



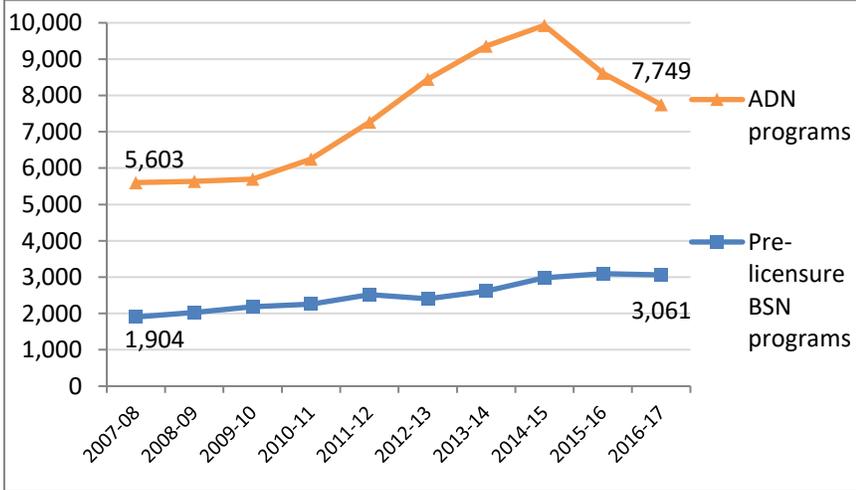
Florida Pre-Licensure Registered Nurse Education: Academic Year 2016-2017

The information below represents **key findings** regarding the pre-licensure RN (Associate Degree in Nursing, ADN, and Bachelor of Science Degree in Nursing, BSN) education system in Florida in Academic Year (AY) 2016-2017. This report describes student education capacity, discusses implications, and proposes research and policy recommendations.

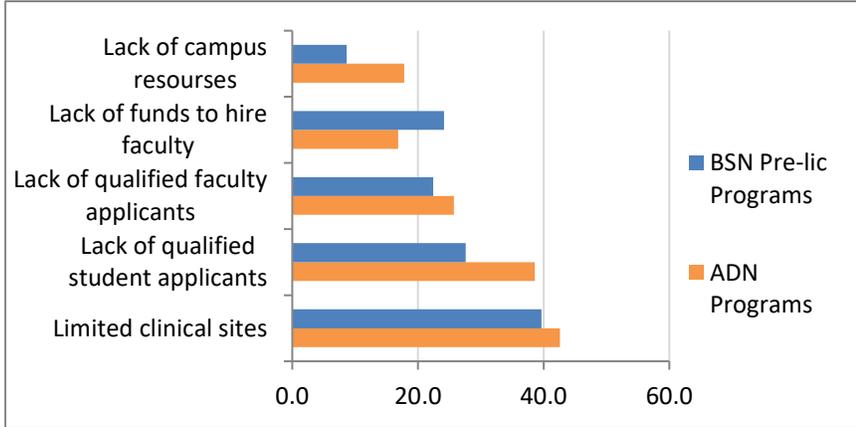
Program Capacity for Pre-licensure RN Programs, AY 2016-2017

| | Curriculum | | | |
|--------------------------|-------------|------------|-------------|----------------------------|
| | Generic ADN | Bridge ADN | Generic BSN | 2 nd Degree BSN |
| # QUALIFIED applications | 17,381 | 3,267 | 7,555 | 2,238 |
| # student SEATS | 14,621 | 3,405 | 5,187 | 1254 |
| # students ADMITTED | 11,578 | 2,852 | 4,323 | 1,409 |
| % declined applications | 33% | 13% | 43% | 37% |
| # NEW enrollees | 10,116 | 2,478 | 3,639 | 958 |

Trend in Number of New Graduate Nurses, 2007-2017



Reported Barriers to Maximizing Program Capacity AY 2016 -2017



- **46 new programs** were surveyed (20 ADN and 26 BSN).
- **Survey response rates were 82.1%**, resulting in a fairly complete picture of RN education and allowing for some trend identification.
- **New graduate ADN nurses decreased** by 865 while **BSN graduates increased** by 35.
- 57% of **BSN-Generic students** and 47% of **BSN second degree students** are age 17 to 25. ADN student age range is 26 to 40.
- **Barriers to maximizing program capacity continue**
 - Limited clinical capacity in 40% of BSN programs and 43% of ADN programs.
 - Lack of funds to hire faculty, and lack of campus resources.

Recommendations

1. Create incentives for nurses to seek advanced education, from RN to BSN and into graduate study, in order to build a nurse faculty pipeline and engage in lifelong learning.
2. Assess the appropriateness and quality of new and existing RN programs in order to determine their impact on the students, nursing workforce and healthcare industry.
3. Develop new methods of education, clinical and didactic, to accommodate the learning style of diverse students, address the shortage of clinical capacity, and prepare newly licensed RNs to work in non-traditional settings.
4. Maintain and fund a consistent, long-term data collection, analysis, and reporting system. Establish consequences for failure to participate when it is mandated to do so.



Florida's 2016-2017
Nursing Education Programs:

Pre-Licensure
Registered Nurse Education

Contents

| | |
|---|----|
| Background | 2 |
| Data Source | 2 |
| Overview of Responding Programs | 3 |
| Program Growth | 3 |
| Programs, Curriculum Options, and Accreditation | 4 |
| Pre-Licensure Registered Nurse Program Capacity | 5 |
| Pre-Licensure Registered Nurse Graduates | 7 |
| Barriers to Maximizing Pre-Licensure Program Capacity | 8 |
| Student Demographics | 8 |
| Race/Ethnicity and Gender | 8 |
| Student Demographics Compared to Faculty | 10 |
| Discussion | 11 |
| Recommendations | 13 |
| References | 15 |

Florida Pre-Licensure Registered Nurse Education: Academic Year 2016-2017

Background

The number of nurse education programs in Florida has grown considerably since 2007, when the Florida Center for Nursing (Center) first initiated the annual nursing education program survey. Program growth has been in response to demand from potential nursing students, demand from employers, and future anticipated demand within the healthcare industry due to a projected nursing shortage as older nurses leave the workforce, the population ages, and access to healthcare increases. The goals of the Center's nurse education program survey are to characterize trends in the education of nurses and the faculty workforce.

The Center's data collection, analysis, and subsequent reports have multiple **benefits to stakeholders**: schools can use the data for academic decision making, to strengthen grant applications, to plan for faculty demand and student expansion; and policy makers can use the data to initiate and/or modify policies and regulations, guide funding decisions and plan strategic use of resources.

This report describes information for pre-licensure RN programs (Associate Degree in Nursing, ADN, and Bachelor of Science Degree in Nursing, BSN) for Academic Year (AY) 2016-2017, and highlights trends in results since the Center began data collection and analysis. The implications are discussed, and research and policy recommendations are offered.

Data Source

Data for this report are from the 2017 Florida Center for Nursing *Survey of Nursing Education Programs*. In October 2017, a survey link was emailed to the dean or program director of each nursing education program in the state of Florida. Responding deans and directors provided data on the faculty and student populations as of September 30th, 2017 and on program capacity for AY 2016-2017.

Nursing education programs are identified from the Board of Nursing website, which maintains an updated database of Licensed Practical Nurse (LPN), Associate Degree in Nursing (ADN) and pre-licensure Bachelor of Science in Nursing (BSN) programs. The list of all nursing programs in Florida was downloaded from the Board of Nursing in August 2017. A total of 213 pre-licensure RN programs were asked to complete the survey, an addition of 46 programs since 2016 (20 new ADN programs and 26 new BSN programs). It is important to note that pre-licensure ADN and BSN nursing programs increase the supply of RNs, whereas post-licensure programs (e.g., RN-BSN, Master's, Doctoral) advance the education level of already licensed RNs.

A total of 175 RN programs responded to the survey, yielding a response rate of 82% (Table 1). The response rate for BSN programs (82.9%) was slightly higher than ADN programs (81.8%).

Table 1. Response Rates for Florida’s Pre-Licensure RN Programs, AY 2016-2017

| Type of Program | Total # of Schools | # New Programs 9/2016 – 8/2017 | Responding Programs | Response Rate |
|-----------------|--------------------|-----------------------------------|---------------------|---------------|
| ADN | 143 | 26 | 117 | 81.8% |
| BSN | 70 | 20 | 58 | 82.9% |
| Total | 213 | 46 | 175 | 82.1% |

Except when indicated, data in this report are from the responding schools. Given that this is the Center’s tenth annual survey, the richness of the data and information are enhanced by the ability to report 10-year trends in results. Thus change, or the lack of it, is evident and provides the opportunity to consider the effect of interventions, such as efforts to increase production of new graduates to enter the workforce. With trends, one can monitor outcomes and identify promising practices for replication.

Overview of Responding Programs

Program Growth

As Figure 1 shows, **pre-licensure RN programs have grown tremendously since 2007**. Both ADN and BSN programs have tripled since that time. **ADN program growth has slowed since 2013, while BSN program growth has accelerated**. From AY 2015 -2016 (labeled as 2016 in the figure) to AY 2016 -2017 (labeled as 2017 in the figure) 20 new ADN and 26 new BSN programs formed.

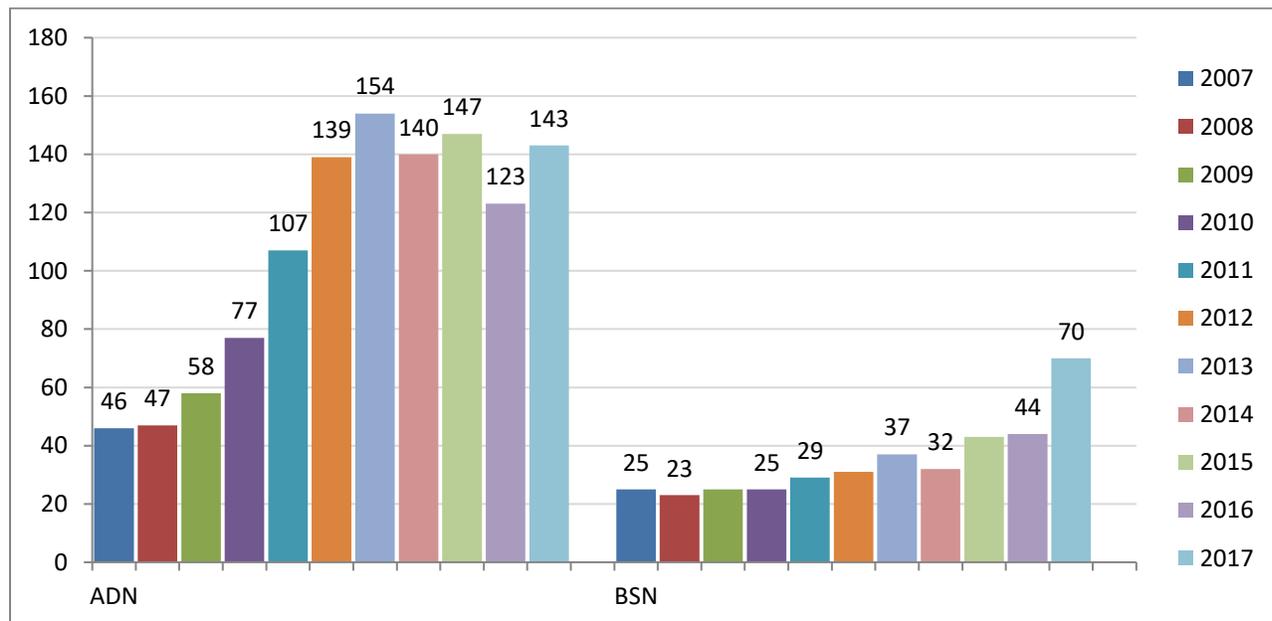


Figure 1. ADN and Pre-licensure BSN Program Growth, 2007-2017.

All data represent the AY ending in the year labeled in the figure.

Programs, Curriculum Options, and Accreditation

Table 2 provides detail of the programs and curriculum options available as of October 2017, based on survey responses. Of the 117 ADN programs responding, 92 have a generic/traditional program for students with no prior health care experience and 51 offer a bridge curriculum that moves LPNs or paramedics through the RN program more quickly. Three programs did not report any students enrolled at the time of data collection.

Of the 58 pre-licensure BSN programs participating, 44 have a generic/traditional program and 18 offer a second-degree curriculum – often called an accelerated program – for students with a baccalaureate degree in another discipline.

Table 2. RN Programs and Curriculum Options Reported, AY 2016-2017

| Pre-licensure Programs | # |
|-------------------------------------|-----|
| ADN Programs | |
| Number of ADN Programs Responding | 117 |
| - Generic/Traditional Curriculum | 92 |
| - Bridge Curriculum | 51 |
| - <i>No students enrolled</i> | 3 |
| Pre-licensure BSN Programs | |
| Number of BSN Programs Responding | 58 |
| - Generic/Traditional Curriculum | 44 |
| - 2 nd Degree Curriculum | 18 |

Note: Curriculum counts exceed program counts because many programs offer multiple curriculum options.

Table 3 shows the Accreditation Commission for Education in Nursing (ACEN) or Commission on Collegiate Nursing Education (CCNE) accreditation status of programs in AY 2016-2017. Schools that have not yet admitted students cannot have achieved accreditation. Forty-four percent of ADN programs and 90 percent of the BSN programs reported being accredited. **Most BSN programs were CCNE accredited.** It is important to note that Florida law requires all pre-licensure RN programs to be nationally accredited within a prescribed time frame.¹

Table 3. Accreditation Status in AY 2016-2017 by Program Type

| Accreditation Status | ADN | BSN |
|---------------------------------------|-----|-----|
| Not accredited | 10% | 0% |
| In process of accreditation | 46% | 10% |
| Accredited by AECN and/or CCNE | 44% | 90% |

**Schools with no students yet were not counted in the accreditation.*

¹ Chapter 2014-92 *Laws of Florida*

Pre-Licensure Registered Nurse Program Capacity

Table 4 displays measures of program capacity – the ability of nursing programs to enroll new students – for pre-licensure programs in operation last academic year. The gray rows in the table show the number and proportion of *qualified* applications that were not processed for admission to programs during AY 2016-2017 due to capacity issues. **Florida’s nursing programs had 30,441 qualified applications** in AY 2016 -2017: 17,381 in the generic ADN programs, 3,267 in the bridge ADN programs, 7,555 in BSN generic programs and 2,238 in BSN generic programs. However, 10,279 applications were declined. At present it is not possible to distinguish the number of *people* denied admission to nursing schools from the number of *applications* declined. A single prospective student may apply to multiple programs and be denied admission (or be accepted) by more than one school. This phenomenon may also contribute to the differences in the number of new enrollees compared to the number admitted, although there is not a large discrepancy. 20, 162 students were admitted.

Table 4. Program Capacity Measures for Pre-licensure RN Programs, AY 2016-2017

| | Curriculum | | | | Total |
|------------------------------------|-------------|------------|-------------|----------------------------|--------|
| | Generic ADN | Bridge ADN | Generic BSN | 2 nd Degree BSN | |
| # QUALIFIED applications | 17,381 | 3,267 | 7,555 | 2,238 | 30,441 |
| # student SEATS | 14,621 | 3,405 | 5,187 | 1,254 | 24,467 |
| # students ADMITTED | 11,578 | 2,852 | 4,323 | 1,409 | 20,162 |
| # declined qualified applications | 5,803 | 415 | 3,553 | 829 | 10,279 |
| % declined qualified applications | 33% | 13% | 44% | 37% | 34% |
| # NEW enrollees | 10,116 | 2,478 | 3,749 | 958 | 17,191 |
| # seats vacant given new enrollees | 4,505 | 927 | 1,548 | 296 | 7,276 |
| % seats vacant given new enrollees | 31% | 27% | 30% | 24% | 30% |

Overall programs had nearly 6,000 more qualified applications relative to available student seats, yet they admitted even less students than they had seats for--around 4,300 fewer students relative to the number of available seats. When considering only new enrollment, **30 percent of available seats were left vacant** (over 7,000 seats).

BSN 2nd degree programs had the largest discrepancy between applications and seats, but **admitted more students than number of seats**, anticipating that a portion of accepted students will choose not to enroll. They had just 24 percent available seats left vacant. Bridge ADN programs had the lowest discrepancy between qualified applicants and seats, but ended up with 27 percent available seats left vacant. ADN generic programs had the highest percentage of available seats left vacant—31 percent. The gap between admitted and enrolled new students is likely to increase when admission to nursing schools is very competitive and prospective students apply to multiple schools but ultimately select only one to attend.

Over time the percentage of qualified applications that were denied has decreased for both ADN and BSN programs (Figure 2). For ADN programs, the downward trend started from a high of 59 percent in 2010-2011. By 2016 -2017 it had fallen to 30 percent. For BSN programs the percentage was high until AY 2013-2014, when it reached a peak of 64 percent. In AY 2016-2017 the percentage had dropped to 41. The decrease in declined applications may result from the growth in the number of new ADN nursing programs over the past years. Growth in existing ADN and BSN programs and differences among which programs respond to each year’s survey may also account for the changes Nevertheless, interest in both ADN and BSN nursing programs remains high, but programs cannot accommodate all potential students.

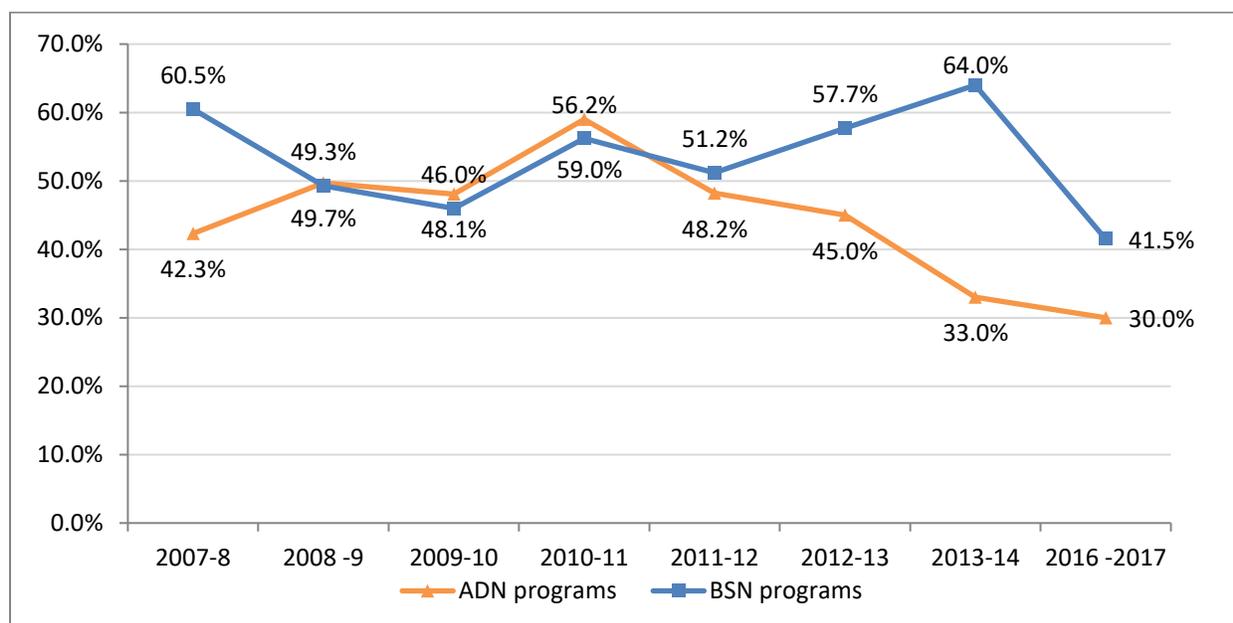


Figure 2. Trend in Percentage of Qualified Applications Declined by ADN and BSN Pre-licensure Programs, 2007-2017

The total number of pre-licensure nursing students enrolled in nursing programs varies by curriculum track. Responding RN programs reported 22,092 ADN students and 9,805 pre-licensure BSN students (Table 5). Because the survey response rate is less than 100 percent, this number is an undercount of all students enrolled in nursing programs in Florida.

Table 5. ADN and BSN Pre-Licensure Student Enrollment by Curriculum Track, AY 2016-2017

| Pre-Licensure Curriculum Track | Total Enrollment (9/30/2017) |
|--------------------------------|------------------------------|
| Generic/Traditional ADN | 18,363 |
| Bridge ADN | 3,709 |
| Total ADN | 22,092 |
| Generic/Traditional BSN | 8,549 |
| 2nd Degree BSN | 1,256 |
| Total Pre-licensure BSN | 9,805 |

Pre-Licensure Registered Nurse Graduates

In AY 2016-2017, there were 7,749 graduates from ADN programs and 3,061 graduates from pre-licensure BSN programs (Figure 3). **Over two-thirds of new graduate RNs were from ADN programs.** Twenty-five percent of the ADN graduates were bridge students, and 27 percent of BSN graduates were 2nd degree students.

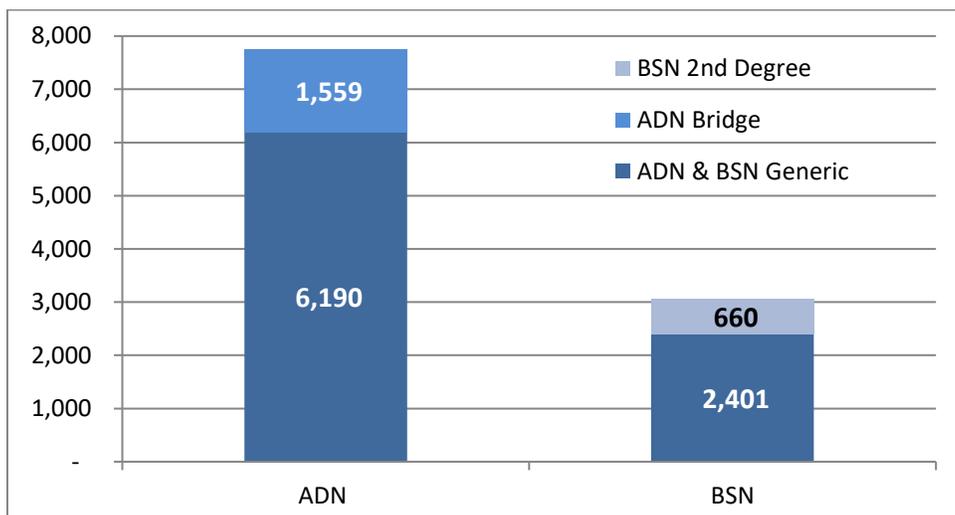


Figure 3. Number of Graduates from Pre-licensure Programs, AY 2016-2017

Between AY 2007-2008 and 2014-2015, the total number of pre-licensure RN graduates rose from year to year, reaching a peak of close to 13,000 per year. However, **since 2015 the total number of pre-licensure graduates has been decreasing.** Although the number of BSN graduates rose slightly in 2015-2016, it fell slightly in 2016-2017, and the number of ADN graduates has fallen sharply in the past two years (Figure 4).

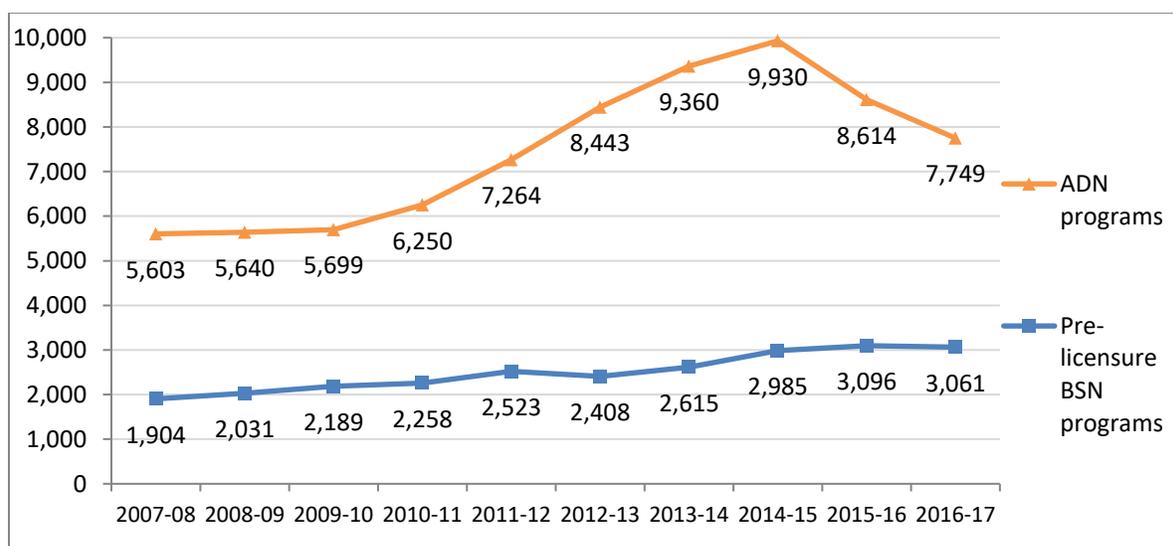


Figure 4. Trend in Number of Pre-licensure Nurse Graduates, 2007-2017

Barriers to Maximizing Pre-Licensure Program Capacity

With the advent of new nursing programs and the growth of established programs, **the capacity to admit more students has increased**. Admitting more students translates to an increased need for nursing faculty, and an increased need for clinical space. A separate report discusses survey results and recommendations related to nurse faculty.

Deans and Directors within all types of pre-licensure nursing programs reported **limited clinical sites as the most common barrier to admitting more students** (40% of BSN, 43% of ADN programs, Figure 5). This was the most common barrier in 2015-2016 as well.^{1,2} Following this, lack of qualified students was a concern (28% of BSN and 39% of ADN programs). About 24 percent of BSN programs reported lack of funds to hire faculty and lack of campus resources as barriers to maximize program capacity. These results are similar to prior years^{1,2}, signifying a lack of progress on these issues. However, schools reporting they lack qualified applicants remains inconsistent with the number of qualified applications not processed for admission as shown in Table 3.

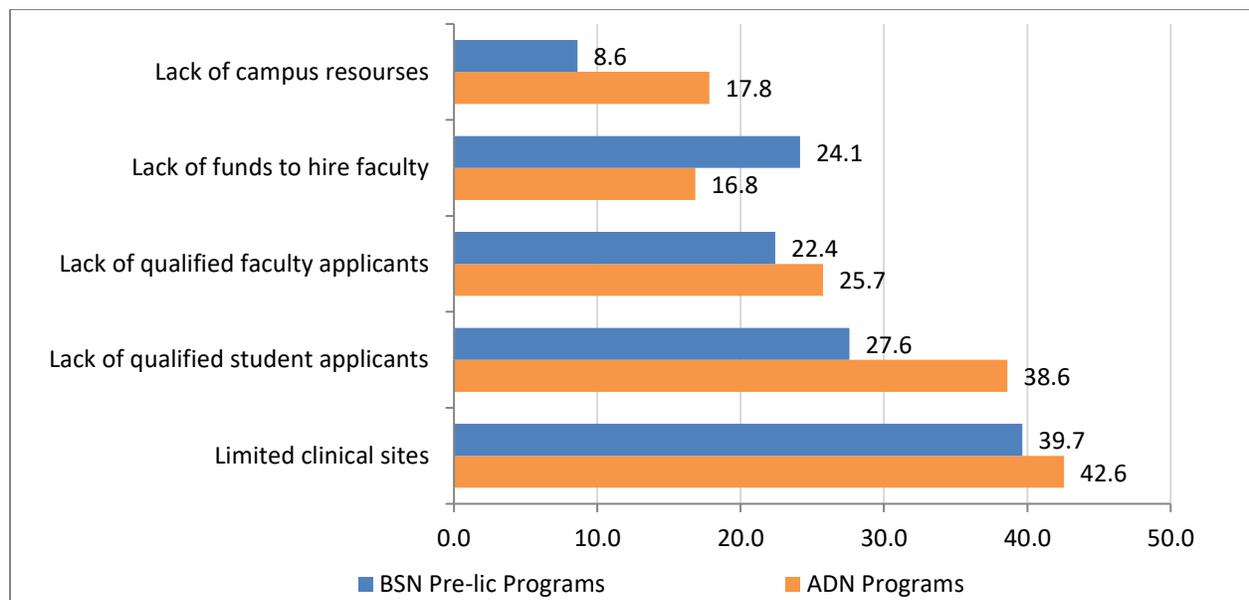


Figure 5. Reported Barriers to Maximizing ADN and BSN Pre-Licensure Program Capacity, AY 2016-2017

Student Demographics

Race/Ethnicity and Gender

Information on pre-licensure RN student race/ethnicity is presented in Figures 6 and 7. Twenty-four percent of ADN students are Black, another 24 percent are Hispanic, and 45 percent are White (Figure 6). Within pre-licensure BSN programs, 17 percent are Black, 32 percent are Hispanic and 41 percent are White (Figure 7). The **pre-licensure RN student population is more racially and ethnically diverse than both the Florida population and the RN workforce**. Florida

population demographics for 2017 are reported as 54 percent White, 17 percent Black, and 26 percent Hispanic.³ In 2016 the Florida RN workforce was 63 percent White, 14 percent Black, and 12 percent Hispanic.⁴

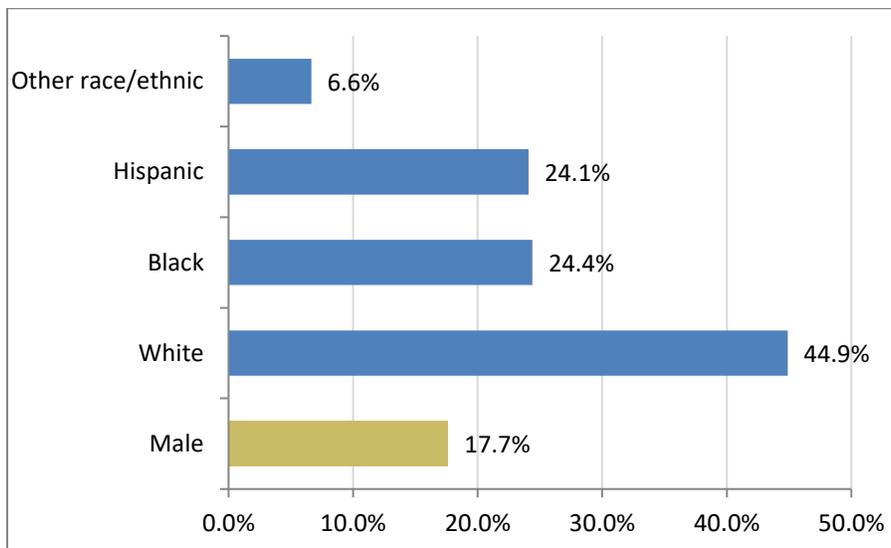


Figure 6. ADN Student Demographics, as of 9/30/2017

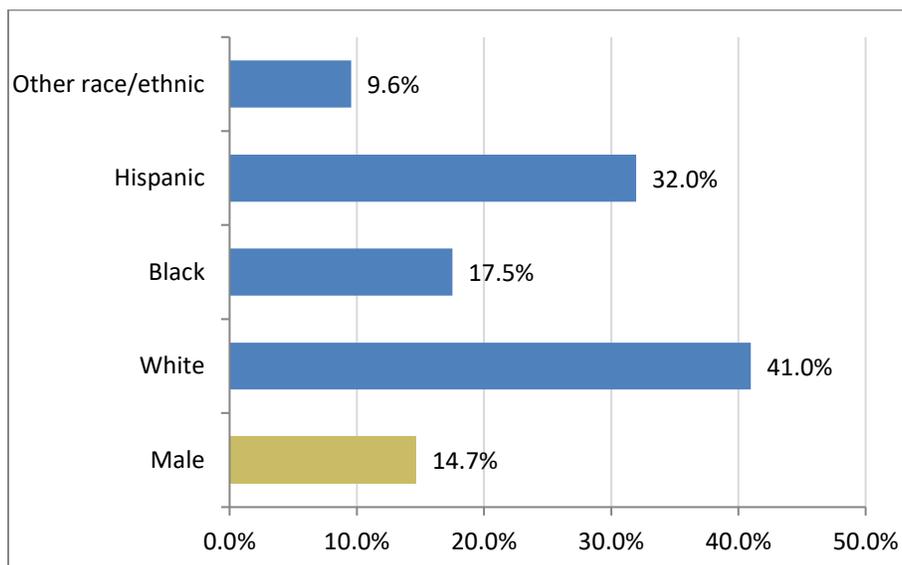


Figure 7. Pre-licensure BSN Student Demographics, as of 9/30/2017

Pre-licensure student gender is also shown in Figures 6 and 7. **Eighteen percent of ADN students and 15 percent of BSN students are male.** This percentage has remained flat since AY 2010-2011. It is still significantly below the fairly even gender split in the population, but is higher than the 2016 Florida RN population of 88 percent female and 12 percent male.⁴

Student age shows much variation by program (Figure 8). Among pre-licensure RN programs, BSN generic and BSN second degree students are younger. For both types of students nearly or more

than one-half are under age 26, indicating that most RN students are getting into nursing shortly after high school or are entering nursing programs rather quickly for their second degree. This also shows that young people have an interest in nursing. Nearly two-thirds of ADN generic students are under the age of 31, also indicating little to no gaps between high school and nursing education. In contrast, over 60% of ADN bridge students are older than 31, supporting the fact that these students are approaching nursing from a prior vocation or profession.

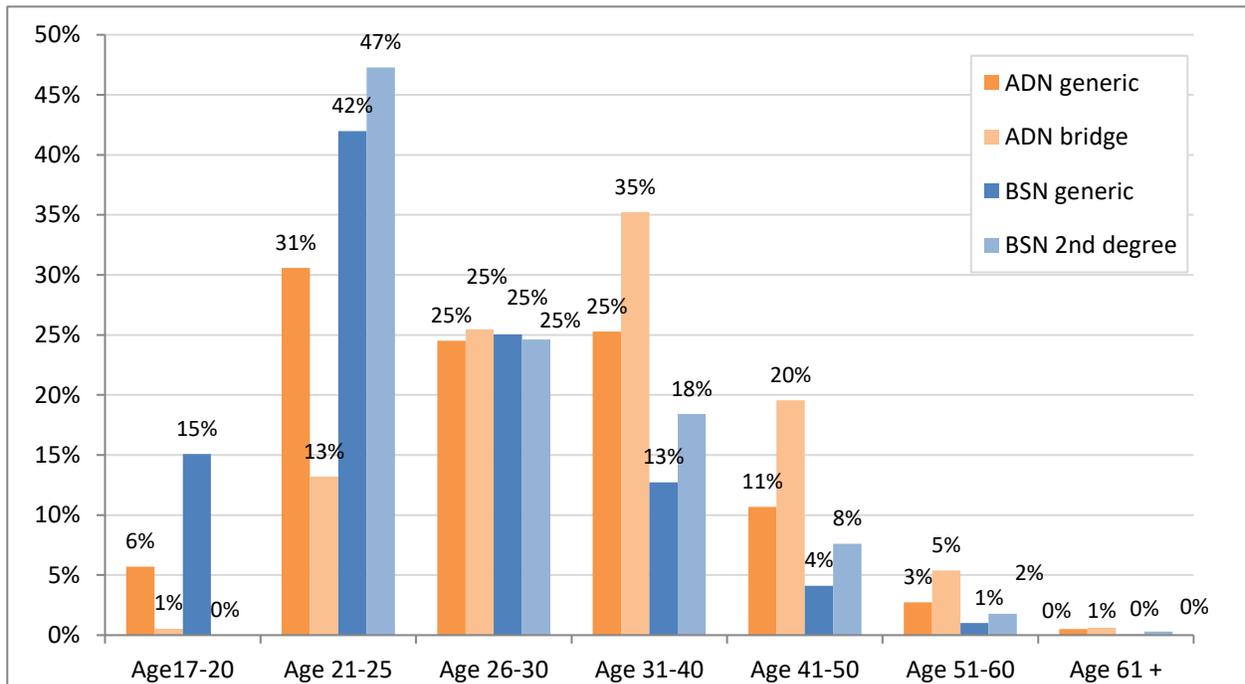


Figure 8. Percentage of ADN and BSN Nursing Students by Age Group, 9/30/2017

Student Demographics Compared to Faculty

Figure 9 shows the race/ethnicity and gender demographics of the AY 2016-2017 student population compared to that year’s faculty demographics. Across the board, **students were more racially and ethnically diverse than their instructors**. For both ADN and BSN programs the greatest discrepancy between students and teachers was with White race and Hispanic ethnicity. For ADN programs, 20 percent fewer students than faculty identified themselves as White and 14 percent more students than faculty as Hispanic. For BSN programs 30 percent less students than faculty were white and 22 percent more were Hispanic. Differences were not that great in either program regarding the percent of those identifying as Black. Also, **more students than faculty were male**. For ADN programs 9 percent more students than faculty were male (twice the number of faculty). For BSN programs 5 percent more students than faculty were male. These findings indicate that diversity of faculty lags behind that of students, which has been increasing over the years.

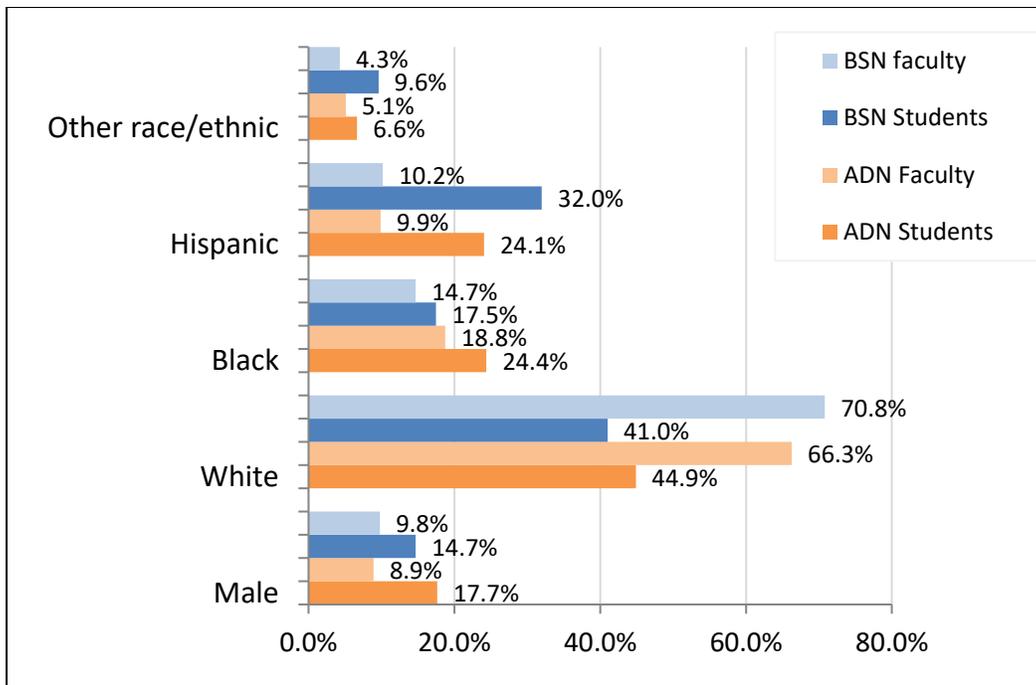


Figure 9. Pre-licensure ADN & BSN Student Demographics Compared to Faculty 9/30/17

Discussion

Overall, the pre-licensure RN program response rate to the Center’s survey was 82 percent. This is certainly better than prior years, some of which had response rates too low to even produce a reliable report. However, for accurate trending of numbers, a high survey response rate with data that accurately represent the students and faculty in *all* nursing schools in Florida is necessary for strategic nurse workforce planning. The Center’s results and information are used to align the needs of nurse employers to new graduates needing jobs, to align future student capacity in nursing programs with anticipated future nurse employment opportunities in the local community, to plan for strategic expansion of nursing programs, and to plan for faculty workforce needs.

This report shows that **nursing program growth continues, although more slowly in recent years**. Nearly all growth since AY 2013-2014 is from BSN programs. Although growth has slowed for ADN programs, program capacities continue to be constrained, as 43 percent of ADN programs reported that an insufficient number of clinical sites limits their expansion capabilities and thus restricts the number of students that can be admitted. With the faster growing BSN programs, 40 percent of pre-licensure BSN programs have capacity issues. A significant percentage of programs also report lacking funds to hire faculty, lacking campus resources, and lacking qualified faculty applicants – all indications that **programs are experiencing program capacity issues**. These challenges to program capacity are similar to those in prior years.

Corresponding to these growth patterns in ADN and BSN programs, survey results show that the number of ADN graduates continues to decline while those of RN programs continues to increase

slowly. This trajectory is in line with the IOM recommendation of increasing the proportion of working nurses with a baccalaureate in nursing or higher. However, in AY 2016 -2017 BSN graduates are still only 28 percent of RN graduates. This is still a long way from the IOM charge to have 80 percent of the nurse workforce with a BSN or higher.⁶ This indicates that there continues to be a need for critical planning as to what types of new nursing programs should be added in the state.

Whether or not the growth of nurse education programs is appropriate depends on the level of demand. Thoughtful expansion of nursing education programs must be balanced with the present ability of healthcare employers to hire newly licensed nurses into the workforce, as well as the state's anticipated future increased need for RN graduates as the population ages, older nurses retire or work fewer hours, and the Patient Protection and Affordable Care Act (PPACA) continues. The Center maintains its position statement from past years: It is crucial to evaluate the impact of these new programs, in terms of student quality, cost-benefit analysis of the programs, health industry assessment of the program's graduates toward meeting employment needs, and the impact on an already significant nurse faculty shortage. Thus far, these objective evaluations of new programs have not occurred.

As far as employer demand, the Center's 2015 nurse employer survey reported continued high demand for RNs, with RN position vacancies of 12,500 in 2015 and future needs for 10,000 additional positions in 2016.⁵ Hospitals reported that the positions most difficult to fill were for RNs with experience, positions which could not be filled by new graduates. This indicates a need for incumbent worker training and promotion to move experienced workers into these existing vacancies, and thus open hiring opportunities for new graduates in other areas. Hospice facilities reported a need for nurse practitioners, which indicates a need for encouraging RNs to gain advanced practice education. Skilled nursing homes, home health agencies, public health, and hospice reported a need for staff nurses, which is a position new graduates can fit into with proper education and training. However, skilled nursing and home health are traditionally not areas where nursing schools have guided their students. Given the rapidly changing healthcare industry needs, nursing schools should work with these various nurse employer industries to ensure the skills of their graduates are aligned with the needs of the different business sectors.

Future demand for nurses in Florida will depend on the continuation of the Patient Protection and Affordable Care Act, the healthcare needs of an aging population requiring more care, an aging and soon to be retiring nurse population, and a shifting healthcare landscape from changing care delivery and reimbursements. It remains to be seen how these changes will impact the nurse workforce, but it is quite likely the demand for nurses will increase. The Center will continue to monitor nurse supply, demand, and education trends, and report on their effects on the state's nursing workforce and give guidance to policy setters.

Recommendations

The Center puts forward the following research and policy recommendations related to Florida's nurse education system with the goal of addressing nurse workforce issues for the health of Florida. These recommendations are not intended to be for the Center alone to implement, but should be a starting point for other groups and policy makers working to make valuable contributions to the nurse workforce.

1. **Create incentives for nurses to seek advanced education, from RN to BSN and graduate study for Master's or Doctoral degrees, in order to build a nurse faculty pipeline and engage in lifelong learning.** A personal dedication to continued lifelong learning is essential for nurses to progress professionally in their careers and learn about advances in nursing and technology. The education recommendations of the IOM report are to increase the percentage of employed RNs with a baccalaureate in nursing or higher degree to 80% and to double the number of doctoral-prepared nurses by 2020.⁶ Increasing the number of nurses with graduate degrees in nursing is a key to addressing the continually high nursing faculty vacancy rate, particularly in baccalaureate and higher programs. As the nurse population at large and, specifically, the faculty workforce retires, the need for nurses with advanced nursing degrees to move into faculty roles is essential.
2. **A critical assessment of the appropriateness and quality of education of new and existing RN programs is needed to determine their impact on the students, nursing workforce and healthcare industry.** The addition of programs and new students is not a guarantee of new nurses entering the workforce in jobs that they are qualified for. An assessment of whether or not students are completing the appropriate level of education, successfully passing the national examination for licensure, and securing employment in Florida must be completed. Additional critical evaluations include a cost benefit analyses of the output of state funding, and a health industry assessment of the contributions of each program's graduates toward meeting employment needs and health consumer demand. An interdisciplinary group of professional and workforce stakeholders should be involved in these analyses.
3. **New methods of education, clinical and didactic, should be developed to accommodate the learning style of diverse students, address the critical shortage of clinical capacity, and prepare newly licensed RNs to work in non-traditional settings.** While most BSN students are 26 or younger, most ADN students are age 26 to 40. Aligning educational technology (such as simulation) with students' diverse learning styles will improve the educational experience. The Center's demand survey tells us that staff RN positions are difficult to fill in skilled nursing facilities, home health, public health and hospice.⁵ Although the education system tends to reinforce the adage that new graduates should start working in a hospital setting, exposure to varied settings such as public health, home health, and skilled nursing, would broaden the students' experience and introduce them to new career pathways while more effectively meeting industry demand.
4. **A consistent, long-term data collection, analysis, and reporting system must be maintained and adequately funded.** The Florida Legislature established the Florida Center for Nursing in 2001 to address issues related to the nursing shortage in Florida. Number one of the three

mandates given in statute (FS 464.0195) is to develop a strategic statewide plan for nursing manpower in this state by:

- Establishing and maintaining a database on nursing supply and demand in the state, to include current supply and demand, and future projections; and
- Selecting from the plan priorities to be addressed.

To achieve this mandate, the Center needs fiscal resources and the authority to collect appropriate data. Florida's legislature should put in place a sustainable funding mechanism for the Center to accomplish its statutory mandate, require nurse education programs within the state to provide appropriate data for analysis, and establish incentives for health industry participation. Consequences for failure to participate in the annual education survey need to be established.

Contributors: Lynn Unruh, PhD, RN, Professor, Health Management & Informatics, University of Central Florida; and Mary Lou Brunell, MSN, RN, Executive Director, Florida Center for Nursing.

References

1. Florida Center for Nursing. (2013). *Florida Pre-Licensure Registered Nurse Education: Academic Year 2011-2012*. Retrieved March 11, 2014 from http://www.flcenterfornursing.org/DigitalLibrary.aspx?Command=Core_Download&EntryId=500 .
2. Florida Center for Nursing (2016). *2015 -2016 Education Survey Results: Pre-Licensure RN Programs*.
3. U.S. Census Bureau. (2018). Current Population Demographics and Statistics for Florida by age, gender and race. Retrieved June 15, 2018 from: <https://www.census.gov/quickfacts/fact/table/fl/PST045217>
4. Florida Center for Nursing. (2018). Florida's 2016 - 2017 Workforce Supply: Registered Nurse's (RNs). Retrieved June 17, 2018 from: https://www.flcenterfornursing.org/DesktopModules/Bring2mind/DMX/Download.aspx?Command=Core_Download&EntryId=1608&PortalId=0&TabId=151
5. Florida Center for Nursing. (2016). *Florida's Demand for Nurses: 2015 Employer Survey*. Retrieved July 28, 2018 from https://www.flcenterfornursing.org/DesktopModules/Bring2mind/DMX/Download.aspx?Command=Core_Download&EntryId=1011&PortalId=0&TabId=151
6. Institute of Medicine. (2010). *The Future of Nursing: Leading Change, Advancing Health*. Retrieved March 11, 2014 from <http://thefutureofnursing.org/IOM-Report>.