

NURSING EDUCATION PROGRAMS 2019-2020 ANNUAL SCHOOL REPORT

STATISTICAL SUMMARY AND TRENDS ANALYSIS

DOH 669-269 (Revised May 2020) **Public Health** – Always Working for a Safer and Healthier Washington

Acronyms

AD-RNAssociate Degree in Nursing – Registered Nurse
AD-MSAssociate Degree in Nursing to Master of Nursing
ARNPAdvanced Registered Nurse Practitioner
BSNBachelor of Science in Nursing – Registered Nurse
PN Licensed Practical Nurse
PN-RNLicensed Practical Nurse to Associate Degree in Nursing Programs
GEGraduate Entry Programs – Registered Nurse
MSN Master of Science Nursing
NCLEX® National Council Licensure Examination
NCQAC Nursing Care Quality Assurance Commission
RNRegistered Nurse
RNBRegistered Nurse Bachelor (Bachelor's degree programs for licensed RNs)
PMCPost Master's Certificate Nurse
DNPDoctorate of Nursing Practice
MNMasters of Nursing
MSMaster of Science

Nursing Programs Annual Report 2019-2020 ACADEMIC YEAR

Introduction

Background

The Nursing Care Quality Assurance Commission (NCQAC) requires all nursing education programs to provide information annually [WAC 246-840-520(3)]. This report summarizes 2019-2020 academic year survey data from approved Washington State nursing programs and out-of-state programs approved for clinical placement of students. Selected data trends are highlighted.

Forty-one approved nursing schools in Washington State completed the annual survey, including 12 universities and 24 community and technical colleges (CTC). Seventy-two schools approved for clinical placements completed the out-of-state survey, during the 2019-2020 academic year and there were 1,738 student clinical placements in Washington State.

This report combines results from three different surveys for the first time this year; 1) the in state prelicensure nursing program survey administered by NCSBN (new this year), 2) the in state post-licensure program survey administered by the NCQAC and, 3) the out-of-state program survey administered by NCQAC.

The number of nurses licensed in the state and first-time NCLEX test takers are provided below for background and comparison. The report will combine, when possible, prelicensure and post-licensure student and faculty instate program information. The more limited but valuable out-of-state program results are provided after the instate program information. When appropriate, Washington state responses will be compared to national benchmarks and selected research findings. Finally, there is a summary and analysis of the annual survey findings, with a list of recommended actions based on these results and trend analysis.

Nurse Workforce

Workforce Survey Analysis

Beginning in January, 2018, nurses (LPNs, RNs and ARNPs) in Washington State were informed of a requirement to complete an online survey with questions about their demographics, work characteristics, and education history when they renewed their nursing license or applied for a new license. The initial analyses for RNs, LPN, and ARNPs with an active Washington State license on May 31, 2019 is complete (Stubbs 2020). A more complete picture of the nursing workforce can be appreciated combining the results of this report with the Nursing Programs Annual Report.

Number of Nurses Licensed

The total number of licensed nurses is 128,699 including 10,767 PNs, 106,666 RNs, and 10,693ARNPs were licensed April 2021. The numbers include nurses from nursing programs in the State of Washington, other states and territories, and other countries. These numbers represent a snapshot of nursing workforce supply data, which were downloaded April 2021 (NCQAC, 2021). The active licensee numbers are provided for 2020 and 2019 for comparison.

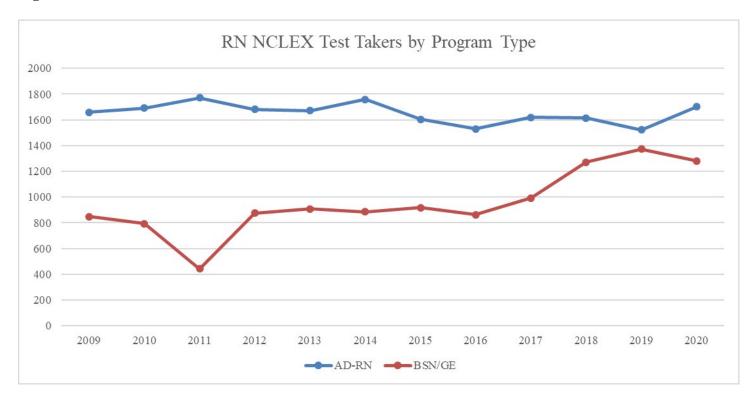
Table 1: Active licensed nurses April 2019, 2020, and 2021

License Type	2019	2020	2021
Practical Nurse	11,035	11,001	10,767
Registered Nurse	97,715	102,642	106,666
Advanced Registered Nurse	8,754	9544	10,693
Practitioner			
Total	117,941	122,760	128,699

NCLEX Test Takers

The total number of RN students taking the NCLEX test in 2020 for the first time was 2984, which is an increase from 2018 (2887). There were 1702 graduates from ADN programs and 1282 from BSN or GE programs taking the NCLEX in 2020. The total BSN and GE test takers since 2010 significantly increased from 794 to 1282. The total ADN test takers since 2010 (1,692 to 1702) has shown no increases.

Figure 1: Total Number of NCLEX First-Time Test Takers



In-State Programs

Forty-one approved nursing schools in Washington State completed the annual survey. There are five licensed practical nurse (PN) programs, and 24 associate degree RN (AD-RN) programs. Five universities and three community colleges offer RN to BSN (RNB) programs. Nine universities offer Bachelor of Science in nursing (BSN) programs. There are two ADN to MSN (AD-MS) programs, two programs offering master's degree graduate entry to the RN (GE), and four master's degree advanced registered nurse practitioner (ARNP) and six other master's programs. Finally, there are three post-master's certificate (PMC) programs, five doctoral of nursing practice (DNP) and two Ph.D. programs. The graduate programs are outlined below.

Undergraduate Programs

Since 2013-2014, the number of pre-licensure graduates are outlined below. In 2019-2020, practical nursing programs (PN) had 238 graduates, similar to 232 graduates the previous year but a decline since 2014-2015. Since 2013-2014, the number of AD-RN graduates has slightly decreased from 1672 to 1561 in 2019-2020. The number of BSN program graduates has declined since 2014-2015 from 1283 students, to 872 in 2019-2020. Those completing GE degrees are included in these graduation numbers because they are prelicensure programs, however, the GE student and faculty demographics are included with the graduate program results.

Table 2. In State Undergraduate Graduates

	PN	AD	BSN/GE/other	RNB
2013-2014	330	1,672	1,075	466
2014-2015	352	1,712	1,283	536
2015-2016	293	1633	967	718
2016-2017	264	1741	937	987
2017-2018	226	1506	978	1319
2018-2019	232	1548	892	1191
2019-2020	238	1561	872	1209

Figure 2: Total Undergraduate Program Graduates by Type of Program

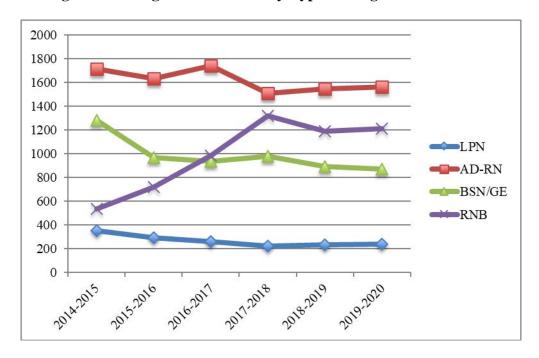


Table 2 and Figure 2 above provide undergraduate and GE/other program graduations for comparison to the past six years. There is a slight decrease in graduates from all program types except the RNB. The Institute of Medicine Report (IOM) [2010], titled *The Future of Nursing*, identifies that nurses should achieve higher levels of education and training through an improved education system that promotes seamless academic progression. Washington State has been a leader in successful strategies for academic progression from AD to BSN.

RN to BSN 2019-2020

The number of RN to BSN enrollment in Washington schools started to rise sharply in 2013-2014 academic year and continued to rise to a high in 2017-2018 with 2582 students enrolled in RNB programs, a significant increase from the previous year reported. The RNB enrollment in 2019-2020 is 1977 and there are 1209 graduates this year representing a levelling off of graduates over the last two years.

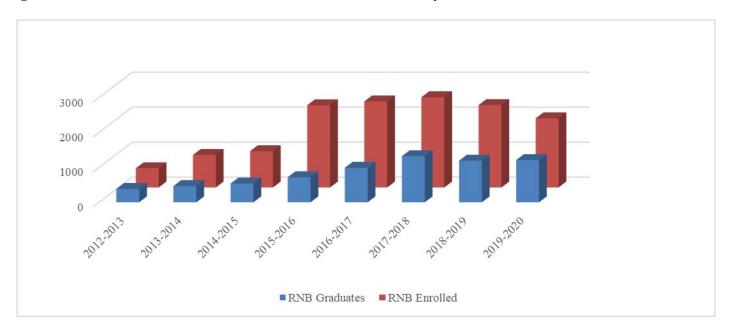


Figure 3: Number of Enrolled and Graduated RNB Students by Year

Figure 4 gives a little different picture of the results of these successful academic progression strategies on increasing the number of RN with BSN degrees. The number of RN to BSN graduates are combined with BSN and GE graduate to represent the total BSN prepared RNs in 2019-2020. This can be compared with the ADN prepared RN graduates. Although an imperfect comparison, it can provide some insight into the changing nursing education landscape in the state.

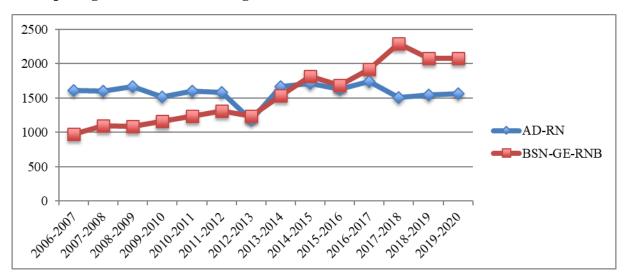


Figure 4: Comparing ADN and total BSN graduate trends (RN)

Graduate Programs

Figure 5 outlines the masters and doctoral graduates by type of program combining graduates into 2 master's categories and one doctoral for illustration. The 264 MN graduates preparing for specialties that do not require an ARNP and 49 RN to MS graduates are combined. Ninety-one master's prepared advanced registered nurse practitioners graduated in 2019-2020 and are combined with the 10 post-master's certificates in nursing (PMCN) graduates. Also, programs reported 351 DNP and 31 PhD for a total of 382 graduates with a nursing doctorate in 2019-2020. The total number of graduates from master's and doctoral programs from 2009-2010 through 2019-2020 is outlined below. Individual specialty programs are provided in Table 3.

Although there were graduates from GE programs during 2019-2020, the graduates were reported above with undergraduate pre-licensure programs, so they are not included in these graduation numbers.

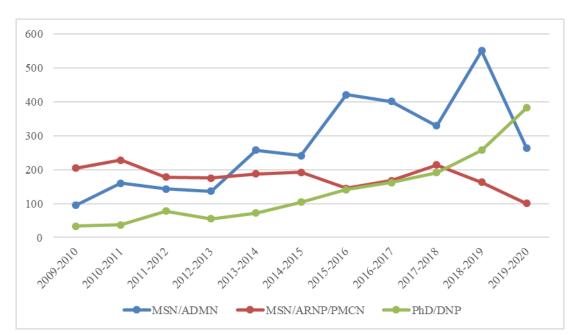


Figure 5: Master's and Doctoral Total Number of Graduates by Program

The graduates prepared in different specialty areas meet needs across the state in primary care, education, research, and other areas of practice. The number of graduates by program and specialty area are outlined below from four types of programs and 12 different specialty areas. Two hundred fifty graduated from MSN programs with specialties in education (78) and administration (172). Graduates from programs preparing for the ARNP included 107 from MSN and 208 from DNP programs. The most common specialty area for graduates of ARNP programs was the FNP (215). The 31 PhD graduates and 351 DNP graduates in 2019-2020 were combined in the above table to illustrate the trends in nurses prepared at the doctoral level.

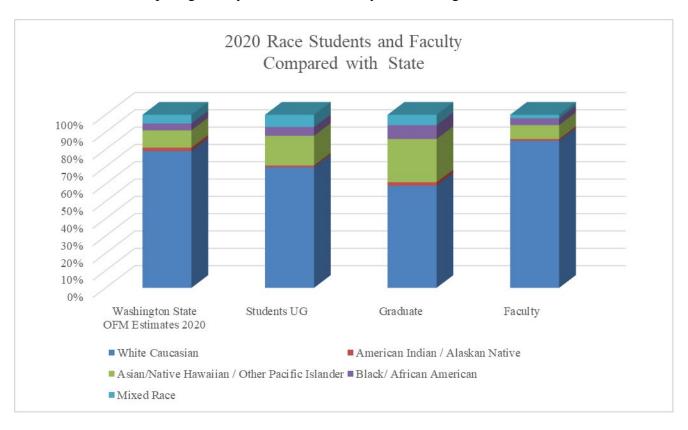
CNS FNP ANP **MHNP PNP GNP** MW**ANES** ED POP TOT Ad Oth 0 6 0 0 0 0 0 0 0 ARNP 57 33 11 107 MN

Table 3. In-State Graduates by Program and Selected Specialty Area

MSN	0	0	0	0	0	0	0	0	78	172	0	0	250
Pre ARNP- DNP	0	100	33	43	10	1	9	0	0	0	0	12	208
Post ARNP DNP	0	1	0	0	0	0	0	0	0	6	0	8	15
DNP not ARNP													128
TOTALS	0	158	39	76	10	1	9	0	78	178	0	31	708

Faculty and Student Race

The 2019-2020 academic survey was completed by nursing programs not yet impacted by the unprecedented Covid-19 pandemic and the challenges it presented. Prior to the pandemic Washington State nurse educators were committed to the goal of assuring faculty and students reflected the diversity of the Washington State residents they serve. These efforts have accelerated with commitment to infuse all work with goals of equity and inclusion. Figure 5 below provides the 2019-2020 comparisons of student and faculty race with Washington State population. Eighty-five percent of combined fulltime and part time faculty members are White/Caucasian, 8 percent Asian/Native Hawaiian or Pacific Islander, 4 percent black/African American. Faculty reporting mixed race is 2 percent and American Indian/Alaskan Native is 1 percent. The figure illustrates that undergraduate and graduate students similarly diverse as the state population in the variable of race. However, when comparing faculty to the state diversity there are significant differences.



Faculty Retention

The retention of full-time faculty teaching in post licensure programs is represented below in Table 4. Twenty two percent of full-time faculty are expected to retire in the next five years and 5 percent have resigned in the last year. The total number of full-time post licensure faculty are reported as 270.

Table 4: Full Time Post Licensure Faculty Turnover

2019-2020

	Percent expected to retire in 5 years	Percent who resigned
2019-2020	22 (59/270)	5 (14/270)

Faculty Education

Fifteen percent of nursing faculty members teaching in post licensure programs are prepared at the master level and 85 percent at the doctoral level. The percent of post-licensure faculty members prepared at each educational level is provided below.

Table 5: Pre and Post Licensure FT Faculty Level of Education 2019-2020

	MS/MSN	DNP	PhD	Total					
Post Licensure Programs									
Percent	15	15	70	100					
Number	56	54	234	344					
Pre-Licensure Programs									
Percent	68	9	23	100					
Number	290	38	96	424					

Faculty Salary

A barrier to successful recruitment and retention of nursing faculty members is inadequate compensation. Respondents answered the following questions. What are the contract lengths and associated salary ranges for your full-time nursing faculty? The largest number of programs reported nine-month contracts. The average salary ranges for nine- and 12-month contracts at community colleges and universities are reported below.

Community and Technical College nursing programs completed the negotiations between the labor unions and college administration regarding the HB 2158 funds to be used for increasing nurse educator support. The goal was to increase nurse educator salaries by 26.5%. Although the impact of the nurse educator funding is still not yet fully known, the increase in overall numbers of faculty were likely instrumental in providing the workforce to address increased needs caused by the *pandemic*.

The Community and Technical College faculty members' average salaries increased in all categories; however, the largest increases were seen in the nine-month contracts. The low end of the range increased 18 percent from \$58,007 in 2018-2019 to \$69,496 in 2019-2020. The high end of the range saw a larger increase of 37 percent from \$66,324 last year to \$91,247 this year. The university average faculty nine-month salary range was \$63,052 to \$83,015. Community and technical college faculty members' average twelve-month salary range was \$70,099 to \$83,142. The university average faculty twelve-month salary range was \$79,153 to \$98,142.

Table 6: average full-time faculty salary ranges 2019-2020 compared to 2018-2019

Contract Length	Organization	Low 2019-2020	Low 2018-2019	High 2019-2020-	High 2018-2019
Nine-Month	Community				
Nine-Month	College	\$69,496	\$58,007	\$91,247	\$66,324
Nine-Month	University	\$63,052	\$64,062	\$83,015	\$98,131
12-Month	Community				
12-Month	College	\$70,099	\$65,603	\$83,142	\$76,251
12-Month	University	\$79,153	\$79,981	\$98,142	\$113,300

Out-of-State Programs

The out-of-state nursing program approval process for student clinical placement in Washington State began in 2012. Initial data were gathered by calendar year in 2013 and 2014. The out-of-state survey was revised to reflect the academic year beginning 2014-2015 so it could be reported with the data from in-state programs to offer a more complete picture of nursing education program capacity in the state.

Because the approval process relates to clinical placements only, the data gathered are different from that gathered from the in-state programs. The student numbers reflect student clinical placement only and do not include graduation numbers. Although many of these students may remain in the state after graduation, we do not track retention and graduation rates. The 72 nursing schools that completed the survey were approved at the time of the survey, for clinical placements in Washington State. There were 80 prelicensure programs and 172 post-licensure programs totaling 252 approved for clinical placement. There were 1738 clinical placements of students from out of state programs.

Table 7: Approved Out of State Programs and Student Clinical Placements 2019-2020

College/University (72 total)	Total Programs	Total Clinical Students
Prelicensure	80	499
Post licensure	172	1239
Totals	252	1,738

Out-of-State Student Statistics

The number of students placed in clinical by out of state programs is illustrated below showing trends for the last four years. Approved out-of-state programs provided 1,738 clinical site placements for students in the 2019-2020 academic year reflecting a decrease from a total of 2,261 students in 2018-2019.

Table 8: Students with Clinical Site Placement from Out of State Programs by Program Type

	PN	AD-RN	BSN	RNB	AD-MS	GE	MSN	NP-MN	PMC	DNP	PhD	Total
2016-2017	48	198	354	249	19	0	313	137	31	66	2	1,417
2017-2018	126	309	400	163	6	0	440	145	40	85	0	1,714
2018-2019	168	276	534	240	4	8	139	516	185	191	0	2,261
2019-2020	20	163	206	107	3	0	61	557	61	94	1	1,738

During the academic year 2019-2020, there were forty-one programs with clinical students in Washington State preparing graduates for initial PN or RN licensure. One practical nurse (PN) program, six (AD-RN) programs, five graduate entry (GE), and 29 schools have students in Bachelor of Science in nursing (BSN) programs.

The remaining programs with clinical students prepare graduates to advance their education post-licensure. There are 30 RN to BSN programs, nine AD to MS, 43 ARNP master's programs and 39 other master's programs. Finally, there are 37 post master's certificate programs (PMCN), 44 doctoral of nursing practice (DNP) and nine Ph.D. programs. The total number of programs by type is outlined below providing the previous three years results for comparison.

Table 9: Number and Types of Out of State Programs with Clinical Site Placements

	PN	AD-RN	BSN	RNB	AD-MS	GE	MSN	NP-MN	PMC	DNP	PhD	Total
2016-2017	4	6	28	22	14	3	35	39	30	42	8	231
2017-2018	4	6	30	19	5	1	37	38	32	39	7	218
2018-2019	3	6	28	33	6	4	41	41	34	51	8	252
2019-2020	1	6	29	30	9	5	39	43	37	44	9	252

Prelicensure placements from out of state programs preparing students for PN or RN licensure declined significantly from previous years. In contrast, the ARNP MN program placements have significantly increased particularly in the last two years.

Summary/Analysis

Washington State nurse educators made the commitment in 2011 for a higher educated and more diverse nursing workforce, when the Council for Nurse Education in Washington State (CNEWS) and the Washington Center for Nursing (WCN) collaborated to develop a Master Plan for Nursing Education (WCN, 2014). The commitment has been reinforced with the work *of Action Now!* and the Critical Gap workgroups addressing the gaps in the nursing workforce. This report highlights trends in the direction to meet these goals as well as refocused goals and priorities due to the pandemic.

Diversity/Inclusion

The survey results indicate there are continued challenges meeting our commitment to a more diverse nursing workforce. Our experiences in the pandemic have further illustrated the urgency of assuring our faculty and students reflect the population they serve.

Providing a nursing faculty workforce that reflects the diversity of their students and the population of Washington State is essential. A diverse nursing workforce can help improve patient and population health outcomes, particularly with regard to reducing disparities in health. The undergraduate student diversity closely resembles Washington residents, and graduate students are showing some positive changes. However, the nursing faculty diversity is furthest from the state population and there has been little change over the past four years (NAM 2021).

Academic Progression

Access to academic progression for nurses at all levels from PN to PhD is important. Nurse educators in Washington have responded with increased enrollments, creative strategies and increased education capacity. Thanks to these significant efforts of nurse educators, the capacity needs for RNB programs are being met at this time. Figure 7 below provides a projection model indicating a prediction of the ratio of AD to BSN graduates in 2025 if the rate of change since 2010 continues.

3500
2500
2500
1500
1500
2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025

Figure 7. Projected graduates from AD and BSN programs maintaining current trends

Enrollment and graduations in graduate programs have shown impressive increases responding to the shortage of nurse faculty, primary care providers, and researchers. Our state mirrors national trends with more ARNP students moving to DNP programs from MSN programs. Approval of out-of-state programs for clinical placements helps ensure quality and additional capacity in high-need areas, however availability of quality clinical placements for ARNP provides a significant challenge for both in state and out of state programs.

Nursing Workforce Data

Increases in nursing school enrollment and graduates have moved to alleviate shortages. However, uneven distribution is a longstanding feature of health care in the United States. A recent national study of nursing workforce projected regional RN workforce growth from 2015 through 2030 in the U.S. (Auerbach 2017) predicting zero expected growth in RN FTE per capita in the Pacific region (Washington, Oregon and California).

Faculty

The overall educational preparation of all faculty (full time and adjunct) needs to be increased to meet state (WAC 246-840-523) and national (CCNE 2017) standards for a master's degree in CTC and a doctorate in universities. Faculty must complete graduate studies potentially accruing additional debt and further straining income inequities. In addition to the imperative to increase nursing faculty education level, there are impending retirements and vacancies.

Recommendations

Diversity/Inclusion

Play key leadership role as the Nursing Commission to support the closure of the identified critical gaps in the nursing workforce. Provide resources and time to infuse concepts of diversity and inclusion in this work, as well as, all ongoing work of the Commission.

Faculty Recruitment and Retention

Work to increase University faculty salaries and examine workload. Support and sustain current funding level of Community and Technical College nursing faculty and additional education for faculty.

Academic Progression

Continue to support strategic initiative on LPN academic progression, scope of practice, and education.

Workforce Data

Lead the work to close the critical gaps in the nursing work force to assure the right mix of nurses to meet the needs of Washington state residents, using supply, demand, and education data to inform actions, meet goals and evaluate progress.

Conclusions

Now is the time to accelerate our progress in providing the educational mix of nurses for safe and quality care in Washington State. The complex multiple education pathways in nursing can be a challenge, but they also provide multiple opportunities to increase the overall education level of nurses. Across settings, nurses are being called upon to coordinate care and to collaborate with a variety of health professionals, including physicians, social workers, physical and occupational therapists, and pharmacists, most of whom hold master's or doctoral degrees.

The Future of Nursing 2020-2030: Charting a Path to Achieve Health Equity (NAM 2021) renews the focus on the education preparation of nurses as well as challenges nurses to be leaders in the urgent work to advance heath equity. RNB, masters, and doctoral enrollments and graduations have continued to increase, adding to a higher educated workforce, but we must continue to accelerate our progress to meet the growing health care needs of the residents of Washington State. The Nursing Commission is one of four lead organizations to address critical gaps in the nursing workforce and will continue to advance the goals of health equity so essential to this work.

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