



HAWAII NURSING WORKFORCE 2015



Hawai'i Nursing Workforce Supply
2015 Report

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Executive Summary

Hawaii's efforts in addressing the Institute of Medicine Future of Nursing recommendations remain a top nursing priority across the state. Over the past three years nursing alongside a wide constituent of stakeholders inclusive of policy makers; national, state, and local government leaders; payers; health care researchers; executives; and professionals as well as licensing bodies, workforce centers, educational institutions, and philanthropic and advocacy organizations have achieved a number of milestones in our efforts to build a diverse, educated and compassionate workforce serving our diverse island communities across the lifespan.

Highlights of Hawai'i's IOM achievements over the past three years are presented below:

Recommendation 1: Remove scope-of-practice barriers for APRNs.

To ensure all advanced practice registered nurses are able to practice to the full extent of their education and training Hawai'i legislation passed full of scope-of-practice authority for APRNs in 2010. Since 2013, there's been an accelerated annual growth (8.4%) in the number of APRNs licensed in Hawai'i. This coincides with national findings that indicate there is accelerated growth after states pass full scope of practice authority.

Recommendation 4: Increase the proportion of nurses with a baccalaureate degree to 80 percent by 2020.

Statewide APIN employer, academic and community partners are collaborating to build seamless academic progression opportunities for students and employed nurses seeking baccalaureate or higher education. The goal is to create a highly educated nursing workforce prepared to meet the demands of our diverse island communities across the lifespan. The proportion of registered nurses with a BSN and higher has grown from 59% to 68%; a 15.3% increase in three years.

Recommendation 7: Prepare and enable nurses to lead change to advance health.

The Hawai'i State Center for Nursing is engaged in statewide initiatives to prepare and enable nurses to lead change. The most notable include the lessons in leadership workshops.

In 2015, the Gordon and Betty Moore Foundation funded the Lessons in Leadership as part of the Hawai'i Action Coalition initiative. Six Lessons in Leadership events were planned across the state to engage in the development of nurse leaders. Each session includes a viewing of one of the Lessons in Leadership videos followed by a dialogue led by a local nurse leader who demonstrates similar leadership traits, functions in nursing or non-nursing leadership roles, or has mentored others into leadership positions. The discussions include what defines the specific leadership needs and opportunities for each community; ideas are generated to engage participants in leadership activities, and plant seeds for future leadership development and engagement activities.

Since 2007, the Hawai'i State Center for Nursing has conducted the biennial nursing workforce survey every odd year. The nursing workforce survey is a collaborative effort with the Hawai'i Board of Nursing and the Department of Commerce and Consumer Affairs Professional & Vocational Licensing Division of the State of Hawai'i (DCCA PVL) license renewal. At the online DCCA PVL license renewal site the workforce survey is made available to all licensed practical nurses (LPNs), registered nurses (RNs) and advanced practice registered nurses (APRNs).

The purpose of the biennial workforce nursing survey is to provide ongoing data to aid in understanding the current and future trend characteristics of our licensed nursing supply; and to inform statewide stakeholders and policy planners. The nursing information is inclusive of LPNs, RNs and APRNs; about where, in what capacity, in what positions nurses' practice and their intentions to remain in the workforce are crucial for workforce and policy planning.

The 2015 workforce survey reflects active nurses licensed by the Hawai'i Board of Nursing (HBON) as of June 2015. A total of 24,543 (85.7%) RNs, 1,312 (4.6%) APRNs, and 2,789 (9.7%) LPNs listed with the HBON were invited to participate. The online survey link at the beginning and end of the HBON renewal process was used to invite nurses to participate in the workforce survey. A total of 11,771 nurses participated in the survey resulting in an overall response rate of 41.1%. Out of the 11,771 nurses who responded, 11,091 (94.2%) provided enough information to classify them into one of the three nursing license categories (LPN, RN and APRN). The respondents by license category represent 38.7% of HBON active licensed nurses.

The intent of this report is to summarize the key findings from the nursing workforce survey. The summarization will include an overview of the entire nursing workforce followed by descriptions of each license category LPNs, RNs and APRNs. The license counts of all active nurses available from the DCCA PVL Division of the State of Hawai'i in July 2015 will also be provided.

The key findings of the 2015 nursing workforce survey reveal:

Nursing Workforce Trends

- 47.2% growth in the HBON licensed nursing workforce in the last ten years.
- Proportion of LPNs, RNs, and APRNs licensed by HBON and living in the State of Hawai'i has declined over the past decade
- Majority of nurses are employed as staff nurses in hospitals.
- Majority of nurses intend to remain active in the workforce for the next decade.
- The two primary reasons to leave a current nursing position is interest in another job and retirement.
- Hawai'i nurses' initial degree coupled with degree achievements through academic progression exceeds the national reported average of baccalaureate prepared nurses by 9%.

Licensed Practical Nurse Workforce

- LPNs represent 12% of the licensed in-state nursing workforce.
- LPN license numbers declined in the last decade by 9.1%, potentially posing future challenges in settings, such as nursing home, extended care or assisted living facilities.
- Nearly 10% of LPNs are male; 45% LPNs are of Filipino ancestry.
- 43% LPNs are ≥ 50 years of age; with a mean age of 46.1 years.
- 61% of LPNs work/reside on O'ahu and 39% on the neighbor islands.
- 75% LPNs are employed as staff nurses.
- LPNs 16% represent a smaller percent of the workforce working in hospitals.
- 40% LPNs work in nursing home/extended care, home health, and physician's offices.

Registered Nurse Workforce

- RNs represent 83% of the licensed in-state nursing workforce.
- Annual growth rate of 3.4% in the number of active licensed RNs.
- 12% RNs are male; the largest ethnic groups are 31% Filipino and 31% Caucasian.
- 62% of RNS are < 50 years of age; with a mean age of 44.2 years.
- 74% RNs work/reside on O'ahu.
- 70% RNs are employed as staff nurses.
- 58% RNs work in hospital settings with 67% under 50 years of age.
- Majority of RNs are located and employed on O'ahu.
- 8% of RNs report current enrollment in a degree-seeking program.
- 13% to 25% RNs have completed additional degrees beyond their initial nursing degree with 55%-60% completing the baccalaureate degree.
- 1 in 4 RNs (26%) intend to leave the nursing workforce within the next 10 years.

Advanced Practice Registered Nurse Workforce

- APRNs represent 5% of the licensed in-state nursing workforce.
- Active in-state APRNs have almost doubled over the last 10 years; with an average annual growth rate of 6%.
- 53% of APRNs are ≥ 50 years of age; the oldest licensed group (mean age 49.1).
- 10% APRNs are male; the largest ethnic groups are 57% Caucasian and 27% Asian ancestry.
- 68% are employed as APRNs; and 16% as staff nurses.
- 80% of APRNs are on the island of O'ahu.
- Small numbers of APRNs with prescriptive authority or specialized certifications including certified nurse practitioners, certified nurse midwives, clinical nurse specialists, and certified registered nurse anesthetists are located on the neighbor islands.

Introduction

Beginning in 2007, the Hawai'i State Center for Nursing has conducted a biannual survey of RNs licensed in the State. In 2015 all licensed nurses (LPNs, RNs, and APRNs) were invited to participate in the survey.

The primary objective of the survey is to estimate and characterize the nursing workforce in Hawai'i. Such an estimate is critical in understanding the extent to which the existing and potential workforce will meet Hawai'i's need for skilled nurses now and in the future.

Nurses in Hawai'i are required to renew their licensure in odd years. To motivate participation and capture as much data as possible about the licensed workforce, HSCN conducts its biennial workforce survey to coincide with licensure activity.

The key findings from the survey are presented here in addition to providing actual license counts captured by Department of Commerce and Consumer Affairs Professional & Vocational Licensing Division of the State of Hawai'i. Together, the information provides an estimate of the size of the active in-state nursing workforce and their demographic, employment, and education characteristics.

The 2015 survey was conducted online. A link to the online survey was made available to nurses renewing their licenses via the Professional and Vocational Licensing (PVL) division of the Department of Commerce and Consumer Affairs (DCCA) of the State of Hawai'i.

As nurses visited the PVL's website to obtain their initial license or renew an existing license, they were encouraged to visit the link and complete the survey. The 65-item survey asked nurses to report information pertaining to the type of license they hold,

employment status (including setting and position), education (academic) progression, professional leadership activity, and demographic information.¹

More than 11,000 of the more than 28,600 LPN, RN and APRN nurses registered with the Hawai'i Board of Nursing as of July 2015 completed the survey.

A description of the HSCN Nursing Workforce Survey respondent rate and the criteria used to derive the nurse sample representative of actively employed in-state nurses will be described. An overview of all nurses licensed by the HBON will then be presented.

Subsequent sections of the report will describe each license category of nurse (LPN, RN, and APRN) working in the State of Hawai'i.

To build our understanding of what is happening across the state in regards to IOM initiatives additional items were included in the 2015 survey. The three priority areas included in the workforce survey were:

- Recommendation 1: APRNs scope of practice
- IOM Recommendation 4: Nurses' engaged in academic progression
- IOM Recommendation 7: Nurses' engaged in leadership efforts

Each of these priority areas will be discussed in the final section of the report titled, *Special Reports on Hawaii's Initiatives*.

¹ Most respondents did not see all 65 items due to logical skips based on responses to preceding questions.

Hawai'i Board of Nursing License Counts

Overview

HBON reports annually the active and inactive license counts for the three nursing license classifications: Licensed Practical Nurse (LPN), Registered Nurse (RN), and Advanced Practice Registered Nurse (APRN).²

Licenses are counted by geographic area including two categories of non-resident geography: U.S. Mainland and foreign. For HBON licensed nurses residing in Hawai'i, counts are also available by individual islands. By-island counts will be presented in a table at the start of each license's section.

Nursing Licenses

In 2015, HBON reported a total of 28,644 nursing licenses.³ Over the last 10 years, the number of total nursing licenses (inclusive of LPN, RN and APRN) has increased by 47.2% at an average annual growth rate of 4.3%.

	Total	In-State	Out-of-State
All	28,644	19,101	9,543(33.3%)
LPNs	2,789	2,326	463(16.6%)
RNs	24,543	15,817	8,726 (25.6%)
APRNs	1,312	958	354 (27.0%)

Table 1. Total 2015 Nursing License Counts

This represents an approximate average annual growth rate of about 4.5% per year.

² All data pertaining to the counts of licenses reported by HBON are available at the PVL's website at: <http://cca.hawaii.gov/pvl/reports/>. Data for 2015 include license counts available as of July 22, 2015.

³ HBON reports counts of licenses in two categories: active and inactive. For the purposes of this report, inactive licenses are not counted. All references to total license counts in this section of the report only include active licenses.

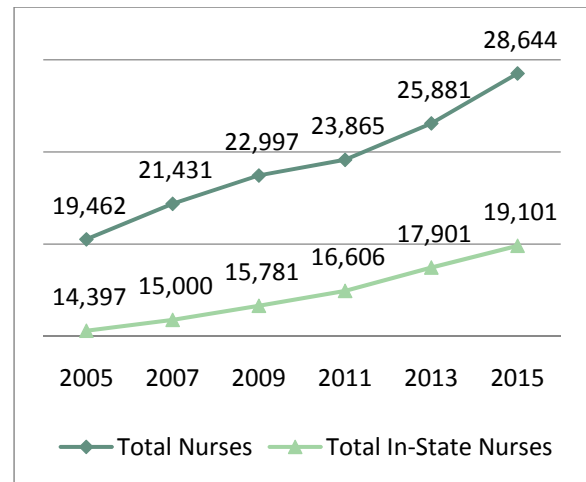


Figure 1. Growth in Nursing Licenses, 2005-2015

The majority of nursing licenses issued in 2015 were RNs. APRNs are growing at the highest rate while comprising the smallest subset of all nursing licenses.

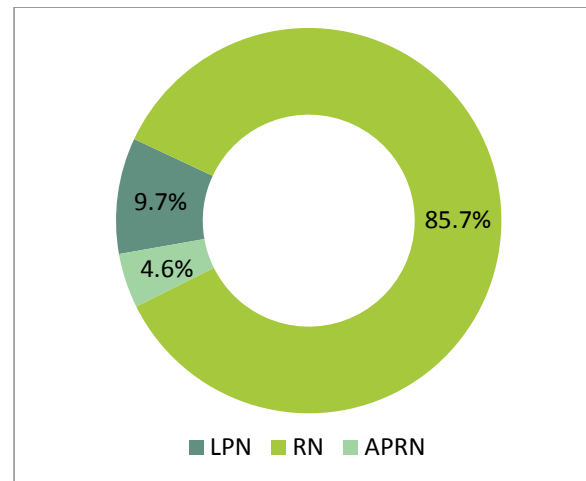


Figure 2. Percent of Total LPNs, RNs, and APRNs Nursing Licenses in 2015

The majority (71.6%) of in-state licensed nurses reside on the island of O'ahu. The island of O'ahu is also home to approximately 70% of the 1.3 million residents of Hawai'i making it the island with the highest demand for nurses.

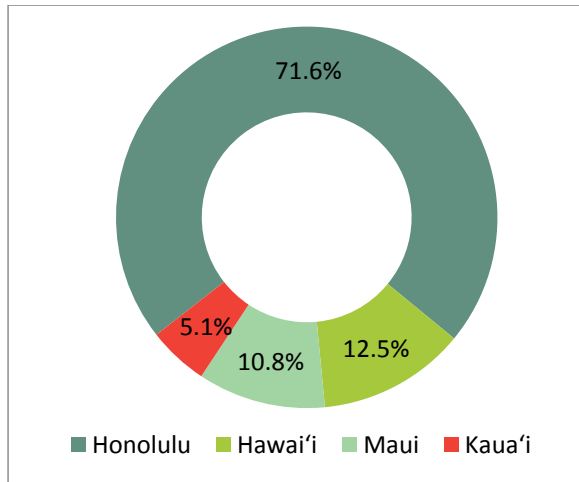


Figure 3. Percent of All Nursing Licenses by County.

Between 2005 and 2015, the percent of LPNs, RNs, and APRNs licensed by HBON and living in the State of Hawai'i declined.

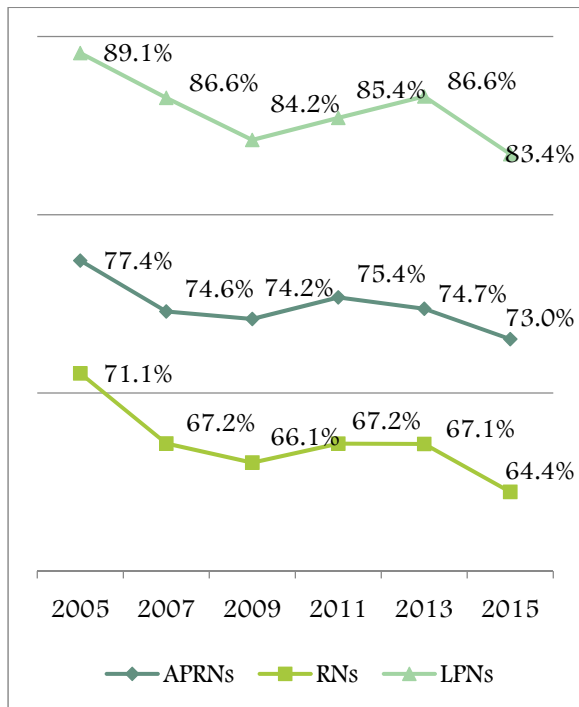


Figure 4. Change in Proportion of In-State vs. Total LPN, RN and APRN Licenses, 2005-2015

Summary

The pattern of HBON's license counts over the past decade (2005 - 2015) suggest several implications for the Hawai'i nursing workforce.

- There is steady growth in the supply of RNs and APRNs in the state.
- Growth in the supply of LPNs in the state is flat.
- The proportion of in-state to out-of-state active LPN, RN and APRN licenses has declined over time.

Trends show the HBON is issuing more licenses to nurses each licensing cycle. There also appears to be an increase in out-of-state migration of licensed nurses.

In 2015, 33% of nurses resided outside of the state. Factors influencing an uptake in out-of-state migration may include: a higher number of newly graduate nurses unable to secure employment; regional employment demands and the proportion of travel nurses licensed by the HBON residing out-of-state.

The next section will provide an overview of the three license groups (LPNs, RNs, and APRNs) based on the HSCN Nursing Workforce Survey.

Subsequent sections of the report will describe each license category of nurse (LPN, RN, and APRN) working in the State of Hawai'i. Finally, priority areas focused on to gain knowledge of APRNs scope of practice and nurses' engagement in academic progression will be discussed.

Hawai'i State Center for Nursing Workforce Survey

Overview

The *Hawai'i State Center for Nursing Workforce Survey* provides information that can be considered in conjunction with the HBON license counts to further describe the Hawai'i nursing workforce.

The information collected from the sample of nurses who volunteered to complete the survey provides insights about nurses who live and work in Hawai'i.

Respondent Rate

The survey was made available to all nurses who renewed their license online with HBON. Participants were asked to complete the survey at the time of relicensing.

Of the 28,644 nurses licensed in the state in 2015, a total of 11,771 nurses participated in the survey resulting in an overall response rate of 41.1%.

Out of the 11,771 nurses who participated, 11,091 (94.2%) provided enough information to classify them into one of the three nursing license categories (LPN, RN and APRN). The respondents by license category represent 38.7% of HBON active licensed nurses (Table 2).

	HBON Active Licensed Nurses	Respondents	Response Rate
Total	28,644	11,091	38.7%
LPN	2,789	837	30.0%
RN	24,543	9,607	39.1%
APRN	1,312	647	49.3%

Table 2. Percent of Survey Respondents by HBON Active License

Nurse Respondents Employed In-State

When all of the inclusion criteria of being classifiable into a license category, being employed in nursing and being in-state were met, a total of 7,106 nurses (60.3% of survey respondents) were eligible for consideration in the survey analyses.⁴

	In-state Active Licenses	Respondents after inclusion criteria	Percent Active In- State Licensed Nurses
Total	19,101	7,106	37.2%
LPN	2,326	551	23.7%
RN	15,817	6,115	38.7%
APRN	958	440	45.9%

Table 3. In-State Nursing Workforce Survey Sample Eligible for Analysis, by License

An additional 77 (1.1%) nurses did not provide their island of residence. However, the 77 may be represented in the statewide figures.

	All Licenses	LPN	RN	APRN
Total	7,029	545	6,048	436
O'ahu	5,147	333	4,465	349
Maui	662	75	562	25
Hawai'i	819	92	682	45
Kaua'i	369	44	312	13
Moloka'i	23	1	20	2
Lāna'i	9	0	7	2

Table 4. Final Nursing Workforce In-State Survey Sample, by License and Island

Gender

The proportion of male nurses in each license category ranges from 9.7% for LPNs to 11.7% RNs in 2015. The percent of RNs has increased from 10% in 2007. Compared to the statewide population, men in nursing continue to be underrepresented in comparison to the statewide population.

⁴ See Appendix A for details of inclusion procedure

Ethnicity

Across the license categories, LPNs and RNs are predominantly Asian (56.2%) and Caucasian (49.7%). APRNs have a greater proportion of Caucasians (56.9%). According to the U.S. Census Bureau's population estimate for 2015, approximately 37.3% of Hawai'i's population is Asian and 26.7% is Caucasian.⁵

These data suggest that Asian persons are overrepresented in LPNs and RNs compared to APRNs in the nursing workforce. Caucasians are underrepresented in LPNs compared to RNs and APRNs. Native Hawaiian and other Pacific Islanders are overrepresented in LPNs and underrepresented in RNS and APRNs.

	LPN	RN	APRN	HI Pop.
Hispanic Origin	10.7%	4.8%	4.2%	10.4%
Males	9.7%	11.7%	10.4%	50.7%
2 or More Races	9.1%	10.5%	8.0%	23.0%
African American; Black American	2.9%	1.0%	1.2%	2.6%
Indian; Alaska Native	.4%	.4%	0.0%	0.5%
Caucasian; White	18.1%	30.5%	56.9%	26.7%
Asian	56.2%	49.7%	27.3%	37.3%
Native Hawaiian or Other Pacific Islander	10.1%	6.1%	5.7%	9.9%
Other	3.1%	1.7%	1.3%	0.0%

Table 5. Percent Race, Ethnicity and Gender of Nurses and Hawai'i's Population.

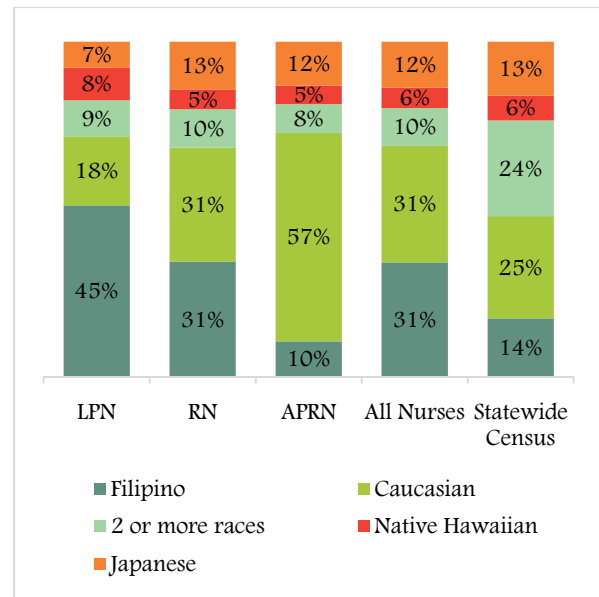


Figure 5. Top Five Ethnicities of Licensed Nurses

Within each license class, nurses predominantly report being either Filipino or Caucasian, though the specific distribution nurses across ethnic groups varies between license categories.⁶

Age

Statewide, the mean age of employed nurses across all license categories is 44.7 years.⁷ RNs are youngest on average (M=44.2 years), LPNs 46.1 and APRNs are oldest (M=49.15).

Age	All	LPN	RN	APRN
Mean	44.7	46.1	44.2	49.2
Median	44.0	46.0	43.0	52.0
Std. Dev.	12.1	11.9	12.1	11.3
Minimum	20.0	20.0	20.0	24.0
Maximum	81.0	81.0	79.0	76.0

Table 6. Mean Age of Employed Nurses in Hawai'i by License.

An examination of the age by 10-year cohorts reveals that 60% of working nurses in Hawai'i across all licenses are under the age of 50 years.

⁵ U.S. Census Bureau, 2010-2015, Population Estimates for Sex, Race, and Hispanic Origin. <http://www.census.gov/popest/data/national/asrh/2015/index.html>.

⁶ HCSN 2015 Workforce Survey.

⁷ HCSN Workforce Survey, 2015

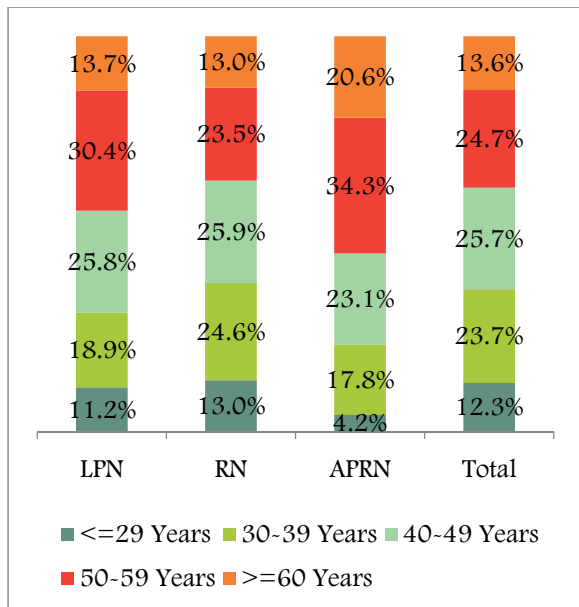


Figure 6. Distribution of Age of Employed Nurses in Hawai'i, by 10-Year Age Cohort

Distribution of Licensed Nurses by Island

The majority of all licensed nurses are on the Island of O'ahu where the greatest proportion of the general population live.

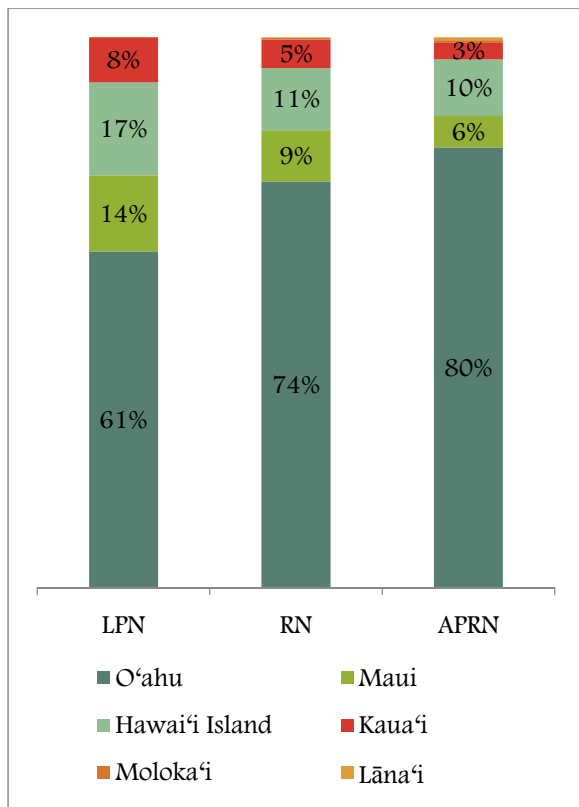


Figure 7. Percent of Licensed Nurses by Island

The distribution of LPNs by island is different when compared to RNs and APRNs. On the island of O'ahu 61% LPN reside; 17% are located on the island of Hawaii and 14% on Maui.

APRNs have the greatest proportion (80%) on the island of O'ahu and lowest proportion on the neighbor islands (Hawai'i Island 10%; Maui 6%; Kauai 3%).

Employment of Hawai'i's Nursing Workforce

The nurses employed in Hawai'i who participated in the workforce survey provided information about their primary employment position and setting. They also provided indication of their likelihood to leave their current positions and the reasons for that potential departure.

Primary Employment Location

Nurses' primary employment zip codes were used to provide a relatively low level of geography of where nurses are employed across the islands. The geo-maps of employment locations provides at-a-glance information about what communities across the state may benefit from the presence of more nurses.

On the island of O'ahu, the highest density of LPNs work in the Honolulu area. On Maui, the highest LPN density is in the Kahului area. On Hawai'i Island, the majority of LPNs work in or around Hilo. Relatively few LPNs work in other areas of the State.

The geographic distribution of RNs throughout Hawai'i is very similar to that of LPNs. The highest density of RNs work in Honolulu on O'ahu, Kahului on Maui, and the Hilo area on Hawai'i Island.

In addition, Lihu'e on Kaua'i has the benefit of a relatively high population of RNs as

does the Kona area of Hawai'i Island. Though the majority of RNs work in more densely populated, relatively more urban areas of the State, RNs are widely dispersed across each of the islands, including Moloka'i and Lāna'i.

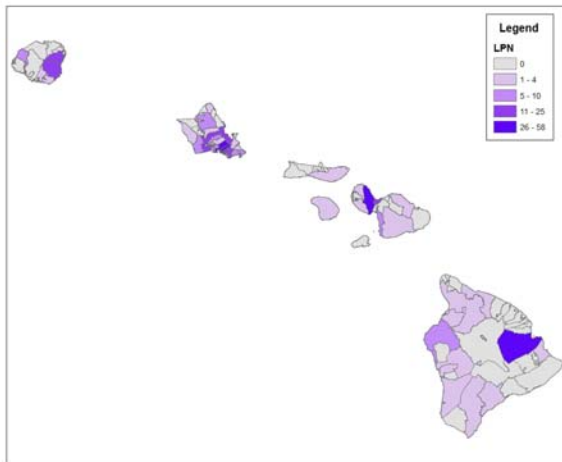


Figure 8. Employment Density of LPNs by Island

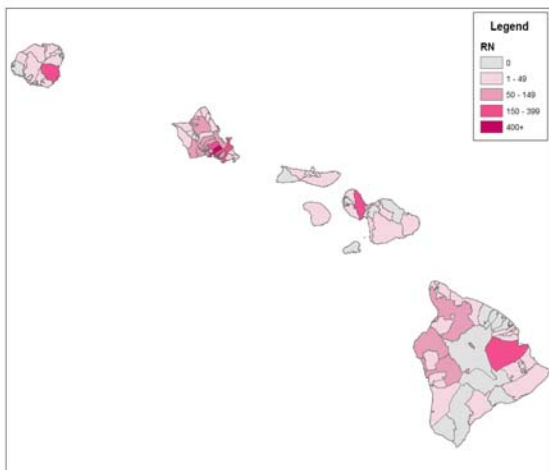


Figure 9. Employment Density of RNs by Island

The largest density of APRNs is in areas that overlap the highest density of LPNs and RNs throughout the State. However, there are relatively more APRNs on the Leeward Coast and Windward areas of O'ahu as well as the Kona area of Hawai'i Island.

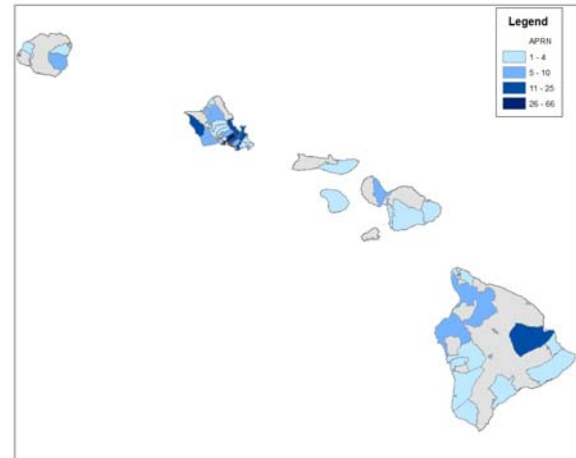


Figure 10. Employment Density of APRNs by Island

Primary Employment Position

Out of the licensed nurses currently working in Hawai'i, the majority of LPNs (75.2%) and RNs (73.1%) reported their primary employment position title was staff nurse. Among APRNs, the majority (64.7%) indicated a primary position title of APRN. Among all nurses, the second most commonly reported primary position title was nurse manager.

	% LPN	% RN	% APRN
Staff Nurse	<u>75.2*</u>	<u>73.1*</u>	15.7
Nurse Manager	5.2	11.5	4.9
Other-Health Care Related	15.7	8.9	2.9
APRN	0.2	0.4	<u>64.7*</u>
Nurse Executive	0.2	2.4	3.4
Nurse Faculty	1.9	1.8	6.1
Consultant	0.2	1.2	1.7
Nurse Researcher	0.2	0.4	0.5
Unemployed or Retired	1.2	0.1	0.0
Other-Not Health Care Related	0.0	0.1	0.0

*Note: The position in which majority of nurses in each license category are employed is indicated by underline.

Table 7. Primary Position Title for Nurses Employed in Hawai'i.

Primary Employment Setting

The workplace settings for LPNs, RNs and APRNs vary. About half of all nurses (54%) work in the hospital setting. LPNs have the smallest proportion working in hospitals (16%) and the largest proportion in other health care setting (40%) inclusive of nursing home/extended care, home health, physician's offices.

RNs (59%) work predominantly in the hospital setting with a smaller percent found in other health care settings (18%). LPNs (28%) and APRNs (26%) are also found in ambulatory care settings.

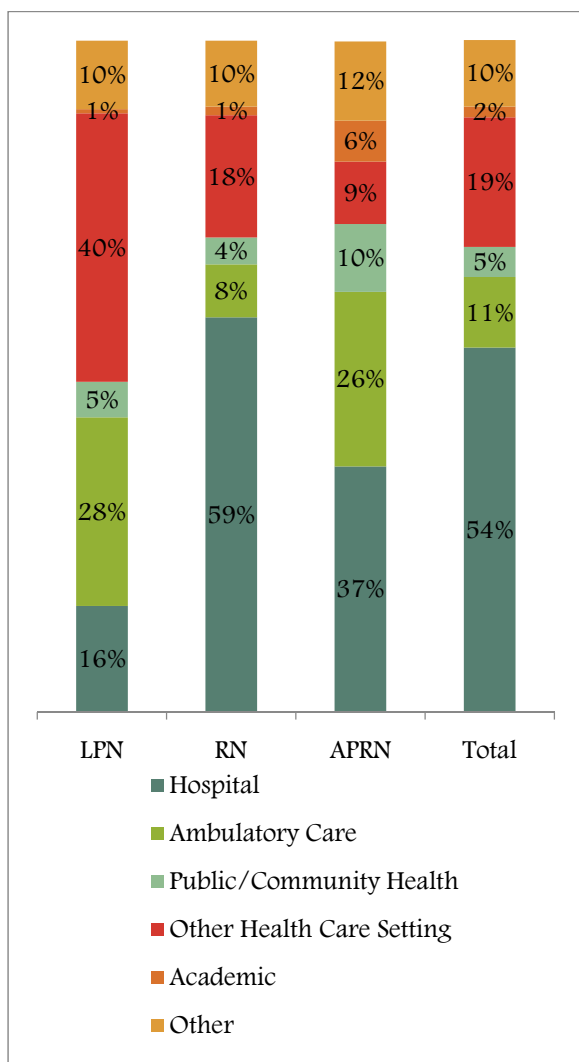


Figure 11. Primary Work Settings among LPN, RN and APRN Employed Nurses

Work Settings by Age Group

A greater proportion of younger nurses 30-39 years and 40-49 years old work in hospital settings. However, both younger <50 years and seasoned >50 years nurses predominantly work in hospital settings (Figure 8).

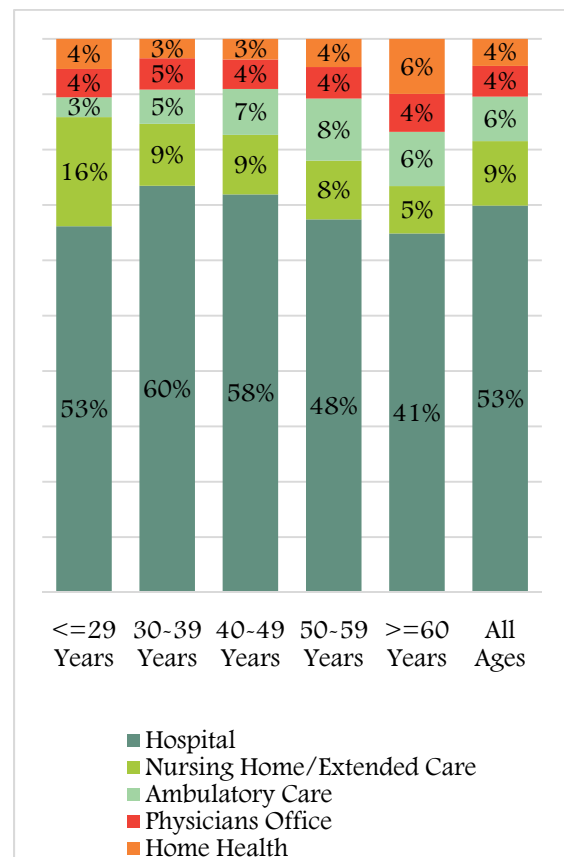


Figure 12. Age distribution of Top Primary Work Settings among All Employed Nurses

Academic Progression

A small percent of all nurses are engaged in academic progression. About 9.1% of APRNs and 3.4% RNs report pursuing a graduate degree, compared to 0.4% LPNs. LPNs report that 9.1% are pursuing a baccalaureate degree compared to 3.4% of RNs doing so. A total of 8.4% of all nurses are pursuing some type of degree.

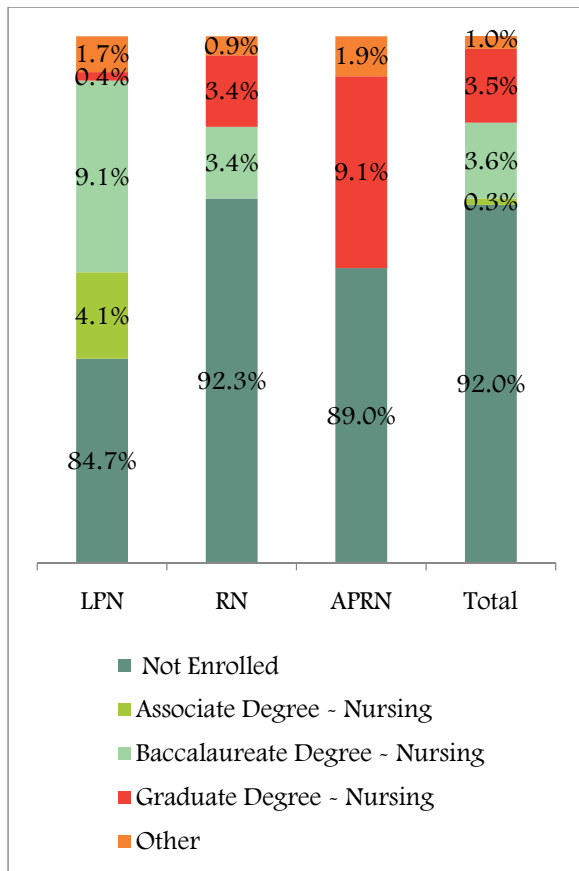


Figure 13. Engagement in Academic Progression among All Employed Nurses

Intent to Leave Position within 12 Months

Among the nearly 16% nurses expressing an intent to leave their current position within the next 12 months, interest in another job or position was the primary reason for doing so (15.9%) (see Table 8). RNs (16.3%) reported the highest frequency of interest in other nursing positions followed by LPNs=14.5% and APRNs=13.0%.

Nurses' responses ranked retirement the second highest (11.4%) reason for intent to leave a current position within the year. Out of this group, RNs (12.1%) reported the greatest intent to retire from their current positions.

Whilst the third highest ranked reason was pay and benefits with LPNs reporting the

highest interest in improving pay and benefits (10.1%).

Lack of good management/ leadership was fourth reason; with APRNs reporting the highest intent to leave 9.8%. APRNs also reported the highest incidence of stressful work environments (13.2%) in the fifth ranked reason for intention to leave a current position

	Total	LPN	RN	APRN
Interest in another position/ job	15.9%	14.5%	16.3%	13.0%
Retirement	11.4%	7.2%	12.1%	7.6%
Better Pay/Benefits	8.8%	10.1%	8.9%	6.5%
Lack of good management/ leadership	8.1%	1.4%	8.4%	9.8%
Stressful work environment	7.2%	7.2%	6.8%	10.9%

Table 8. Reasons Nurses Intend to Leave their Position within 12 months by License.

Likelihood to Retire and Leave Nursing

Nearly half of all licensed nurses currently working in-state indicate an intention to remain in the nursing workforce for the next 20 years (49%). Approximately 73% of nurses' in-state also intends to remain in the workforce for the next decade.

Examination of intention to leave the profession between license categories suggests, fewer RNs (26%) intend to leave the nursing workforce within the next 10 years than either LPNs (34%) or APRNs (34%).

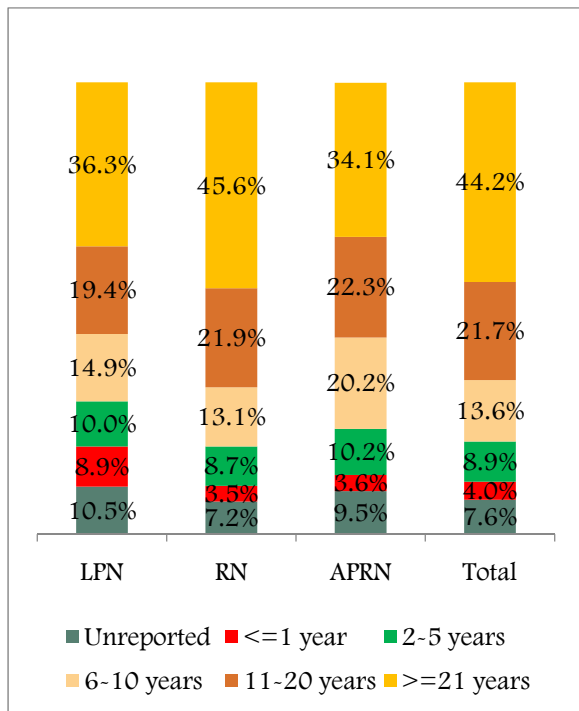


Figure 14. Employed In-state Nurses Intention to Retire from the Workforce

Summary

Hawai'i's nursing workforce is diverse. Demographically, the composition of the nursing workforce has changed little since the 2013 Nursing Workforce survey. The majority of nurses in the state are women and there is no notable increase in the proportion of men by nursing license as compared to 2013 (LPN=8.5%, RN=11.9%, APRN=9.1%).⁸ In the case of gender and ethnicity the workforce continues to be disproportionate to the overall demography of the State.

The ethnic composition of nurses working in Hawai'i continues to be predominantly Caucasian and Asian. APRNs tend to be more frequently Caucasian than Asian,

whereas the reverse is true for LPNs and RNs.

Based on nurses' responses to the workforce survey, the majority of nurses statewide are employed as staff nurses in hospitals. This is true even among APRNs. Though O'ahu has a supply of APRNs who are working in a primary care capacity, the neighbor islands are experiencing a shortage of APRNs working either in primary care or in specialized certification positions.

Adding to the nursing workforce, especially in the classes of LPNs and APRNs, will ensure that there is an adequate number of nurses to meet the healthcare needs of an aging population, particularly in extended and nursing care facilities.

The survey suggests the existing nursing workforce will experience little impact from retirement of nurses (4%) in the short term. However, the percent of nurses intending to leave the practice of nursing will more than double within 5 years (Figure 14).

⁸ LeVasseur, S. A. (2013). *A Report on Hawai'i's Nursing Workforce Supply*.

Licensed Practical Nurses

License Counts

In 2015, HBON reported a total of 2,789 licensed LPNs. LPNs account for 9.7% of all licensed nurses in Hawai'i compared to 2005 when LPNs represented 14.8% of all licenses.

Since 2005, the number of active licensed in-state LPNs has declined by 9.1% with a negative (0.3%) annual growth rate. This shows the proportion of LPNs in the total nursing workforce has declined by 34.5% in the 10 year period.

Total		2,789
In-State	Total	2,326
	O'ahu	1,347
	Hawai'i	363
	Maui	421
	Kaua'i	182
	Moloka'i	12
	Lāna'i	1
Out of -State	Total	463
	Mainland	458
	Foreign	5

Table 9. Geographic Distribution of LPN Licenses in 2015

A number of factors may be attributable to the slow growth rate among LPNs including change in education programs geared toward academic progression to the baccalaureate or higher degrees, job demand, aging out of the LPN workforce, and changes in entry-to-nursing preferences, which were not assessed by the 2015 Nursing Workforce Survey.

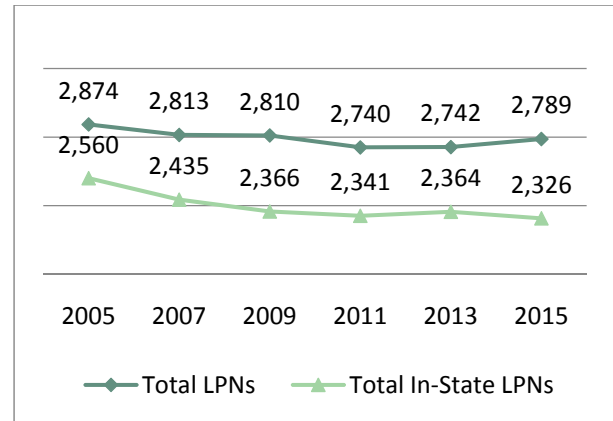


Figure 15. Growth in Total and In-State LPN Licenses, 2005-2015

The decline in LPNs may pose future challenges for the nursing workforce, particularly in settings employing chiefly LPNs, such as nursing homes or extended care facilities.

Hawai'i's LPN Workforce

In 2015, 837 (30%) of the 2,789 HBON licensed LPNs invited to participate in the survey responded. Out of this number, 2,326 were identified as in-state. After application of exclusion criteria and data cleaning 551 (23.7%) in-state actively employed LPN responses were used in the information presented below.

Diversity

Gender

More than 9 out of every 10 LPNs in Hawai'i are female (90.3%). This is a higher proportion of females than the overall nursing population in the State, and a higher proportion of females than the nurses in the other license categories.

Ethnicity

Nearly half (44.7%) of LPNs report being of Filipino ancestry whereas only 18.0% report being Caucasian. LPNs are also older than the average age of the overall nursing workforce though the majority (55%) of the workforce is under 50 years of age.

While this population has years to reach retirement age, the LPN population has high rates of reported enrollment in academic progression in nursing programs. This may indicate a future attrition from LPNs into other nursing license categories and roles. Academic progression across license types and over time will continue to be monitored through future Nursing Workforce Surveys to assess trends.

Age

Statewide, the mean age, 46.1, and median age, 46.0, makes LPNs an older workforce on average than employed nurses across all license categories.

Across the state, the Island of Maui has the youngest LPNs whereas Moloka'i has the oldest LPNs.

	Mean	Median
O'ahu	45.6	44.5
Maui	43.5	45.0
Hawai'i Island	49.9	52.5
Kaua'i	44.7	45.0
Moloka'i	68.0	68.0
Statewide	46.1	46.0

Table 10. Age (in years) of LPNs by Island

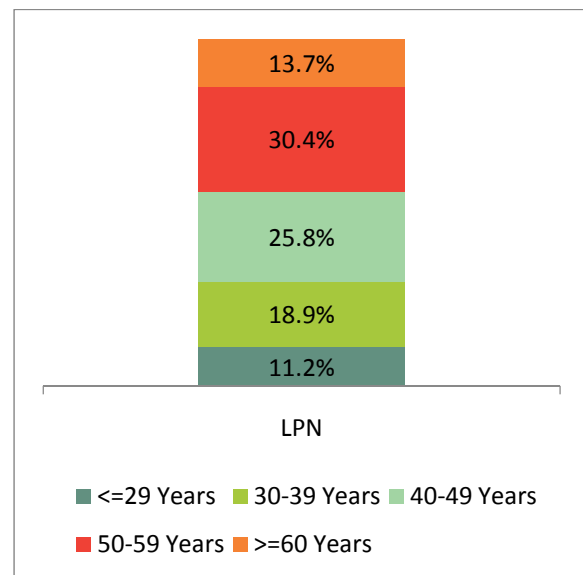


Figure 16. Distribution of Age of Employed LPNs in Hawai'i, by 10-Year Age Cohort

Within the statewide LPN workforce, 44% is 50 years of age or older, which is 7 percentage points higher than the overall nursing workforce. However, 56% is younger than 50 years of age and therefore relatively far from retirement age.

Academic Progression

Between 3-13% of LPNs, across the state, have gone back to school and achieved higher degrees after obtaining their first degree in nursing.

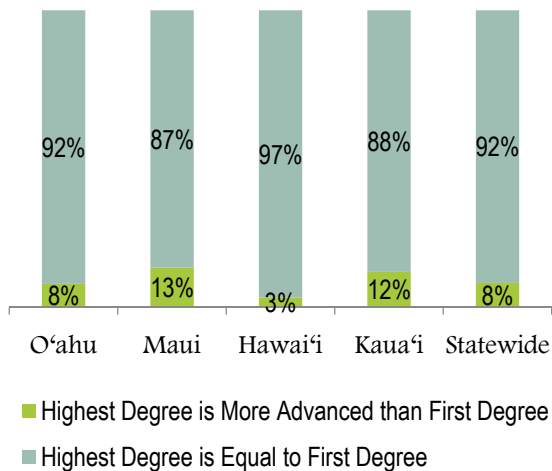


Figure 17. Percent of LPNs Making Academic Progression by Island

Through this academic progression, LPNs reporting their highest academic degree increases from 9% to 13% for an Associate's degree and from 10% to 14% for a Baccalaureate Degree.

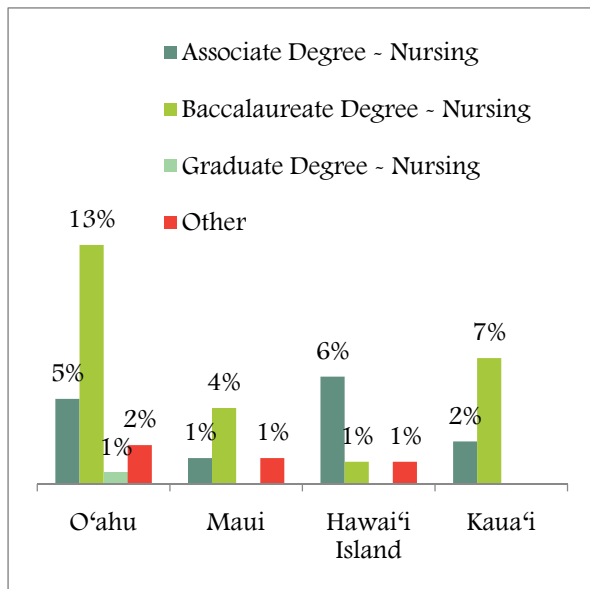


Figure 18. Percent of Enrolled LPNs Currently Pursuing Higher Degrees

When asked about current enrollment, statewide, 15% of LPNs are actively seeking academic progression. O'ahu had the highest percentage of LPNs in a degree-seeking program at 21%, followed by

Kaua'i (9%). Moloka'i LPNs did not report current degree-seeking activities.

Primary Position Title

The overwhelming majority of LPNs across the state report the employment position of staff nurse.

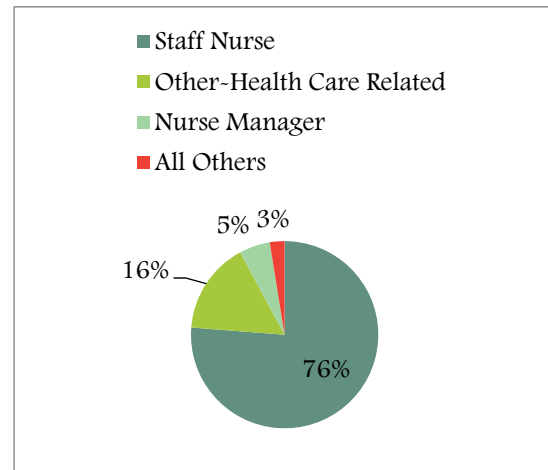


Figure 19. Top Position Titles for LPNs, Statewide

Primary Position by Island

When compared by Island, staff nurse is the primary position held by LPNs on all islands except Moloka'i, in which 100% of survey respondents noted employment in an Other, Health Related position.

On O'ahu, 3 LPNs held positions of Nurse Executive (n=1, 0.3%), Nurse Researcher (n=1, 0.3%), and Consultant (n=1, 0.3%).

	O'ahu	Maui	Hawai'i	Kaua'i	Moloka'i
Nurse Faculty	3%	3%	--	--	--
Nurse Manager	4%	8%	6%	10%	--
Other (Health-Related)	17%	14%	18%	5%	100%
Staff Nurse	75%	75%	76%	86%	--

Table 11. Percent of LPNs in Each Position, by Island

Primary Work Settings

The top workplace settings for LPNs are nursing or other extended care facilities (25.3%), physicians' offices (16.3%), hospitals (14.8%), and ambulatory care settings (10.0%). The other 33% of LPNs work in a range of other settings.

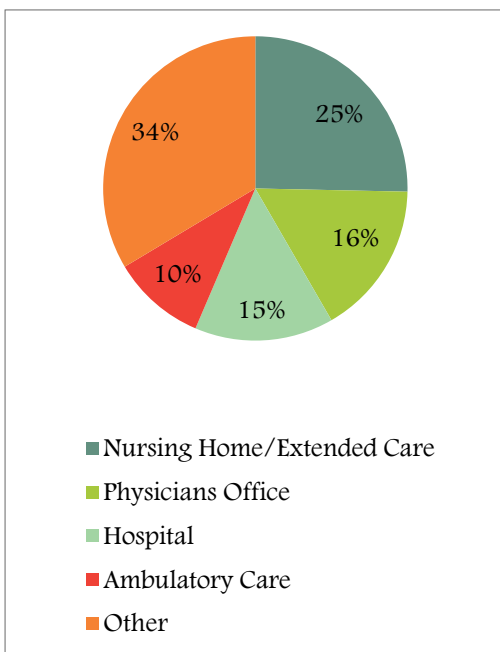


Figure 20. Top 5 Employment Settings of LPNs.

Examining the workplace settings by island reveals that LPNs on Maui are more likely to work in physicians' offices than any other setting.

Proportionally, LPNs working on Kaua'i are more likely to work in hospitals than are LPNs working on any other island. A larger proportion of Hawai'i Island's LPNs work in community health settings than do LPNs on any other island. These data demonstrate some variability in workplace setting among LPNs across the islands despite the largest statewide proportion of LPNs employment in extended care facilities.

Primary Work Settings by Age Group

Among the five most frequently reported LPN work settings, only hospitals employ a majority of LPNs who are over the age of 50 (59.7%). It is worth noting, although the majority of LPNs employed in hospitals are 50 years or older, only 19.5% of hospital-employed LPNs are 60 or older.

	LPNs Primary Work Setting %	<50 Age Group %	>=50 Age Group %
Nursing/Extended Care	25.3	60.6	37.9
Physician's Office	16.3	63.5	35.3
Hospital	14.8	37.7	59.7
Ambulatory Care	10.0	57.7	36.5
Assisted Living	5.4	67.9	28.6

Table 12. Top Primary Workplace Settings among LPNs by Age Group

Likelihood to Leave Current Position

Across the state, over two-thirds of the LPNs are very unlikely or somewhat unlikely to leave their current work positions.

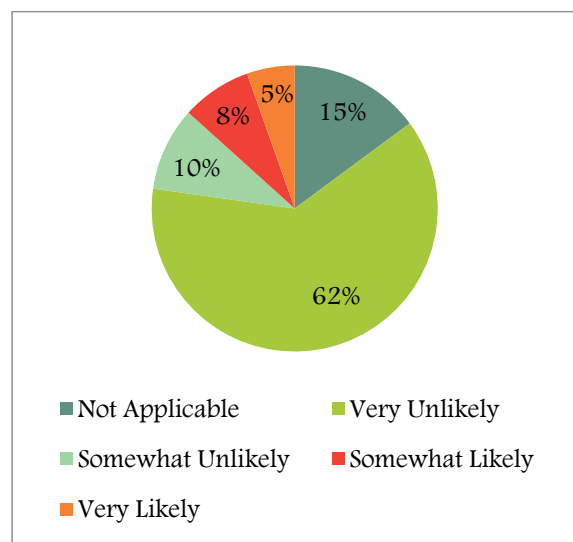


Figure 21. Likelihood to Leave Current Position in Next 12 Months for LPNs Statewide

LPNs are most likely to report an intention to leave their current posts due to interest in other positions (14.5%). LPNs' also

report seeking positions offering higher pay and benefits (10.1%).

Out of the 13% of LPNs that indicated an intention to leave their current position in the next 12 months, only a minority will leave the workforce.

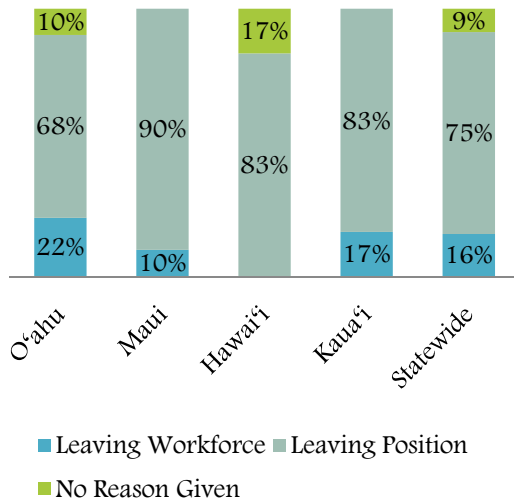


Figure 22. Reasons LPNs Are Leaving Their Current Position in Next 12 Months

Summary

LPNs are predominantly older and female working in nursing home/extended care, physician's offices and hospital settings. LPNs <50 years of age are more likely working in assisted living facilities, physician's offices and nursing/extended care.

Trends suggest as the current >=50 age LPN workforce retires the proportion working in hospitals will decline. The overall decline in the LPN workforce will also be impacted by nurses seeking higher degrees and potentially changing license categories to improve job/career opportunities.

Registered Nurses

License Counts

HBON reported a total of 24,543 RN licenses in 2015. RNs are the largest nursing license category, comprising 85.7% of all nursing licenses.

The number of active RN licenses issued by HBON has steadily increased since 2005. In 2015, total RNs increased by 54.4% as compared to 2005 (n=15,897) and 11.3% as compared to 2013 (n=22,058). Between 2005 and 2015, there was an annual growth rate of 3.4% in the number of active in-state licensed RNs.

Total		24,543
In-State	Total	15,817
	O'ahu	11,580
	Hawai'i	1,923
	Maui	1,507
	Kaua'i	748
	Moloka'i	38
	Lāna'i	21
Out-of-State	Total	8,726
	Mainland	8,628
	Foreign	97
	Other	1

Table 13. Geographic Distribution of RN Licenses in 2015

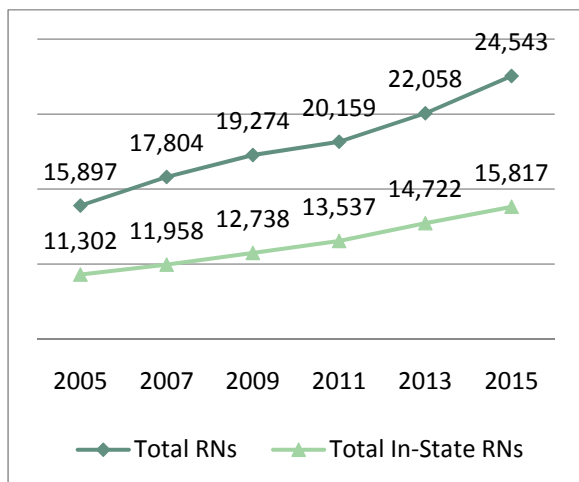


Figure 23. Growth in Total and In-State RN Licenses, 2005-2015

Though there was a steady 10-year increase in the number of RN licenses issued by HBON, the proportion of RN licenses held by Hawai'i residents has decreased. In 2015, less than two-thirds of RN licenses were held by residents of Hawai'i, representing a decline of 6.6 percentage points compared to 2005.

Hawai'i's RN Workforce

In 2015, 9,607 (39.1%) of the 24,543 total active licensed RNs responded to the survey. After exclusion criteria and data cleaning 6,115 (38.7%) in-state actively employed RN responses were used in the analyses presented below.

Diversity

Gender

Men represent 12.1% of RNs across the state. Moloka'i had the largest proportion of Male RNs, at 30.0%, and Kaua'i had the lowest proportion of Male RNs, at 6.9%.

Ethnicity

A majority of RNs report being of 31% Filipino or 31% Caucasian ancestry. In the top 5 reported ethnicities, following Filipino and Caucasian are Japanese, 2 or more races, and Native Hawaiian.

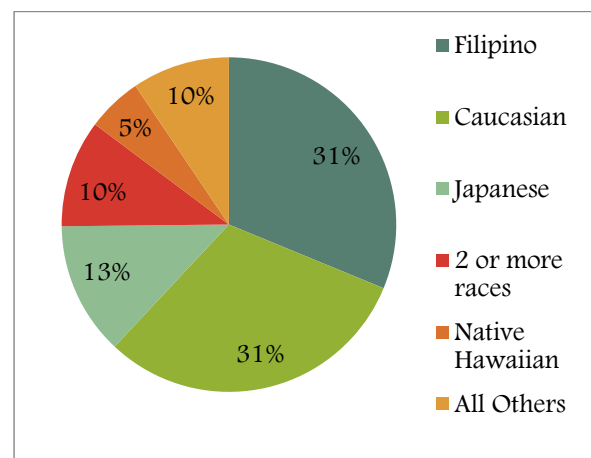


Figure 24. Top 5 Ethnicities of RNs Statewide

Age

Across the state, RNs on O'ahu have the youngest mean age (42) and Lāna'i has the oldest mean age.

	Mean	Median
O'ahu	43.7	43.0
Maui	45.1	44.0
Hawai'i Island	46.4	47.0
Kaua'i	45.1	44.0
Moloka'i	46.9	51.5
Lāna'i	53.9	56.0
Statewide	44.2	43.0

Table 14. Mean age (in years) of RN Licenses, by Island

RNs have the largest proportion of nurses <50 years of age (61.7%). RNs have a smaller proportion of the population (35.5%) ≥50 years.

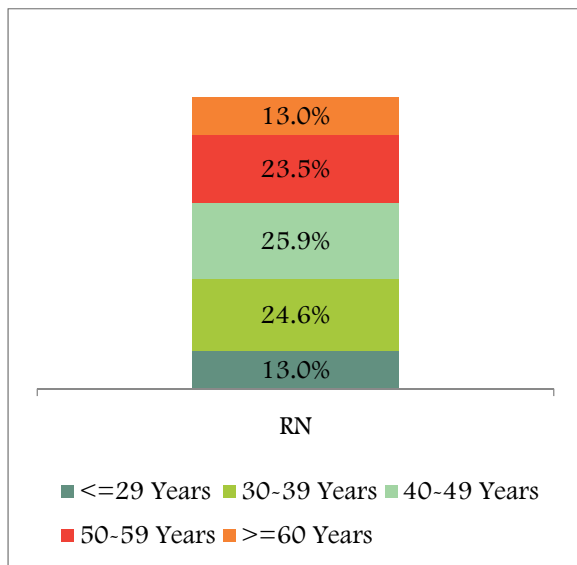


Figure 25. Distribution of Age of Employed RNs in Hawai'i, by 10-Year Age Cohort.

Work Position and Setting

A majority of RNs reported that hospitals are their primary work setting (57.8%). Nearly 3 out of every 4 RNs (70%) are employed as a staff nurse.

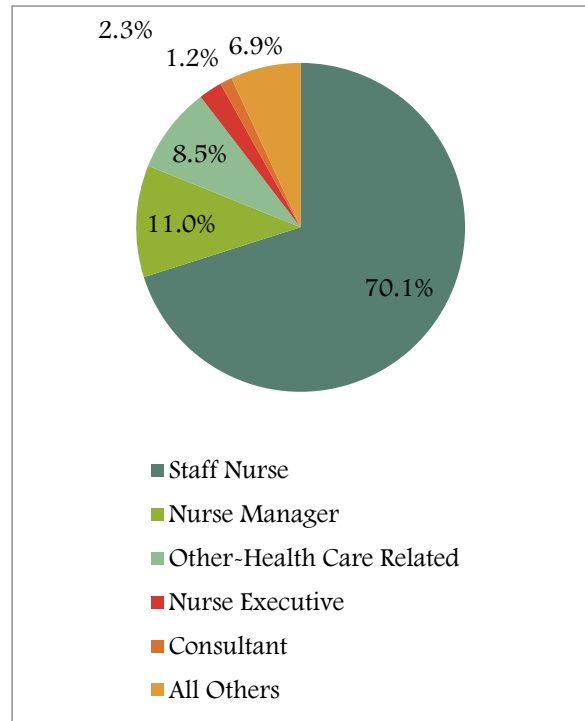


Figure 26. Top Positions for RNs Statewide

The pattern of employment of RNs as staff nurses is similar on all the islands. Moloka'i (20%) and Lāna'i (29%) have the greatest proportion of Nurse Managers, Hawai'i Island has a greater percentage of Nurse Managers (14.1%) and Other Health Related positions (11%) compared to the other islands O'ahu, Maui, and Kaua'i.

Kaua'i has the largest percent of RNs in Nurse Executive roles (3.5%) and Moloka'i has the largest percent of Nurse Faculty (5%), though the relatively small overall nursing population on these state compared to more populous island may make these distributions overrepresented on these Islands.

	O'ahu	Maui	Hawai'i	Kaua'i
Staff Nurse	70.8%	68.9%	65%	73.4%
Nurse	10.1%	13.9%	14.1%	12.2%
Manager				
Other Health Related	8.6%	6.8%	11%	5.1%
Nurse	2.2%	2.3%	2.9%	3.5%
Executive				
Nurse Faculty	1.5%	3.2%	2.1%	1.3%
Consultant	1.3%	0.5%	1%	1%

Table 15. Percent of RNs in Top Positions by O'ahu, Maui, Hawai'i and Kaua'i

	Moloka'i	Lāna'i	Total All Islands
Staff Nurse	55%	71.4%	70.1%
Nurse	20%	28.6%	11.0%
Manager			
Other Health Related	15%	-	8.5%
Nurse	-	-	2.3%
Executive			
Nurse Faculty	5%	-	1.7%
Consultant	5%	-	1.2%

Table 16. Percent of RNs in Top Positions by Moloka'i and Lana'i Islands

Primary Work Settings

The considerable majority of RNs statewide report their primary workplace setting is in hospitals (57.8%). Nursing home/extended care facilities (7.9%), ambulatory care settings (5.0%), and home healthcare (3.7%) are the three most frequently reported non-hospital workplace settings among RNs.

Approximately one-quarter (25.6%) of RNs report working in a primary setting other than those accounted for in the other top five settings. Although this appears to be a substantial proportion of RNs, less than 3% of RNs report working in any one of the settings included in this grouping, indicating that RNs work in a broad range of settings.

The percent of RNs less than 50 years of age employed in the top five settings was between 52% and 56%. RNs 50 years or older employed in these setting was between 42% and 45%.

	RNs Primary Work Setting %	<50 Age Group %	>=50 Age Group %
Hospital	57.8	66.5	30.5
Nursing Home/Extended Care	7.9	72.4	25.0
Ambulatory Care	5.0	55.7	41.6
Home Healthcare	3.7	53.4	44.3
Insurance	2.9	52.0	45.0

Table 17. Top Primary Workplace Settings among RNs by Age Group

Academic Progression

RNs across the state report between 13% and 23% have completed additional degrees beyond their initial nursing degree. Of those who have achieved academic progression, there is a reported increase from 29% to 33% with an Associate's degree, 55% to 60% with a Baccalaureate degree, and 2% to 6% with a Master's degree, as compared to their initial degree.

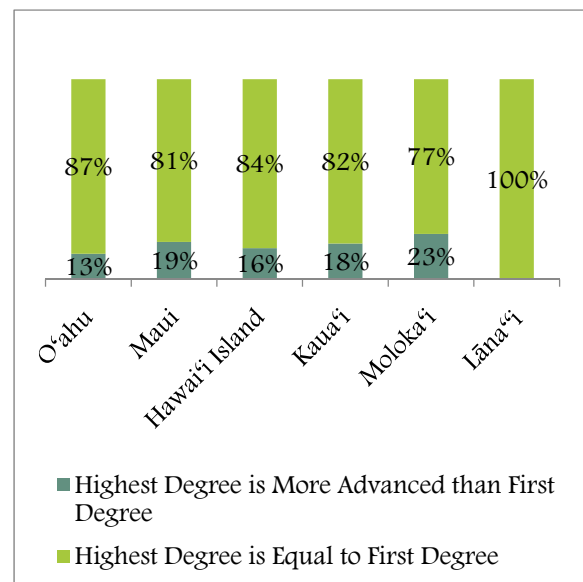


Figure 27. Percent of RNs Making Academic Progression by Island

When asked about current enrollment, statewide, 7.8% of RNs are actively seeking academic progression. Out of those currently enrolled, Lana'i (37.5%) have a higher percent of enrollments in the baccalaureate degree reflective of the small number of RNs. Maui 5.4% have the second highest enrollments. Moloka'i (4.5%) and O'ahu (3.9%) have the highest percent of graduate enrollments.

All of the degrees currently pursued by RNs include the 3.3% Baccalaureate Degree, 3.6% Masters Degree or 1.0% Other. This is reflective of the overall academic progression findings that the highest degree for RNs is more likely to be a Baccalaureate, Master's Degree or higher, if academic progression has been achieved.

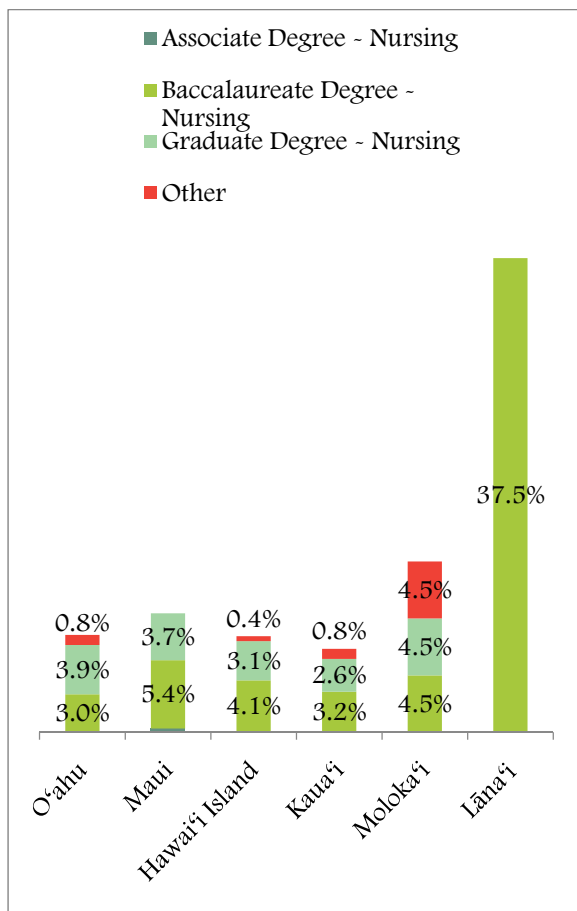


Figure 28. Percent of Enrolled RNs Currently Pursuing Degrees at Each Level

Likelihood to Leave Current Position

Fifteen percent of RNs reported they were somewhat likely or very likely to leave their current position within the next 12 months. Of this group, most were interested in other positions (16.3%). The second most common reason for leaving was retirement (12.2%).

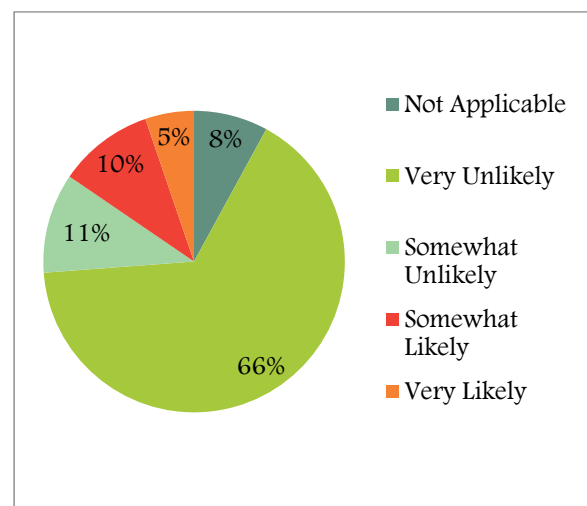


Figure 29. Likelihood to Leave Current Position in Next 12 Months for RNs Statewide

Better pay and benefits (9%), lack of good management/leadership (8.5%), and personal/family reasons were the other most frequently cited reasons for an intention to leave a current position.

Kauai (26%) had a greater proportion of RNs interested in another position. Maui RNs reported the highest proportion wanting to retire within 12 months (22%) and seeking greater pay/benefits (16%). Moloka'i was either personal/family reason 67% or retirement 33%. Lana'i had no responses.

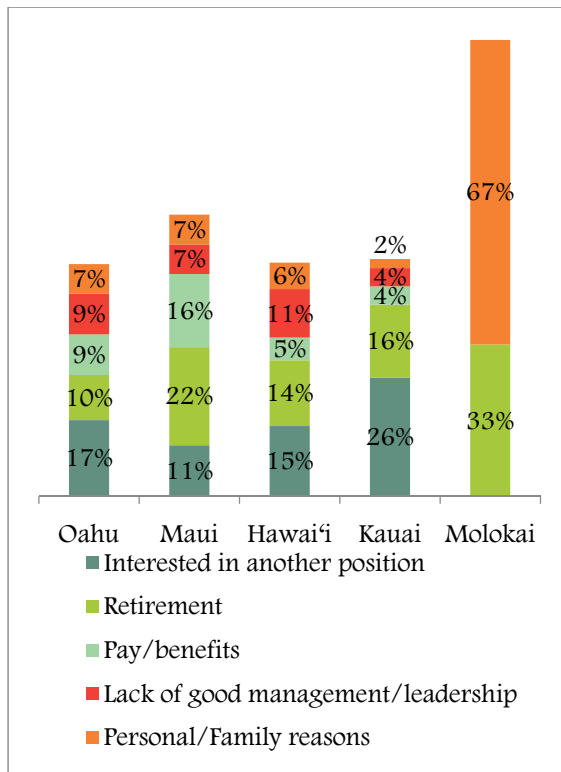


Figure 30. Reasons RNs Are Likely to Leave Workforce in the Next 12 Months by Island

Summary

RNs (83%) make up the majority of the nursing workforce in Hawai'i. Most RNs are employed in hospital settings and describe their position title as staff nurse.

RNs are the youngest licensed group of nurses in the workforce. However there is a large cohort of RNS 50 years of age or older in all settings such as hospitals.

Male RNs make up about 12% of the licensed group. RNs also represent a diverse ancestry population. However, some racial ethnic groups in the RN workforce continue to be underrepresented in comparison to Hawai'i's general population. Native Hawaiians and Other Pacific Islander represent 6.1% of the RN workforce which is lower than 9.9% reported by the U.S. Census Bureau.

Advanced Practice Registered Nurses

License Counts

In 2015 a total of 1,312 nurses were licensed by HBON as APRNs. Out of this number, 958 (73%) are active in-state.

Total		1,312
In-State	Total	958
	O'ahu	731
	Hawai'i	107
	Maui	65
	Kaua'i	48
	Moloka'i	5
Out-of-State	Lāna'i	2
	Total	354
	Mainland	351
	Foreign	3

Table 18. Geographic Distribution of APRN Licenses in 2015

APRNs make up about 5% of Hawai'i's nursing workforce. Over the past decade, the number of licensed in-state APRNs has nearly doubled; with an average annual growth rate of about 6%.

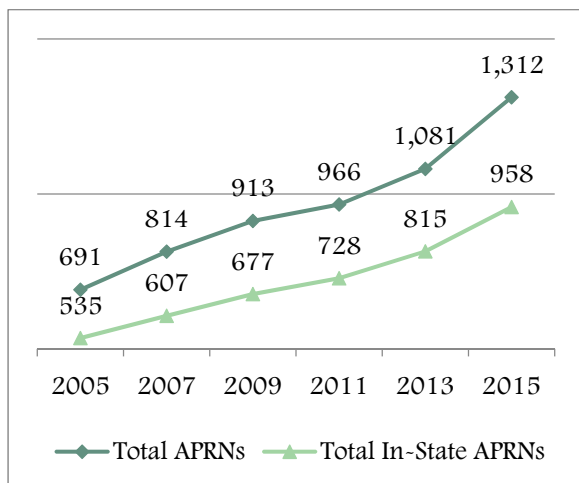


Figure 31. Growth in Total and In-State RN Licenses, 2005-2015

Consistent with LPNs and RNs, the percent of HBON licensed APRNs who live in-state has declined slightly (4.4%) over the past decade.

Hawai'i APRN Workforce

In 2015, 647 (49.3%) of the total 1,312 active licensed APRNs responded to the survey. After data cleaning and exclusion criteria, 440 (45.9%) of the 958 in-state active APRN responses were included in the analyses presented below.

Gender

Men represent 10.6% of APRNs across the state. Moloka'i and Lana'i had the largest proportion of Male APRNs, at 50.0%, and Kaua'i had the lowest proportion of Male APRNs, at 0%.

Ethnicity

APRNs of Caucasian (56.7%) ancestry represent the largest proportion of nurses in this HBON licensed group. APRNs of Asian ancestry (27.3%) are the second largest ethnic group. Underrepresented groups include those with 2 or More Races 8% and Native Hawaiian or Pacific Islander 5.7% ancestry. However, the three groups (Asian, 2 or More Races; Native Hawaiian and Pacific Islander) are also disproportionately less than the general population in Hawai'i.

Age

APRNs are the oldest group in the nursing workforce, both by mean age and percent over the age of 50 years. Compared to the state mean of 44.7, the mean age of APRNs is 49.2, with the mean of APRNs without prescriptive authority higher, at 52.6.

	With Prescriptive Authority	Without Prescriptive Authority
O'ahu	46.5	51.8
Maui	52.0	60.8
Hawai'i Island	53.2	59.0
Kaua'i	47.0	56.5
Moloka'i	47.0	-
Lana'i	29.5	-

Table 19. Mean Age (in Years) of APRNs by Island

Among APRNs the majority of working nurses (54.9%) are 50 years or older, and 20.6% are 60 years or older. Within this license class, there may be some concern that the workforce will be adversely impacted by retirement within the next 10 to 15 years. However, as noted earlier, the APRN population is the smallest population of all license categories and experiences the greatest growth rate annually of all the licensed groups.

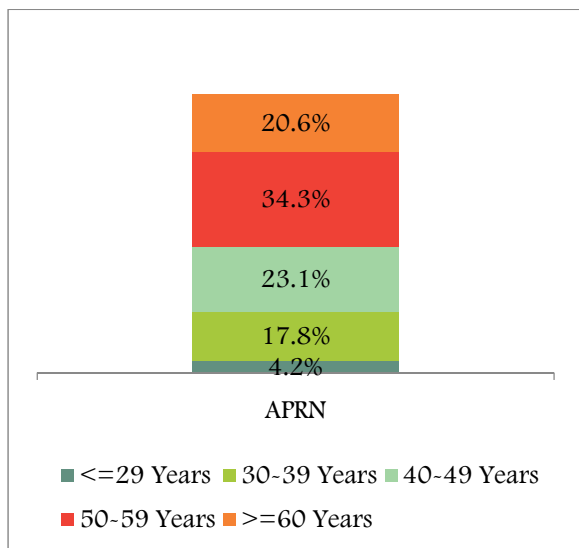


Figure 32. Distribution of Age of Employed APRNs in Hawai'i, by 10-Year Age Cohort.

Certification

Nurses with an APRN license are comprised of four certification groups: Clinical Nurse Specialist (CNS), Certified Nurse Practitioner (CNP), Certified Nurse Midwife (CNM) and Certified Registered Nurse Anesthetist (CRNA).

CNP is the most common certification, with over three quarters (76%) of all APRNs holding a CNP certification alone or in combination with another APRN certification.

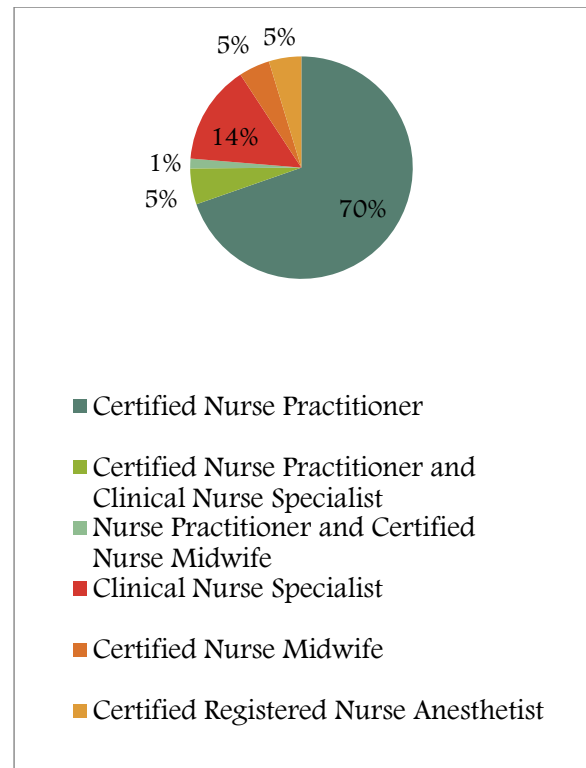


Figure 33. Statewide APRN Certifications held

Across the state, 68% of APRNs have prescriptive authority. Certified NPs are more likely to hold prescriptive authority privileges under their license compared to other types of APRN certifications across the state.

	Percent With Prescriptive Authority
O'ahu	65%
Maui	80%
Hawai'i Island	82%
Kaua'i	85%
Moloka'i	100%
Lana'i	100%

Table 20. Statewide APRNs with Prescriptive Authority

APRNs Working in Hospital Settings

Out of APRNs working in hospitals, 40.9% report working as a RN in their primary position, 17.3% are acute care NPs and 12.6% primary care NP. CNSs (7.9%) make up the smallest group of APRNs in hospital settings.

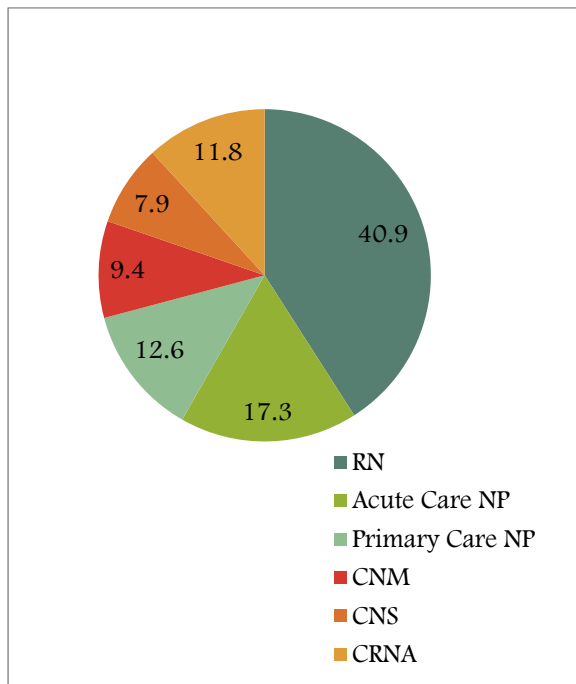


Figure 34. Distribution of APRNs by Primary Positions.

Approximately 36.4% of APRNs report working in hospital settings across the state. Out of this percent, 57.7% of APRNs working in hospital settings report having prescriptive authority.

	With Prescriptive Authority %	Without Prescriptive Authority %
RN	51.9	48.1
Acute Care NP	81.8	18.2
Primary Care NP	100.0	-
CNM	83.3	16.7
CNS	30.0	70.0
CRNA	13.3	86.7
Total	59.8	40.2

Table 21. Percent of APRNs Working in Hospital Settings by Prescriptive Authority

Primary care NPs report the highest percent of (100%) prescriptive authority. Followed by CNM (83.3%) and Acute care NPs (81.8%) hold prescriptive authority.

APRNs with Specialized Certification by Island

The distribution of APRNs with specialized certifications varies by island. The island of O'ahu has 110 APRNs working in hospital settings and is the only island with APRNs working in each primary position.

Hawai'i island has the second largest number of APRNs in hospitals (n=6) with the most representation of APRNs are Acute care NPs (33.3%). CNMs (16.7%) and CRNAs (16.7%) with specialized certification are also found in Hawaii Island hospital settings.

	O'ahu %	Maui %	Hawai'i Island %	Kaua'i %	Moloka'i %
RN	39.1	75.0	33.3	100.0	~
Acute Care NP	17.3	25.0	33.3	~	~
Primary Care NP	13.6	~	~	~	~
CNM	8.2	~	16.7	~	100.0
CNS	9.1	~	~	~	~
CRNA	12.7	~	16.7	~	~

Table 22. Percent of APRNs Working in Hospital Settings by Island.

On Maui, Kaua'i, and Moloka'i, there is less dispersion of APRNs across various positions. On Maui, 42.9% of APRNs are working as RNs, and there are no APRNs on island working in positions requiring specialized certifications. Kaua'i's APRNs are all working as RNs, and 100% of Moloka'i's APRNs are CNMs. There are no APRNs working in acute care on the island of Lāna'i.

Primary Position Title

APRNs are commonly employed in an APRN role (64%), followed by Staff Nurse (16%), Nurse Faculty (6%), and Nurse Manager (5%).

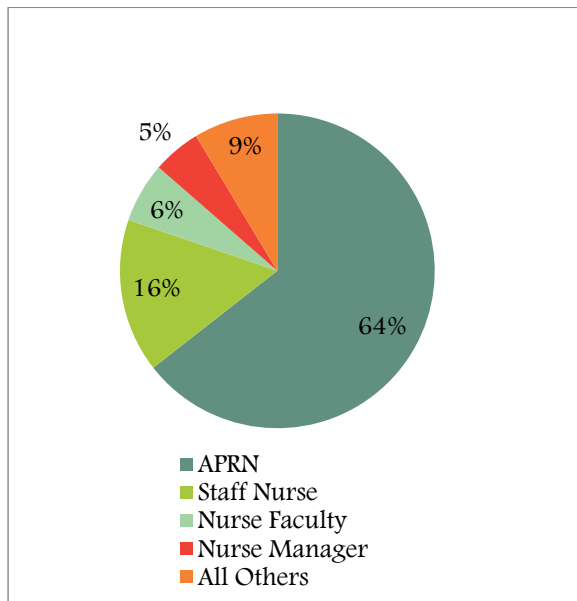


Figure 35. Top Positions Held by APRNs (with or without Prescriptive Authority)

The top three positions reported by APRNs with prescriptive authority are consistent with the overall APRN population. In contrast, only 39% of APRNs without prescriptive authority report employment as an APRN.

	With Prescriptive Authority	Without Prescriptive Authority
APRN	76%	39%
Staff Nurse	11%	26%
Nurse Manager	4%	13%
Nurse Faculty	3%	8%
Other Health Care Related	3%	6%
Nurse Executive	3%	4%
Consultant	1%	3%
Nurse Researcher	~	1%

Table 23. Roles, Statewide of APRNs by Prescriptive Authority

Twenty six percent of APRNs without prescriptive authority report employment as an RN; nearly double the 11% reported by APRN with prescriptive authority. The Nurse Manager position is three times more likely to be held by APRNs without prescriptive authority, compared to APRNs with prescriptive authority.

Primary Work Settings

Like RNs, the majority of APRNs report working in acute care settings including hospitals (36.3%) and ambulatory care settings (16.3%). APRNs also frequently report working in physicians' offices (9.5%), community health settings (8.5%) and academic settings (6.1%).

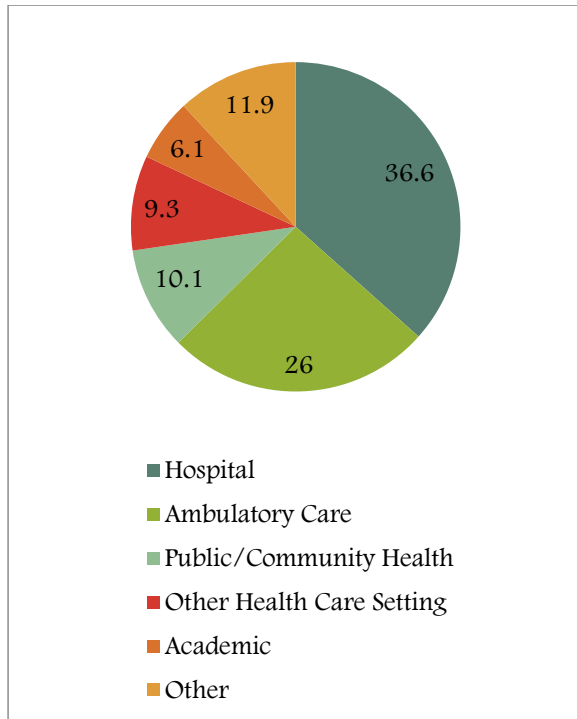


Figure 36. Top Employment Settings of APRNs.

Primary Work Settings by Age Group

Ambulatory care settings is the primary workplace for 16.3% of APRNs, 61.2% of whom are 50 years or older. Academic settings are the primary place of employment for 6.1% of APRNs with 92% 50 years or older compared to 8% less than 50 years.

	APRNs Primary Work Setting %	<50 Age %	>=50 Age %
Hospital	36.3	49.7	46.3
Ambulatory Care	16.3	37.3	61.2
Physician's Office	9.5	71.8	25.6
Community Health	8.5	51.4	42.9
Academic	6.1	8.0	92.0

Table 24. Percent of APRNs by Top Workplace Settings and Age Group

Employment Settings Differ for APRNs with or without Prescriptive Authority

The employment settings for APRNs with prescriptive authority differ somewhat from APRNs without prescriptive authority.

APRNs without prescriptive authority are more likely to work in hospitals (49.2%) and academic settings (11.7%) than are APRN with prescriptive authority (30.5% and 3.5%, respectively). APRN with prescriptive authority are more likely to work in ambulatory care settings (18.1%), physicians' offices (12.8%), and community health settings (11.7%) than APRNs without prescriptive authority (12.5%, 2.3%, and 1.6%, respectively).

Although the top two work settings are similar, APRNs with prescriptive authority are less likely to work in hospitals than APRNs without prescriptive authority (30% vs 49%). APRNs with prescriptive authority are also more likely to work in Physician's Offices (13%) and Community Health Centers (12%). Whereas APRNs without prescriptive authority are more likely to work in Ambulatory Care Settings (12%), in Academic Settings (12%) or in Public Health (4%).

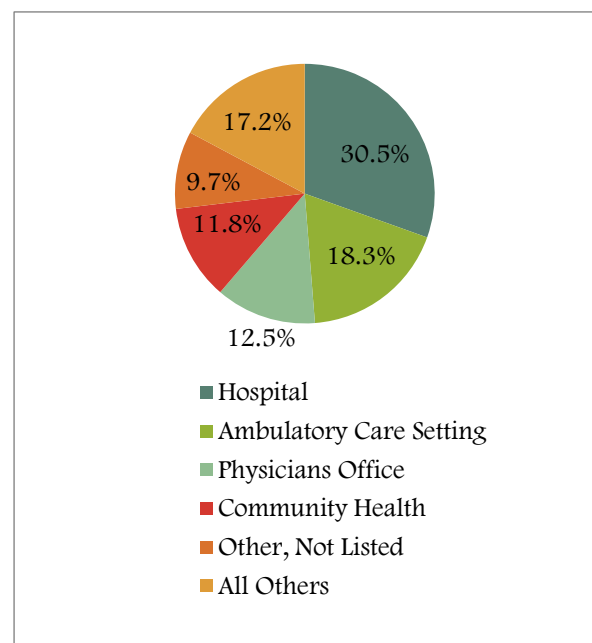


Figure 37. Top Employment Settings for APRNs with Prescriptive Authority, Statewide

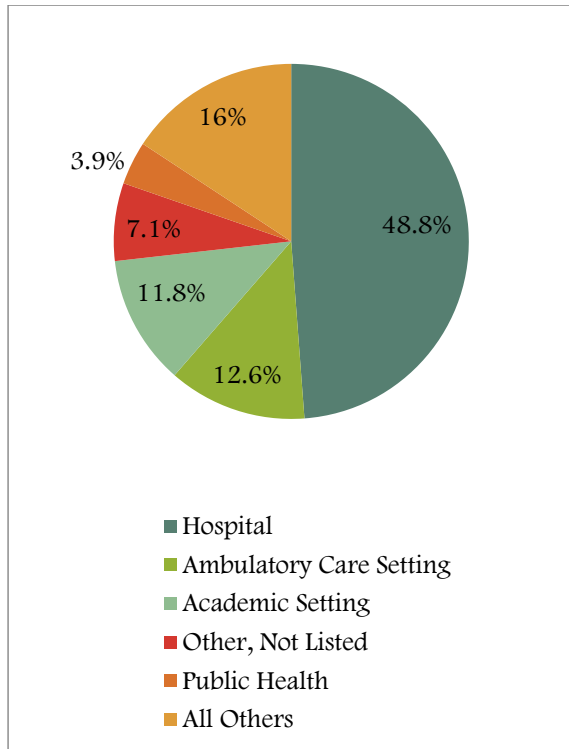


Figure 38. Top Employment Settings for APRNs without Prescriptive Authority, Statewide

Academic Progression

Out of APRNs responding to the workforce survey, 9% report being currently enrolled in a graduate degree program. Another 2% said they were enrolled in some other type of education such as certification and most 89% were not enrolled currently.

Likelihood to Leave Current Position within 12 Months

About 22% of APRNs indicated they were somewhat or very likely to leave their current position within the next 12 months. The response was similar in those with or without prescriptive authority.

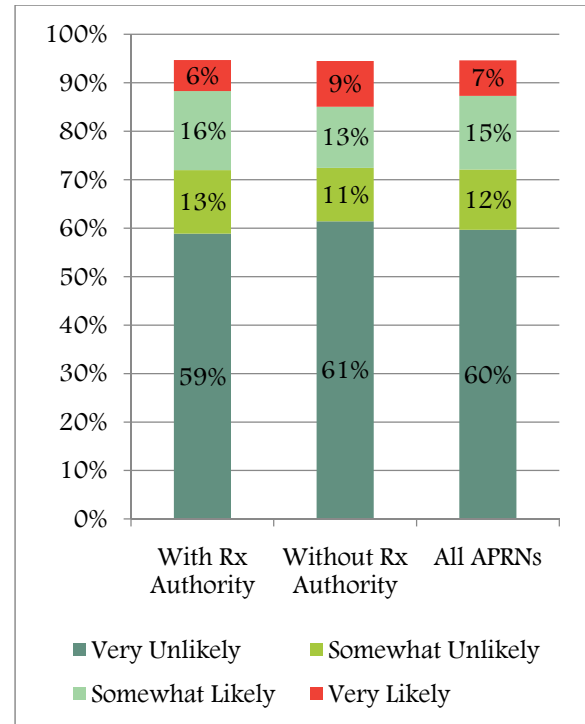


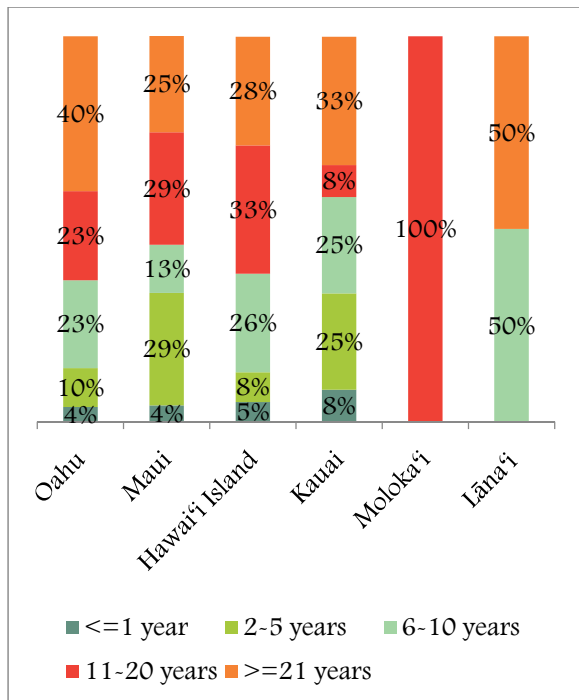
Figure 39. APRNs Likelihood to Leave Position in Next 12 Months

Like the overall nursing workforce, APRNs were most likely to report an intention to leave their current posts due to interest in other positions (13%). APRNs second most frequent reason for leaving was 10.9% stressful work environment and thirdly, 9.8% lack of good management/leadership. The fourth reason reported by APRNs was an intention to retire or leave for personal/family reasons. These reasons had a similar 7.6% response frequency.

Intention to Retire and Leave Profession

Overall a small percent of APRN plan to leave the profession within the next year (4%). This percent will increase to 10% in the next 5 years and 20% within the decade.

In the next 5 years, the islands of Kaua'i, Maui, O'ahu and Hawai'i island are expected to experience the most loss based on APRNs intention to leave the profession (Figure 40).



5 years due to retirement of APRNs from the profession is unclear. The percent of APRNs reporting an intent to leave the profession within the next 5 years by island are 33% Kaua'i, 33% Maui, 14% O'ahu, and 13% Hawai'i island.

Figure 40. APRNs Intention to Leave the Profession by Island

Summary

APRNs make up 5% of Hawai'i's nursing workforce. Over the past decade, licensed in-state APRNs have nearly doubled; with an average annual growth rate of 6%.

APRNs of Asian, Native Hawaiian/Pacific Islander or of 2 or More Races are all significantly underrepresented and disproportionately underrepresented when compared to the general population (9.9%). Conversely, Caucasians (53%) are disproportionately over represented in the APRN licensed category and the general population.

Most APRNs are located on the island of O'ahu with few APRNs with prescriptive authority found on the neighbor islands.

Licensed APRNs are the oldest group with 53.4% over the age of 50 years. The average age of APRNs without prescriptive authority is highest, at 52.6. APRNs on the islands of Maui and Hawai'i have the oldest average age. The impact over the next 1 to

Special Reports on Hawai'i Nursing Initiatives

Robert Wood Johnson and the IOM

In 2008, the Robert Wood Johnson Foundation (RWJF) approached the Institute of Medicine (IOM) to propose a partnership to assess and respond to the need to transform the nursing profession. Recognizing that the nursing profession faces several challenges in fulfilling the promise of a reformed health care system and meeting the nation's health needs, RWJF and the IOM established a 2-year Initiative on the Future of Nursing. The cornerstone of the initiative was the final report containing recommendations for an action-oriented blueprint for the future of nursing, including changes in public and institutional policies at the national, state, and local levels.

The IOM Future of Nursing Report serves as the basis for extensive work underway nationally to transform nursing. Since the release of the Future of Nursing report, Hawaii's nursing priorities have been driven by these recommendations.

During the 2015 workforce survey cycle additional items were added to the survey to gain an understanding of the current status of three of the IOM recommendations: scope of practice, engagement in further education, and leadership. Each of these initiatives will be discussed below.

Scope of Practice Barriers

Recommendation 1: Remove scope-of-practice barriers.

Advanced practice registered nurses should be able to practice to the full extent of their education and training.

APRNs and Scope of Practice

APRNs perceptions of full scope of practice were included for the first time in the 2015 survey. Across the state, 87% of APRNs with prescriptive authority and 81% of APRNs without prescriptive authority, working in an APRN role, indicated they felt they were working to their full scope of practice. No APRN reported that state laws or other regulations caused them to be working below full scope of practice.

Of the APRNs that reported working below their full scope, 25% of APRNs with prescriptive authority and 63% of APRNs without prescriptive authority stated they were not working in an APRN role. All APRNs reporting that they are working below full scope of practice cited workplace policy and not state or other regulations as the reason.

	With Prescriptive Authority %	Without Prescriptive Authority %
Not Working as APRN	25	63
Working to Full Scope of Practice	65	30
Working Below Full Scope of Practice	10	7

Table 25. APRNs Working to Full Scope of Practice by Prescriptive Authority and Island

Not all specialties need prescriptive authority to function at the full scope of practice and this survey analysis did not compare nursing roles or employment settings by APRN certification or perceptions of working at full scope.

Further work is needed of APRN certification, prescriptive authority, role, work setting, and scope to deepen the understanding of APRN roles in Hawai'i and allow advanced practice registered nurses to provide care to patients in all circumstances in which they are qualified to do so.

Academic Progression of Nurses in Hawai'i

Recommendation 4: Increase the proportion of nurses with a baccalaureate degree to 80 percent by 2020.

Nurses should achieve higher levels of education and training through an improved education system that promotes seamless academic progression.⁹

Academic progression is central to the development of Hawai'i's nursing workforce. Progression through academic programs enables nurses to obtain higher licenses, diversify roles within the nursing practice, engage in nursing and healthcare leadership roles, as well as enter into advanced nursing practice.

To this end, the Hawai'i Nursing Workforce Survey asked nurses to report on their academic progression since their initial licensure.

The majority (81%) of LPNs reported that they held a vocational certificate or diploma at the time of initial nursing licensure. When asked what the highest degree held is, fewer LPNs report that their highest degree earned is a vocational degree (73%). The proportion of LPNs reporting holding either an associates or baccalaureate-level degree increased by 4 percentage points each. These data suggest that a relatively small number of LPNs have pursued additional academic training since their initial licensure.

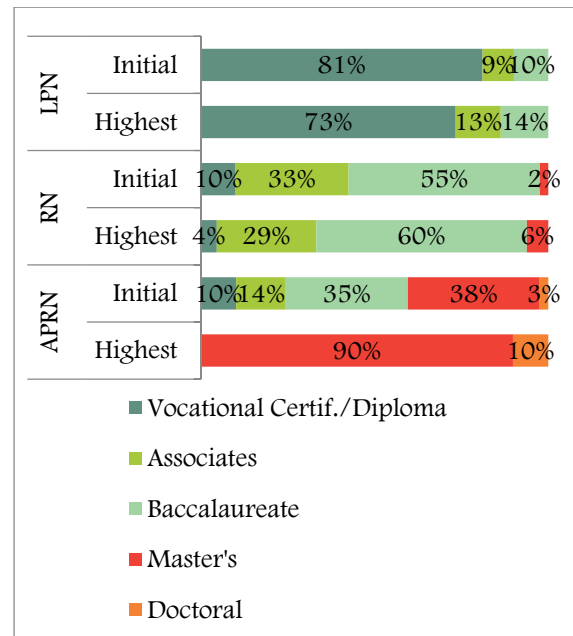


Figure 41. Initial vs. Highest Academic Degree for Nurses in Each License.

Although LPNs reported the lowest rates of academic progression among currently licensed nurses, more LPNs reported being currently enrolled in a degree-seeking academic program (15%) than either RNs (8%) or APRNs (11%).

The trend in a greater proportion of LPN engagement in academic progression may reflect individuals' needs to improve job opportunities and upward career mobility.

Fewer hospitals hire LPNs and many healthcare organizations have taken a preferred baccalaureate in nursing hiring stance. Nursing programs offering LPN programs have improved seamless progression to the baccalaureate degree which attract LPN students.

For RNs, the majority (55%) reported that their initial academic degree was at the baccalaureate level and an additional 33% report that their initial degree was at the Associate degree level. There was a 5% increase in the proportion of RNs reporting that their highest degree is at the baccalaureate level. Nationally, the

⁹ Institute of Medicine. (2010). The future of nursing: Leading change, advancing health. Retrieved from http://books.nap.edu/openbook.php?record_id=12956&page=R1

Campaign for Action reported in 2014, 51% of nurses held at least a baccalaureate degree.¹⁰ Hawai'i nurses' initial degree coupled with degree achievements through academic progression exceeds the national reported average of baccalaureate prepared nurses by 9%.

APRNs reported much higher rates of academic progression than did LPNs or RNs. Over one third of APRNs report a master's degree at time of initial nursing licensure, indicating a high level of education at entry into nursing for this license group. It is worth noting that APRN licensure requires a graduate-level degree, necessitating the pursuit of higher level degrees for the 59% APRNs whose initial nursing degree was at the baccalaureate level or lower. Ten percent of APRNs report holding a doctoral level nursing degree as compared to 3% of APRNs who reported that a doctoral degree provided their initial nursing license.

Important to note that while the majority of nurses who obtain additional academic training pursue higher degrees in nursing, there are several who report holding advanced degrees in non-nursing fields. Amongst licensed RNs, 3% report holding non-nursing master's degrees. Among APRNs, 9% report holding a non-nursing master's degree and 5% report holding a non-nursing doctoral degree.

Leadership Participation by Nurses

Recommendation 7: Prepare and enable nurses to lead change to advance health.

Nurses, nursing education programs, and nursing associations should prepare the nursing workforce to assume leadership

positions across all levels, while public, private, and governmental health care decision makers should ensure that leadership positions are available to and filled by nurses.

The Institute of Medicine (IOM) report "The Future of Nursing" recognized that strong leadership is necessary to achieve healthcare transformation. The IOM recommended nurses develop leaders from the bedside to the boardroom to support the interprofessional efforts to achieve the transformation goals. It went on to recommend that the nursing profession should prepare and enable nurses to lead change to advance health.¹¹ Evidence indicates nurses in leadership roles support improve patient outcomes and staff satisfaction and retention. However leadership development requires coordinated planning and action over time to create change.¹²

To understand the current environment of leadership and executive participation by Hawai'i's nurses, the Hawai'i Nursing Workforce Survey asked nurses to report on their participation in leadership activities. Specifically, nurses participation on boards, committees and organizations.

Participation on boards, committees, and organizations is substantially higher among APRNs (11%) than either RNs (4%) or LPNs (1%).

Across all nursing licenses, the highest proportion of nurses report serving a State-level professional nursing organization (29%) followed by a community or civic organization (23%). Less than 20% of all

¹⁰ Campaign for Action. (2016). Future of Nursing Campaign for Action Dashboard. Retrieved from <http://campaignforaction.org/wp-content/uploads/2016/04/Campaign-Dashboard-5-19-16.pdf>

¹¹ Institute of Medicine. 2010. "Future of Nursing: Leading Change, Advancing Health."

¹² Sherman, R., & Pross, E. (2010). Growing Future Nurse Leaders to Build and Sustain Healthy Work Environments at the Unit Level. *Online Journal of Issues In Nursing*, 15(1), 4.

nurses report serving other healthcare-related organizations.

Among LPNs who serve on boards and committees, the largest proportion (80%) report serving on with organizations that are unaffiliated with healthcare or their professional practice as compared to 20% who report serving on with a healthcare-related organization. No LPN who serves on a board, committee, or organization reported serving a professional nursing organization or a community or civic organization.

About one-quarter of RNs report serving in a State-level professional nursing organization. An additional 25% of RNs report serving on a community or civic organization. APRNs report higher frequency of serving a State-level organization (40%) and 23% of APRNs who serve report serving community or civic organizations.

Discussion

Over the past three years the IOM's Future of Nursing recommendations have continued to drive nursing priorities nationally and in Hawai'i. During this time the three recommendations below have received the greatest attention.

Fundamental to each of these priorities is the ongoing need for better nursing workforce data to aid in understanding the complexities innate to the profession including practice characteristics of APRNs, the incidence and prevalence of nurses engagement in academic progression and leadership by licensed nurses in Hawai'i.

The 2015 nursing workforce survey cycle was used to help gather additional information concerning APRNs scope of practice, and all nurses' engagement in academic progression and leadership

activities. Below are some of the achievements over the last three years:

Recommendation 1: Remove scope-of-practice barriers. APRNs should be able to practice to the full extent of their education and training.

In 2009, Hawai'i legislators revised the nurse practice act to meet the growing need for primary health care in rural and underserved areas. Under the new law, nurse practitioners could, for the first time, prescribe medicines without the co-signature of a physician. Nurse practitioners could also establish their own practices, be designated as a primary care provider, and sign the paperwork required to order and make referrals to care.

Since the passage of the law, the number of nurse practitioners with prescriptive authority in Hawai'i has nearly doubled—from 193 in 2009 to 383 in 2013—helping increase consumers' access to care.

Recommendation 4: Increase the proportion of nurses with a baccalaureate degree to 80 percent by 2020.

The Hawai'i Action Coalition, made up of leaders from across the state, are partnering with education accrediting bodies, private and public funders, and employers to sustain academic progression efforts. Employer and academic nurse leaders across the state are working together to increase access to further education. To date, these efforts have increased the proportion of RNs with a baccalaureate degree from 58 to 68 percent over 3 years; representing a 15.3% growth in baccalaureate degree nurses.

Recommendation 7: Prepare and enable nurses to lead change to advance health.

Nurses, nursing education programs, and nursing associations are embracing education and support mechanisms to

encourage and build leadership into our nursing workforce. Academic programs are incorporating leadership into the curriculum with the vision that student nurses in the future will assume leadership roles and positions across all levels of healthcare, while public, private, and governmental health care advocates are findings ways to ensure leadership positions are available to and filled by nurses.

Balancing Supply and Demand

Similar to other states across the country, Hawai'i is challenged by finding ways to balance the complexities of workforce supply and demand. As Joanne Spetz¹³ points out, there are a number of forecast models available and each with their own limitations.¹⁴

Two such models the HRSA and Georgetown forecasts suggest a nearly balanced labor market for RNs in the future; and both demonstrate that whether there is a future surplus or shortage will depend on graduations, international migration, and the extent to which licensed RNs choose to work.¹⁵

Over the past decade Hawai'i has experienced the ups and downs of graduation numbers and the extent that RNs choose to work. International migration however is small but the in and out migration of nurses to/from mainland

states is evident by the one-third of licensed nurses residing out-of-state.

Nurse leaders and educators need to be cognizant these three factors are highly dependent on public policy, wages, and job opportunities. Job opportunities, for instance, may be created by a small surplus of RNs. This surplus provides an opportunity for employers to use RNs in even more roles than they do now, as well as perhaps to enrich nurse-to-patient ratios. It is easy to imagine small changes in the use of RNs by employers could quickly absorb a surplus. Similarly, a small shortage of RNs could quickly be remedied by wage increases, which would draw more licensed RNs to work.

So what is a nurse leader or educator to do? Spetz recommends nurse leaders track their local labor market and plan how they can creatively utilize the nursing resources available to them; while advocating that nursing graduations be maintained so the retiring Baby Boomer cohort will be adequately replaced.

Educators might modulate the volume of graduations by increasing or decreasing enrollments of new nurses while promoting academic progression of nurses in the workforce to aid in upward career mobility and succession planning that simultaneously creates job opportunities for new graduate nurses.

¹³ Spetz J. (2015). Too Many, Too Few, or Just Right? Making Sense Of Conflicting RN Supply and Demand Forecasts. *Nursing Economics*, May-June 2015, (33):3. 176-85.

¹⁴ Spetz J. (2015). Too Many, Too Few, or Just Right? Making Sense Of Conflicting RN Supply and Demand Forecasts. *Nursing Economics*, May-June 2015, (33):3. 176-85.

¹⁵ Georgetown University Center on Education and the Workforce forecasts of nursing demand, 2015; and Health Resources and Services Administration (HRSA), National Center for Health Workforce Analysis, *The Future of the Nursing Workforce: National- and State-Level Projections, 2012-2025*, 2014.

Appendix-A

Inclusion Criteria

The goal of the workforce survey is to describe the supply of in-state nurses (LPNs, RNs and APRNs) employed in nursing and nursing related positions by license category (LPN, RN, and APRN).

Thus, the following procedure was followed to obtain the in-state and employed in nursing sample population:

1. 11,771 cases could be classified by license (LPNs 839; RNs 9710; APRNs 647).
2. Out of the 11,771 licensed cases, 11,091 completed and reported on their employment status. Out of this number, 9,359 reported Employment in Healthcare: nursing position (LPNs 617; RNs 8154; APRNs 588).
3. Out of the 9,359 cases employed in nursing, 7106 reported being in-state (LPN 551; RN 6115; APRN 440).

Appendix-B

APRNs with/ without Prescriptive Authority

Until 2013 the State of Hawai'i granted two separate APRN licenses, one that granted a nurse prescribing authority, and one that did not. In 2013, the State of Hawai'i's Administrative Rules underwent a modification that resulted in the removal of the separate APRN-Rx license, instead permitting any APRN meeting the additional requirements for prescriptive authority to apply for a special designation on their license without having to apply for an additional license. HBON geo-reports since 2014 do not include counts of APRN licensees with prescriptive authority.

Because of the lack of available data on the number of APRNs holding prescriptive authority, comparisons cannot be made between 2015 and prior study years. The data below provide counts reported by HBON of all APRN licenses regardless of prescriptive authority designation. A historical record of APRN-Rx license counts is available in prior years' nursing workforce reports and the DCCA's PVL geographic reports archive.