

HAWAII STATE NURSE EDUCATION CAPACITY REPORT

AY 2021-2022



Hawai'i State Nurse Education Capacity Report

Academic Year 2021-2022

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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.

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List of Abbreviations

Abbreviation	Definition
ADN	associate degree program in nursing
AGPCNP	adult-gerontology primary care nurse practitioner
APRN	advanced practice registered nurse
AY	academic year
AY 21-22	academic year 2021-2022
AY 20-21	academic year 2020-2021
BSN	baccalaureate degree program in nursing
DNP	Doctor of Nursing Practice
FNP	family nurse practitioner
GEPN	graduate entry program in nursing
HBON	Hawai'i Board of Nursing
HSCN or The Center	Hawai'i State Center for Nursing
LPN	licensed practical nurse
MSN	master's degree program in nursing
NCSBN	National Council of State Boards of Nursing
NCLEX	National Council Licensure Examination
NP	nurse practitioner
RN	registered nurse
The Forum	National Forum of State Nursing Workforce Centers

Introduction

Purpose of this Report

The annual Hawai'i State Nurse Education Capacity Report summarizes data about the extent to which local schools of nursing have the capacity to prepare a nursing workforce that meets in-state employment demand for nurses at all levels of practice.

This report provides information about schools' capacity to enroll new students, the number of graduates their programs contribute to the nursing workforce, and factors that adversely impact their programs. Because academic programs are the beginning of the workforce pipeline, schools' enrollment capacity and ability to retain students through graduation is necessary to sustain and grow the nursing workforce in Hawai'i.

By producing this report annually, the Hawai'i State Center for Nursing can make schools, employers, and workforce planners aware of changes in the demand for nurse education, schools' enrollment caps or graduates, and the availability of academic programs that support the stability of the statewide nursing workforce.

The Nurse Education Capacity Survey

The data presented in this report were collected from all eight academic institutions that offer nursing education at a physical campus in the state, and whose nurse education programs are approved by the Hawai'i Board of Nursing. The survey was conducted between February and April of 2023. Follow ups with several schools related to

their data continued through September of 2023. The survey asked schools to report data for academic year 2021-2022. A detailed description of the survey methodology is included in the appendix of this report.

Data Dashboards

Historical education capacity data related to LPN programs, pre-license RN programs, and nursing faculty are available in [interactive online dashboards on the Center's website](#).

Inclusive Language

Throughout this report, the term "Filipino/a" refers to persons of any gender who have ethnic ancestry originating in the Philippine Islands. The term "Latino/a/e" refers to persons of any gender with ethnic ancestry originating in Latin America. We have chosen these terms in an attempt to be simultaneously gender inclusive and culturally sensitive.

Accessibility

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 may, however, be tables in the report that are difficult to interpret using screen readers or other assistive technology. 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.

Key Findings

Pre-License Programs

- Schools' capacity to admit new pre-license students continues to be insufficient to keep pace with enrollment demand. ADN programs had the lowest acceptance rate (26%) resulting in the rejection of 74% of qualified applications. LPN, BSN, and GEPN programs had acceptance rates of 39%, 55%, and 36% respectively.
- Enrollment demand for LPN and BSN programs decreased in AY 21-22 as compared to the previous academic year. The number of qualified applications received by LPN programs decreased by 25% and BSN applications decreased by 20%. Enrollment demand increased for ADN and GEPN programs. As compared to AY 20-21, ADN programs received 5% more applications and the state's one GEPN program received 39% more applications. These data may suggest that prospective nurses are looking for efficient pathways into nursing practice, opting for programs that decrease the amount of time they spend in school in preparation for nursing licensure.
- ADN, BSN, and GEPN programs all graduated slightly more students in AY 21-22 than in the previous year. However, a very small increase in graduates combined with persistent capacity constraints mean that schools are unable to keep pace with the anticipated increase in employment demand for nurses.

Post-License Programs

- Capacity in post-license programs is less constrained than in pre-license programs due to flexible admissions caps in RN-to-BSN programs and lower overall enrollment demand for post-license and graduate nursing education. Additionally, one school opened admission to a new DNP program which increased overall statewide post-license education capacity.
- Schools have responded to the most crucial gaps in our advanced practice nursing workforce. Four of Hawai'i's eight schools of nursing now prepare students for practice as family or adult-gerontology primary care nurse practitioners and one school now offers a psychiatric/mental health nurse practitioner program.

Nursing Faculty

- Schools of nursing reported lower faculty vacancy rates in AY 21-22 than in the previous academic year. The overall faculty vacancy rate decreased from 11% to 7% and the full-time faculty vacancy rate decreased from 18% to 13%.
- Though schools reported that fewer of their funded faculty lines were vacant, several schools stressed that they have fewer funded faculty lines than they did several years ago. Despite having fewer faculty positions, schools feel pressure to maintain high enrollments to achieve institutional admissions targets or to respond to employer demand for more nurses.

The lower faculty vacancy rate should not be interpreted as schools having enough faculty.

- 47% of full-time faculty are over the age of 55. In contrast, 25% of Hawai'i's overall nursing workforce are over the age of 55. Many faculty spend some time in practice before they transition into academic roles, so the age difference between faculty and the rest of the nursing workforce is neither surprising nor cause for undue alarm. However, the fact that nearly half of faculty are within 10 years of typical retirement age does warrant strategic planning for how Hawai'i can prepare the next generation of nurse faculty.

Challenges Affecting Schools of Nursing

- A lack of clinical placements and difficulty hiring faculty continue to be the challenges that schools report as being the most significant issue affecting their existing programs or their ability to create new programs. Insufficient faculty and clinical placements are challenges that are neither new nor unique to Hawai'i. Continuing to focus on how to address the faculty shortage or increase clinical placements will likely be insufficient to bring about meaningful change in schools' nurse education capacity.
- In response to the various challenges that affect schools' ability to maintain existing programs or grow new ones, schools have increased their use of simulation and sought alternate sources of funding such as grants or academic-practice partnerships. Half of schools, however, have had to decrease admission cohort sizes which

further limits Hawai'i's ability to grow its own nursing workforce.

Quality Indicators for Nurse Education Programs

- Hawai'i's schools of nursing generally fare well when examined against NCSBN's quality indicators for nurse education programs. Most schools reported that:
 - they provide formal onboarding or mentorship for their faculty,
 - they provide professional development opportunities for faculty,
 - clinical faculty have recent experience in direct patient care, and
 - faculty are expected to engage in continuing education and professional development in nursing education and adult pedagogy.
- There are two indicators that suggest specific areas in which schools could benefit from additional support:
 - Only one school reported that their simulation faculty hold certifications in simulation. Though certification is not required for simulation instructors, half of schools reported that they have replaced some live clinical experiences with simulation due to clinical placement shortages. Simulation is an important tool for schools and the increased use of simulation warrants schools' consideration of supporting simulation certification for their faculty.

- Most schools reported that their faculty are not required to have formal training or education in teaching, curriculum design, assessment, or teaching in multiple modalities. Preparing faculty for the role by teaching them how to teach can support faculty retention and better outcomes for students.

Matching Employment Demand

- The Healthcare Association of Hawai'i reported in its Healthcare Workforce Initiative Report (2022) that:
 - There were 1,000 vacant RN positions and 210 vacant LPN positions across the state,

- The number of vacant positions and the vacancy rate for RN positions both increased as compared to 2019,
- Vacant LPN positions increased by 47% between 2019 and 2022.

These data quantify the magnitude of Hawai'i's current statewide nursing shortage and highlight the important role of local nurse education programs in supporting the workforce. The persistent challenges that schools have in securing quality clinical placements, hiring and retaining full-time and clinical faculty, and acquiring the resources they need to increase enrollment make it difficult for schools to keep pace with employer demand for nurses.

Overview of Nurse Education Programs Offered in Hawai'i

Accreditation, Board Approval, & Tax Classification of Schools of Nursing

There have been no changes in the number of schools of nursing in the state, their accreditation status, or their federal tax classifications as compared to AY 20-21 (Hawai'i State Center for Nursing, 2022). All eight of

Hawai'i's schools of nursing are accredited by either the Accreditation Commission for Education in Nursing or the Commission on Collegiate Nursing Education. There are no for-profit nursing schools with a physical campus in Hawai'i.

Table 1. Accreditation Status and Federal Tax Classification of Hawai'i Schools of Nursing

School Name	Accreditation		Federal Tax Classification		
	ACEN	CCNE	Public	Not for Profit	For Profit
Number of Schools (State)	5	4	6	2	0
City & County of Honolulu					
Chaminade University		✓		✓	
Hawai'i Pacific University		✓		✓	
Kapi'olani Community College	✓		✓		
University of Hawai'i at Mānoa		✓	✓		
County of Hawai'i					
Hawai'i Community College	✓		✓		
University of Hawai'i at Hilo	✓	✓	✓		
County of Maui					
University of Hawai'i Maui College	✓		✓		
County of Kaua'i					
Kaua'i Community College	✓		✓		

Note. University of Hawai'i at Hilo's BSN program is accredited by ACEN and their DNP program is accredited by CCNE.

Types of Nursing Programs Available in Hawai'i

There are two schools of nursing that have approved standalone LPN programs, however only one school, located on O'ahu, admitted LPN students in AY 21-22. A portion of the students admitted to the ADN program on Maui will stop out of the RN program after the first year and practice as LPNs for one year before continuing the RN program.

There was no change in the number or location of schools offering RN education. ADN programs prepare RNs on Maui and Kaua'i. BSN programs are available on O'ahu and Hawai'i

Island. Nurses on Maui or Kaua'i who wish to advance their education must rely on online RN-to-BSN programs on other islands or out of state.

Graduate nursing education was available at four schools in AY 21-22. Previously, three schools offered MSN or DNP programs on O'ahu and Hawai'i Island. The new DNP program expands graduate nursing education on O'ahu. Hawai'i's graduate programs prepare advanced population health RNs and NPs (family, primary care adult-gerontology, acute care adult-gerontology, and psychiatric/mental health). General post-master's DNP and executive leader DNP programs are also available.

Table 2. Academic Awards in Nursing Offered by Institution

School Name	LPN. Cert.	ADN	BSN	MSN	DNP	PhD
Number of Schools (State)	3	4	4	2	4	1
City & County of Honolulu						
Chaminade University			✓		✓	
Hawai'i Pacific University			✓	✓	✓	
Kapi'olani Community College	✓	✓				
University of Hawai'i at Mānoa			✓	✓	✓	✓
County of Hawai'i						
Hawai'i Community College	✓	✓				
University of Hawai'i at Hilo			✓		✓	
County of Maui						
University of Hawai'i Maui College	✓	✓				
County of Kaua'i						
Kaua'i Community College		✓				

Note. In AY 2021-2022, only Kapi'olani and Hawai'i Community Colleges had "standalone" LPN programs. Kaua'i Community and UH Maui Colleges offered LPN Certificates to students enrolled in their ADN programs following the completion of the first year of the RN curriculum.

Table 3. Graduate Nurse Education Programs Offered by Institution

	Chaminade University	Hawai'i Pacific University	University of Hawai'i, Hilo	University of Hawai'i, Mānoa
Master's Degree Programs				
Specialty RN				
Advanced Population Health				✓
APRN				
Adult-Gerontology Acute Care NP		✓		
Family NP		✓		
Doctor of Nursing Practice Programs				
General/Executive DNP				
Post-Master's DNP		✓		✓
Executive Leader	✓		✓	
APRN				
Adult-Gerontology Primary Care NP				✓
Family NP	✓		✓	✓
Psychiatric-Mental Health NP	✓			

Pre-License Programs

Enrollment Capacity and Demand

Consistent with recent trends, demand for pre-license programs continues to exceed schools' capacity to enroll new students. LPN, ADN and

GEPN programs rejected more qualified applicants than they admitted. BSN programs were the only type of pre-license program in which more than half of applicants were offered admission.

Table 4. Pre-License Programs: Openings, Applicants, Admissions & New Enrollments

	LPN	ADN	BSN	GEPN
Available Openings	32	136	348	50
Qualified Applications	82	521	660	133
Applications Received per Available Opening (Qualified Applications Received / Available Openings)	2.6	3.8	1.9	2.7
Admissions Offered	32	133	360	48
Acceptance Rate (Admissions Offered / Qualified Applications Received)	39%	26%	55%	36%
New Students Enrolled	32	133	309	48

Though enrollment demand continues to exceed education capacity, interest in pre-license nursing education declined in AY 21-22 as compared to the previous academic year. LPN programs received 25% fewer applications and BSN programs received 20% fewer applications. Data from the Education Capacity Survey do not provide explanations for the decline in enrollment demand for LPN and BSN programs. However, the relatively lower rate of pay for the LPN role as compared to the RN role may explain lower LPN demand. For BSN programs, the decline in applications may be due in part widespread media coverage about challenges associated with the nursing profession including burnout, exhaustion, and violence in the workplace. Additionally, the ADN and BSN degrees both provide minimum education necessary for RN practice. ADN

programs are generally shorter and less expensive than BSN programs which may make them more appealing to cost-conscious students, especially given the rising cost of consumer goods and housing. ADN programs received 5% more applications in AY 21-22 than in the previous academic year lending some support to this hypothesis.

Enrollment demand increased sharply in AY 21-22 for the state's only GEPN program. The program, which admits students who already have a baccalaureate degree into a graduate degree program in nursing, covers the RN curriculum in one year. After the completion of the RN curriculum and passing the NCLEX-RN, students transition into their selected graduate program. The accelerated pace of the RN curriculum allows full-time students to earn both an RN and a

graduate degree in as few as three years. This makes the GEPN program the fastest route to nursing licensure of any program in the state, which may explain its growing appeal to prospective nurses, especially those who already have an undergraduate degree.

Admissions & New Enrollments

Admissions and enrollments in LPN programs were nearly the same in AY 21-22 as in the previous academic year. Schools did not report any change in their capacity to admit LPN students, and they admitted as many students as their capacity would allow. Data for AY 22-23 should show an increase in LPN admissions and enrollments due to one school converting their required LPN stop-out to a standalone program.

ADN programs reported a 14% decrease in admissions offered and an 8% decrease in new students enrolled. The primary driver of the decrease in new students was a 7% decrease in seats available for new students in AY 21-22. ADN programs, especially those on the Neighbor Islands report having significantly fewer funded faculty lines than they did eight or 10 years ago. The decrease in funded faculty positions has caused some schools to decrease their enrollment caps. By admitting fewer students, schools are able to maintain manageable class sizes and ensure that they are compliant with the 8:1 student-to-faculty ratio that most clinical placements require.

In Maui and Kaua'i Counties, ADN programs are the sole option for anyone who wants to become an RN without relocating to either Hawai'i Island or O'ahu. The value of ADN

programs as contributing to the sustainability and growth of the nursing workforces on the Neighbor Islands cannot be overstated. If ADN programs are going to be able to fulfill their crucial role of growing the RN workforces in Kaua'i, Maui, Hilo, and Kona, the state needs to invest in them. ADN programs need sustainable funding sources for additional faculty lines, increases in faculty base salaries, faculty transition-to-role support, instructional space, and regularly scheduled upgrades to simulation lab equipment.

Admissions and enrollments to BSN programs decreased by 21% and 2% respectively. Unlike ADN programs, however, decreases in admissions and enrollments were not due to decreases in enrollment capacity. In fact, there was a small 4% increase in BSN seats throughout the state in AY 21-22 as compared to the previous academic year. The decrease in admissions is best explained by the 20% decrease in enrollment demand. Fewer prospective students applied to BSN programs which means there were fewer applicants to offer admission to. Schools generally admit more students than they can accept knowing that not all applicants will accept an offer of admission, and then not all students who accept an offer of admission will enroll. At half of the BSN programs, the number of students that enrolled was less than the number of seats available for new students.

The decline in demand for BSN programs in Hawai'i follows a national trend in which BSN enrollment declined between 2021 and 2022 for the first time in over two decades (American Association of Colleges of Nursing, 2023). This is

part of a larger trend of declining enrollment in post-secondary education programs across the country, perhaps owing to prospective students' concerns about the cost of higher education. The decline in demand for BSN education may also be partly attributable to heightened national attention to the issue of nursing wellbeing. Individuals who may have considered nursing as a profession at one point may have decided to pursue other career options or delay entry into the profession until some real headway is made to protect the physical, emotional, and psychological wellbeing of nurses.

Admissions and enrollments to the GEPN program did not materially change between AY 21-22 and the prior academic year. Although the program received considerably more applications, the program's capacity to admit new students did not change. As a result, a similar number of students were admitted as compared to the previous year. Although the GEPN program did not admit any more students, it reported a 12% increase in enrollments. This is because a higher percentage of admitted students enrolled in classes in AY 21-22 than in the previous year.

Graduates

The ability for schools of nursing to graduate students from their pre-license programs is vital for workforce stability. There are only three sources that the nursing workforce comes from: individuals who relocate to Hawai'i from another location, travel nurses who practice on short-term contracts, and locally educated new graduates. As of 2023, 52% of all nurses practicing in Hawai'i received their nursing education from a local school of nursing (Hawai'i State Center for

Nursing, 2023). Declining educational capacity will cause the number of graduates to decrease, which will, in turn, result in a greater demand for nurses from out of state which is unlikely to be met as the country is experiencing a national nursing workforce shortage.

Optimistically, the number of students who graduated from ADN and BSN programs increased by 3% and 7% respectively in AY 21-22 as compared to the previous year. Combined, ADN and BSN programs graduated 403 students in AY 21-22 which is a 6% increase over the previous academic year. GEPN graduates – students who completed the RN year of the program – increased by 12%, but the impact of these graduates to the workforce is different from that of ADN and BSN programs. These students are expected to continue to their graduate programs and could enter the workforce as advanced population health nurses, NPs, or prepared for work in a role other than direct patient care.

Unlike the RN and GEPN programs, Hawai'i's LPN programs reported a 48% decrease in the number of students who earned certificates of achievement. There were no meaningful changes to LPN program admissions or enrollments, so the loss of graduates is attributable to a decrease in the number of LPN certificates of achievement that were awarded to ADN students completing the first year of their RN education.

The Center first expressed concern about the shrinking LPN workforce in 2019 and identified education capacity constraints as one of

the significant drivers of that shortage (Hawai'i State Center for Nursing, 2019). The shortage has worsened, and limited educational capacity continues to be a significant contributing factor. There is cause for optimism, however, as one community college has developed a standalone LPN program that focuses on recruiting students,

with the support of their employers, who are working in CNA or medical assistant roles who wish to continue working while pursuing their LPN education. Evidence of the program's impact on Hawai'i's LPN education capacity should be evident in next year's version of this report.

Table 5. Pre-License Programs: Graduates

	LPN	ADN	BSN	GEPN
Program Graduates	32	139	264	48
% Graduates from Neighbor Island Schools	31%	65%	14%	0%

Note. There are no GEPN programs on Neighbor Islands. See Table 1 for types of programs offered in each county.

Table 6. Pre-License Programs: Student Demographic Characteristics

Demographic Characteristic	LPN		ADN		BSN		GEPN	
	#	%	#	%	#	%	#	%
Gender Total	32	100%	232	100%	852	100%	48	100%
Female	27	84%	186	80%	705	83%	37	77%
Male	5	16%	46	20%	147	17%	11	23%
Other/Nonbinary	0	0%	0	0%	0	0%	0	0%
Unknown/Missing	0	0%	0	0%	0	0%	0	0%
Race/Ethnicity Total	32	100%	232	100%	852	100%	48	100%
Multiracial	9	28%	98	42%	260	31%	12	25%
White	2	6%	29	13%	99	12%	5	10%
Black/African American	0	0%	0	0%	6	1%	0	0%
American Indian/Alaska Native	0	0%	0	0%	4	0%	0	0%
Chinese	0	0%	2	1%	21	2%	3	6%
Filipino/a	8	25%	23	10%	154	18%	4	8%
Japanese	3	9%	6	3%	18	2%	8	17%
Korean	0	0%	1	0%	10	1%	1	2%
Other Asian	0	0%	0	0%	173	20%	1	2%
Native Hawaiian	0	0%	3	1%	59	7%	9	19%
Samoan	0	0%	0	0%	1	0%	2	4%
Other Pacific Islander	0	0%	0	0%	5	1%	0	0%
Some Other Race/Ethnicity	0	0%	0	0%	11	1%	3	6%
Unknown/Missing	10	31%	70	30%	31	4%	0	0%
Hispanic/Latino/a/e Origin	32	100%	232	100%	852	100%	48	100%
Hispanic/Latino/a/e	0	0%	0	0%	91	11%	6	13%
Non-Hispanic/Latino/a/e	0	0%	57	25%	740	87%	42	88%
Unknown/Missing	32	100%	175	75%	21	2%	0	0%
Age Total	32	100%	232	100%	852	100%	48	100%
20 Years or Younger	2	6%	2	1%	215	25%	0	0%
21 Years to 25 Years	9	28%	18	8%	394	46%	19	40%
26 Years to 30 Years	19	59%	114	49%	106	12%	17	35%
31 Years to 40 Years	2	6%	25	11%	114	13%	8	17%
41 Years to 50 Years	0	0%	3	1%	17	2%	3	6%
51 Years to 60 Years	0	0%	0	0%	2	0%	1	2%
61 Years and Older	0	0%	0	0%	2	0%	0	0%
Unknown/Missing	0	0%	70	30%	2	0%	0	0%

Post-License Programs

Enrollment Capacity and Demand

Enrollment demand and capacity in all post-license programs increased in AY 21-22 as compared to the previous academic year. The number of qualified applications to RN-to-BSN programs increased by 69%. The significant increase in RN-to-BSN applicants reverses a two-year long trend in which enrollment demand for post-license BSN programs declined. Schools that offer RN-to-BSN programs often do not place enrollment caps on their programs and adjust their capacity to enroll new students based on admissions.

Enrollment demand for graduate nursing programs also increased in AY 21-22 as compared to the previous academic year, however, the magnitude of the increases is due in part to underreporting of demand and capacity in graduate programs on the AY 20-21 Education Capacity Survey. Though the data do not allow us to accurately quantify the magnitude of increase in enrollment demand, the addition of three DNP programs at one school increased statewide graduate program capacity which likely contributed to the increase in enrollment demand.

Table 7. Post-License Programs: Openings, Applications, Admissions, and New Enrollments

	RN-to-BSN	MSN	DNP	PhD
Available Openings	117*	85	117	0
Qualified Applications	108	133	121	0
Applications Received per Available Opening (Qualified Applications Received / Available Openings)	--*	1.6	1.0	--
Admissions Offered	107	94	106	0
Acceptance Rate (Admissions Offered / Qualified Applications Received)	99%	71%	88%	--
New Students Enrolled	66	66	80	0

Notes. *At least one institution reported that available seats for new students varied depending on enrollment demand and availability of clinical faculty. In these cases, the number of qualified applications received substitutes for the number of openings for new students. The ratio of applications per opening is not reported because of this substitution.

Admissions & New Enrollments

RN-to-BSN programs admitted 58% more students in AY 21-22 than in the prior academic year. RN-to-BSN applicants have a lower rate of enrollment than students in other programs, so although admissions increased by nearly 60%, new enrollments increased by 10%.

Graduate admissions and enrollments were also underreported in AY 20-21, it is not possible to accurately quantify change in MSN and DNP program enrollment in AY 21-22. Though an accurate year-over-year comparison is not possible, most graduate programs were enrolled at or very near full capacity suggesting that interest in graduate nursing education is strong, especially for DNP programs.

Graduates

Table 8. Post-License Programs: Graduates

	RN-to-BSN	MSN	DNP	PhD
Program Graduates	54	30	25	2
% Graduates from Neighbor Island Schools	31%	0%	16%	0%

Note. There are no MSN or PhD programs on Neighbor Islands. See Table 1 for types of programs offered in each county.

Although enrollment demand and new student enrollments increased for RN-to-BSN programs in AY 21-22, the number of graduates decreased by 10%. Graduations are a lagging reflection of the number of students that a program admitted. Two years of declining RN-to-BSN admissions necessarily resulted in a decrease in graduates. If the students who enrolled in RN-to-BSN programs this year complete their programs on time, there should be an increase in the number of graduates from RN-to-BSN programs in next year's version of this report.

MSN programs reported a 67% increase in graduations in AY 21-22 as compared to the previous academic year. Though this rate of increase seems extraordinary, the number of students graduating from MSN programs annually is relatively small, so the large proportional increase represents the graduation of 12 additional students.

DNP programs reported a 22% decrease in the number of students graduating in AY 21-22. Though DNP enrollment has increased over time and most DNP programs are designed to be completed in two years, many students enrolled in DNP programs are employed. This means they may opt to enroll in the DNP on a part-time basis or take additional academic terms to complete their final DNP projects. This would result in a lag between initial increases in DNP program enrollment and an increase in graduates.

Of note is that 64% of MSN and DNP graduates completed programs that prepared them for licensure and practice as APRNs, mostly as family NPs. Most of Hawai'i outside of the Honolulu urban core has a primary care provider shortage (Health Resources & Services Administration, n.d.). Schools that offer primary care APRN programs play an important role in helping to address that shortage.

Table 9. Post-License Programs: Student Demographic Characteristics

Demographic Characteristic	RN-to-BSN		MSN		DNP		PhD	
	#	%	#	%	#	%	#	%
Gender Total	86	100%	115	100%	170	100%	4	100%
Female	69	80%	97	84%	150	88%	4	100%
Male	17	20%	17	15%	17	10%	0	0%
Other/Nonbinary	0	0%	1	1%	0	0%	0	0%
Unknown/Missing	0	0%	0	0%	3	2%	0	0%
Race/Ethnicity Total	86	100%	115	100%	170	100%	4	100%
Multiracial	15	17%	31	27%	43	25%	0	0%
White	11	13%	34	30%	40	24%	3	75%
Black/African American	1	1%	4	3%	3	2%	0	0%
American Indian/Alaska Native	4	5%	0	0%	3	2%	0	0%
Chinese	2	2%	3	3%	6	4%	0	0%
Filipino/a	18	21%	11	10%	17	10%	0	0%
Japanese	9	10%	11	10%	13	8%	0	0%
Korean	2	2%	1	1%	6	4%	0	0%
Other Asian	0	0%	1	1%	19	11%	0	0%
Native Hawaiian	15	17%	3	3%	14	8%	1	25%
Samoan	0	0%	0	0%	0	0%	0	0%
Other Pacific Islander	0	0%	11	10%	0	0%	0	0%
Some Other Race/Ethnicity	7	8%	5	4%	0	0%	0	0%
Unknown/Missing	2	2%	0	0%	6	4%	0	0%
Hispanic/Latino/a/e Origin	86	100%	115	100%	170	100%	4	100%
Hispanic/Latino/a/e	10	12%	18	16%	10	6%	0	0%
Non-Hispanic/Latino/a/e	75	87%	96	83%	158	93%	4	100%
Unknown/Missing	1	1%	1	1%	2	1%	0	0%
Age Total	86	100%	115	100%	170	100%	4	100%
20 Years or Younger	0	0%	0	0%	0	0%	0	0%
21 Years to 25 Years	15	17%	4	3%	15	9%	0	0%
26 Years to 30 Years	19	22%	21	18%	43	25%	1	25%
31 Years to 40 Years	31	36%	57	50%	62	36%	0	0%
41 Years to 50 Years	13	15%	30	26%	34	20%	0	0%
51 Years to 60 Years	6	7%	1	1%	13	8%	0	0%
61 Years and Older	2	2%	2	2%	3	2%	3	75%
Unknown/Missing	0	0%	0	0%	0	0%	0	0%

Nurse Faculty

Faculty Positions and Vacancies

Table 10. Nurse Faculty: Total Positions, Filled Positions, and Vacancies

Position Type	Full-Time		Part-Time		Total	
	#	%	#	%	#	%
Position Total	141	100%	167	100%	308	100%
Filled	122	87%	163	98%	285	93%
Vacant	19	13%	4	2%	23	7%

Schools reported having a total of 308 funded faculty positions in AY 21-22, representing an increase of 18% as compared to the prior academic year. The increase was due largely to a 27% increase in part-time faculty positions, although full-time faculty positions also increased by 8%.


In addition to having more funded faculty positions, schools also reported having fewer vacant positions. In AY 21-22, the overall faculty vacancy rate was 7% as compared to 11% in the prior year. The full-time faculty vacancy rate dropped to 13% from 18% in the previous year.

Although these data are optimistic, they do not suggest that the nursing faculty shortage has been resolved. Hawai'i's 11% vacancy rate is still higher than the national vacancy rate of 9% (American Association of Colleges of Nursing, 2022). Moreover, part-time positions comprise 53% of all filled faculty positions. This is up from 48% in AY 20-21. Part-time faculty are crucial to the operation of nursing schools, but they do not contribute to the programs in the same way that full-time faculty are expected to. Part-time faculty members' responsibilities are generally confined to teaching the small number of classes to which they

are assigned. They are not typically expected (or contractually bound) to do student advisement, serve on department, school, or university committees, or engage in scholarly activity or professional development. As such, the increases in filled part-time faculty positions does not necessarily reflect an improvement in the workload of full-time faculty or an increase in educational capacity.

In addition to the quantitative evidence of a persistent faculty shortage in Hawai'i, several school administrators commented on the 2021-2022 Education Capacity Survey that calculating the current number of funded positions and the vacancy rate obscure how truly understaffed they are. Many schools reported that as recently as a decade ago, they had more funded positions. However, due to a variety of factors, schools are operating on sometimes as many as half the positions they once had.

Although some schools have responded to the change in staffing by reducing admissions cohort sizes, many of the other functions that full-time faculty perform are unaffected by student enrollment. Preparing and conducting accreditation self-studies, hiring and mentoring



new faculty, and serving as program directors or in other administrative roles are examples of work that must be done with the same frequency and quality regardless of the number of faculty on a schools' staff. These responsibilities must be fulfilled by faculty who are also responsible for teaching the entire curriculum on a regular schedule to ensure that their students can complete their programs on time.

Faculty are stretched thin working diligently to ensure that their programs persist and

that their students receive a high-quality education. To ensure that faculty do not burn out and leave local schools for higher paying jobs in clinical settings, assertive efforts to support faculty retention should be a statewide nursing workforce development priority.

Table 11. Nurse Faculty: Demographic Characteristics

Demographic Characteristic	Full-Time		Part-Time		Total	
	%	#	%	#	%	#
Gender	121	100%	163	100%	284	100%
Female	104	86%	132	81%	236	83%
Male	17	14%	31	19%	48	17%
Other/Nonbinary	0	0%	0	0%	0	0%
Unknown/Missing	0	0%	0	0%	0	0%
Race/Ethnicity	121	100%	163	100%	284	100%
Multiracial	18	15%	17	10%	35	12%
White	58	48%	44	27%	102	36%
Black/African American	6	5%	0	0%	6	2%
American Indian/Alaska Native	1	1%	1	1%	2	1%
Chinese	3	2%	3	2%	6	2%
Filipino/a	11	9%	7	4%	18	6%
Japanese	4	3%	10	6%	14	5%
Korean	1	1%	1	1%	2	1%
Other Asian	6	5%	36	22%	42	15%
Native Hawaiian	8	7%	20	12%	28	10%
Samoan	0	0%	0	0%	0	0%
Other Pacific Islander	0	0%	4	2%	4	1%
Some Other Race/Ethnicity	3	2%	1	1%	4	1%
Unknown/Missing	2	2%	19	12%	21	7%
Hispanic/Latino/a/e Origin	121	100%	163	100%	284	100%
Hispanic/Latino/a/e	7	6%	5	3%	12	4%
Non-Hispanic/Latino/a/e	114	94%	136	83%	250	88%
Unknown/Missing	0	0%	22	13%	22	8%
Age	121	100%	163	100%	284	100%
30 Years or Younger	3	2%	8	5%	11	4%
31 Years to 40 Years	13	11%	63	39%	76	27%
41 Years to 50 Years	35	29%	44	27%	79	28%
51 Years to 55 Years	13	11%	9	6%	22	8%
56 Years to 60 Years	19	16%	7	4%	26	9%
61 Years to 65 Years	21	17%	9	6%	30	11%
66 Years to 70 Years	10	8%	4	2%	14	5%
71 Years and Older	7	6%	3	2%	10	4%
Unknown/Missing	0	0%	16	10%	16	6%
Highest Degree Earned	121	100%	163	100%	284	100%
ADN	10	8%	9	6%	19	7%
BSN	6	5%	61	37%	67	24%
Baccalaureate, Non-Nursing	0	0%	0	0%	0	0%
Master's Degree, Nursing	21	17%	50	31%	71	25%
Master's Degree, Non-Nursing	10	8%	1	1%	11	4%
DNP	40	33%	34	21%	74	26%
Doctoral Practice Degree, Non-Nursing	4	3%	0	0%	4	1%
PhD, Nursing	22	18%	3	2%	25	9%
PhD, Non-Nursing	8	7%	2	1%	10	4%
Unknown/Missing	0	0%	3	2%	3	1%

Challenges Affecting Hawai'i's Nurse Education Programs

As has been the case since the AY 2017-2018 Education Capacity Report, a shortage of clinical placements and difficulty hiring faculty were reported by schools of nursing as having a significant negative impact on their programs. Schools further report that their strategies for addressing the effects of these challenges have remained the same – increasing their use of simulation, decreasing admissions cohort sizes, and attempting to identify alternate sources of funding.

These issues continue to limit nursing education capacity, not only in Hawai'i, but in the nation. Nursing school faculty and administrators will continue to be frustrated by these issues until

we can shift toward a more solution-oriented mindset. Work should focus on creating better transition-to-role support programs for new faculty and clinical instructors to support retention, investigating whether there are tools or strategies that can help make lesson planning and assessment writing easier and more efficient, and providing easier access to validated simulation scenarios to reduce the amount of time, energy, and effort faculty spend building new scenarios from scratch.

By prioritizing solvable problems, we can make better headway in supporting schools of nursing in their mission of educating the next generation of Hawai'i's nurses.

Table 12. Factors that Adversely Affect Nurse Education Programs

Challenges Affecting Programs	#1 Challenge	Affects Existing Programs	Affects New Program Development
Insufficient number of clinical training sites	50%	63%	50%
Difficulty filling clinical faculty positions	25%	63%	63%
Difficulty filling full-time faculty positions	13%	75%	63%
Insufficient funding, faculty, or other resources for program maintenance or development	13%	75%	63%
Insufficient number of preceptors for clinical training experiences	0%	75%	50%
Insufficient resources (e.g., faculty, facilities, etc.) to provide simulated clinical experiences	0%	38%	38%
Lack of funding for new faculty lines or raises	0%	63%	63%

Note. The sum of percentages in “Affects Existing Programs” and “Affects New Program Development” columns exceed 100% due to multiple responses from some schools.

Table 13. Tactics Used by Nurse Education Programs to Address Adverse Impacts

Responses to Challenges	% Schools Reporting
Reduced admissions cohort sizes	50%
Replacement of live clinical experiences with high-fidelity simulation	50%
Pursuit of alternate/supplemental funding sources	38%
Other response	38%
Elimination of degree programs or program tracks	13%
Decreased frequency of new student admissions	0%
Increased student tuition and/or fees	0%
Payments to clinical sites	0%
Payments directly to preceptors	0%
Delayed or terminated development of new degree programs or program tracks	0%

Note. The sum of the percentages exceeds 100% due to multiple responses from some schools.

NSCBN Evidence-Based Quality Indicators for Nursing Education Programs

Beginning in AY 20-21, the Center has included questions on the Education Capacity Survey that reflect the National Council of State Boards of Nursing’s (2020) quality indicators for nursing education programs. Data about the extent to which schools meet the quality indicators can provide insight into possible priorities for education-related workforce development activities.

As was the case in the prior academic year, in AY 21-22, Hawai‘i’s schools of nursing fared well on most of the quality indicators. A majority of schools report that they have some formal onboarding or mentorship for clinical and full-time faculty. Most schools also report that they require their faculty to engage in professional development related to teaching and adult learner pedagogy and that they provide opportunities for faculty professional development. A majority of schools

also reported that at least 35% of their faculty hold full-time positions.

There are two quality indicators that fewer than half of schools meet. First, only one school reported that their simulation faculty hold specialty certification in simulation. Effective simulation education not only requires a mastery of the clinical content that the simulation is supposed to provide, but it also requires expertise in developing, facilitating, and debriefing simulation scenarios. The shortage of clinical placements that currently limits schools’ educational capacity is not likely to change in the foreseeable future. As a result, simulation has and will likely continue to have a more prominent and important role in nursing education. To ensure that students are getting the best possible education and that faculty feel well-prepared to provide that education, facilitating simulation faculty members’ access to

certification courses and examinations should be a faculty development priority.

Second, less than half of schools reported that they require their faculty to have formal training in how to teach. Nursing faculty are experts in their area of practice, but often learn how to perform the essential functions of the faculty role – planning lessons, writing assessments, giving

learner feedback – on the job. While requiring faculty to have formal education in teaching would likely further limit an already too-small pool of nurse faculty applicants, schools should consider the value of providing teaching-related education to existing members of their faculty, especially for those in the first five years in their role.

Table 14. Faculty-Related NCSBN Pre-License Program Approval Guidelines

Faculty-Related Program Quality Indicators	% Schools Meeting Criterion
Proportion of Full-Time Faculty	
At least 35% of all faculty are full-time hires.*	75%
Education and Experience Required for Faculty Role**	
Clinical faculty have direct patient care experience within the last five years.	88%
Simulation faculty are certified.	13%
Faculty are required to have had some formal training in teaching, curriculum design, assessments, teaching in multiple platforms, classroom management, etc.	38%
Transition-to-Role Support	
New clinical faculty members are provided formal orientation to their role.	75%
New faculty members are formally mentored by an experienced faculty member in your department.	88%
Professional Development & Lifelong Learning	
Faculty members are required or expected to complete continuing education or other professional development related to nursing education and adult learner pedagogy.	63%
Your department/institution hosts workshops/presentations/etc. to support your faculty members' professional development.	88%

Note. *Schools reported the total number of filled faculty lines by FTE status (part-time vs. full-time). Based on those data we determined whether a school met the 35% full-time faculty quality indicator. **The Guidelines include two additional criteria related to the minimum education for faculty by the type of program in which they teach. We did not ask schools to classify their faculty by program so we could not calculate the percentage of schools meeting each criterion.

Appendices

Appendix A – Glossary of Nurse Education Programs Offered in Hawai‘i

Term	Definition
Pre-license Programs	Nurse education programs that admit students with no prior education or experience in nursing.
LPN Program	A program of instruction that requires at least one year of full-time equivalent coursework generally within a high school, vocational/technical school, or community/junior college setting, the completion of which results in a diploma or certificate of completion and eligibility to apply for licensure as an LPN (see also Hawai‘i Administrative Rules §16-89-11 and §16-89-12).
ADN Program, Generic/Traditional	A program of instruction that requires at least two years of full-time equivalent college academic work generally within a junior or community college, the completion of which results in an associate degree with a major in nursing and eligibility to apply for licensure as an RN. (See also Hawai‘i Administrative Rules §16-89-10).
Pre-License BSN Program, Generic/Traditional*	A program of instruction to prepare <i>generalist</i> registered nurses that admits students with no previous nursing education, the completion of which results in a baccalaureate degree (e.g., BS, BSN, etc.) with a major in nursing and eligibility to apply for licensure as an RN. The program requires at least four years but not more than five years of full-time equivalent college course work within a senior college or university. (See also Hawai‘i Administrative Rules §16-89-10).
Pre-License <i>Graduate</i> Entry (<i>GEPN</i>) Program*	A program of instruction that admits baccalaureate degrees in other disciplines and no previous nursing education. The program prepares graduates for entry into the profession, eligibility to apply for licensure as an RN, and upon completion, <i>awards a graduate degree in nursing (e.g., MSN, DNP, PhD)</i> . (See also Hawai‘i Administrative Rules §16-89-10).
Post-license Programs	Nurse education programs that require a prospective student to hold an active nursing license to be eligible for admission.
<i>LPN to BSN Program*</i>	<i>A program for students licensed as LPNs the completion of which results in a baccalaureate degree (e.g., BS, BSN, etc.) with a major in nursing and eligibility to apply for licensure as an RN.</i>
Post-License BSN (RN-to-BSN) Program	A <i>post-license BSN</i> program for students who are already licensed as RNs whose highest nursing education is a diploma or associate degree.
MSN Program *	A post-license master’s program with emphasis on advanced clinical practice, including Nurse Practitioner, Nurse Anesthetist, Nurse Midwifery, and Clinical Nurse Specialist tracks. <i>Includes RN-to-MSN and post-baccalaureate admissions pathways.</i>
DNP Program*	A program of instruction that prepares graduates for the highest level of nursing practice beyond the initial preparation in the discipline. The DNP is the terminal practice degree. <i>Includes post-baccalaureate and post-master’s admissions pathways.</i>
PhD Program*	A post-licensure doctoral program that culminates in the PhD in Nursing. <i>Includes post-baccalaureate and post-master’s admissions pathways.</i>

Note. *Italicized program titles, definitions, or parts of definitions are additions or modifications to those published in the source document published by the National Forum of State Nursing Workforce Centers (2020).

Appendix B – Method for 2021-2022 Nurse Education Capacity Survey

Instrumentation

The data collection instrument for the Education Capacity Survey is based on the National Nursing Workforce Minimum Dataset for Education as published by the National Forum of State Nursing Workforce Centers (2020). The Forum recommends that states use the appropriate MDS for education, supply, and employment demand so that national dialogue about nursing workforce development can be informed by data that is collected at the state level.

In addition to the data points recommended by the Forum, the Center added several questions regarding specialty or certificate education offered in baccalaureate and graduate nurse education programs, challenges to program growth or sustainability, and the responses schools have had to those challenges.

The survey instrument was converted to a form-fillable .pdf with calculation and data validation fields intended to support the submission of high-quality, error-free data.

The full instrument is available upon request to Dr. Carrie Oliveira, Workforce Researcher at the Hawai'i State Center for Nursing.

Institutional Review Board Review

Because the survey collected aggregated, secondary data, it does not meet the definition of “human subjects research” and did not require review or oversight by the IRB at the University of Hawai'i at Mānoa where the Center is housed.

Procedure

The study period commenced on March 1, 2022, when the Center's Researcher sent emails to the chief administrator of each school of nursing requesting their participation in the study. The email included a link to a website that provided a copy of the form-fillable survey and answers to frequently asked questions. The survey form was also attached to the email for the schools' convenience. School administrators were asked to complete the survey and email it back to the Center's researcher by April 1, 2021. All schools submitted their completed surveys by the deadline. Following the submission of all surveys, the Center's researcher reviewed each survey for data quality issues and followed up with the individual designated on each survey for clarification.

Appendix C – Program Admissions by Semester, AY 2021-2022

	LPN			ADN			BSN			GEPN			LPN to BSN			RN to BSN			MSN			DNP			PhD					
# Programs	2			4			4			1			1			4			2			3			1					
Admissions Semesters*	F	S	I	F	S	I	F	S	I	F	S	I	F	S	I	F	S	I	F	S	I	F	S	I	F	S	I	F	S	I
Associate Degree-Granting Institutions																														
Hawai'i Community College				•																										
Kapi'olani Community College	•	•		•	•	•																								
Kaua'i Community College				•																										
University of Hawai'i Maui College		•		•																										
Baccalaureate Degree-Granting Institutions																														
Chaminade University							•	•														•	•							
Hawai'i Pacific University							•	•											•	•		•	•							
University of Hawai'i at Hilo							•									•	•					•								
University of Hawai'i at Mānoa							•			•						•	•		•			•								

Notes. *Letters in this row refer to the session in a traditional academic year wherein F = Fall Semester, S = Spring Semester, I = Summer Intersession. A gray cell indicates that a school did not offer a given program during AY 21-22. A white cell indicates that a school operated the program during the AY but did not admit new students during the academic term. A dot indicates that a school admitted new students into the program for the indicated semester. The LPN program at UH Maui College began accepting students in the winter of 2022 so the program was operational but had not accepted students that were reflected in the data in this report.

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