%	8.5%	20.8%	22.2%
Pediatric - Primary Care NP	8.5%	9.3%	4.3%	4.2%	11.1%
Adult/Gerontology - Acute Care NP	7.7%	8.9%	2.1%	4.2%	0.0%
Psychiatric/Mental Health - Lifespan NP	3.6%	3.7%	2.1%	4.2%	0.0%
Women's Health NP	3.6%	4.1%	0.0%	0.0%	11.1%
Other NP	2.5%	3.0%	0.0%	4.2%	0.0%
Neonatal NP	1.4%	1.5%	2.1%	0.0%	0.0%
Psychiatric/Mental Health - Adult NP	1.4%	0.7%	4.3%	0.0%	11.1%
Pediatric - Acute Care NP	0.8%	0.7%	0.0%	4.2%	0.0%
Clinical Nurse Specialist	8.4%	9.0%	5.3%	7.1%	9.1%
Adult/Gerontology CNS	56.4%	61.3%	33.3%	50.0%	100.0%
Women's Health CNS	30.8%	22.6%	66.7%	50.0%	0.0%
Other CNS	12.8%	16.1%	0.0%	0.0%	0.0%
Family/Lifespan CNS	2.6%	3.2%	0.0%	0.0%	0.0%
Certified Registered Nurse Anesthetist	7.1%	7.5%	5.3%	0.0%	0.0%
Certified Nurse Midwife	3.7%	3.8%	5.3%	0.0%	9.1%
Multiple Types of APRN Certifications Held	2.2%	2.0%	1.8%	7.1%	0.0%

Table 30. Primary Care Certified APRNs Working as Primary Care Providers

<u>APRNs Working as Primary Care Providers</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Nurse Practitioner					
Psychiatric/Mental Health - Adult NP	80.0%	100.0%	50.0%	0.0%	100.0%
Family/Lifespan NP	61.8%	60.5%	77.4%	54.5%	25.0%
Pediatric - Primary Care NP	59.1%	57.9%	100.0%	0.0%	0.0%
Psychiatric/Mental Health - Lifespan NP	50.0%	42.9%	100.0%	0.0%	0.0%
Adult/Gerontology - Primary Care NP	37.5%	30.0%	25.0%	100.0%	50.0%
Women's Health NP	18.2%	11.1%	0.0%	100.0%	0.0%
Clinical Nurse Specialist					
Family/Lifespan CNS	100.0%	100.0%	0.0%	0.0%	0.0%
Adult/Gerontology CNS	50.0%	37.5%	100.0%	50.0%	0.0%
Women's Health CNS	28.6%	25.0%	0.0%	0.0%	0.0%

Note. Represents the proportion of APRNs within each type of certification who reported "Yes" on a survey question that asked "Are you a primary care provider?"

APRN EDUCATION

APRN Education Key Findings At-A-Glance

- ▼ 25% received their initial educational preparation for nursing in a GEPN program.
- ▼ 48% initially completed a BSN program.
- ▼ 44% completed their initial nursing education at an in-state institution.
- ▼ 82% hold a Master's degree as their highest nursing degree.
- ▼ 16% have a DNP or PhD in nursing.
- ▼ 76% have completed a nurse education program higher than the program that initially prepared them for entry into practice.
- ▼ 45% have a degree in a non-nursing field. Of these, 33% hold a non-nursing graduate degree.
- ▼ 6% are currently enrolled in a degree-leading program in nursing. Of these:
 - 84% are enrolled in a DNP program.
 - 58% are enrolled in an out-of-state institution.
 - 69% are receiving instruction entirely by distance education.

Table 31. Educational Characteristics of APRNs.

<u>Initial Nurse Education</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
LPN Certificate	6.0%	4.6%	10.5%	14.3%	9.1%
RN Diploma	4.9%	5.8%	1.8%	3.6%	0.0%
ADN	16.1%	15.6%	19.3%	3.6%	72.7%
BSN	48.0%	48.3%	56.1%	42.9%	9.1%
GEPN Leading to MSN	23.4%	24.0%	10.5%	35.7%	9.1%
GEPN Leading to DNP	1.5%	1.7%	1.8%	0.0%	0.0%
<u>Location of Initial Nurse Education Program</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Hawai'i	43.9%	48.0%	22.8%	32.1%	63.6%
Other US State or Territory	52.0%	47.1%	73.7%	67.9%	36.4%
Foreign Country	4.1%	4.9%	3.5%	0.0%	0.0%
<u>Highest Nurse Education Completed</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
ADN	0.4%	0.3%	0.0%	0.0%	9.1%
BSN	1.7%	1.7%	3.5%	0.0%	0.0%
MSN	81.5%	82.4%	75.4%	89.3%	72.7%
DNP	13.1%	11.6%	21.1%	7.1%	18.2%
PhD	3.2%	4.0%	0.0%	3.6%	0.0%
<u>Location of Highest Nurse Education Program</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Hawai'i	49.6%	53.3%	31.6%	42.9%	63.6%
Other US State or Territory	50.4%	46.7%	68.4%	57.1%	36.4%
<u>Highest Nurse Education is a Doctoral Degree</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Has a DNP or PhD in Nursing	16.3%	15.6%	21.1%	10.7%	18.2%
<u>Academic Progression in Nursing</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Obtained Degree beyond Initial Nurse Education	75.5%	75.1%	86.0%	67.9%	81.8%

Table 32. Educational Characteristics of APRNs, Continued

<u>Non-Nursing Education</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Has a Degree in Any Non-Nursing Field	45.2%	44.2%	47.4%	53.6%	45.5%
<u>Highest Degree in a Non-Nursing Field</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Associate Degree	11.4%	8.5%	25.9%	13.3%	40.0%
Baccalaureate Degree	55.2%	53.6%	37.0%	80.0%	60.0%
Master's Degree	24.8%	28.8%	25.9%	0.0%	0.0%
Practice Doctorate	4.8%	6.5%	0.0%	0.0%	0.0%
PhD	3.8%	2.6%	11.1%	6.7%	0.0%
<u>Current Enrollment in Nurse Education Program</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Currently Enrolled in Degree-Leading Nurse Education Program	6.0%	6.4%	5.3%	7.1%	0.0%
<u>Current Degree Program Type</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
MSN	12.0%	10.0%	0.0%	50.0%	--
DNP	84.0%	85.0%	100.0%	50.0%	--
PhD	4.0%	5.0%	0.0%	0.0%	--
<u>Current Degree Program Location</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Hawai'i	42.3%	47.6%	0.0%	0.0%	--
Out of State	57.7%	52.4%	100.0%	100.0%	--
<u>Current Degree Program Mode of Delivery</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Face-to-Face	3.8%	4.8%	0.0%	0.0%	--
Distance Education	69.2%	66.7%	50.0%	100.0%	--
Hybrid Face-to-Face & Distance	26.9%	28.6%	50.0%	0.0%	--

Note. Indented rows indicate the distribution within the subset of nurses represented in the preceding unindented row.

APRN WORKFORCE RETENTION

APRN Retention Key Findings At-a-Glance

- ✎ Of APRNs who are employed, 24% have been with their current employer for 10 years or longer.
- ✎ 18% have been in their current position for 10 years or longer.
- ✎ 15% report that they are likely to leave their current position within the next 12 months. Of these, 30% plan to leave the state's workforce to relocate out of state or retire.
- ✎ Within the next 5 years:
 - 9% of APRNs expect to be retired from the workforce.
 - 48% plan to be working in their current position.

Figure 39. Distribution of APRNs' Likelihood of Leaving their Current Position within the Next 12 Months.

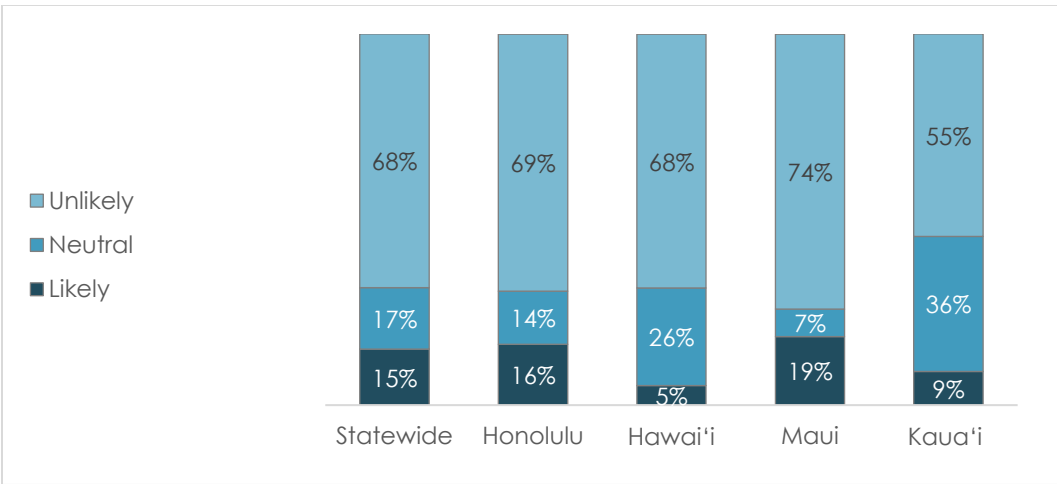
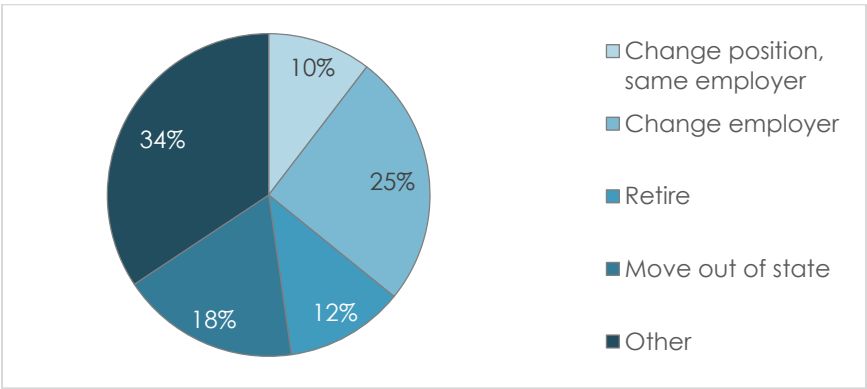


Figure 40. APRNs' Reasons for Leaving their Current Position within 12 Months.



Note. Includes only those APRNs who reported being likely or very likely to leave their current position within the next 12 months.

Table 33. Factors Related to the Retention of APRNs.

<u>Length of Time with Current Employer</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Less than 1 Year	21.6%	21.1%	25.5%	20.0%	22.2%
1 Year to Less than 3 Years	21.2%	20.5%	29.4%	16.0%	22.2%
3 Years to Less than 5 Years	15.3%	14.7%	13.7%	24.0%	11.1%
5 Years to Less than 10 Years	17.4%	17.4%	11.8%	24.0%	0.0%
10 Years or Longer	24.4%	26.3%	19.6%	16.0%	44.4%
<u>Length of Time in Current Position</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Less than 1 Year	24.5%	23.9%	29.4%	20.0%	22.2%
1 Year to Less than 3 Years	24.2%	23.3%	29.4%	28.0%	22.2%
3 Years to Less than 5 Years	17.9%	18.1%	13.7%	24.0%	22.2%
5 Years to Less than 10 Years	15.6%	15.3%	11.8%	20.0%	11.1%
10 Years or Longer	17.7%	19.3%	15.7%	8.0%	22.2%
<u>Intention to Leave Current Position within 12 Months</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Very Likely	11.6%	12.3%	5.3%	11.1%	9.1%
Likely	3.5%	4.1%	0.0%	7.4%	0.0%
Neutral	16.6%	14.3%	26.3%	7.4%	36.4%
Unlikely	11.4%	10.8%	8.8%	14.8%	18.2%
Very Unlikely	57.0%	58.5%	59.6%	59.3%	36.4%
<u>Reason for Intention to Leave Current Position within 12 Months¹</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Want a different position with current employer	10.4%	10.9%	0.0%	0.0%	0.0%
Want a different employer	25.4%	23.6%	33.3%	40.0%	0.0%
Want/plan to retire	11.9%	10.9%	33.3%	20.0%	0.0%
Want/plan to move out of state	17.9%	20.0%	0.0%	0.0%	0.0%
Want/plan to leave nursing for another field	0.0%	0.0%	0.0%	0.0%	0.0%
Other reason	34.3%	34.5%	33.3%	40.0%	100.0%
<u>Anticipated Career Plan 5 Years from Now</u>	<u>State</u>	<u>Honolulu</u>	<u>Hawai'i</u>	<u>Maui</u>	<u>Kaua'i</u>
Working in current position	48.2%	50.6%	43.9%	40.7%	36.4%
Working in a different specialty	11.8%	12.4%	8.8%	14.8%	0.0%
Working as a nurse manager	0.4%	0.6%	0.0%	0.0%	0.0%
Working as a nursing/healthcare administrator/executive	3.5%	3.2%	3.5%	3.7%	9.1%
Working as nurse faculty	2.4%	2.6%	1.8%	3.7%	0.0%
Working in a non-nursing field	1.3%	1.2%	0.0%	3.7%	9.1%
Retired	9.4%	8.5%	19.3%	7.4%	9.1%
Unsure	15.6%	14.1%	12.3%	22.2%	27.3%
Other plans	7.2%	6.8%	10.5%	3.7%	9.1%

¹Includes only those nurses who reported being likely or very likely to leave their positions within the next 12 months.

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Appendix – Statewide Data Tables

Table 34. Sample Size and Margin of Error by License.

	All Nurses	LPNs	RNs	APRNs
Nurses Who Renewed a License in 2019	26,519	1,841	23,130	1,548
Nurses Who Participated in the 2019 Workforce Supply Survey	12,308	784	10,723	801
Response Rate for 2019 Workforce Supply Survey	46.4%	42.6%	46.4%	51.7%
Minimum ¹ Margin of Error Around All Reported Frequencies (+/-)	0.65%	2.65%	0.69%	2.41%

¹Margin of error will vary depending on the number of respondents who answered each question.

Table 35. Employment Status of Hawai'i Nurses.

	All Nurses	LPNs	RNs	APRNs
Working in a Nursing License-Relevant Position	90.7%	87.1%	90.8%	93.8%
Unemployed or Not Working in a License-Relevant Position	9.3%	12.9%	9.2%	6.3%

Note. 98.7% of Hawai'i RNs working in a license-relevant role report a primary practice location in Hawai'i. Nurses practicing in Hawai'i comprise the subset of nurses who are included in subsequent tables.

Table 36. Demographic Characteristics of the State's Residential Population and Nurses.

	Population	All Nurses	LPNs	RNs	APRNs
Gender					
Males	49.7%	13.1%	10.7%	13.2%	15.4%
Females	50.3%	86.2%	88.0%	86.2%	84.2%
Other/Prefer Not to Say	--	0.7%	1.3%	0.6%	**
Age					
Median Age	39.2	44.0	47.0	44.0	46.5
20-24 Years	7.2%	1.4%	1.3%	1.5%	**
25-34 Years	15.4%	23.0%	22.2%	23.8%	14.2%
35-44 Years	12.6%	25.7%	19.2%	25.9%	30.6%
45-54 Years	12.2%	23.9%	25.6%	23.6%	24.6%
55-59 Years	6.3%	9.5%	12.2%	9.0%	12.6%
60-64 Years	5.5%	9.9%	13.7%	9.6%	10.4%
65-74 Years	9.4%	6.1%	5.3%	6.1%	7.1%
75 and Older Years	10.8%	0.5%	**	0.5%	**
Generation					
Millennials (Age 23-38)	--	35.6%	29.9%	36.8%	27.1%
Generation X (Age 39-54)	--	38.8%	39.0%	38.5%	42.8%
Baby Boomers (Age 55-73)	--	25.6%	31.2%	24.7%	30.2%
Race					
Two or More Races	22.5%	20.0%	22.9%	19.7%	19.2%
One Race	77.5%	80.0%	77.1%	80.3%	80.8%
White	20.8%	27.7%	15.9%	27.7%	44.2%
Black	2.1%	1.1%	2.9%	0.9%	1.5%
American Indian/Alaska Native	0.1%	0.3%	**	0.3%	**
Chinese	5.1%	2.7%	1.4%	2.6%	5.3%
Filipinx	15.5%	32.6%	45.2%	32.9%	12.1%
Japanese	13.8%	9.8%	3.9%	10.4%	9.5%
Korean	2.6%	1.6%	1.9%	1.4%	2.9%
Other Asian	6.2%	1.4%	1.0%	1.4%	1.7%
Native Hawaiian	5.2%	1.6%	1.9%	1.5%	1.9%
Samoa	1.2%	0.3%	1.0%	0.2%	**
Other Pacific Islander	3.5%	0.4%	1.0%	0.3%	0.0%
Some Other Race	1.4%	0.6%	**	0.6%	**
Native Hawaiian Ancestry					
Any Part Native Hawaiian Ancestry ¹	24.4%	10.7%	12.6%	10.6%	9.5%
Hispanic/Latinx Ancestry					
Hispanic/Latinx of Any Race	9.9%	7.8%	9.8%	7.7%	6.8%

Note. Population data for the State of Hawai'i are from the US Census Bureau's American Community Survey Demographic and Housing 1-Year Estimates for 2018 (Table DP05). Table is available from data.census.gov.

¹Represents the proportion of individuals of Native Hawaiian ancestry in combination with any other ethnic or racial group. Census data also include persons of Other Pacific Islander ancestry.

Table 37. Employment Characteristics of Nurses.

<u>Relation of License to Primary Position</u>	<u>All Nurses</u>	<u>LPNs</u>	<u>RNs</u>	<u>APRNs</u>
License is Required	94.2%	89.6%	94.3%	97.4%
License is Preferred or Enhances Job Performance	4.5%	7.5%	4.4%	1.7%
Not Reported	1.4%	2.9%	1.3%	0.9%
<u>Number of License-Related Positions Held</u>	<u>All Nurses</u>	<u>LPNs</u>	<u>RNs</u>	<u>APRNs</u>
1 Position	81.3%	81.6%	82.1%	69.7%
2 Positions	15.0%	14.4%	14.5%	23.0%
3+ Positions	3.7%	4.0%	3.5%	7.3%
<u>Full-Time Equivalent Employment</u>	<u>All Nurses</u>	<u>LPNs</u>	<u>RNs</u>	<u>APRNs</u>
At Least 1 Full-Time Position	78.3%	77.7%	78.1%	82.0%
Part-Time or Per Diem Employment Only	21.7%	22.3%	21.9%	18.0%
<u>Total Hours Worked in a Typical Week in All Positions</u>	<u>All Nurses</u>	<u>LPNs</u>	<u>RNs</u>	<u>APRNs</u>
Average Hours Worked per Week	39.2	39.1	39.0	42.5
19 Hours or Less	4.5%	6.3%	4.4%	2.8%
20-40 Hours	69.4%	73.2%	70.0%	56.7%
41 Hours or More	26.1%	20.5%	25.6%	40.5%
<u>Total Hours Worked in a Typical Week in Primary Position Only</u>	<u>All Nurses</u>	<u>LPNs</u>	<u>RNs</u>	<u>APRNs</u>
Average Hours Worked per Week	37.0	37.0	37.0	39.0
19 Hours or Less	5.0%	6.9%	4.9%	3.7%
20-40 Hours	79.0%	82.2%	79.2%	71.6%
41 Hours or More	16.0%	10.9%	15.9%	24.7%
<u>Travel Nurses</u>	<u>All Nurses</u>	<u>LPNs</u>	<u>RNs</u>	<u>APRNs</u>
Employed as a Travel Nurse	1.7%	2.1%	1.7%	1.1%
<u>Agency Nurses</u>	<u>All Nurses</u>	<u>LPNs</u>	<u>RNs</u>	<u>APRNs</u>
Employed through Nursing Staffing Agency	9.5%	17.1%	9.2%	3.7%

Table 38. Primary Practice Settings of Nurses.

	<u>All Nurses</u>	<u>LPNs</u>	<u>RNs</u>	<u>APRNs</u>
Acute Care Hospital	47.0%	8.3%	51.9%	26.7%
Post-Acute/Long-Term Care	11.8%	28.6%	10.8%	4.4%
Assisted Living Facility	16.1%	21.6%	15.2%	0.0%
Nursing Home/Extended Care Facility	72.7%	70.3%	72.9%	85.0%
Rehabilitation Hospital	11.2%	8.1%	11.9%	15.0%
Ambulatory Setting	16.7%	34.7%	13.3%	41.1%
Community Health Center	16.4%	16.1%	13.9%	28.1%
Dialysis Clinic	15.8%	8.9%	20.5%	1.6%
Outpatient Clinic/Urgent Care	42.0%	51.1%	39.5%	43.8%
Provider's Office	14.7%	22.8%	10.7%	24.3%
Same-Day Surgery Center	11.1%	1.1%	15.4%	2.2%
Home Health/Hospice	6.6%	8.3%	6.6%	4.2%
Home Health	60.5%	65.1%	59.8%	63.2%
Hospice	39.5%	34.9%	40.2%	36.8%
All Other Settings	17.9%	20.1%	17.3%	23.6%
College/University	7.2%	0.0%	6.3%	23.6%
Correctional Facility	3.3%	1.9%	3.5%	2.8%
Government/Regulatory Agency	10.7%	19.2%	9.6%	13.2%
Insurance Company	18.2%	4.8%	21.0%	3.8%
Public Health	6.0%	3.8%	6.5%	2.8%
School Health Room/Clinic	8.5%	8.7%	8.4%	9.4%
Other, Non-Clinical	13.2%	17.3%	13.7%	3.8%
Other, Clinical	32.9%	44.2%	31.0%	40.6%

Note. Distributions of individual settings sum to 100% within a given setting type.

Table 39. Primary Practice Characteristics of Nurses Employed in All Settings.

Primary Practice Specialty	All Nurses	LPNs	RNs	APRNs
Administration/Management	5.6% ⁵	3.8% ⁵	6.0%	2.5%
Adult-Gerontology	14.4% ²	30.4%¹	12.8% ²	16.6% ²
Cardiac	3.3%	0.2%	3.6%	2.9%
Critical Care	5.6% ⁵	0.2%	6.3% ⁵	2.0%
Emergency/Trauma	5.8% ⁴	0.2%	6.6% ⁴	2.0%
Family Health	2.7%	9.3% ³	1.2%	16.1% ³
Gastroenterology	1.0%	0.8%	1.1%	0.4%
Maternal-Child/Obstetrics	4.4%	1.2%	4.7%	2.9%
Medical-Surgical	10.0% ³	2.6%	11.2% ³	1.6%
Neonatal	1.7%	0.0%	1.9%	1.3%
Nephrology/Dialysis	2.7%	3.0%	2.8%	1.1%
Nurse Education	1.2%	0.2%	1.2%	2.2%
Oncology	2.0%	0.8%	2.1%	2.5%
Palliative Care/Hospice	2.2%	2.8%	2.1%	2.0%
Pediatrics	5.0%	6.8% ⁴	4.6%	7.4% ⁴
Perioperative/Surgical	4.8%	0.6%	5.4%	1.6%
Psychiatric/Mental Health	3.9%	3.6%	3.7%	7.4% ⁵
Public/Population Health	1.8%	0.8%	2.0%	0.7%
Rehabilitation	1.7%	2.2%	1.7%	0.4%
School/Student Health	1.0%	0.6%	1.1%	0.7%
Women's Health	1.3%	0.8%	1.0%	6.3%
Other	17.9%¹	29.0% ²	16.9%¹	19.5%¹
Primary Practice Position Title	All Nurses	LPNs	RNs	APRNs
Independent Practitioner	1.3%	0.0%	0.0%	22.5%
Staff Nurse	67.1%	71.6%	67.0%	61.9%
Nurse Manager	7.8%	3.3%	8.6%	2.3%
Nurse Executive	1.9%	0.0%	2.0%	2.3%
Nurse Faculty/Educator	2.4%	0.4%	2.2%	7.4%
Case Manager	7.1%	1.8%	8.0%	0.9%
Other	12.4%	23.0%	12.2%	2.6%
Primary Practice Job Function	All Nurses	LPNs	RNs	APRNs
Direct Patient Care & Education	69.6%	77.6%	68.2%	79.6%
Teaching/Training of Nursing Students or Staff	3.3%	0.7%	3.3%	6.3%
Administration/Management	9.7%	4.6%	10.5%	5.2%
Quality/Practice Improvement	2.3%	0.7%	2.4%	2.4%
Case Management	3.7%	1.1%	4.1%	0.2%
Care Coordination	5.2%	2.8%	5.6%	2.4%
Other	6.3%	12.4%	5.9%	3.9%
Types of Patients Treated in Primary Practice	All Nurses	LPNs	RNs	APRNs
Disabled	54.0%	47.0%	53.8%	64.8%
Houseless	51.9%	29.6%	53.5%	59.6%
Medicare or Medicaid	79.8%	76.9%	79.4%	88.3%
Opioid Addiction/Dependency	41.5%	22.3%	43.4%	42.1%
Telehealth	12.2%	11.4%	11.9%	16.6%
Transgender	29.7%	27.5%	28.9%	41.5%

Note. "Types of Patients Treated in Primary Practice" indicates the percentage of nurses with a primary job function of direct patient care and education who reported that they treat each of the listed patient categories in their primary nursing position.

Table 40. Primary Practice Characteristics of Nurses Employed in Acute Care Hospitals.

Primary Practice Specialty	All Nurses	LPNs	RNs	APRNs
Administration/Management	4.0%	7.3% ⁵	4.0%	5.0%
Adult-Gerontology	2.8%	19.5% ³	2.4%	7.6% ²
Cardiac	6.0%	0.0%	6.1%	6.7% ³
Critical Care	11.3% ⁴	0.0%	11.7% ³	5.9% ⁴
Emergency/Trauma	11.4% ³	0.0%	11.7% ²	5.9% ⁴
Gastroenterology	1.0%	2.4%	1.0%	0.8%
Maternal-Child/Obstetrics	8.0% ⁵	4.9%	8.1% ⁵	5.0%
Medical-Surgical	19.9% ¹	22.0% ¹	20.5% ¹	4.2%
Neonatal	3.6%	0.0%	3.6%	5.0%
Nephrology/Dialysis	0.7%	0.0%	0.8%	0.0%
Nurse Education	0.7%	0.0%	0.7%	0.8%
Oncology	2.0%	0.0%	2.1%	0.8%
Palliative Care/Hospice	0.2%	0.0%	0.1%	4.2%
Pediatrics	3.2%	7.3%	3.1%	5.9% ⁴
Perioperative/Surgical	7.6%	0.0%	7.9%	4.2%
Psychiatric/Mental Health	4.4%	19.5% ²	4.2%	4.2%
Rehabilitation	0.2%	4.9%	0.2%	0.0%
Women's Health	0.7%	0.0%	0.6%	2.5%
Other	12.1% ²	12.2% ⁴	11.4% ⁴	31.1% ¹
Primary Practice Position Title	All Nurses	LPNs	RNs	APRNs
Independent Practitioner	0.3%	0.0%	0.0%	9.9%
Staff Nurse	81.0%	79.1%	81.3%	71.2%
Nurse Manager	5.8%	0.0%	6.0%	3.6%
Nurse Executive	1.5%	0.0%	1.4%	3.6%
Nurse Faculty/Educator	1.6%	0.0%	1.6%	3.6%
Case Manager	2.6%	2.3%	2.6%	0.9%
Other	7.2%	18.6%	7.1%	7.2%
Primary Practice Job Function	All Nurses	LPNs	RNs	APRNs
Direct Patient Care & Education	81.5%	76.7%	81.7%	79.2%
Teaching/Training of Nursing Students or Staff	2.4%	0.0%	2.4%	3.3%
Administration/Management	7.5%	0.0%	7.7%	6.7%
Quality/Practice Improvement	2.2%	4.7%	2.0%	4.2%
Case Management	1.5%	0.0%	1.6%	0.0%
Care Coordination	1.8%	7.0%	1.6%	2.5%
Other	3.2%	11.6%	3.0%	4.2%
Types of Patients Treated in Primary Practice	All Nurses	LPNs	RNs	APRNs
Disabled	60.1%	53.1%	59.8%	71.4%
Houseless	69.4%	34.4%	69.8%	71.4%
Medicare or Medicaid	80.5%	65.6%	80.4%	87.9%
Opioid Addiction/Dependency	57.2%	31.3%	57.5%	59.3%
Telehealth	14.2%	0.0%	14.2%	18.7%
Transgender	36.5%	15.6%	36.3%	50.5%

Note. "Types of Patients Treated in Primary Practice" indicates the percentage of nurses with a primary job function of direct patient care and education who reported that they treat each of the listed patient categories in their primary nursing position.

Table 41. Primary Practice Characteristics of Nurses Employed in Post-Acute/Long-Term Care Settings.

Primary Practice Specialty	All Nurses	LPNs	RNs	APRNs
Administration/Management	6.3% ⁴	2.2% ⁴	7.2% ⁴	5.0% ²
Adult-Gerontology	66.8%¹	71.5%¹	65.2%¹	85.0%¹
Emergency/Trauma	0.1%	0.0%	0.2%	0.0%
Gastroenterology	0.1%	0.0%	0.2%	0.0%
Maternal-Child/Obstetrics	0.1%	0.0%	0.2%	0.0%
Medical-Surgical	0.4%	0.0%	0.5%	0.0%
Nurse Education	0.8%	0.0%	1.1%	0.0%
Palliative Care/Hospice	0.9%	1.5% ⁵	0.8%	0.0%
Pediatrics	1.9% ⁵	0.0%	2.4% ⁵	0.0%
Psychiatric/Mental Health	1.1%	0.0%	1.4%	0.0%
Rehabilitation	11.5% ²	5.8% ³	13.0% ²	5.0% ²
Other	10.0% ³	19.0% ²	8.1% ³	5.0% ²
Primary Practice Position Title	All Nurses	LPNs	RNs	APRNs
Independent Practitioner	0.7%	0.0%	0.0%	30.0%
Staff Nurse	71.1%	84.0%	68.2%	65.0%
Nurse Manager	13.2%	4.2%	15.5%	5.0%
Nurse Executive	2.6%	0.0%	3.3%	0.0%
Nurse Faculty/Educator	0.8%	0.0%	1.0%	0.0%
Case Manager	3.1%	2.1%	3.4%	0.0%
Other	8.6%	9.7%	8.6%	0.0%
Primary Practice Job Function	All Nurses	LPNs	RNs	APRNs
Direct Patient Care & Education	69.9%	84.5%	66.2%	80.0%
Teaching/Training of Nursing Students or Staff	2.8%	0.7%	3.4%	0.0%
Administration/Management	13.1%	5.4%	15.2%	5.0%
Quality/Practice Improvement	1.7%	0.0%	1.9%	10.0%
Case Management	1.5%	0.7%	1.8%	0.0%
Care Coordination	4.8%	2.0%	5.4%	5.0%
Other	6.1%	6.8%	6.1%	0.0%
Types of Patients Treated in Primary Practice	All Nurses	LPNs	RNs	APRNs
Disabled	36.3%	29.9%	37.4%	60.0%
Houseless	15.9%	17.1%	14.1%	60.0%
Medicare or Medicaid	89.2%	88.9%	88.9%	100.0%
Opioid Addiction/Dependency	14.2%	7.7%	14.5%	60.0%
Telehealth	1.3%	3.4%	0.5%	6.7%
Transgender	4.8%	7.7%	3.9%	6.7%

Note. "Types of Patients Treated in Primary Practice" indicates the percentage of nurses with a primary job function of direct patient care and education who reported that they treat each of the listed patient categories in their primary nursing position.

Table 42. Primary Practice Characteristics of Nurses Employed in Ambulatory Care Settings.

Primary Practice Specialty	All Nurses	LPNs	RNs	APRNs
Administration/Management	4.3%	1.1%	5.9%	0.5%
Adult-Gerontology	9.1% ⁴	9.0% ³	8.8% ⁴	10.4% ⁵
Cardiac	2.0%	0.6%	2.5%	1.6%
Critical Care	0.1%	0.6%	0.0%	0.0%
Emergency/Trauma	0.6%	0.0%	0.7%	0.5%
Family Health	14.0% ²	22.6% ²	7.7% ⁵	32.8% ¹
Gastroenterology	2.7%	1.7%	3.6%	0.0%
Maternal-Child/Obstetrics	2.0%	1.7%	2.2%	1.6%
Medical-Surgical	0.8%	1.7%	0.7%	0.0%
Nephrology/Dialysis	13.9% ³	8.5% ⁵	17.8% ²	2.2%
Nurse Education	0.6%	0.6%	0.7%	0.0%
Oncology	5.0%	0.6%	6.3%	3.8%
Pediatrics	5.6%	9.0% ⁴	4.3%	7.7%
Perioperative/Surgical	6.6% ⁵	1.1%	9.2% ³	0.5%
Psychiatric/Mental Health	3.9%	2.8%	2.5%	11.5% ⁴
Public/Population Health	1.2%	0.6%	1.6%	0.0%
Rehabilitation	0.3%	0.6%	0.1%	0.5%
Women's Health	4.6%	2.3%	3.3%	12.6% ³
Other	22.8% ¹	35.0% ¹	22.0% ¹	13.7% ²
Primary Practice Position Title	All Nurses	LPNs	RNs	APRNs
Independent Practitioner	4.3%	0.0%	0.0%	28.2%
Staff Nurse	67.5%	76.1%	65.3%	68.5%
Nurse Manager	10.7%	4.0%	14.4%	1.1%
Nurse Executive	1.5%	0.0%	1.9%	1.1%
Nurse Faculty/Educator	1.0%	0.6%	1.2%	0.6%
Case Manager	4.7%	0.0%	6.8%	0.0%
Other	10.4%	19.3%	10.4%	0.6%
Primary Practice Job Function	All Nurses	LPNs	RNs	APRNs
Direct Patient Care & Education	73.4%	86.7%	65.9%	93.0%
Teaching/Training of Nursing Students or Staff	1.7%	1.7%	1.9%	1.1%
Administration/Management	11.4%	1.1%	16.0%	1.6%
Quality/Practice Improvement	1.4%	0.6%	1.9%	0.0%
Case Management	2.2%	0.6%	3.1%	0.0%
Care Coordination	5.5%	2.2%	7.2%	1.6%
Other	4.4%	7.2%	4.1%	2.7%
Types of Patients Treated in Primary Practice	All Nurses	LPNs	RNs	APRNs
Disabled	53.6%	56.6%	48.8%	66.3%
Houseless	42.4%	41.4%	37.3%	59.6%
Medicare or Medicaid	82.0%	77.9%	80.7%	90.4%
Opioid Addiction/Dependency	28.8%	35.2%	24.6%	36.1%
Telehealth	15.3%	17.9%	14.6%	15.1%
Transgender	35.6%	47.6%	29.5%	44.0%

Note. "Types of Patients Treated in Primary Practice" indicates the percentage of nurses with a primary job function of direct patient care and education who reported that they treat each of the listed patient categories in their primary nursing position.

Table 43. Primary Practice Characteristics of Nurses Employed in Home Health/Hospice.

Primary Practice Specialty	All Nurses	LPNs	RNs	APRNs
Administration/Management	7.2% ⁵	7.3% ⁵	7.6% ⁵	0.0%
Adult-Gerontology	27.7% ²	29.3%¹	25.8% ²	63.2%¹
Critical Care	0.7%	0.0%	0.8%	0.0%
Emergency/Trauma	0.2%	0.0%	0.3%	0.0%
Family Health	0.9%	0.0%	0.8%	5.3% ⁴
Maternal-Child/Obstetrics	0.4%	0.0%	0.5%	0.0%
Medical-Surgical	0.4%	0.0%	0.5%	0.0%
Nurse Education	0.9%	0.0%	1.0%	0.0%
Oncology	0.4%	0.0%	0.5%	0.0%
Palliative Care/Hospice	29.8%¹	26.8% ²	30.6%¹	21.1% ²
Pediatrics	13.9% ⁴	22.0% ³	13.6% ⁴	0.0%
Psychiatric/Mental Health	0.7%	0.0%	0.8%	0.0%
Public/Population Health	0.9%	0.0%	1.0%	0.0%
Rehabilitation	0.2%	0.0%	0.3%	0.0%
School/Student Health	0.4%	0.0%	0.5%	0.0%
Women's Health	0.4%	0.0%	0.5%	0.0%
Other	14.9% ³	14.6% ⁴	15.2% ³	10.5% ³
Primary Practice Position Title	All Nurses	LPNs	RNs	APRNs
Independent Practitioner	1.1%	0.0%	0.0%	27.8%
Staff Nurse	46.5%	55.8%	44.6%	66.7%
Nurse Manager	8.4%	0.0%	9.7%	0.0%
Nurse Executive	3.3%	0.0%	3.9%	0.0%
Nurse Faculty/Educator	1.3%	0.0%	1.5%	0.0%
Case Manager	23.6%	2.3%	26.9%	5.6%
Other	15.8%	41.9%	13.6%	0.0%
Primary Practice Job Function	All Nurses	LPNs	RNs	APRNs
Direct Patient Care & Education	61.6%	79.1%	58.1%	94.7%
Teaching/Training of Nursing Students or Staff	1.2%	0.0%	1.4%	0.0%
Administration/Management	10.6%	4.7%	11.7%	0.0%
Quality/Practice Improvement	2.7%	0.0%	3.1%	0.0%
Case Management	12.0%	4.7%	13.4%	0.0%
Care Coordination	7.5%	2.3%	8.1%	5.3%
Other	4.4%	9.3%	4.1%	0.0%
Types of Patients Treated in Primary Practice	All Nurses	LPNs	RNs	APRNs
Disabled	49.9%	55.9%	47.5%	70.6%
Houseless	17.6%	17.6%	17.2%	23.5%
Medicare or Medicaid	83.7%	79.4%	83.2%	100.0%
Opioid Addiction/Dependency	14.8%	11.8%	14.3%	29.4%
Telehealth	6.9%	5.9%	6.7%	11.8%
Transgender	10.1%	17.6%	8.4%	17.6%

Note. "Types of Patients Treated in Primary Practice" indicates the percentage of nurses with a primary job function of direct patient care and education who reported that they treat each of the listed patient categories in their primary nursing position.

Table 44. Primary Practice Characteristics of Nurses Employed in All Other Settings.

Primary Practice Specialty within All Other Settings	All Nurses	LPNs	RNs	APRNs
Administration/Management	10.2% ³	8.0% ²	11.2% ²	2.9%
Adult-Gerontology	10.8% ²	17.0% ¹	9.6% ⁴	16.2% ²
Cardiac	0.7%	0.0%	0.7%	1.9%
Critical Care	0.7%	0.0%	0.7%	1.9%
Emergency/Trauma	1.5%	1.0%	1.6%	1.0%
Family Health	2.1%	6.0% ⁴	0.8%	10.5% ⁴
Gastroenterology	0.5%	0.0%	0.5%	1.0%
Maternal-Child/Obstetrics	1.1%	1.0%	0.8%	3.8%
Medical-Surgical	1.7%	1.0%	1.7%	1.9%
Neonatal	0.1%	0.0%	0.1%	0.0%
Nephrology/Dialysis	0.4%	0.0%	0.4%	1.0%
Nurse Education	3.7%	0.0%	3.6%	8.6% ⁵
Oncology	1.1%	3.0%	0.8%	2.9%
Palliative Care/Hospice	0.2%	1.0%	0.2%	0.0%
Pediatrics	7.7% ⁵	6.0% ³	7.4% ⁵	11.4% ³
Perioperative/Surgical	0.6%	1.0%	0.5%	1.0%
Psychiatric/Mental Health	5.4%	4.0% ⁵	5.6%	5.7%
Public/Population Health	8.9% ⁴	3.0%	10.1% ³	2.9%
Rehabilitation	1.0%	0.0%	1.2%	0.0%
School/Student Health	5.6%	3.0%	6.1%	2.9%
Women's Health	1.0%	0.0%	1.0%	1.9%
Other	35.1% ¹	45.0%	35.4% ¹	21.0% ¹
Primary Practice Position Title within All Other Settings	All Nurses	LPNs	RNs	APRNs
Independent Practitioner	1.7%	0.0%	0.0%	23.7%
Staff Nurse	34.4%	49.0%	32.5%	38.7%
Nurse Manager	6.6%	3.9%	7.2%	3.2%
Nurse Executive	2.1%	0.0%	2.3%	3.2%
Nurse Faculty/Educator	7.2%	1.0%	6.1%	26.9%
Case Manager	18.3%	3.9%	21.2%	2.2%
Other	29.7%	42.2%	30.8%	2.2%
Primary Practice Job Function within All Other Settings	All Nurses	LPNs	RNs	APRNs
Direct Patient Care & Education	38.7%	57.7%	34.8%	57.5%
Teaching/Training of Nursing Students or Staff	8.1%	0.0%	7.9%	19.8%
Administration/Management	12.1%	12.5%	12.2%	11.3%
Quality/Practice Improvement	3.9%	1.0%	4.3%	2.8%
Case Management	9.0%	1.9%	10.5%	0.9%
Care Coordination	13.3%	1.9%	15.4%	2.8%
Other	15.0%	25.0%	14.9%	4.7%
Types of Patients Treated in Primary Practice	All Nurses	LPNs	RNs	APRNs
Disabled	44.7%	50.0%	43.0%	50.0%
Houseless	36.1%	30.4%	34.4%	51.7%
Medicare or Medicaid	58.4%	55.4%	55.9%	76.7%
Opioid Addiction/Dependency	26.5%	21.4%	26.4%	31.7%
Telehealth	12.0%	19.6%	9.1%	21.7%
Transgender	24.1%	30.4%	20.9%	36.7%

Note. "Types of Patients Treated in Primary Practice" indicates the percentage of nurses with a primary job function of direct patient care and education who reported that they treat each of the listed patient categories in their primary nursing position.

Table 45. Educational Characteristics of Nurses.

<u>Initial Nurse Education</u>	<u>All Nurses</u>	<u>LPNs</u>	<u>RNs</u>	<u>APRNs</u>
LPN Certificate	11.7%	80.8%	5.8%	6.0%
RN Diploma	6.3%	2.2%	6.7%	4.9%
ADN	24.2%	2.7%	26.8%	16.1%
BSN	54.2%	14.2%	58.3%	48.0%
GEPN Leading to MSN	3.2%	0.0%	2.0%	23.4%
GEPN Leading to DNP	0.4%	0.0%	0.3%	1.5%
GEPN Leading to PhD	0.0%	0.0%	0.0%	0.0%
<u>Location of Initial Nurse Education Program</u>	<u>All Nurses</u>	<u>LPNs</u>	<u>RNs</u>	<u>APRNs</u>
Hawai'i	53.7%	53.8%	54.3%	43.9%
Other US State or Territory	32.2%	28.5%	31.1%	52.0%
Foreign Country	14.2%	17.7%	14.6%	4.1%
<u>Highest Nurse Education Completed</u>	<u>All Nurses</u>	<u>LPNs</u>	<u>RNs</u>	<u>APRNs</u>
LPN Certificate	5.8%	72.6%	0.0%	0.0%
RN Diploma	4.9%	3.6%	5.4%	0.0%
ADN	19.4%	6.9%	21.8%	0.4%
BSN	56.6%	16.8%	64.2%	1.7%
MSN	11.3%	0.0%	7.4%	81.5%
DNP	1.4%	0.0%	0.7%	13.1%
PhD	0.6%	0.0%	0.5%	3.2%
<u>Location of Highest Nurse Education Program</u>	<u>All Nurses</u>	<u>LPNs</u>	<u>RNs</u>	<u>APRNs</u>
Hawai'i	53.9%	53.8%	54.2%	49.6%
Other US State or Territory	32.6%	28.1%	31.8%	50.4%
Foreign Country	13.5%	18.1%	14.0%	0.0%
<u>Academic Progression in Nursing</u>	<u>All Nurses</u>	<u>LPNs</u>	<u>RNs</u>	<u>APRNs</u>
Obtained Degree beyond Initial Nurse Education	21.6%	8.4%	18.9%	75.5%
<u>Non-Nursing Education</u>	<u>All Nurses</u>	<u>LPNs</u>	<u>RNs</u>	<u>APRNs</u>
Has a Degree in Any Non-Nursing Field	33.7%	32.3%	33.1%	45.2%
<u>Highest Degree in a Non-Nursing Field</u>	<u>All Nurses</u>	<u>LPNs</u>	<u>RNs</u>	<u>APRNs</u>
Associate Degree	33.6%	50.8%	34.2%	11.4%
Baccalaureate Degree	50.7%	44.1%	50.9%	55.2%
Master's Degree	12.9%	4.0%	12.5%	24.8%
Practice Doctorate	2.3%	1.1%	2.2%	4.8%
PhD	0.5%	0.0%	0.2%	3.8%
<u>Current Enrollment in Nurse Education Program</u>	<u>All Nurses</u>	<u>LPNs</u>	<u>RNs</u>	<u>APRNs</u>
Currently Enrolled in Degree-Leading Nurse Education Program	6.3%	10.2%	5.9%	6.0%
<u>Current Degree Program Type</u>	<u>All Nurses</u>	<u>LPNs</u>	<u>RNs</u>	<u>APRNs</u>
ADN	8.1%	61.5%	0.3%	0.0%
BSN	34.6%	38.5%	36.4%	0.0%
MSN	37.8%	0.0%	45.5%	12.0%
DNP	18.4%	0.0%	16.7%	84.0%
PhD	1.1%	0.0%	1.1%	4.0%
<u>Current Degree Program Location</u>	<u>All Nurses</u>	<u>LPNs</u>	<u>RNs</u>	<u>APRNs</u>
Hawai'i	34.1%	51.9%	30.7%	42.3%
Out of State	65.9%	48.1%	69.3%	57.7%
<u>Current Degree Program Mode of Delivery</u>	<u>All Nurses</u>	<u>LPNs</u>	<u>RNs</u>	<u>APRNs</u>
Face-to-Face	11.0%	42.3%	6.6%	3.8%
Distance Education	63.0%	30.8%	67.6%	69.2%
Hybrid Face-to-Face & Distance	26.0%	26.9%	25.8%	26.9%

Table 46. Factors Related to the Retention of Nurses.

Length of Time with Current Employer¹	All Nurses	LPNs	RNs	APRNs
Less than 1 Year	14.6%	16.0%	14.0%	21.6%
1 Year to Less than 3 Years	19.2%	21.9%	18.9%	21.2%
3 Years to Less than 5 Years	13.5%	12.6%	13.5%	15.3%
5 Years to Less than 10 Years	18.6%	15.2%	19.0%	17.4%
10 Years or Longer	34.0%	34.2%	34.7%	24.4%
Length of Time in Current Position	All Nurses	LPNs	RNs	APRNs
Less than 1 Year	18.2%	19.1%	17.7%	24.5%
1 Year to Less than 3 Years	23.3%	22.8%	23.3%	24.2%
3 Years to Less than 5 Years	15.0%	12.2%	15.1%	17.9%
5 Years to Less than 10 Years	17.9%	14.7%	18.3%	15.6%
10 Years or Longer	25.5%	31.2%	25.6%	17.7%
Intention to Leave Current Position within 12 Months	All Nurses	LPNs	RNs	APRNs
Very Likely	8.6%	8.4%	8.4%	11.6%
Likely	4.3%	3.5%	4.4%	3.5%
Neutral	19.0%	22.7%	18.8%	16.6%
Unlikely	13.3%	12.8%	13.5%	11.4%
Very Unlikely	54.9%	52.5%	55.0%	57.0%
Reason for Intention to Leave Current Position within 12 Months	All Nurses	LPNs	RNs	APRNs
Want a different position with current employer	16.3%	8.5%	17.4%	10.4%
Want a different employer	24.1%	28.8%	23.6%	25.4%
Want/plan to retire	16.3%	15.3%	16.7%	11.9%
Want/plan to move out of state	16.3%	10.2%	16.6%	17.9%
Want/plan to leave nursing for another field	3.6%	6.8%	3.6%	0.0%
Other reason	23.5%	30.5%	22.1%	34.3%
Anticipated Career Plan 5 Years from Now	All Nurses	LPNs	RNs	APRNs
Working in current position	43.2%	38.4%	43.3%	48.2%
Working in a different specialty	17.0%	18.9%	17.2%	11.8%
Working as a nurse manager	2.9%	2.6%	3.1%	0.4%
Working as a nursing/healthcare administrator/executive	3.6%	2.4%	3.7%	3.5%
Working as nurse faculty	1.6%	1.5%	1.5%	2.4%
Working in a non-nursing field	1.7%	2.8%	1.7%	1.3%
Retired	10.3%	11.4%	10.3%	9.4%
Unsure	13.7%	12.2%	13.7%	15.6%
Other plans	6.0%	9.7%	5.6%	7.2%