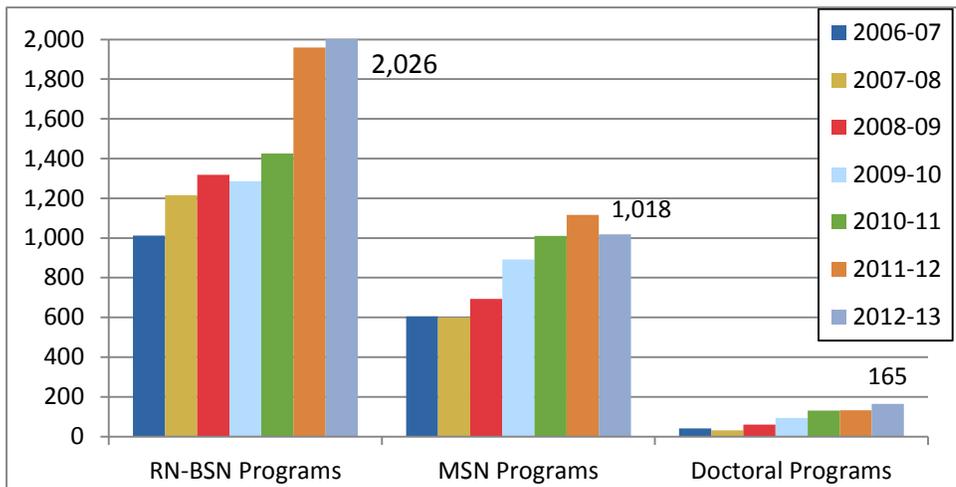


The information below represents the **key findings** regarding the post-licensure (RN-BSN, Master's, Doctorate) nursing education system in Florida. This report details information on student education capacity, discusses implications, and proposes research and policy recommendations.

### Program Capacity for Post-licensure Nursing Programs, AY 2012-2013

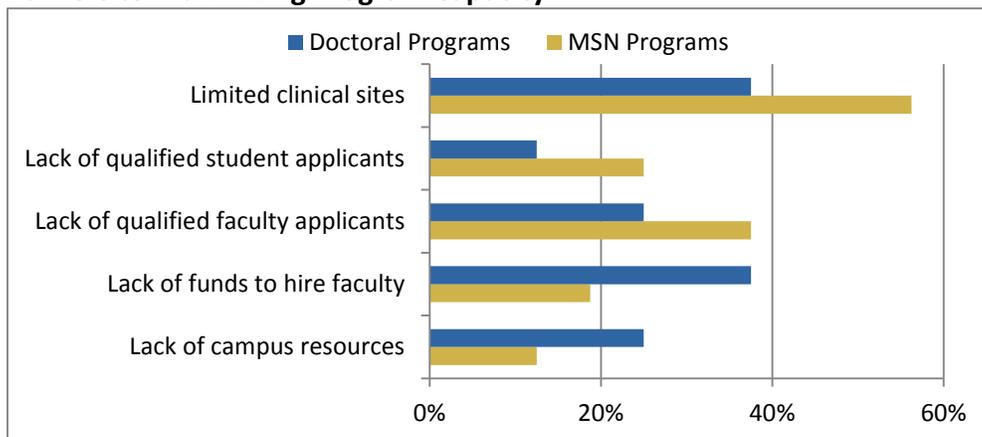
	RN-BSN	MSN	Doc: PhD	Doc: DNP
# QUALIFIED applications	5,917	2,405	53	363
# students ADMITTED	4,940	1,462	44	312
# rejected applications	977	943	9	51
% rejected applications	17%	39%	17%	14%
# NEW enrollees	3,711	1,213	36	262

### Trend in Post-Licensure Nurse Graduates, 2007-2013



- 35 RN-BSN programs, 16 Master's programs, and 8 Doctoral programs participated in the survey.
- RN-BSN graduates increased by 80 people relative to last year.
- Master's program graduates decreased by 100 people.
- Doctoral graduates increased by 30 people.
- Barriers to maximizing program capacity remain the same: limited clinical sites, lack of qualified faculty applicants, lack of funds to hire faculty
- Enrollment trends vary by program.
  - Overall Master's Degree enrollment remained flat.
  - Nurse educator curriculum enrollment is down 7%.
  - PhD enrollment is down 36%.
  - DNP enrollment increased 6%.

### Barriers to Maximizing Program Capacity



### Recommendations

1. Develop strategies to address the critical shortage of clinical capacity for nursing education.
2. Create incentives for nurses to seek advanced education, from RN to BSN and graduate studies, to support existing nurses to further their education and build a nurse faculty pipeline.
3. A consistent, long-term data collection, analysis, and reporting

system must be maintained and adequately funded to provide critical information on which to base funding and policy decisions.

4. Identify a way to effectively capture student information from online-only out-of-state nursing programs that enroll Florida students.

## Florida Post-Licensure Registered Nurse Education: Academic Year 2012-2013

### 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 expected 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 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; policy makers can use the data to guide funding decisions and to plan strategic use of resources. This report describes information for post-licensure RN programs – Registered Nurse to Bachelor of Science in Nursing (RN to BSN), Master of Science in Nursing (MSN and RN to MSN), Advanced Registered Nurse Practitioner (ARNP), Certified Nurse Midwife (CNM), Certified Registered Nurse Anesthetist (CRNA), Clinical Nurse Specialist (CNS), Doctorate in Nursing Practice (DNP), and Doctorate of Philosophy (PhD) degrees for Academic Year (AY) 2012-2013, 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 2013 Florida Center for Nursing *Survey of Nursing Education Programs*. In October 2013, 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 provide data on the faculty and student populations as of September 30<sup>th</sup>, 2013 and on program capacity for AY 2012-2013.

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's in Nursing (BSN) programs. Neither the Board of Nursing nor the Office of Program Policy Analysis and Government Accountability (OPPAGA) track nursing programs that do not lead to a new license, such as RN-BSN programs. Thus the Center expanded the Board of Nursing list of programs by identifying RN-BSN, Master's, and Doctoral programs. Six online nursing education programs were contacted by the Center (from participation in previous years' surveys) and were asked to provide data.

Sixty-one percent of the programs offering BSNs or higher degrees responded to the survey (Table 1). Many of the BSN and higher schools also have RN-BSN programs, or Master's and Doctoral programs. The Florida legislature has modified statute to allow state community

colleges to transition to state colleges offering baccalaureate degrees in addition to the Associate Degree in Nursing. Thus there are RN to BSN programs offered in multiple venues: state colleges, state universities and colleges offering four year and higher degrees, and online only programs operating in Florida that may be based in another state. RN-BSN programs do not have a calculated response rate because we do not have an accurate count of the number of these programs in the state.

The Center surveyed the online-only programs that we have contacted in previous surveys, or that are based in Florida. Numerous online RN-BSN programs enroll Florida students, but we do not have a tracking mechanism to identify each of them. Three online-only programs responded to our survey. One is an LPN-BSN program (and this information is included in our companion report on pre-licensure RN programs), and the two with RN-BSN and Master’s programs are included in this report.

**Table 1. Response Rates for Florida’s Post-Licensure Nursing Programs, AY 2012-2013**

Type of Program	Total # of Schools	Responding Programs	Response Rate
RN-BSN	N/A	25	N/A
BSN or higher	38	23	61%
Online only	6	3	50%

Data in this report are from the responding schools. Given that this is the Center’s seventh annual survey, the richness of the data and information are enhanced by the ability to report seven-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.

## Results

### Programs, Curriculum Options, and Accreditation

Detail of the programs and curriculum options available in Florida’s post-licensure nursing programs (also known as baccalaureate and higher), based on survey responses, is provided in Table 2. 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. When the students are enrolled in a program leading to licensure as an advanced registered nurse practitioner (ARNP), certified registered nurse anesthetist (CRNA), certified nurse midwife (CNM), or clinical nurse specialist (CNS), these are distinct categories of licensure.

RN-BSN programs, which move associate degree or diploma prepared RNs to the baccalaureate level, are the most numerous type of post-licensure programs. State colleges offering the ADN are increasingly offering this post-licensure mobility curriculum, as are online-only programs. Numerous online-only RN-BSN programs are offered throughout the United States, enabling students located anywhere to continue their education. The Center surveys programs that are based in Florida or have a campus in Florida, as they will have the largest number of Florida-based students. (Efforts to collect data from some out-of-state programs with a campus in Florida have not thus far been successful.) Three programs with an online-only curriculum responded to the survey. Two programs had post-licensure only (RN-BSN, Master's) and one is an LPN-BSN program. Several online programs reported it was difficult to isolate Florida students for reporting purposes as the programs teach students from all over the country.

Many of the state's universities, and several private universities, offer graduate degrees in nursing. Sixteen schools offered a master's degree in nursing (MSN) program and eight offered doctoral programs. Six schools reported they have a nurse anesthetist program, and two schools offer a nurse midwife program.

In addition to degree-granting programs, 12 schools reported having certificate programs. Seven schools offer a Nurse Educator certificate program, seven had a nurse practitioner (NP) family practice program, and two had an Administrator certificate program. Schools also had NP certificate programs in pediatrics, acute care, and adult gerontology.

**Table 2. Post-Licensure Programs and Curriculum Options Reported by Respondents in AY 2012-2013**

	Number
<b>Post-licensure and Certificate Programs</b>	
<b>RN-BSN Program (Post-licensure)</b>	<b>25</b>
<b>Online Only (RN-BSN, Master's)</b>	<b>2</b>
<b>MSN Programs</b>	<b>16</b>
-Advanced Registered Nurse Practitioner Program	11
- Nurse Anesthetist Program	6
- Nurse Midwife Program	2
- Nurse Educator Curriculum	9
- Leadership/Management Curriculum	6
- Clinical Nurse Specialist Curriculum	3
- Clinical Nurse Leader Curriculum	5
- Holistic Nursing Curriculum	1
<b>Doctoral Programs</b>	<b>8</b>
- Ph.D. Curriculum	6
- DNP Curriculum	8
<b>Certificate Programs</b>	<b>12</b>
- Education	7
- Administration	2
- NP Pediatrics	1
- NP Acute Care	2
- NP Family Practice	7
- NP Adult Gerontology	6
- Other Certificate	8

Note: The number of curriculum counts exceeds the number of program counts because many programs offer multiple curriculum options.

### Post-Licensure Program Measures

Program measures for post-licensure programs in AY 2012-2013 are shown in Table 3. Far fewer qualified applications are declined by post-licensure programs relative to pre-licensure programs, but it is worth noting that the Nurse Practitioner (NP) programs continually turn away qualified students (39% this AY), suggesting sustained interest in these programs. Nurse Anesthetist programs turned away 65 percent of qualified applications. CNS, CNL, Midwife, and Holistic nursing programs have fewer students than the other programs. The number of qualified applications and new enrollees to PhD and DNP programs have increased since AY 2011-2012.<sup>1</sup> The number of new enrollees decreased from last year, this may be a result of the lower response rate.

**Table 3. Post-licensure Programs Admission, Enrollment and Graduation, AY 2012-2013**

	<b>RN-BSN</b>	<b>MSN:NP</b>	<b>MSN:Educator</b>	<b>MSN: Management</b>	<b>MSN:CNS</b>	<b>MSN:CNL</b>
# QUALIFIED applications	5,917	1,406	240	144	14	42
# students ADMITTED	4,940	858	221	118	11	37
# rejected applications	977	548	19	26	3	5
% rejected applications	17%	39%	8%	18%	21%	12%
# NEW enrollees	3,711	758	182	82	7	32
# students GRADUATED	2,026	580	168	86	4	27

	<b>MSN: Nurse Anesthetist</b>	<b>MSN: Midwife</b>	<b>MSN: Holistic</b>	<b>Doc: Ph.D.</b>	<b>Doc: DNP</b>
# QUALIFIED applications	526	20	13	53	363
# students ADMITTED	184	20	13	44	312
# rejected applications	342	0	0	9	51
% rejected applications	65%	0%	0%	17%	14%
# NEW enrollees	129	13	10	36	262
# students GRADUATED	140	8	5	36	129

Notes: MSN curriculum options include students entering with a Bachelor's degree as well as RN-MSN students entering without a Bachelor's degree. The number of RN-MSN students is very small.

Total student enrollment in programs offering post-licensure degrees also varied by program. RN-BSN programs reported the largest number of currently enrolled students at 6,235 (Table 4). MSN programs reported 2,862 enrolled students. Nurse Practitioner programs had the most enrollment, followed by Nurse Anesthetist, Nurse Educator, and Leadership/Management programs. Twenty-four percent of doctoral students were enrolled in PhD programs. Increasing enrollment in nurse education programs and PhD programs is critical for alleviating the long-term nursing shortage as these students are selecting a curriculum path to replace nurse educators and professors who will soon be retiring.

**Table 4. Enrollment of Post-Licensure Students by Curriculum Track, AY 2012-2013**

Curriculum Track	Total Enrollment on 9/30/2013
<b>RN-BSN</b>	<b>6,235</b>
<b>Master's Programs</b>	
Nurse Practitioner	1,803
Nurse Anesthetist	388
Nurse Midwife	11
Nurse Educator	364
Leadership/Management	209
Clinical Nurse Specialist	11
Clinical Nurse Leader	59
Holistic Nursing	17
<b>Total MSN</b>	<b>2,862</b>
<b>Doctoral Programs</b>	
Ph.D.	194
DNP	612
<b>Total Doctoral</b>	<b>806</b>

Since 2007, master’s degree programs increased enrollment by nineteen percent, but overall master’s degree enrollment remained flat the last two Academic Years (Figure 1). Enrollment in nurse educator curriculum tracks is down 7 percent relative to last year. PhD enrollment has decreased by 36 percent since last year, while DNP enrollment has increased by six percent. Given the future shortage of nurses prepared to assume faculty roles, the decrease in MSN Educator and PhD student enrollment is concerning. Enrollment numbers will continue to be tracked to determine if these decreases are a new trend, or perhaps a result from the changing program response year to year. Enrollment in RN-BSN programs continues to increase, as more nurses pursue Bachelor’s degrees, and was up 11 percent since last year. In addition to the programs responding to the Center’s survey, there are several post-graduate nursing programs which have an online only curriculum and are producing graduate nurses who reside in Florida. However, these programs are not included in our survey, so we do not have a count of currently enrolled students or recent graduates for these programs.

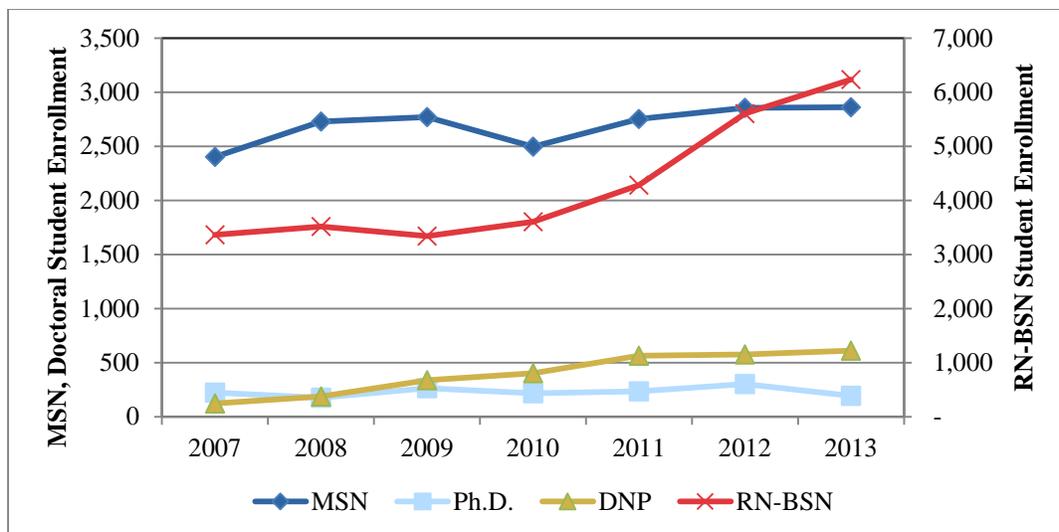


Figure 1. Trends in Total Enrollment for Post-licensure Programs, 2007-2013

### Student Demographics

The racial and ethnic diversity of the nursing student population is increasingly reflective of Florida’s diverse population (Figure 2). About 42 percent of RN-BSN students are white, 14 percent are black, and 17 percent Hispanic. MSN and Doctoral programs are similar. In contrast, 66 percent of Florida’s RNs working in nursing are white, 12.7 percent are black, and 9.3 percent are Hispanic.<sup>2</sup> As the race and ethnicity of the student population continues to diversify, racial and ethnic diversity will gradually increase within the entire licensed nurse population, thus better mirroring Florida’s population at large.

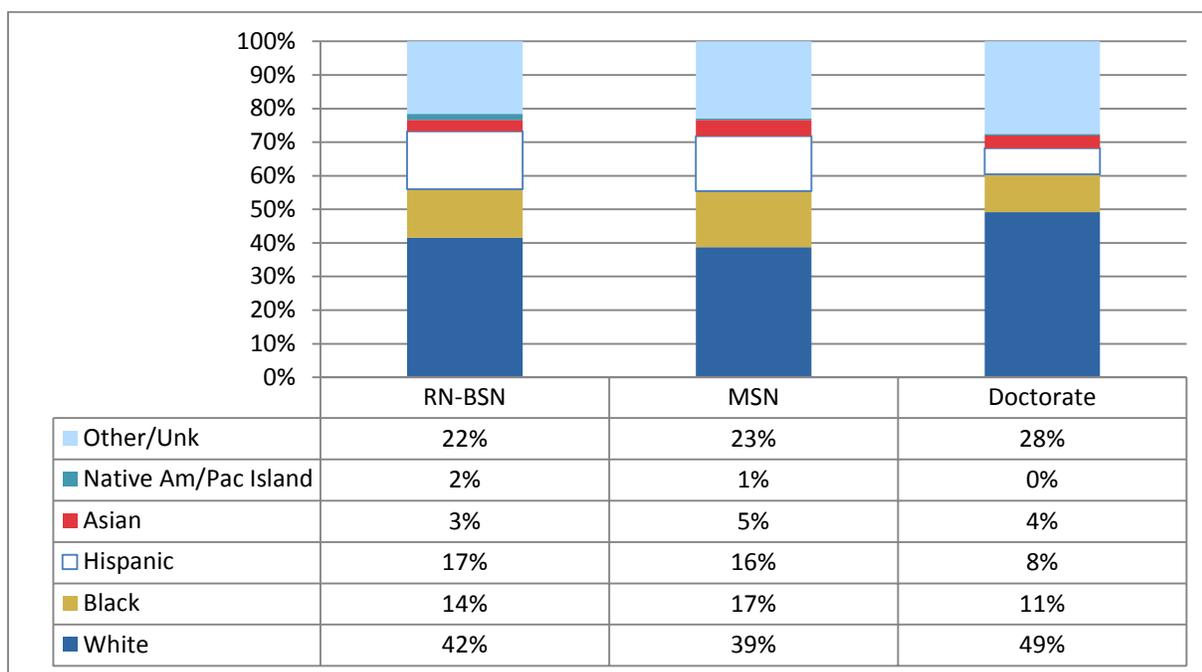
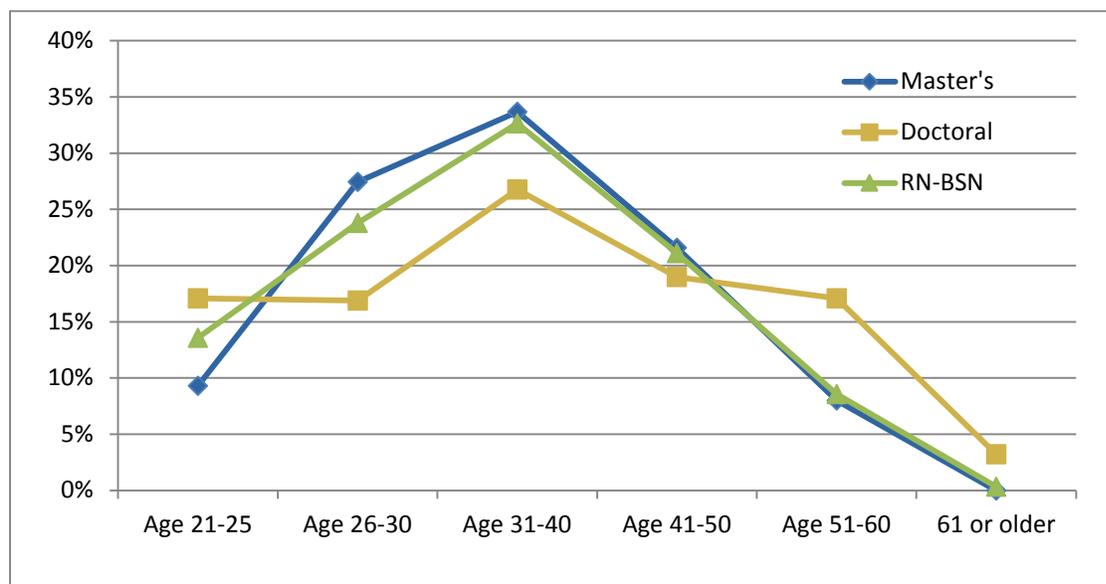


Figure 2. Race and Ethnicity of Post-Licensure Nursing Students, 9/30/2013, By Program

As more men enter nursing school, the number of men in the profession will likewise gradually increase. The percentage of men in upper-level nursing programs is about the same as last year. Men are 15 percent of the student population in MSN programs, 10 percent in doctoral programs, and 12 percent in RN-BSN programs. Ninety percent of Florida’s RN workforce is female, and 86 percent of the ARNP workforce is female.<sup>2</sup>

Student age varies by program (Figure 3). Thirty-seven percent of RN-BSN students are age 30 or younger, indicating these nurses are quickly returning to school to obtain their Bachelor’s degrees. Interestingly, about 37 percent of Master’s and Doctoral students are age 21-30, indicating that people are entering these graduate programs soon after finishing their first nursing degrees.

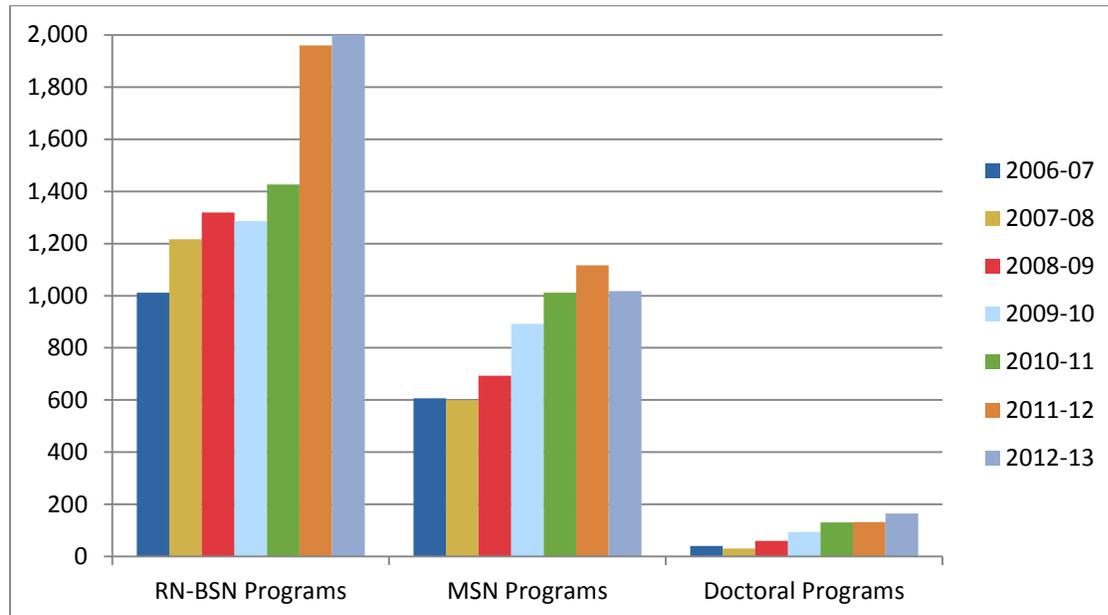


**Figure 3. Percentage of Post-Licensure Nursing Students by Age Group, 9/30/2013**

**Post-Licensure Nurse Graduates**

The number of post-licensure MSN program graduates decreased by 100 people over the last academic year, while the number of doctoral graduates has increased by about 30 people (Figure 4). The rate of the growth in the RN-BSN graduates has slowed, with an increase of about 80 graduates last year compared to a 500 person increase two years ago. These graduates are likely an undercount of RN-BSN, Master’s and Doctoral graduates in Florida, because not all of the programs surveyed responded. Furthermore, these post-licensure programs are now offered online through many different colleges, and the Center is not able to track those graduates. Nevertheless, all of these post-graduate programs have seen an increase in the number of graduates since AY 2009-2010. The Center’s RN and ARNP supply report shows that statewide 78.5 percent of ARNPs have a Master’s degree in nursing, and 3.5 percent

have a doctorate in nursing,<sup>2</sup> thus we can anticipate the number of nurses with advanced degrees to gradually increase.

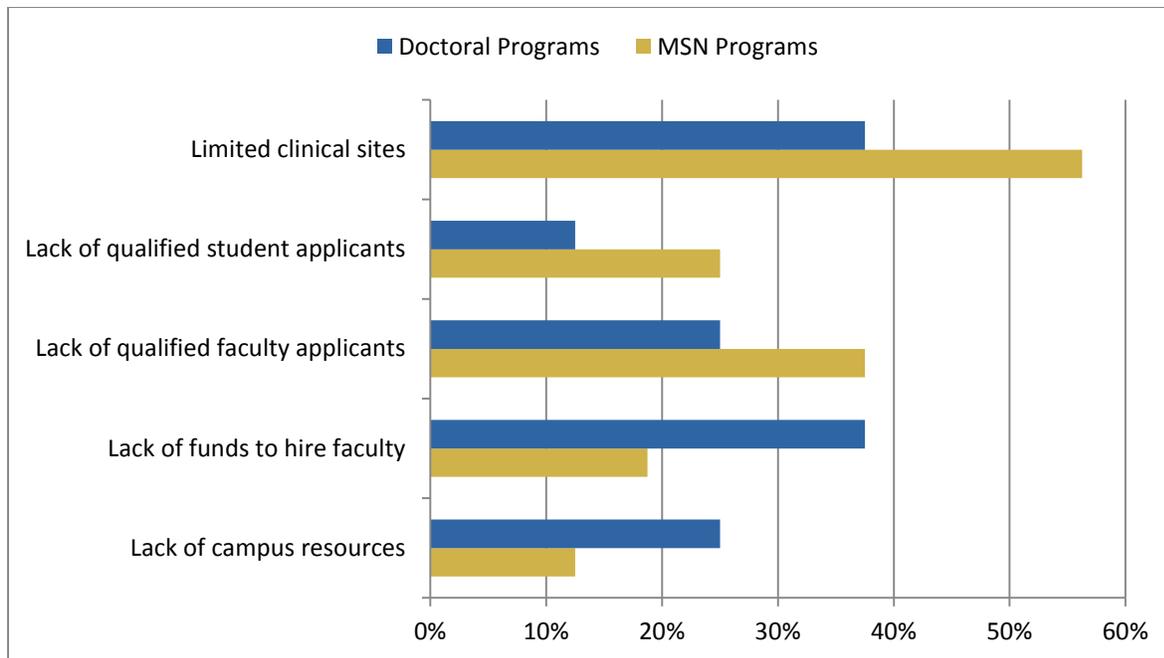


**Figure 4. Post-Licensure Nurse Graduates, 2007-2013**

This year the Center’s survey asked a few new questions about admissions requirements to post-licensure nursing programs. (Respondents could select more than one answer to the admission question.) Of the 16 MSN programs responding, 13 require an RN degree (not necessarily a BSN), 7 require an RN degree and a non-nursing Bachelor’s or Master’s degree, and 15 require a BSN degree for entry into the program. Of the 8 Doctoral programs responding, five require an RN degree, one requires an RN and a non-nursing Bachelor’s or Master’s degree, six require a BSN degree, and seven require an MSN degree for entry into the program.

### *Barriers to Maximizing Post-Licensure Program Capacity*

Barriers to admitting more post-licensure students are shown in Figure 5. Last year, nearly 80 percent of doctoral programs reported a lack of qualified student applicants, but that was not the situation this year as only 13% of doctoral programs reported lacking qualified students. Limited clinical sites were reported as barriers by 56 percent of responding MSN programs and 38 percent of doctoral programs. Lack of qualified faculty applicants was reported by 38 percent of MSN programs, and lack of funds to hire faculty was reported by 38 percent of doctoral programs.



**Figure 5. Reported Barriers to Maximizing Post-Licensure Program Capacity in AY 2012-2013**

### Discussion

Twenty-five RN-BSN programs, 2 online-only RN-BSN programs, 16 Master’s programs, and 8 Doctoral programs responded to the survey. These programs have 6,235 RN-BSN students, 2,862 Master’s students, and 806 Doctoral students currently enrolled. Though these numbers are undercounts of the total student enrollment statewide in post-licensure nursing programs, as the survey response rate was less than 100 percent; they provide excellent information for discussion and trend identification.

The *Patient Protection and Affordable Care Act* (PPACA) will increase access to health care which will increase demand for health care providers. Advanced registered nurse practitioners (ARNPs) will be increasingly utilized as primary care providers after implementation of the PPACA. ARNPs can provide quality primary care and expand healthcare access for all Floridians, as well as helping fill the gap left by the primary care physician shortage. Recognizing the need for data about the ARNP profession, this year the Center revised the survey to collect admission, enrollment, and graduation data for specific types of advanced practice nurse master’s programs: Nurse Practitioner, CRNA, midwife, and holistic nursing. We now have the ability to track this program capacity and graduation information and analyze changes over time.

The IOM report recommends that nurses achieve higher levels of education and training through an improved education system that promotes seamless academic progression. It further recommends that the proportion of working nurses with a baccalaureate in nursing or

higher degree increase to 80 percent by 2020, and to double the number of nurses with a doctorate degree by 2020.<sup>3</sup> The number of RN-BSN graduates increased three percent (to 2,026) and Doctoral graduates (PhD and DNP) increased 25 percent (to 165) last year, however MSN graduates decreased 10 percent (about 100 fewer graduates). Enrollment in MSN programs as a whole has been flat, however student enrollment in the MSN Educator track decreased by seven percent from last year, and PhD student enrollment decreased by 36 percent (about 100 students). We would expect to find yearly fluctuation due to survey response differences. A decrease in enrollment in these tracks is not good news, because it indicates there will be fewer future education-focused graduates to fill vacant nurse faculty positions. Future data will tell whether this enrollment decrease is a one-time occurrence or a trend.

Some Master’s and Doctoral programs indicated several barriers to maximizing program capacity as reasons for slowing growth. The most commonly reported barriers to admitting more students to post-licensure programs are limited clinical sites (reported by 56% of MSN programs), lack of funds to hire faculty, and lack of qualified faculty applicants. Limited clinical sites and lack of funds to hire faculty are common challenges for all levels of nursing education (LPN, ADN, BSN, and higher), and are reported year after year.

The Center surveyed Florida’s nurse employers in summer 2013, and results indicated that some of their difficult to fill positions required additional education and/or experience, and could not be filled by new graduates. The post-licensure education programs in this report address the employers’ needs by providing educational advancement opportunities for their employees. Employers could encourage and incentivize nurses with Associate Degrees to obtain their BSN, thus increasing the education level of their nurse workforce. Incentives should also be in place to promote baccalaureate prepared nurses to enter graduate education.

## 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. **Develop strategies to address the critical shortage of clinical capacity for nursing education.** All types of nursing programs (LPN, ADN, BSN, post-licensure) report limited clinical capacity as a barrier for maximizing program capacity. Limited clinical locations and space is a problem year after year. As a result, programs admit fewer applicants and the potential number of nursing graduates is restricted. The Center data clearly shows a need for nurses in Florida in the short-term (4,163 estimated RN growth for 2014) and long-term (50,300 RN FTEs by 2025).<sup>4,5</sup> Barriers of limited clinical capacity must be removed in order to

supply more graduate nurses. This will require strategic planning, partnerships, and innovation to achieve improved access.

2. **Create incentives for nurses to seek advanced education, from RN to BSN and graduate studies, to support existing nurses to further their education and build a nurse faculty pipeline.** The complexities of health care, combined with the need to work smarter and more effectively as a collaborative team, support the need to advance the education of all nurses. Strategic effort must be made to transition nurses progressively up the clinical and academic levels, including the need for more nurses prepared with doctoral degrees to fill the growing faculty shortage. This is also consistent with the recommendations of the IOM report to advance the education of employed nurses<sup>3</sup>, specifically to achieve 80% of employed RNs having a baccalaureate degree in nursing or higher degree and to double the number of doctoral prepared nurses by 2020.
  
3. **A consistent, long-term data collection, analysis, and reporting system must be maintained and adequately funded to provide critical information on which to base funding and policy decisions.** 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 and require nurse education programs within the state to provide appropriate data for analysis.
  
4. **Identify a way to effectively capture student information from online-only out-of-state nursing programs that enroll Florida students.** Numerous online-only RN-BSN programs are offered throughout the United States, enabling students located anywhere to continue their education. Currently the Center is limited to surveying programs that are based in Florida, as they are able to clearly identify Florida-based students. Efforts to collect data from out-of-state programs operating in Florida have not been successful. Several online programs reported it was difficult to isolate Florida students for reporting purposes as the programs teach students from all over the country. Capturing Florida student information from these programs would provide more complete and accurate data.

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## References

1. Florida Center for Nursing. (2013). *Florida Nurse Faculty Supply and Demand: Academic Year 2011-2012*. Retrieved March 11, 2014 from [http://www.flcenterfornursing.org/DigitalLibrary.aspx?Command=Core\\_Download&EntryId=501](http://www.flcenterfornursing.org/DigitalLibrary.aspx?Command=Core_Download&EntryId=501) .
2. Florida Center for Nursing. (2012). *Florida's RN and ARNP Supply*. Retrieved March 11, 2014 from [http://www.flcenterfornursing.org/DigitalLibrary.aspx?Command=Core\\_Download&EntryId=450](http://www.flcenterfornursing.org/DigitalLibrary.aspx?Command=Core_Download&EntryId=450) .
3. Institute of Medicine. (2010). *The Future of Nursing: Leading Change, Advancing Health*. Retrieved March 11, 2014 from <http://thefutureofnursing.org/IOM-Report> .
4. Florida Center for Nursing. (2014). *Demand for Nurses in Florida: The 2013 Survey of Florida's Nurse Employers*. Retrieved March 4, 2014 from [http://www.flcenterfornursing.org/DigitalLibrary.aspx?Command=Core\\_Download&EntryId=656](http://www.flcenterfornursing.org/DigitalLibrary.aspx?Command=Core_Download&EntryId=656) .
5. Florida Center for Nursing. (2010). *RN and LPN Supply and Demand Forecasts, 2010-2025: Florida's Projected Nursing Shortage in View of the Recession and Healthcare Reform*. Retrieved March 13, 2014 from [http://www.flcenterfornursing.org/DigitalLibrary.aspx?Command=Core\\_Download&EntryId=17](http://www.flcenterfornursing.org/DigitalLibrary.aspx?Command=Core_Download&EntryId=17) .