NURSING EDUCATION PROGRAMS
2017-2018 ANNUAL SCHOOL REPORT

STATISTICAL SUMMARY AND TRENDS ANALYSIS

DOH 669-269 (Revised July 2019)

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Acronyms

AD .................. Administration/Leadership Specialty
AD-RN .............. Associate Degree in Nursing – Registered Nurse
AD-MS ............. Associate Degree in Nursing to Masters of Nursing
ANES ............. Nurse Anesthetist
ANP .................. Adult Nurse Practitioner
ARNP ............... Advanced Registered Nurse Practitioner
BSN .................. Bachelor of Science in Nursing – Registered Nurse
CNS .................. Clinical Nurse Specialist
DNP .................. Doctorate of Nursing Practice
ED .................. Education Specialty
FNP .................. Family Nurse Practitioner
GE .................. Graduate Entry Programs – Registered Nurse
GNP .................. Geriatric Nurse Practitioner
MHNP ............... Mental Health Nurse Practitioner
MN .................. Masters of Nursing
MS .................. Master of Science
MSN .................. Master of Science Nursing
MW .................. Nurse Midwife
NCLEX® ........... National Council Licensure Examination
NCQAC ............. Nursing Care Quality Assurance Commission
PMC ............... Post Master’s Certificate Nurse
PN .................. Licensed Practical Nurse
PNP ................. Pediatric Nurse Practitioner
RN .................. Registered Nurse
RNB ................. Registered Nurse Bachelor (Bachelor’s degree programs for licensed RNs)
Introduction

Background

The Nursing Care Quality Assurance Commission (NCQAC) requires all nursing education programs to provide information annually [WAC 246-840-5554(4)]. This report summarizes 2017-2018 academic year survey data from approved Washington State nursing programs and out-of-state distance learning programs, highlighting selected data trends since 2008.

Forty-one approved nursing schools in Washington State completed the annual survey, including 12 universities and 29 community and technical colleges (CTC). Seventy-eight schools approved for clinical placements completed the out-of-state survey, during the 2017-2018 academic year and there were 1,714 student clinical placements by out of state programs in Washington State.

This report presents both in-state and out-of-state program survey results together. The numbers of nurses licensed in the state and first-time NCLEX test takers are provided below for background and comparison. The report will provide the student and faculty in-state program survey results of undergraduate and graduate programs. Next, the out-of-state program results are provided. 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.

Nurses Licensed in Washington

Number Licensed

The total number of licensed nurses is 116,743, including 11,108 PNs, 97,014 RNs, and 8,621 ARNPs. 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 the nursing workforce supply, downloaded December 2018 from the National Council for State Boards of Nursing (NCSBN, 2018). This is an estimate of the workforce supply data. More accurate and complete workforce supply data will be available in 2020 after full implementation in Washington State of the requirement for nurses to complete a workforce survey when relicensed.

Table 1: Licensed Nurses

<table>
<thead>
<tr>
<th>License Type</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practical Nurse</td>
<td>11,108</td>
</tr>
<tr>
<td>Registered Nurse</td>
<td>97,014</td>
</tr>
<tr>
<td>Advanced Registered Nurse Practitioner</td>
<td>8,621</td>
</tr>
<tr>
<td>Total</td>
<td>116,743</td>
</tr>
</tbody>
</table>

**2018 NCLEX Test Takers**

The total number of RN students taking the NCLEX in 2018 for the first time was 2,587, which is a slight decrease from 2017 (2611). There were 1,605 graduates from AD-RN programs and 982 from BSN or GE programs taking the NCLEX in 2018. Those taking the NCLEX for the first time went from nearly equal numbers from AD-RN programs (487) and BSN (484) programs in 2001 to almost twice as many from AD-RN as those from BSN programs. The total BSN and GE test takers since 2010 has increased from 794 to 982.

![Figure 1: Total Number of NCLEX First-Time Test Takers](image)

The total AD-RN test takers since 2012 (1,682 to 1605) has remained stable. The number of PN first-time test takers was 377, a decrease from 484 in 2017 continuing a steady decline since 2012, when there were 870 PNs taking the exam.

**In-State Programs**

Forty-one approved nursing schools in Washington State completed the annual survey. There are five licensed practical nurse (PN) programs, and 29 associate degree RN (AD-RN) programs. Five universities and four community colleges offer RN to BSN (RNB) programs. Nine universities offer Bachelor of Science in nursing (BSN) programs. There are three ADN to MSN (AD-MS) programs, two programs offering master’s degree graduate entry to the RN (GE), and three master’s degree advanced registered nurse practitioner (ARNP) and seven other master’s programs. Finally, there are two post-master’s certificate (PMC) programs, six doctoral of nursing practice (DNP) and two Ph.D. programs. See below.
Twenty-three of 29 community or technical colleges (CTC) have national nursing accreditation and 12 of the 12 universities have national nursing accreditation. There are six CTC programs without national nursing accreditation; one is in pre-accreditation status, two are planning accreditation in 2019, and the final three are planning accreditation in 2020.

**Undergraduate Programs**

Trends in the number of undergraduate students who graduated between 2006-2007 and 2017-2018 outlined below. Practical nursing programs (PN) had 226 graduates in 2017-2018, a decrease from 264 graduates the previous year. In 2017-2018, AD-RN programs graduated 1506 students, which is a decrease from 1,741 graduates the previous year.

In 2017-2018, BSN programs graduated 877 students, and GE programs graduated 101 nurses which is an increase from the previous year. Note that BSN and GE students combined in the figure below because they are both preparing students in the university setting for initial RN licensure. Although those completing GE degrees are included in these graduation numbers because they are pre-licensure programs, the GE student and faculty demographics are included with the graduate program results.

The impressive gains in the number of RNB graduates continue this year with 1319 RNB graduates compared to 987 in 2016-2017. This reflects almost four times the number of RNB graduates in 2006-2007 (231) with a significant spike in the increase seen in 2013.
Figure 2: Total Undergraduate Program Graduates by Type of Program

Table 2: In State Undergraduate Graduations

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>PN</th>
<th>AD</th>
<th>BSN/GE</th>
<th>RNB</th>
<th>BSN/GE/RNB</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-2014</td>
<td>330</td>
<td>1,672</td>
<td>1,075</td>
<td>466</td>
<td>1,541</td>
</tr>
<tr>
<td>2014-2015</td>
<td>352</td>
<td>1,712</td>
<td>1,283</td>
<td>536</td>
<td>1,819</td>
</tr>
<tr>
<td>2015-2016</td>
<td>293</td>
<td>1,633</td>
<td>967</td>
<td>718</td>
<td>1,685</td>
</tr>
<tr>
<td>2016-2017</td>
<td>264</td>
<td>1,741</td>
<td>937</td>
<td>987</td>
<td>1,924</td>
</tr>
<tr>
<td>2017-2018</td>
<td>226</td>
<td>1,506</td>
<td>978</td>
<td>1,319</td>
<td>2,297</td>
</tr>
</tbody>
</table>

The table above provides undergraduate and GE program graduations for comparison in the past five years. There is a slight decrease in graduates from PN and AD program and an increase in BSN/GE and significant increase in RNB program graduates.
RN to BSN (RNB) 2017-2018

The number of RNB graduates in Washington schools rose sharply in 2010-2011 academic year and continued to rise through 2017-2018 with 1319 graduates. It is important to note that the increased number of graduates will likely continue since there are 2,582 students enrolled in RNB programs, a significant increase from the previous year reported.

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

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. Figure three gives a different illustration of the successful strategies for academic progression in Washington State. When combining the number of graduates from all three BSN programs; RNB, BSN and GE graduates, it allows comparison of the total number of AD graduates with the total number of BSN graduates.
Program Completion Rate

Schools provided an allotted time for completion in semesters or quarters, and the number of graduates who completed in 100 and 150 percent of the chosen allotted program completion time. The completion rates for the undergraduate programs are below. The RNB programs have the lowest completion rates (67 percent) in 100 percent of the allotted time, which is consistent with part-time programs. AD programs have the highest completion rates with 92 percent completing in 100 percent allotted time, however, because the program chooses the allotted time for completion, it is difficult to compare programs.

Table 3: In-State Undergraduate Program Completion Rates by Program

<table>
<thead>
<tr>
<th>Program Type</th>
<th>100 percent allotted time</th>
<th>150 percent allotted time</th>
</tr>
</thead>
<tbody>
<tr>
<td>PN</td>
<td>90 percent</td>
<td>100 percent</td>
</tr>
<tr>
<td>AD</td>
<td>92 percent</td>
<td>97 percent</td>
</tr>
<tr>
<td>RNB</td>
<td>67 percent</td>
<td>99 percent</td>
</tr>
<tr>
<td>BSN</td>
<td>87 percent</td>
<td>97 percent</td>
</tr>
</tbody>
</table>

The variation in completion rates may be related to the structure of the program, student demographics, choice of allotted completion time, or other factors. There was a wide variation in the choices of allotted times for RNB, and BSN programs because of the different structure and makeup of the programs. All programs had completion rates between 97-100% at 150 percent of the allotted time.
Direct Transfer Agreement (DTA) 2017-2018

The support over four years of funding from the Robert Wood Johnson Foundation (RWJF) helped accelerate the progress toward a higher educated workforce by supporting the adoption of the Direct Transfer Agreement (DTA) streamlining academic progression between ADN and BSN programs. Questions were added to the annual survey to track progress and to evaluate success.

Thirteen community colleges had implemented the Associate in Nursing DTA at the time of the survey, reporting 1,667 students currently enrolled in this pathway and this new degree was awarded to 757 graduates.

Ten of the 16 colleges who have not yet implemented the DTA were either in the process of implementation (three) or interested in implementation, but not started (seven). One school will not implement the DTA because it has implemented its own RN to BSN program. A second school will not implement because it has an existing agreement with a university that meets students’ needs.

The number of students graduating from a DTA program progressing directly to the BSN is an essential terminal evaluation point. We are in the process of determining the best measure to capture the progression of students from DTA programs to RNB programs. However, with 1,667 students enrolled and 10 more colleges planning to implement the DTA, this streamlined pathway from AD to BSN is poised to have an effect on increasing the overall education level of nurses in the state.

Clinical Hours

Nursing faculty members plan, evaluate, and supervise clinical experiences for nursing students. Clinical experiences provide direct patient care activities and increase student learning. Clinical learning is critical to providing quality nursing education and can be a barrier to increasing enrollment. Fifteen colleges and universities reported inadequate clinical sites for their students 2017-2018. The nursing programs that report the greatest difficulty finding clinical sites are undergraduate and ARNP programs. Nursing programs could increase clinical practice experience by increasing their use of simulation. WAC 246-840-534 allows LPN, RN, or RN to BSN programs to use simulation up to fifty percent of a clinical, practice course. Nursing programs report use of simulation at a very low percentage of total clinical hours with only slight increases from last year.

The average number of clinical hours in PN programs is 409. The average clinical hours in AD-RN programs is 607. Finally, the average clinical hours in the BSN programs are 842. See below for the breakdown of the average clinical hours by program type.

Direct care experiences make up an average of 91 percent of the total clinical experience hours in PN, 84 percent in AD-RN and 86 percent in BSN programs. See the table below for clinical observation and simulation percentages.
### Table 4: Clinical Hours by Program and Type

<table>
<thead>
<tr>
<th>Clinical Hours</th>
<th>PN</th>
<th>AD-RN</th>
<th>BSN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average</strong></td>
<td>409</td>
<td>607</td>
<td>842</td>
</tr>
<tr>
<td><strong>Direct Care</strong></td>
<td>91 percent</td>
<td>84 percent</td>
<td>86 percent</td>
</tr>
<tr>
<td><strong>Observation</strong></td>
<td>5 percent</td>
<td>7 percent</td>
<td>9 percent</td>
</tr>
<tr>
<td><strong>Simulation</strong></td>
<td>4 percent</td>
<td>9 percent</td>
<td>6 percent</td>
</tr>
</tbody>
</table>

### Graduate Programs

The MSN graduates from master’s degree programs in nursing, but not ARNP (244) and RN to MS graduates (85) were reported as a combined number. There were 201 master’s prepared advanced registered nurse practitioner graduates in 2017-2018 and 13 post master’s certificate in nursing (PMCN) graduates combined for display below.

Programs reported 171 DNP and 20 Ph.D. graduates for 191 graduates with a nursing doctorate in 2017-2018. The total number of graduates from master’s and doctoral programs from 2005-2006 through 2017-2018 is outlined below. Doctoral prepared nurses are continuing to grow over the course of the past six years.

Although there were 101 graduates from GE programs during 2017-2018, these graduates were already reported above with undergraduate pre-licensure programs, so they will not be included in these graduation numbers.

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

#### Program Completion Rates

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Graduate nursing programs also chose a time for completion of their programs, reporting students who graduated in 100 percent of that time and those who graduated in 150 percent of that time. Overall 93 percent students from master’s programs preparing for ARNP roles completed in the allotted time and 68 percent of MSN students completed in the allotted time. DNP programs reported an 89 percent completion rate. All graduate programs reported 100% completion rates at 150 percent of the chosen allotted time. The variations in completion rates may be related to the structure of the programs or to students’ choice for slower progression plans because of personal or economic concerns.

Table 5: In-State Graduate Program Completion Rates by Program

<table>
<thead>
<tr>
<th>Program Type</th>
<th>100 percent allotted time</th>
<th>150 percent allotted time</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE</td>
<td>96 percent</td>
<td>100 percent</td>
</tr>
<tr>
<td>ADMS</td>
<td>49 percent</td>
<td>100 percent</td>
</tr>
<tr>
<td>MSN ARNP</td>
<td>93 percent</td>
<td>100 percent</td>
</tr>
<tr>
<td>MSN</td>
<td>68 percent</td>
<td>100 percent</td>
</tr>
<tr>
<td>PMCN</td>
<td>100 percent</td>
<td>100 percent</td>
</tr>
<tr>
<td>DNP</td>
<td>89 percent</td>
<td>100 percent</td>
</tr>
</tbody>
</table>

Graduate Degree Specialties

The graduates prepared in different specialty areas meet needs across the state in primary care, education, research, and other areas of practice. The graduates by program and specialty area are outlined below. Programs reported graduates from seven types of programs and 10 different specialty areas. There were 244 graduates from MSN programs. Eighty-two with a specialty in education (ED), 106 with a specialty in administration/leadership (AD), and 56 described as other. Graduates from programs preparing nurses for the ARNP included 201 from MSN and 142 from DNP programs. The most common specialty area for graduates of ARNP programs was the family nurse practitioner (FNP). Other specialties include; clinical nurse specialist (CNS), adult nurse practitioner (ANP), mental health nurse practitioner (MHNP), pediatric nurse practitioner (PNP), geriatric nurse practitioner (GNP), nurse midwife (MW), and nurse anesthetist (ANES).
Table 6: In-State Graduates by Program and Specialty Area

<table>
<thead>
<tr>
<th>Type</th>
<th>CNS</th>
<th>FNP</th>
<th>ANP</th>
<th>MHNP</th>
<th>PNP</th>
<th>GNP</th>
<th>MW</th>
<th>ANES</th>
<th>ED</th>
<th>AD</th>
<th>Oth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>GE</td>
<td>24</td>
<td>17</td>
<td>15</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>101</td>
</tr>
<tr>
<td>ADMS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>41</td>
<td>42</td>
<td>2</td>
<td>85</td>
</tr>
<tr>
<td>ARNP MS</td>
<td>3</td>
<td>136</td>
<td>15</td>
<td>45</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>201</td>
</tr>
<tr>
<td>MSN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>82</td>
<td>106</td>
<td>56</td>
<td>244</td>
</tr>
<tr>
<td>PMCN</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Pre ARNP</td>
<td>2</td>
<td>60</td>
<td>27</td>
<td>28</td>
<td>16</td>
<td>7</td>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>141</td>
</tr>
<tr>
<td>DNP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9</td>
<td>5</td>
<td></td>
<td>29</td>
</tr>
<tr>
<td>Totals</td>
<td>5</td>
<td>226</td>
<td>42</td>
<td>92</td>
<td>16</td>
<td>17</td>
<td>19</td>
<td>13</td>
<td>123</td>
<td>157</td>
<td>104</td>
<td>814</td>
</tr>
</tbody>
</table>

Faculty and Student Ethnicity

Eighty-one percent of combined fulltime and part time faculty members are White/Caucasian, six percent Asian/ Native Hawaiian/other Pacific Islander, seven percent black/African American, three percent for Hispanic/Latino, two percent mixed race and one percent American Indian/Alaskan Native. Nursing programs reported 1,531 faculty members employed during 2017-2018 academic year. There were 715 full-time faculty members and 816 part-time faculty members. The missing or unknown ethnicity data were not included in the percentage calculations below.
Nursing Faculty

Educating the right mix of practicing nurses will require increased numbers of nursing faculty members. Washington State regulations require a minimum of a master’s degree in nursing, or a bachelor’s degree in nursing and a master’s degree in a related field, to teach registered nursing. Practical nursing faculty members must have a minimum of a bachelor’s degree in nursing. Washington State nursing programs are experiencing increasing difficulty in hiring nursing faculty members.

Nursing programs continue to explore strategies to attract and retain nursing faculty members. Workload adjustment, sharing faculty, support for ongoing academic endeavors, and professional development are the major strategies reported to address the problem. Beyond the need for increasing nursing faculty pay, nursing programs identified faculty workload adjustment around the rigors of clinical instruction, committee work, and mentoring of new faculty members as areas critical to program continuation or expansion.

Faculty Turnover

There were sixty three open full-time nursing faculty positions in active recruitment during 2017-2018 representing 9 percent (63/715) of all full time faculty positions. Community college nursing programs reported 25 percent of their nursing faculty members are anticipating retiring in the next five years. University programs reported retirements of 11 percent. Additional factors adding to the difficulties are resignations and orientation of new faculty members. Sixteen percent of the fulltime faculty at CTC and five percent at universities resigned in the previous year. Eleven percent of faculty members at community colleges were in
their first year of employment during 2017-2018 compared to 5 percent in the university programs. Given the
difficulty nursing programs are having finding nursing faculty members, tracking this information as we
develop strategies to address the nursing faculty shortage will be essential. The significant increase in the
anticipated retirements in CTC from 13 percent last year to 25 percent this year should drive strategic planning
to prevent potential shortages when these retirements occur.

Table 7: Full Time Faculty Turnover 2017-2018

<table>
<thead>
<tr>
<th></th>
<th>Expected to retire in 5 years</th>
<th>Resigned</th>
<th>First year of employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community and Technical College</td>
<td>25 percent (55/216)</td>
<td>16 percent (35/216)</td>
<td>11 percent (24/216)</td>
</tr>
<tr>
<td>University</td>
<td>11 percent (53/499)</td>
<td>5 percent (24/499)</td>
<td>5 percent (25/499)</td>
</tr>
</tbody>
</table>

Faculty Education

Forty-two percent of nursing faculty members at universities are prepared at the master level and 50 percent
at the doctoral level, which is a slight increase in overall education level of faculty since the previous year.
Community and technical colleges have 69 percent of their faculty prepared at the MSN and 6 percent at the
doctorate level showing little change from the previous year. The figure below illustrates the difference in
faculty preparation between community colleges and universities in 2017 - 2018.

Figure 7: Faculty Level of Education 2017 - 2018
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? Please do not include time for non-teaching activities such as administration. The largest number of programs reported nine-month contracts with the lowest average nine-month salary reported as $54,484 and the highest $99,703. The average salary ranges for nine and 12-month contracts at community colleges and universities are reported below. Community and technical college faculty members’ average nine-month salary range was $54,484 to $65,426 and the university average faculty nine-month salary range was $60,996 to $99,703.

Adding to the challenge of recruitment and retention of nursing faculty is the stark contrast in salaries between positions in practice and faculty roles in academics. For example, the Washington State Employment Security Department (ESD 2019) reports an average salary of $81,044 for RNs with a 2 year degree. Faculty require a minimum of a master’s degree preparation and often require a doctorate, however their salaries are often less than nurses requiring a two year degrees.

Table 8: Average Faculty Salary Ranges

<table>
<thead>
<tr>
<th>Contract Length</th>
<th>Organization</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nine-Month</td>
<td>Community College</td>
<td>$54,484</td>
<td>$65,426</td>
</tr>
<tr>
<td>Nine-Month</td>
<td>University</td>
<td>$60,996</td>
<td>$99,703</td>
</tr>
<tr>
<td>12-Month</td>
<td>Community College</td>
<td>$55,503</td>
<td>$72,194</td>
</tr>
<tr>
<td>12-Month</td>
<td>University</td>
<td>$86,384</td>
<td>$112,882</td>
</tr>
</tbody>
</table>

Out-of-State Programs

The out-of-state nursing program approval process for student clinical placement in Washington State began 2012. The out-of-state survey reflects the academic year beginning 2014-2015 so it could be combined 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. Seventy-eight nursing schools approved for clinical placement in Washington State completed the survey.
Table 9: Approved Out of State Programs and Student Clinical Placements

<table>
<thead>
<tr>
<th>College/University (78 total)</th>
<th>Total Programs</th>
<th>Total Clinical Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>43</td>
<td>998</td>
</tr>
<tr>
<td>Graduate</td>
<td>160</td>
<td>716</td>
</tr>
<tr>
<td>Totals</td>
<td>219</td>
<td>1,714</td>
</tr>
</tbody>
</table>

Out-of-State Student Statistics

Approved out-of-state programs placed 1,714 student in clinical site placements across 219 programs in the 2017-2018 academic year, an increase from 1417 students in 2016-2017. The decrease in the number of RNB students is notable and may represent students choosing in state programs.

Table 10: Number of Students with Clinical Site Placement from Out of State Programs

<table>
<thead>
<tr>
<th></th>
<th>PN</th>
<th>AD-RN</th>
<th>BSN</th>
<th>RNB</th>
<th>AD-MS</th>
<th>GE</th>
<th>MSN</th>
<th>ARNP-MN</th>
<th>PMCN</th>
<th>DNP</th>
<th>PhD</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014-2015</td>
<td>25</td>
<td>89</td>
<td>323</td>
<td>105</td>
<td>15</td>
<td>0</td>
<td>180</td>
<td>110</td>
<td>18</td>
<td>31</td>
<td>0</td>
<td>904</td>
</tr>
<tr>
<td>2015-2016</td>
<td>25</td>
<td>159</td>
<td>349</td>
<td>142</td>
<td>8</td>
<td>2</td>
<td>162</td>
<td>125</td>
<td>12</td>
<td>33</td>
<td>0</td>
<td>1,017</td>
</tr>
<tr>
<td>2016-2017</td>
<td>48</td>
<td>198</td>
<td>354</td>
<td>249</td>
<td>19</td>
<td>0</td>
<td>313</td>
<td>137</td>
<td>31</td>
<td>66</td>
<td>2</td>
<td>1,417</td>
</tr>
<tr>
<td>2017-2018</td>
<td>126</td>
<td>309</td>
<td>400</td>
<td>163</td>
<td>6</td>
<td>0</td>
<td>440</td>
<td>145</td>
<td>40</td>
<td>85</td>
<td>0</td>
<td>1,714</td>
</tr>
</tbody>
</table>

Thirty of the programs with clinical students in Washington State prepare graduates for PN or RN licensure. There are four licensed practical nurse (PN) programs and six AD-RN programs. Nineteen schools have students in Bachelor of Science in nursing (BSN) programs. One of the approved schools offers a graduate entry (GE) option. The remaining programs prepare graduates to advance their education post RN licensure. There are 30 RNB programs, five AD to MS, 37 ARNP and 38 other master’s programs. Finally, there are 32 post master’s certificate programs (PMCN), 39 doctoral of nursing practice (DNP) and seven Ph.D. programs. Table 11 outlines the total number of programs by type.

Table 11: Number and Types of Out of State Programs with Clinical Site Placements

<table>
<thead>
<tr>
<th></th>
<th>PN</th>
<th>AD-RN</th>
<th>BSN</th>
<th>RNB</th>
<th>AD-MS</th>
<th>GE</th>
<th>MSN</th>
<th>ARNP-MN</th>
<th>PMCN</th>
<th>DNP</th>
<th>PhD</th>
<th>Oth</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014-2015</td>
<td>2</td>
<td>5</td>
<td>19</td>
<td>9</td>
<td>7</td>
<td>5</td>
<td>24</td>
<td>24</td>
<td>20</td>
<td>25</td>
<td>5</td>
<td>148</td>
<td></td>
</tr>
<tr>
<td>2015-2016</td>
<td>3</td>
<td>5</td>
<td>21</td>
<td>12</td>
<td>5</td>
<td>1</td>
<td>27</td>
<td>29</td>
<td>23</td>
<td>28</td>
<td>4</td>
<td>2</td>
<td>160</td>
</tr>
<tr>
<td>2016-2017</td>
<td>4</td>
<td>6</td>
<td>28</td>
<td>22</td>
<td>14</td>
<td>3</td>
<td>35</td>
<td>39</td>
<td>30</td>
<td>42</td>
<td>8</td>
<td>1</td>
<td>232</td>
</tr>
<tr>
<td>2017-2018</td>
<td>4</td>
<td>6</td>
<td>30</td>
<td>19</td>
<td>5</td>
<td>1</td>
<td>37</td>
<td>38</td>
<td>32</td>
<td>39</td>
<td>7</td>
<td>1</td>
<td>219</td>
</tr>
</tbody>
</table>
Analysis/Recommendations

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). This report highlights trends in the direction to meet the goals.

Academic Progression

Access to academic progression for nurses at all levels from PN to Ph.D. is important. The progress toward a higher educated workforce continue to accelerate as the Direct Transfer Agreement (DTA) streamlining academic progression between ADN and BSN programs is fully implemented. The availability and adoption of the DTA will facilitate a smooth pathway for community colleges and universities to collaborate on programs providing students rapid and seamless progression to the BSN. Nurse educators in Washington have also responded with increased enrollments and education capacity in BSN, RNB and graduate programs.

The recent addition of new RNB programs at both universities and CTCs, and expansion of current RNB programs, has resulted in significant increases in enrollment and graduations. Four community colleges offer RNB programs and more community colleges are considering this option.

Despite the change in the education level of the nurses the total number of graduates from undergraduate and graduate programs preparing students for the registered nurse (RN) licensure (AD-RN, BSN, and GE) in Washington State has remained stable over the past nine years from 2,360 in 2005-2006 to 2,484 graduates in 2017-2018.

Figure 3 above illustrates the number of BSN graduates has outpaced the number of AD grads for the first time when combining RNB graduates to pre-licensure BSN and GE students. Figure 8 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. The model provides a tool for strategic planning to meet the goals of academic progression outlined in the Washington State Master Plan for Nursing Education (2014).
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. GE programs have increased enrollment and graduation providing additional options at initial RN licensure for student academic progression. Approval of out-of-state programs for clinical placements helps ensure quality and additional capacity in high-need areas.

**Nursing Workforce Data**

The Nursing Commission implemented a rule in January 2018 requiring all nurses to complete a demographic survey at new licensure or license renewal. Consequently, starting in 2020 accurate and complete nursing supply data will be available to more precisely plan for the effect of regional and national trends. The availability of this important data will provide a previously absent ability to monitor progress and evaluate successful strategies.

Although not all nurses have completed the demographic survey, preliminary analysis of 52 percent of responding nurses in the state indicate there are 62.5 percent of the nursing workforce educated at the BSN or higher level; BSN (48), MSN (14), and Doctoral preparation (0.6). There are 33 percent of RNs prepared at the AD level and 5 percent diploma prepared nurses for 37 percent prepared below the BSN level.

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). The nursing supply data available in the next year will provide the number of nurses by county, specialty area, and practice site. This data will provide an important tool to target and address challenges with distribution, particularly in the rural area.
Faculty

Meeting state nursing workforce needs, and educational advancement requires a sufficient, robust, and diverse faculty pool. The Action Now! Initiative — launched by the Council for Nursing Education in Washington State (CNEWS), the Nursing Care Quality Assurance Commission (NCQAC), and the Washington Center for Nursing (WCN) — is working with practice partners and other stakeholders toward solutions to many nursing education challenges. This group has identified ensuring a sufficient, robust, and diverse faculty pool as a Number 1 priority. Analysis of the NCQAC Nursing Annual Report reinforces the urgency of the faculty need.

Meeting state (WAC 246-840-523, WAC 246-840-524, WAC 246-840-526, WAC 246-840-527 and WAC 246-840-528) and national accreditation standards for a master’s degree in CTC and a doctorate in universities will require an increase in the educational preparation of faculty. The table above shows how many 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.

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 (Williams, SD et al., 2014). The undergraduate student diversity more 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 have been no changes over the past four years (NCQAC 2018).

The faculty turnover numbers are alarming and warrant sustained and aggressive measures to prevent even more shortages. We must act now to increase the number of full time nurse educators by providing comparable salaries with nursing practice, so we can recruit and retain nursing faculty.

Recommendations

Faculty Recruitment and Retention

• Continue to support work to increase faculty salaries, examine workload, and support additional education for current faculty.

Academic Progression

• We need to continue the trend where we graduate and license more BSN nurses than ADN nurses.
  o More AD-RN community college nursing program students must move directly to the BSN.
  o Students entering at the community college should have an opportunity to choose a program where they exit and take NCLEX at the BSN.
  o RNB program capacity at universities and CTC maintained or increased to serve community college students moving more rapidly to the BSN.
  o University nursing programs in the state should increase growth in BSN and GE programs.
  o Graduate programs should increase MSN and doctoral graduates to prepare nurse educators, primary care providers, and researchers.
Workforce Data

- Develop a strategic plan to assure there are 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 take bold steps to accelerate our progress in providing the right educational mix of nurses for safe and quality care in Washington State. 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. (IOM 2011) The Future of Nursing: Leading Change, Advancing Health. RNB, masters, and doctoral enrollments and graduations have continued to increase, significantly adding to a higher educated workforce, but we must continue to accelerate our progress to meet the growing health care needs of the residents in Washington State.

References


Auerbach, Dl, Staiger, DO (2017) How fast will the registered nurse workforce grow through 2030? Projections in nine regions of the country, Nursing Outlook.


Williams, SD, Hansen,K, Smithey, M, Burnley, J, Koplitz, M, Koyama, K, Young, J, Bakos, A 014) Using Social Determinants of Health to Link Health Workforce Diversity, Care Quality and Access, and Health Disparities to Achieve Health Equity in Nursing, Public Health Reports, SAGE Publications Inc.