



***Wisconsin Nursing Education and Nurse Faculty:  
2012 Survey Results***



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## Acknowledgements

The Wisconsin Center for Nursing (WCN) *Wisconsin Nursing Education and Nurse Faculty: 2012 Survey Report* was accomplished with help of key partners and support from the *Taking the LEAD for Nursing in Wisconsin: Leadership, Educational Advancement & Diversity*, a State Implementation Program (SIP) grant (#70696) from the Robert Wood Johnson Foundation® and grant staff members Dr. Stephanie Stewart, Project Coordinator, and Molly Gottfried, Administrative Assistant.

The *Wisconsin Nursing Education and Nurse Faculty Survey* yields critical information on the status of nursing education in Wisconsin. This survey serves as a foundation to assess the capacity for nurses needed to address predicted future nursing shortages which will impact the healthcare in our state.

We are grateful to the University of Wisconsin Oshkosh - College of Nursing Research Department for assistance in making the survey accessible to all nursing education programs in Wisconsin and to the many schools that participated in the survey. Thank you also to Seneca Bivens, Research Assistant, and Dr. Brent MacWilliams, Assistant Professor at UW Oshkosh - College of Nursing, who assisted in the compilation of data and writing of the report.

WCN greatly appreciates the work of the Administrators of Nursing Education of Wisconsin (ANEW), as a partner organization dedicated to this effort. This vital organization brings together leadership from all public and private, baccalaureate and associate degree nursing programs throughout Wisconsin. ANEW provides a collaborative structure to advance nursing education and ensure the educational capacity needed for adequate numbers and types of nurses for the people of our state.

As a member of the National Forum of Nursing Workforce Centers, WCN appreciates the work of this organization to provide resources for systematic data collection for the nursing workforce. The *National Minimum Data Set: Education* developed by the Forum was a significant resource in the creation of the survey design.

Finally, we would like to acknowledge and express our gratitude to the many schools and organizations that will utilize this information to advance nursing education and practice to assure a sufficient, competent, and diverse nursing workforce for the people of Wisconsin.

The Wisconsin Center for Nursing looks forward to continued collaborative relationships to insure a bright future for nursing in our state.

Thank you,

Carolyn Krause, PhD, RN  
WCN Board President

## Executive Summary

This report presents the findings from the 2012 Wisconsin Survey of Nursing Education and Nurse Faculty, sponsored by the Wisconsin Center for Nursing (WCN). Combined with findings from the 2010 and 2011 surveys, these results provide insight into the current state of nursing programs in the state.

Key findings in the 2012 survey include:

The response rate for the 2012 Wisconsin Center for Nursing Survey of Nursing Programs improved to 83%.

- There was an increase in the number of ADN programs reporting in 2012, so the 2012 data better reflects the program capacity measures.
- The lack of clinical sites for student placement continues to be the most commonly identified factor limiting student admissions to both ADN and BSN programs.
- A lack of funds to hire faculty and lack of campus resources were identified as factors that limited admissions to pre-licensure programs.
- The diversity of the student population in Wisconsin nursing programs continues to reflect the diversity of the general population of Wisconsin. However, Wisconsin lags behind national data in the number of men in nursing programs. Males are consistently underrepresented in all nursing programs in Wisconsin.
- The diversity of the student population based on race and ethnicity continues to be greater in ADN programs than in BSN programs.
- An increase was noted in DNP student graduates, and a significant increase in new DNP student enrollment was reported.
- Compared to 2011 survey data, there was a decrease in PhD student graduates and a significant drop in new PhD student enrollment based on the schools reporting.
- An increase was noted in the percentage of full-time faculty reported across all institutions based on the schools reporting.
- The gender and race and ethnicity profile for nursing faculty is very different than the profile of students. Across all programs, almost all faculty are female (95%) and Caucasian (93.5%).

The investigators make the following recommendations:

- *Continue efforts to increase the response rate to 100%. Increasing the response rate of participating nursing education institutions would allow for more reliable trending of student enrollment patterns and faculty characteristics. The data missing from the nursing programs across the state at the ADN and BSN levels continues to make interpretation of what may be emerging student enrollment patterns difficult.*
- *Continue to evaluate potential strategies to address the factors related to limited clinical sites for pre-licensure and advanced practice nursing programs.*

- *Monitor the increase in ADN program capacity and evaluate potential strategies to create seamless progression to BSN.*
- *Make the recruitment and retention of men in nursing (especially when they are also diverse by race or ethnicity) a strategic educational priority in Wisconsin.*
- *Assess the factors that limit diversity within BSN programs and evaluate potential strategies to promote inclusion.*
- *Evaluate potential strategies to address the factors limiting enrollment for male students across all nursing programs.*
- *Continue the development of pathways for students from diverse backgrounds to become nursing faculty.*
- *Analyze the current education survey in collaboration with other workforce centers to create a standardized survey to help unify the national data set.*

## **Wisconsin Center for Nursing 2012 Survey of Nursing Programs in Wisconsin**

### **Background**

The 2012 Survey of Nursing Programs in Wisconsin is the third survey by the Wisconsin Center for Nursing (WCN) to collect and analyze comprehensive data on the status of nursing education programs in the state. These surveys are intended to track trends in student enrollment, program capacity, faculty recruitment and retention, and other important variables. As was indicated in the 2011 survey (WCN, 2013, p. 4),

Such findings are also integral to the fulfillment of WCN's mission "to assure an adequate, well-prepared and diverse nurse workforce to meet the needs of the people of Wisconsin," since state nursing education programs provide the pipeline of future nurses into diverse employment settings. WCN is mandated by legislation and supported by a grant from the WI Department of Workforce Development (DWD) to (a) monitor and validate trends in the applicant pool for programs in nursing; (b) evaluate the effectiveness of nursing education, including the interaction amongst nursing schools to ensure a uniform education and the transferability of student credits, to increase access to nursing education and enhance career mobility, especially for populations that are under-represented in the nursing profession; and (c) facilitate partnerships between the nursing community and other health care providers, licensing authority, business and industry, consumers, legislators, and educators to achieve policy consensus, promote diversity within the profession, and enhance nursing career mobility and nursing leadership development (WISCONSIN ACT 28 Wisconsin State Statute 106.30 Nursing Workforce Survey & Grant, 2009).

## National Perspective

As stated in the 2011 WCN Education Report (WCN, 2013), “Nurses continue to play key roles in the delivery of safe, high quality, affordable, accessible healthcare, especially as healthcare reform unfolds and as nurse educators respond to calls for radical transformation of nursing education” (Benner, Sutphen, Leonard, & Day, 2010). Key stakeholders have undertaken coordinated national efforts to assure that the recommendations of the 2010 Institute of Medicine (IOM) Report *The Future of Nursing: Leading Change, Advancing Health* are implemented. A prominent example is The Campaign for Action, which “is a national initiative coordinated through the Center to Champion Nursing in America (CCNA), an initiative of AARP, the AARP Foundation, and the Robert Wood Johnson Foundation. The campaign has mobilized diverse stakeholders nationally and in 49 states to address the nation’s most pressing health care challenges – access, quality and increasing cost – by utilizing nurses more effectively and preparing nursing for the future” (<http://thefutureofnursing.org/about>).

Nursing workforce shortages remain a major concern. The American Association of College of Nursing (AACN), citing the Bureau of Labor Statistics Employment Projections 2012-2022, offers these projections:

According to the Bureau of Labor Statistics’ Employment Projections 2012-2022 released in December 2013, Registered Nursing (RN) is listed among the top occupations in terms of job growth through 2022. The RN workforce is expected to grow from 2.71 million in 2012 to 3.24 million in 2022, an increase of 526,800 or 19%. The Bureau also projects the need for 525,000 replacements nurses in the workforce bringing the total number of job openings for nurses due to growth and replacements to 1.05 million by 2022 (AACN, 2014).

## Wisconsin Perspective

The 2010, 2011, and 2012 efforts in Wisconsin to systematically gather and analyze nursing workforce data, including nursing education, were more successful than in the past. Survey responses were similar, but still have not approached the desired 100% level. The current survey is being analyzed to streamline data gathering for nursing programs to help increase consistency of reporting and trend data validity. The long-term success of these efforts is dependent on the commitment of administrators in nursing education programs throughout the state to consistently complete the survey. If trends in student enrollment, program capacity, faculty recruitment and retention, and other important variables are going to be valid and reliable, the data set must be complete.

As identified in the 2011 Wisconsin education survey (WCN, 2013), WCN, in partnership with the Rural Wisconsin Health Cooperative and charged with carrying forth the vision of the IOM report, received designation as an Action Coalition from the Robert Wood Johnson Foundation® (RWJF). The Wisconsin Action Coalition has actively endeavored to create regional working

groups and has recently received funding for a Robert Wood Johnson Foundation®, State Implementation Project (SIP) grant, *Taking the LEAD for Nursing in Wisconsin*, a 2-year grant project to implement recommendations of the Future of Nursing Campaign for Action - IOM Report. WCN has also co-sponsored three statewide conferences to advance its work on bringing the IOM recommendations to fruition in Wisconsin.

## Data Source

Data for this report are from the 2012 Wisconsin Center for Nursing Survey of Nursing Programs. This was the third survey of all educational programs conducted on site in the state of Wisconsin. The survey was distributed to the deans or directors of all nursing education institutions in the state through an email that included a link to a secure site for data entry. The survey was distributed to 43 nursing education institutions in August 2013. Repeated follow-up requests were sent to the deans and directors, and the original deadline was extended to improve the response rate. Deans and directors were asked to provide data on current students and faculty based on the fall 2012 census date for their institution, as well as program capacity data for academic year 2011-2012.

The overall response rate for the 2012 survey was 83%, a slight increase over the 2011 response rate of 78%. The educational institutions were divided into three categories by the highest nursing degree awarded by the institution: ADN (n= 19), BSN (n=9), and graduate degree (n=15). Response rates varied by category of institution: 13 (68%) of the institutions where an ADN was the highest degree awarded completed surveys, 8 (88%) of the institutions where a BSN was the highest degree awarded completed surveys, and 12(86%) of the institutions awarding graduate degrees complete surveys.

As with the 2011 survey, caution must be taken in interpreting and using data from the 2012 survey. We experienced missing data from those who completed the survey. We are taking precautionary steps to prevent this from happening in the future. Although there was a small increase in overall response rate from the previous year, the survey results continue to describe an incomplete picture of the status of both students and faculty in nursing education because of the missing data from some of the educational institutions preparing nurses in Wisconsin. Large schools with traditional BSN, RN completion, and/or MSN programs did not participate, which may have skewed data. In addition, schools with RN-completion programs had missing data.

## Results

### *Program, Curriculum Options, and Accreditation*

Table 1 describes the programs and curriculum options reported by the participating institutions in the 2012 Survey of Nursing Programs. The 2012 survey includes data reported from one LPN program. Of the 38 institutions participating in this year's survey, 18 reported on

an ADN program and 14 reported on a BSN program. The 2012 survey includes data from seven nurse practitioner programs, compared to the nine reported in 2011; four clinical nurse leader programs, compared to three in 2011; and seven DNP programs, compared to six in 2011. The 2012 Survey also asked institutions to differentiate between CNS only, combined educator/CNS, and educator only programs, which will allow for trending and comparison over time in these programs. There was a 100% response rate to the survey for the PhD programs, which provides an accurate PhD program status report and the potential for future trend analysis.

**Table 1. Programs and Curriculum Options Reported by Respondents**

	Number of Responses	
<b>Pre-licensure Programs</b>		
	2011	2012
<b>LPN Programs</b>		
Generic/Traditional Curriculum	3	1
<b>ADN Programs</b>		
Generic/Traditional Curriculum	15	18
Bridge Curriculum	12	12
<b>Pre-licensure BSN Programs</b>		
Generic/Traditional Curriculum	16	15
2 <sup>nd</sup> Degree Curriculum	4	2
<b>Pre-licensure Master Programs</b>	1	2
<b>Post-licensure and Certificate Programs</b>		
<b>RN to BSN curriculum (Post-licensure)</b>	13	10
<b>Clinical track Master Programs</b>	10	8
Clinical Nurse Specialist (CNS) Curriculum	4	3
Combined CNS/Educator Curriculum	4	0
Nurse Midwifery Curriculum	1	1
Nurse Practitioner (NP) Curriculum	9	8
Nurse Anesthetist Curriculum	1	0
Clinical Nurse Leader (CNL) Curriculum	3	4
Other	4	3
<b>Non-clinical track Master Programs</b>	8	8
Nurse Educator Curriculum	6	7
Leadership/Management Curriculum	5	4
Other	1	0
<b>Doctoral Programs</b>		
PhD Curriculum	3	3
DNP Curriculum	6	7

**Table 1.** (cont.)

<b>Certificate Programs</b>	<b>9</b>	<b>10</b>
Nurse Educator		
Nurse Education	5	5
Nurse Practitioner	1	2
CNS/MSN to NP	3	3
NP to CNS	6	0
Other	4	4

There was a difference noted in the accreditation status between LPN, ADN, and BSN programs. The LPN program did not report accreditation. One ADN program reported that they were not accredited. All BSN programs report accreditation. There is a clear distinction in preferred accreditation bodies, with all ADN programs reporting accreditation through the National League for Nursing Accrediting Commission (NLNAC) or the Accreditation Commission for Education in Nursing (ACEN), and all BSN programs reporting accreditation through the Commission on Collegiate Nursing Education (CCNE) (Table 2).

**Table 2. Accreditation Status in 2012 by Program Type**

<b>ACCREDITATION STATUS</b>	<b>LPN N (%)</b>	<b>ADN N (%)</b>	<b>BSN N (%)</b>	<b>Pre-licensure MSN N (%)</b>
Not accredited	1 (100%)	1 (5.3%)		
Accredited by NLNAC and/or CCNE		1 (5.3%)	1 (5.3%)	
<b>ACCREDITATION TYPE</b>				
NLNAC accredited		16 (84.2%)		
CCNE accredited		1 (5.3%)	18 (94.7%)	2 (100%)

### *Program Capacity*

The capacity of pre-licensure LPN and RN nursing education programs for academic year 2010-2011 and academic year 2011-2012 is shown in Tables 3a and 3b. The LPN data cannot be compared to last year's data since only one program reported. The number of ADN-qualified applicants, student seats, students admitted, and new enrollees increased from 2010-2011 for generic ADN programs. In 2010-2011, 1,187 admitted and 1,063 new enrolled students were reported for generic ADN programs, compared to 1,917 admitted and 1,893 new enrolled students in 2011-2012. A slight increase was noted in the number of new students enrolled in ADN Bridge programs, from 122 in 2010-2011 to 138 in 2011-2012. The percent of rejected applicants for generic ADN programs decreased from 43.6% in 2010-2011 to 23.7% in 2010-2011. The number of seats left vacant changed dramatically from 219 in 2010-2011 to 10 seats left vacant in 2011-2012. The response rate for ADN programs increased in the 2012 survey and better reflects the current status of ADN programs in the state. If the ADN numbers are higher



than previously reported or are increasing, there appears to be unused program capacity in the RN to BSN programs to accommodate the seamless transition from ADN to BSN.

In contrast to the ADN programs, the generic BSN programs showed decreases in the number of qualified applicants, student seats, admitted students, and enrolled students. In 2010-2011, 2,546 admitted and 1,725 new enrolled students were reported for generic BSN programs, compared to 2,546 admitted and new enrolled students in 2011-2012. The percent of rejected applicants for generic BSN programs also increased from 30.1% in 2010-2011 to 37.7% in 2011-2012.

In the 2<sup>nd</sup> degree BSN programs, there was a decrease in the number of qualified applicants and the number of new students enrolled, from 121 in 2010-2011 to 89 in 2011-2012. The percent of rejected applicants in 2<sup>nd</sup> degree BSN programs decreased from 61.3% in 2010-2011 to 36.5% 2011-2012. Generic BSN programs reported that 353 seats were left vacant in 2011-2012. However, a number of Generic BSN programs reported “unlimited students seats,” which puts accurate assessment of program capacity into question.

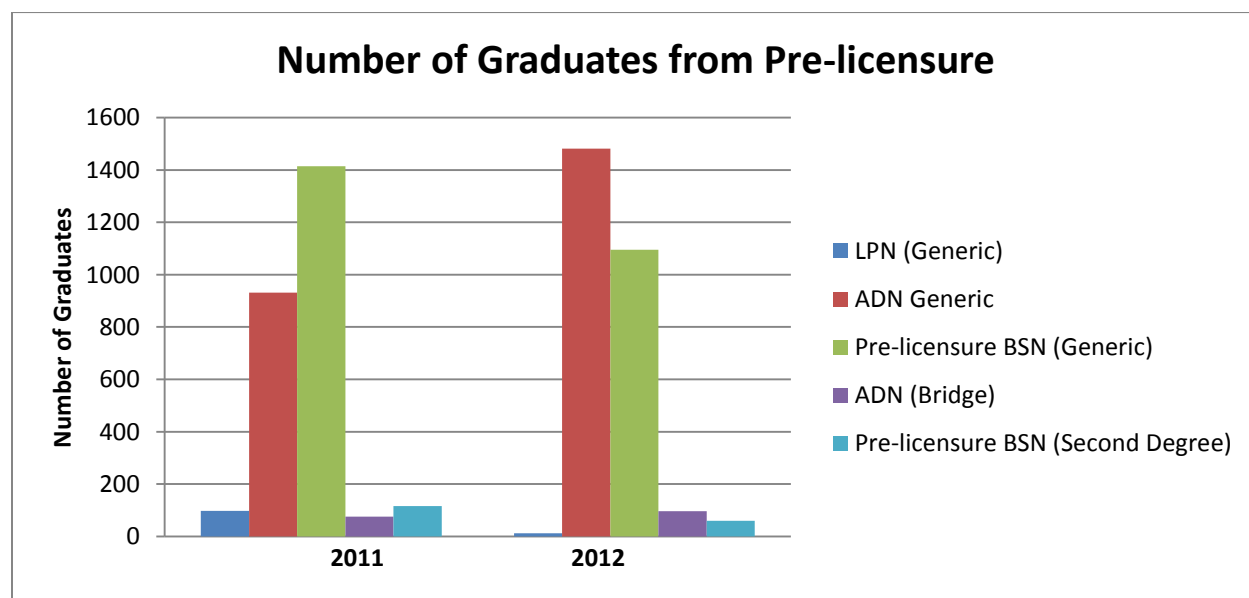
**Table 3a. Program Capacity Measures for Pre-licensure Programs, AY 2010-2011**

	<b>LPN Generic</b>	<b>ADN Generic</b>	<b>ADN Bridge</b>	<b>BSN Generic</b>	<b>BSN 2<sup>nd</sup> Degree</b>	<b>Pre- licensure MSN</b>
Qualified applicants	225	2105	179	3641	313	21
Student seats	152	1287	130	Unlimited	119	16
Students admitted	132	1187	106	2546	121	19
Rejected applications	93	918	73	1095	192	2
Rejected applications (%)	41.3	43.6	40.8	30.1	61.3	9.5
New enrollees	129	1068	122	1725	121	16
Seats left vacant	23	219	8	171	0	0

**Table 3b. Program Capacity Measures for Pre-licensure Programs, AY 2011-2012**

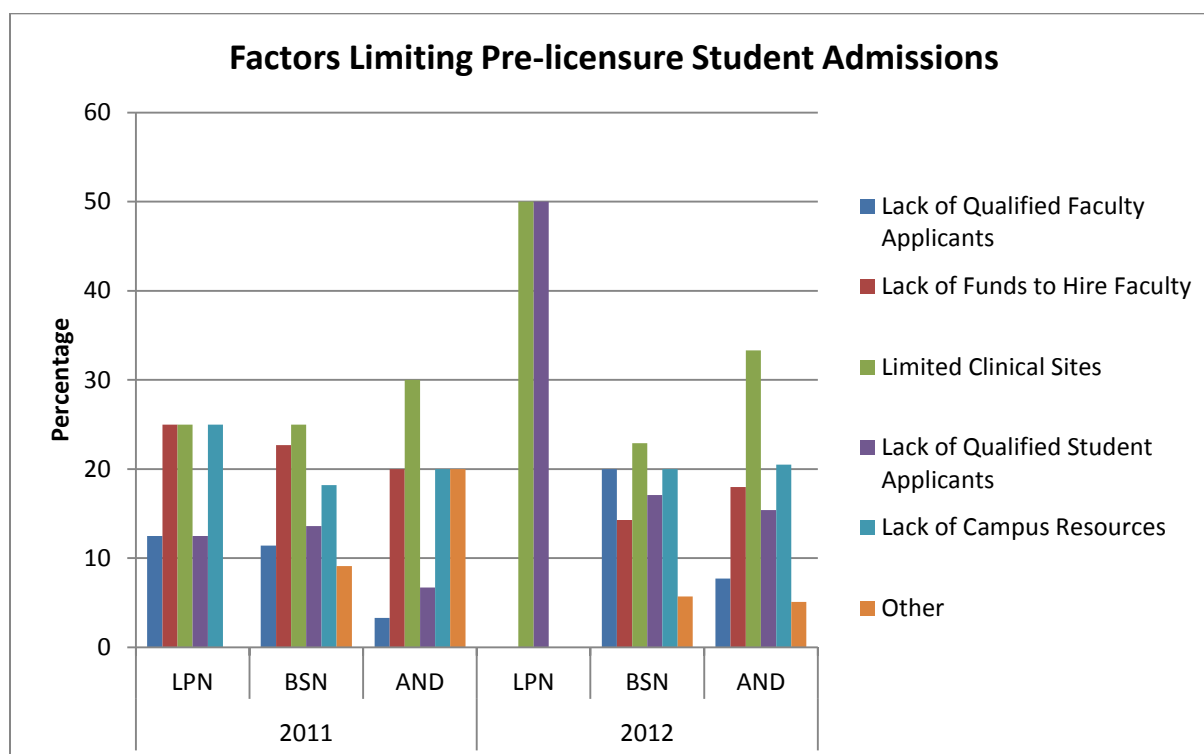
	LPN Generic	ADN Generic	ADN Bridge	BSN Generic	BSN 2 <sup>nd</sup> Degree	Pre- licensure MSN
Qualified applicants	30	2514	224	2935	244	915
Student seats	40	1907	172	Unlimited	89	126
Students admitted	26	1917	151	1858	89	383
Rejected applications	4	597	73	1095	155	532
Rejected applications (%)	13.3	23.7	32.6	37.3	36.5	58.1
New enrollees	26	1893	138	1286	89	168
Seats left vacant	14	-10	21	-353	0	-257

Figure 1 shows that there were 2,733 graduates from pre-licensure RN programs, an increase from 2010-2011 when 2,537 graduates were reported. The percentage of pre-licensure RN graduates from ADN programs increased from 39.7% in 2010-2011 to 54% 2010-2011.

**Figure 1. Number of Graduates from Pre-licensure Programs, AY 2010-2011 and AY 2011-2012**

Information on factors limiting pre-licensure student admissions is shown in Figure 2. Limited clinical sites continues to be the factor that is most commonly identified as limiting student admissions. Nearly 60% of both ADN and BSN programs report this as an area of significant challenge. Lack of funds to hire faculty and lack of campus resources are the other two major factors limiting admissions to pre-licensure programs. In 2011-2012, 7% of ADN programs and 20% of BSN programs reported lack of qualified faculty applicants as a factor, compared to 3.3% of ADN programs and 11.4% of BSN programs in 2010-2011.

**Figure 2. Factors Limiting Pre-licensure Student Admissions in AY 2010-2011 and AY 2011-2012**



The 2012 survey collected information about enrollment in DNP programs and differentiated between CNS and combined CNS/Educator programs. Program capacity in both masters and DNP post-licensure clinical programs is shown in Table 4. The total number of new enrollees in APN programs dropped from 487 in 2011 to 389 in 2012. Graduates from DNP programs were greater, with 12 in 2011 and 52 in 2012. This may represent the shift in nurse practitioner education from and MSN to DNP or simply the change in nursing schools completing the survey.

Nurse leadership/management programs saw an increase in applicants and admitted students. However, there was an increase from 14 to 23 new enrollees. The number of graduates in leadership/management programs increased from 2011 (14) to 2012 (38).

The 2012 survey distinguished between nurse educator and combined CNS/educator programs. The number of qualified applicants in Nurse Educator programs increased from 29 enrollees in 2011 to 59 enrollees in 2012. The number of graduates from programs with an educator focus increased from 38 in 2010 to 46 in 2011.

PhD programs showed decreases in all program capacity measures from 2011 to 2012. Qualified applicants dropped from 38 to 31, the number of admitted students decreased from 36 to 7, and new enrollees decreased from 31 to 12. The number of graduates decreased from 25 to 19. There appears to be a trend of decreasing enrollments perhaps in favor of the DNP becoming more popular, which is a national trend.

**Table 4. Program Capacity Measures for Post-licensure Clinical Masters and DNP Programs, AY 2011-2012**

<b>2012</b>							
	CNS	CNS/ Educator- MSN	Nurse Midwifery- MSN	NP	Nurse Anesthetist- MSN	Post- master DNP	Clinical Other
Qualified applicants	1	0	5	431	0	61	20
Student seats	0	0	0	91	0	76	30
Students admitted	1	0	5	384	0	49	20
Rejected applications	0	0	0	47	0	12	0
Rejected applications (%)	0.0	0.0	0.0	10.9	0.0	19.7	0.0
New enrollees	1	0	5	327	0	40	16
Students graduated	23	0	7	285	0	52	16

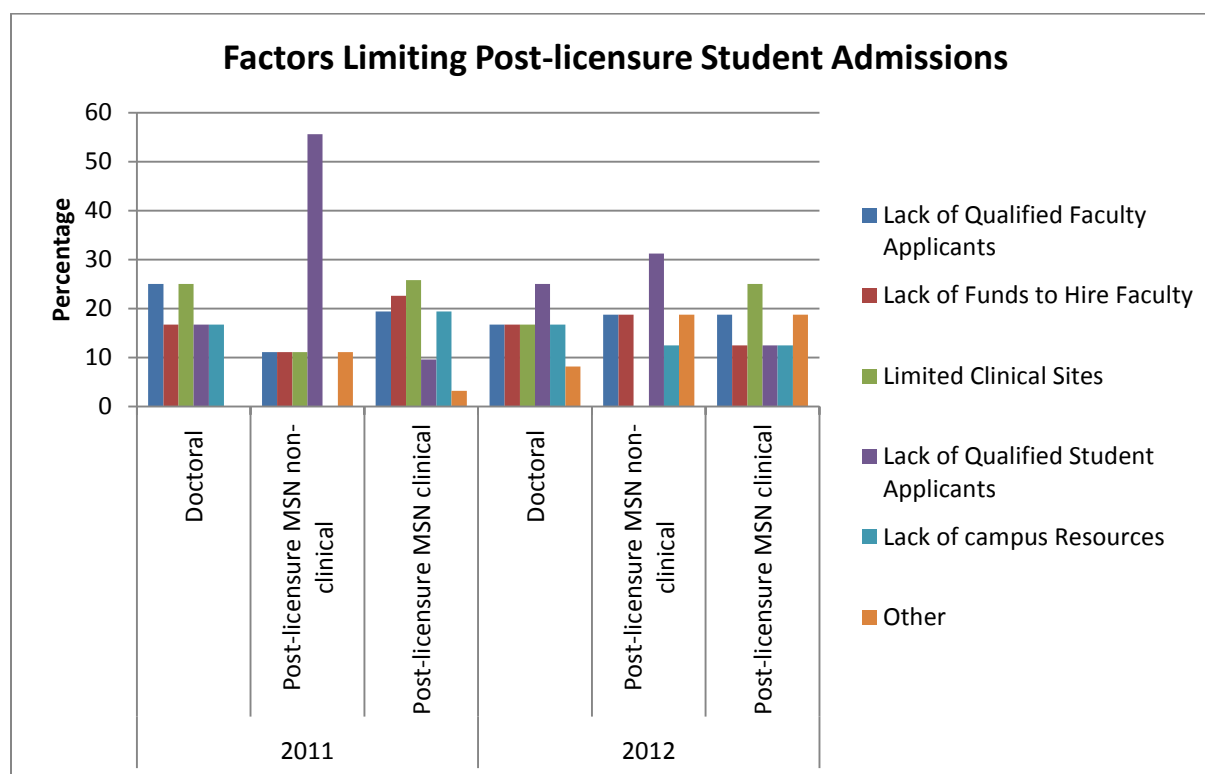
The number of qualified applicants and students admitted to RN to BSN programs showed increases from 2011 to 2012. The number of new enrollees in RN to BSN programs also increased from 503 in 2011 to 751 in 2012. There was a significant increase in the number of RN to BSN graduates from 2011 (380) to 2012 (425). These increases are both significant and relative, as four RN to BSN programs did not report over last year. CNL program capacity measures indicate that there is great capacity in AY 2011-2012, but fewer qualified applicants. Those programs continue to be very small.

**Table 5. Program Capacity Measures for Post-licensure BSN Completion, CNL, Non-Clinical Master's and PhD Programs, AY 2010-2011 and AY 2011-2012**

	RN to BSN	CNL	Post-licensure Non-clinical Track Master Programs			PhD
			Nurse Educator	Leadership/ Management	Other (Research)	
2010-2011						
Qualified applicants	769	70	29	14	0	38
Student seats	Unlimited	28	31	16	0	50
Students admitted	769	8	29	14	0	36
Rejected applications	0	2	0	0	0	2
Rejected applications (%)	0	20	0	0	0	5.3
New enrollees	506	7	25	14	0	31
Students graduated	380	0	38	14	5	25
2011-2012						
Qualified applicants	956	19	59	26	0	31
Student seats	Unlimited	46	38			
Students admitted	955	14	56	23	0	7
Rejected applications	1	5	3	3	0	24
Rejected applications (%)	0.1	26.3	5.9	11.5	0.0	77.4
New enrollees	751	12	52	23	0	12
Students graduated	425	2	46	38	0	19

Note: We have program capacity in Wisconsin that is not being used at this time; pipeline issue as obstruction.

**Figure 3. Factors Limiting Post-licensure Student Admissions in AY 2010-2011 and AY 2011-2012**



Overall reported enrollment in ADN nursing programs increased from 2011 to 2012 (Table 6). It is not known how much of this increase is due to the increased response rate of institutions. There was an increase in reporting from ADN institutions. This will need to be tracked in future years for further analysis. The decrease in response rate of BSN institutions may have contributed to the significant decrease in BSN enrollments (1065 less students than in 2011). There was a decrease in RN to BSN enrollments, from 1304 in 2011 to 1266 in 2012. PhD enrollment should represent actual numbers, since the response rate for these institutions was 100% in both years. There was a decrease of 118 students in post-licensure clinical and non-clinical track master's programs. DNP program enrollment increased by 82 students. PhD program enrollment increased by two students.

**Table 6. Enrollment of Students by Curriculum Track, Fall 2011 and Fall 2012**

<b>Curriculum Track</b>	<b>Enrollment</b>	
	<b>2011</b>	<b>2012</b>
<b>LPN</b>	<b>172</b>	<b>26</b>
Generic/Traditional ADN	2801	5471
Bridge ADN	134	193
<b>Total ADN</b>	<b>2935</b>	<b>5664</b>
Generic/Traditional BSN	4928	3793
2 <sup>nd</sup> degree BSN	129	118
<b>Total pre-licensure BSN</b>	<b>5057</b>	<b>3992</b>
<b>Pre-licensure MSN</b>	<b>25</b>	<b>702</b>
<b>RN to BSN</b>	<b>1304</b>	<b>1266</b>
MSN: CNS	49	15
MSN: CNS/ Educator	92	0
MSN: CNM		25
MSN: Nurse Midwifery	27	
MSN: NP	938	943
MSN: Nurse Anesthetist	20	0
MSN: CNL	19	33
MSN: Other post-licensure clinical	59	70
<b>Total post-licensure clinical track</b>	<b>1204</b>	<b>1086</b>
MSN: Nurse Educator	92	138
MSN: Management / Leadership	66	53
MSN: Other post-licensure non-clinical	2	0

Table 6. (cont.)

Curriculum Track	Enrollment	
	2011	2012
<b>Total post-licensure non-clinical track MSN</b>	<b>160</b>	<b>191</b>
DNP: CNS	2	4
DNP: CNS/Educator	2	2
DNP: NP	69	722
DNP: System	2	6
DNP: Post-Masters	107	96
<b>Total PhD</b>	<b>139</b>	<b>141</b>
<b>Total DNP</b>	<b>182</b>	<b>264</b>
<b>Total Doctoral</b>	<b>321</b>	<b>405</b>

Figure 4 depicts the race and ethnicity of nursing students by program. According to the 2012 statistics, Wisconsin's population was 88.2% Caucasian (U.S. Census Bureau, 2014b), which approximates the racial and ethnic makeup of the students in all types of nursing programs in this survey except for the 2012 ADN data, which indicate 70.4% Caucasian. RN to BSN, BSN generic, pre-licensure MSN, MSN clinical track, and MSN non-clinical track programs reported lower numbers of Black/African American students, ranging from approximately 3.3% to 4.1% each. Doctoral programs showed a decrease in Black/African American students, from 6.1% in 2010-2011 to 5.1% in 2010-2012. Wisconsin reported 6.2% of its population as Hispanic (U.S. Census Bureau, 2014b); of the Wisconsin nursing programs, the pre-licensure ADN programs came closest to this percentage, reporting 8.8% of their students as being Hispanic, up from the previous survey reporting 3.9% Hispanic. Wisconsin ADN programs reported a decrease of Asian students to 2.7% (down from 3.1%), as compared with the state population (2.5%). BSN (2.6%), post-licensure MSN clinical track (2.2%), and doctoral programs (4.7%) exceeded the state profile; while pre-licensure MSN (2.2%) and post-licensure MSN non-clinical track (2.7%) programs reported an increase from no Asian students in the 2011 survey.

American Indian and Alaskan Natives continued to be underrepresented across Wisconsin nursing programs when compared to the 1.1% that makes up the Wisconsin population (U.S. Census Bureau, 2014 b). It should be noted that LPN, ADN, BSN, and doctoral programs reported numbers of students that either met or exceeded the 1.2% reported for the nation as



a whole (U.S. Census Bureau, 2014a). No program except LPN (34.6% with one school reporting) exceeded 1% (range 0 to 1.82%).

**Figure 4. Race and Ethnicity of Nursing Students by program, AY 2011-2012**

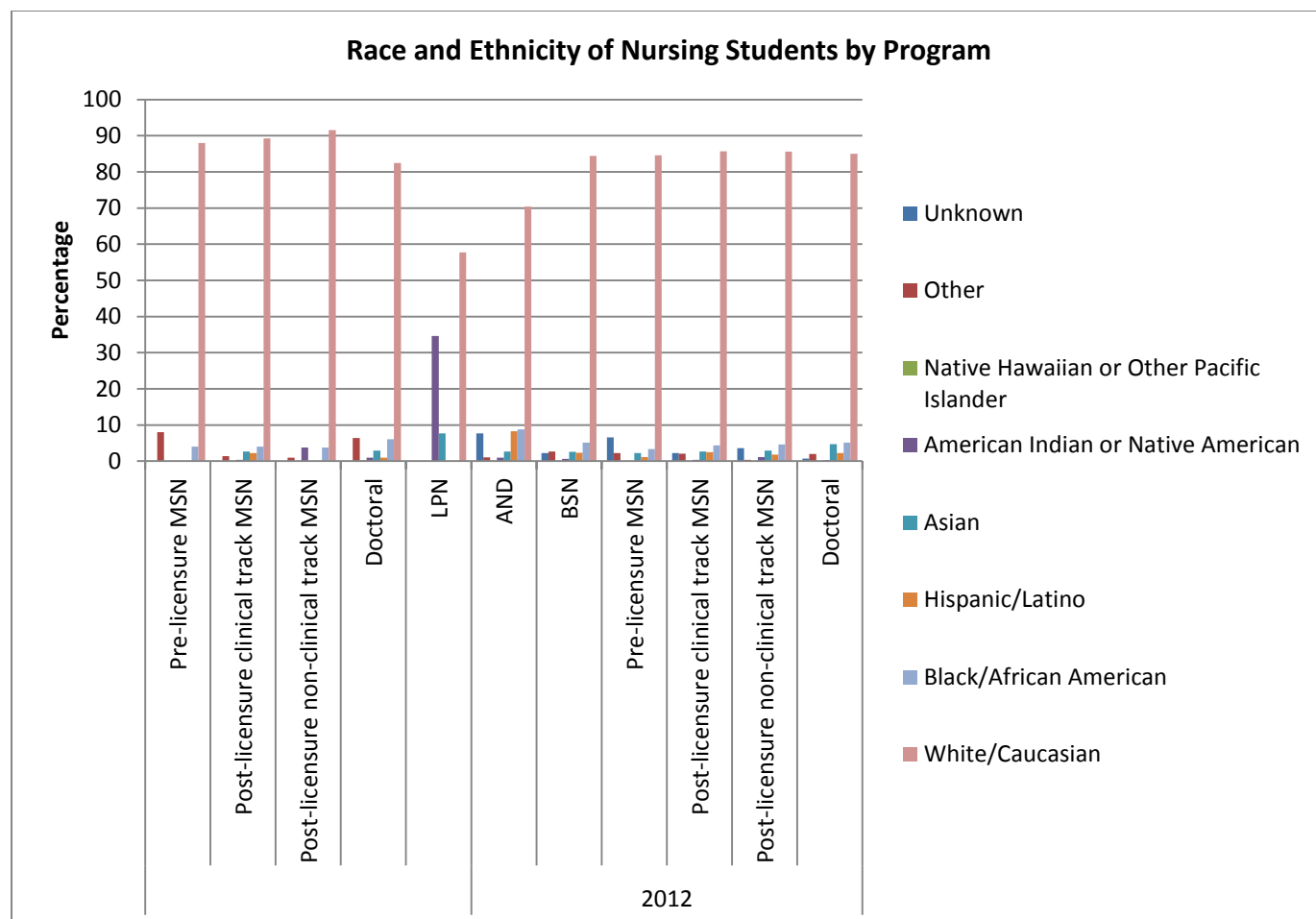
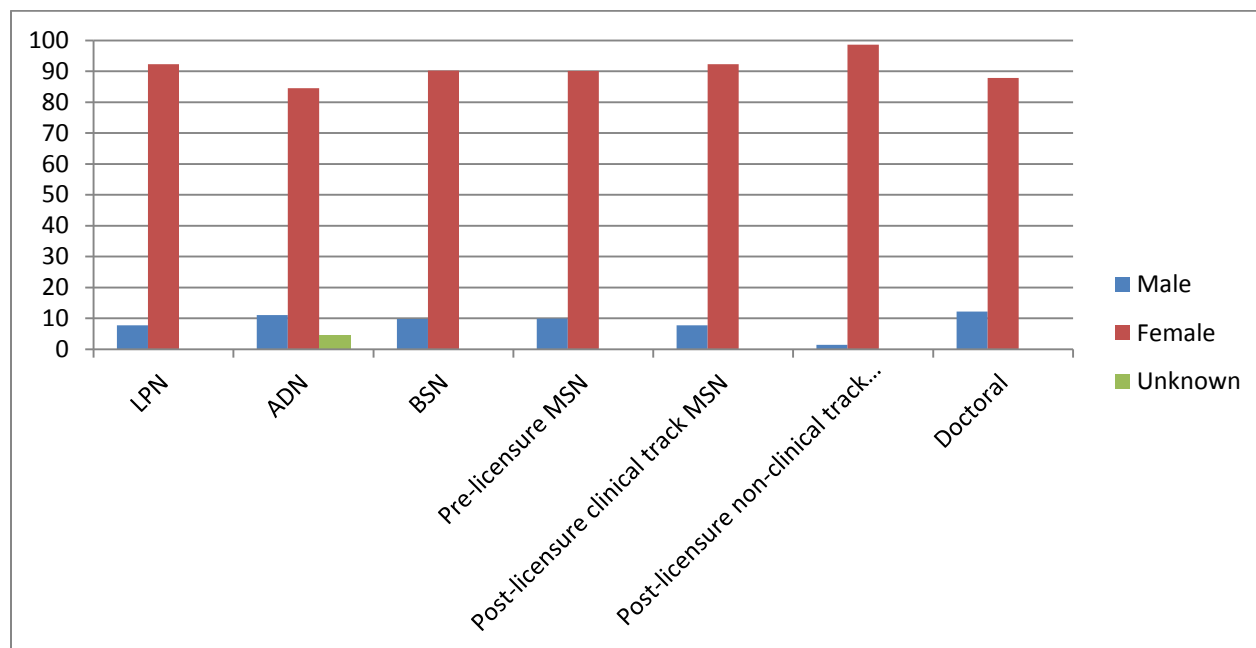


Figure 5 shows that Wisconsin nursing students continue to be predominately female across all programs. LPN programs reported the smallest number of male students (7.6%), while pre-doctoral programs reported the largest number of male students in 2012 (9.6%). Males in ADN programs increased from 10.09% to 11%, while male enrollments in BSN programs remained relatively stable. The NLN National Survey for the latest academic year reported that males comprised 14% and 15% of baccalaureate and ADN programs, respectively (NLN, 2014); these WCN data indicate that Wisconsin nursing programs continue to have room for improvement in attracting and retaining male students.

**Figure 5. Gender of Nursing Students by Program, AY 2011-2012**



Additional information was collected in the current survey to enhance the student profile. Figure 6 presents the age profile of Wisconsin nursing students. These findings should be interpreted with caution, given the large number of students in all categories whose ages were reported as Unknown.

**Figure 6. Age Distribution of Nursing Students by Program, AY 2011-2012**

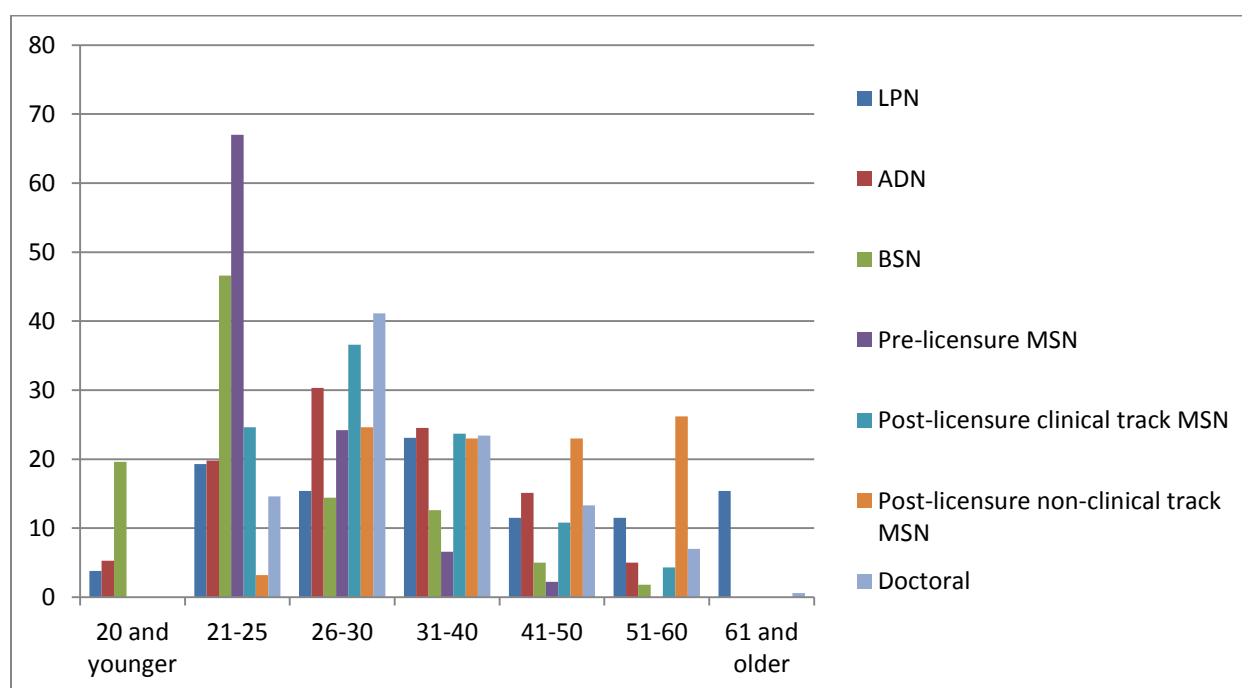


Table 7 depicts a comparison of the percentage of students over age 30 between national data as reported by the NLN (2014) and the current WCN 2012 and WCN 2011 Educational Survey data. These findings suggest that Wisconsin nursing students in post-licensure programs are younger than reported nationally, whereas students in Wisconsin pre-licensure programs (ADN and BSN) are generally older. The proportion of Wisconsin LPN students over 30 is nearly equal to those in the national sample for 2011, but increases in 2012. As might be expected, the number of doctoral students over age 30 is quite large. This tendency seems to be changing, attracting younger students, some who can be expected to enroll shortly after completing their undergraduate programs.

**Table 7. Comparison of Percentage of Students Over Age 30 by Program Type**

Source	2011						2012					
	Pre-licensure Programs			Post-licensure Programs			Pre-licensure Programs			Post-licensure Programs		
	LPN	ADN	BSN	RN to BSN	MSN	Doctoral	LPN	ADN	BSN	RN to BSN	MSN	Doctoral
NLN	39	44	14	69	67	87	40	50	16	71	67	83
WCN	38	48	23	61	47	72	62	45	15	44	73	51

Institutions reported on the number of full- and part-time faculty, as well as other faculty characteristics that allow for the continued development of a profile of nursing faculty in the state of Wisconsin. The 2011 survey includes responses from 34 institutions. The 2012 survey response rate of 36 institutions continues to result in a less than complete profile of nursing faculty across the state. The 2011 survey also includes responses from three LPN programs. The 2012 survey has data from only one LPN program. In 2012 the total number of full-time faculty across all institutions grew to 764 from 651. Vacant positions remained low; although, there appears to be a slight increase in vacant part-time positions in ADN institutions.

**Table 8. Comparison Filled and Vacant Faculty Positions by Institution Type**

Institution Type	2011				2012			
	Filled Faculty Positions		Vacant Faculty Positions		Filled Faculty Positions		Vacant Faculty Positions	
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
LPN	18	6	3	0	2	2	1	0
ADN	250	74	6	13	386	92	3	5
BSN and higher	383	474	23	1	376	338	55	6
Totals	651	554	32	14	764	432	59	11

Institutions were asked to report on new faculty hired in 2011-2012 (Table 9). Average time to fill a vacancy continues to be longer in BSN and higher institutions. The length of time to fill a full-time vacancy was about the same in 2011-2012 for both types of institutions. Vacancy rates were greater in BSN and higher, up by 30 in the reporting institutions over last year. Table 9 depicts new faculty hired in 2012 compared to 2011. The LPN data are difficult to compare, since only one school reported and indicated no new hires. The ADN schools reporting indicated five more new hires over last year. This can possibly be attributed to a relatively stable faculty work force. BSN and higher schools reported over 80 new full time faculty and over 200 part-time faculty hired. The explanation for these increases remains unclear. It could be the result of retirements and/or a skewed data set.

**Table 9. New Faculty Hired in AY 2010-2011 and AY 2011-2012 by Institution Type**

Institution Type	2011				2012			
	Number of New Faculty Hired		Average Weeks to Fill Faculty Vacancies		Number of New Faculty Hired		Average Weeks to Fill Faculty Vacancies	
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time
LPN	4	3	8	3	0	0	0	0
ADN	22	19	5.6	3.4	27	33	5.1	3.7
BSN and higher	36	115	9.9	6.7	123	320	11.5	6.7
Totals	62	137	8.1	5	150	353	8.3	5.2

**Table 10. New Faculty Positions Expected Over Next Two Academic Years**

	2011			2012		
	LPN Institutions	ADN Institutions	BSN + Institutions	LPN Institutions	ADN Institutions	BSN + Institutions
New Full-time Positions expected	1	7	45	1	21	182
New Part-time Positions Expects	3	11	88	0	29	120
Total New Faculty Members Needed	4	18	133	1	50	302
% Growth Over Current Positions	16.67	5.56	15.52	25	10.5	10.9

Table 11 describes the educational background of nursing faculty members. In 2011, 47.8% of full-time faculty in BSN and higher Institutions had doctorates. The 2012 survey revealed that 56.5 % of full-time faculty in BSN and higher Institutions have doctorates, while the majority of part-time faculty in these institutions hold a master's degree. In LPN and ADN programs, the

majority of full-time and part-time faculty hold a master's degree. The one LPN program reporting was associated with an ADN program.

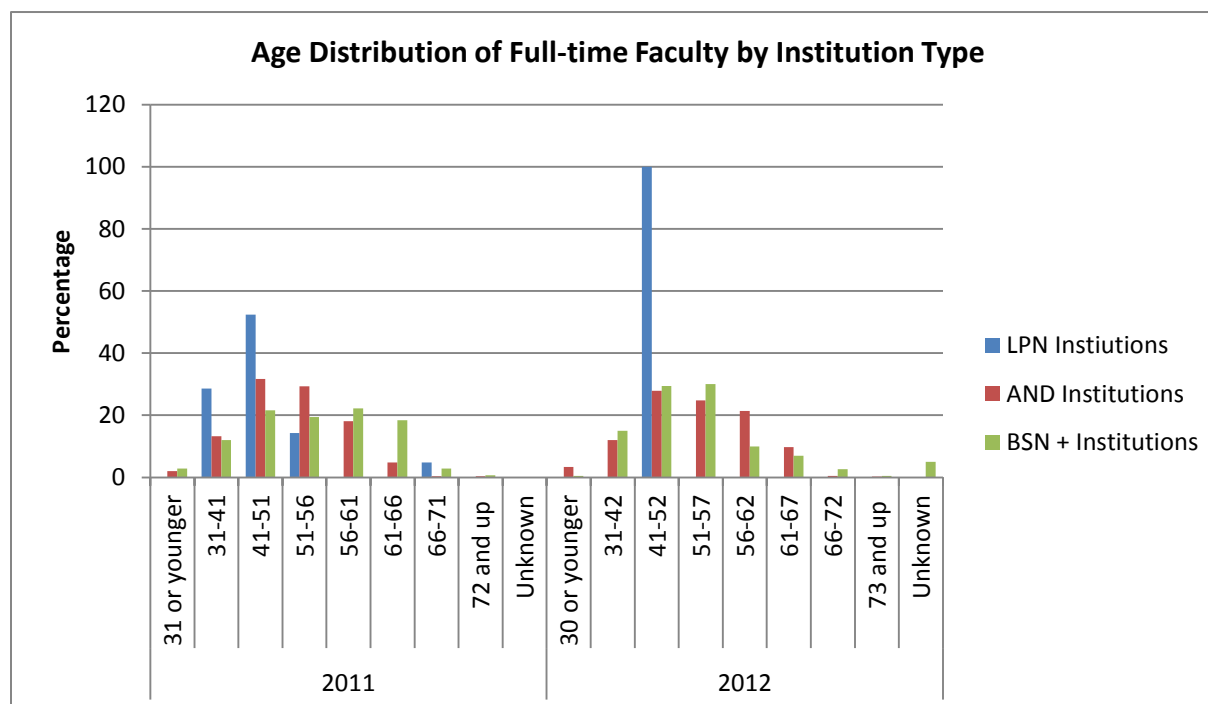
**Table 11. Full-time Faculty Education Distribution by Institution Type**

Highest Degree earned	LPN Program	ADN Institution	BSN + Institution	Total Institution	LPN Program	ADN Institution	BSN + Institution	Total Institution
	<b>2011</b>				<b>2012</b>			
<b>Full-time Faculty</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
PhD in Nursing	0.0	1.6	31.6	19.2	0.0	6.7	42.3	19.6
Doctorate of Nursing Practice	0.0	1.6	4.8	3.4	0.0	1.3	4.2	3.4
Other Nursing Doctorate	0.0	0.0	1.6	0.9	0.0	0.3	2.8	1.3
Non-nursing Doctorate	0.0	1.2	9.8	6.2	0.0	2.1	7.2	3.2
Masters in Nursing	66.7	94.0	48.7	66.7	0.0	88.6	42.4	70.8
Non-nursing Masters	0.0	0.4	1.1	0.8	0.0	0.0	0.2	0.3
Bachelors in Nursing	33.3	1.2	2.4	2.8	100.0	1.1	0.9	1.5
<b>Part-time/Adjunct Faculty</b>								
PhD in Nursing	0.0	0.0	2.7	2.3	0.0	2.0	13.6	5.2
Doctorate of Nursing Practice	0.0	0.0	1.5	1.3	0.0	1.0	8.1	3.0
Other Nursing Doctorate	0.0	0.0	0.2	0.2	0.0	0.0	0.5	0.2
Non-nursing Doctorate	0.0	0.0	4.8	4.1	0.0	1.0	1.3	0.8
Masters in Nursing	33.3	72.0	77.7	76.4	100.0	84.0	73.0	85.7
Non-nursing Masters	0.0	1.3	4.4	4.0	0.0	0.0	0.7	0.2
Bachelors in Nursing	66.7	26.7	8.4	11.5	0.0	12.0	2.8	4.9
Non-nursing Bachelors	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0

Figure 7 shows the age distribution of Wisconsin full-time nursing faculty. There are similar patterns in the age of faculty across ADN and BSN and higher institutions. ADN institutions report that 43.9% of full-time faculty are under age 50, while 44.9% of full-time faculty in BSN and higher institutions are under age 50. Last year's data showed a greater age range, with ADN instructors being younger. WCN 2011 report indicated that ADN institutions reported only 5.6%

of full-time faculty over the age of 60, while BSN and higher institutions reported 25.5% of full-time faculty over the age of 60. This year both report 10.5% of their faculty are over 60. The LPN numbers represent only one school.

**Figure 7. Age Distribution of Full-Time Faculty by Institution Type**



## Conclusions and Recommendations

### Key Findings

The response rate for the 2012 Wisconsin Center for Nursing Survey of Nursing Programs improved to 83%; however, some key programs were missing. Analysis and interpretation of the survey results continues to be limited by this response rate and missing data, particularly in ADN and BSN programs. This year's survey also includes very limited data on LPN programs, with only one LPN program reporting.

In contrast to the 2011 findings, there was an increase reported in the program capacity measures for ADN programs, from 1187 student admissions to 1917. This was due in part to increased reporting and should better reflect the current ADN program capacity status.

The lack of clinical sites for student placement continues to be the most commonly identified factor limiting student admissions to both ADN and BSN programs. Nearly 60% of both ADN and BSN programs report this as an area of significant challenge.

A lack of funds to hire faculty and lack of campus resources are also factors limiting admissions, especially in BSN programs, up from 11.4% in 2011 to 20% in 2012.

The diversity of the student population in Wisconsin nursing programs continues to reflect the diversity of the general population of Wisconsin. However, Wisconsin lags behind national data in the number of men in nursing programs. The NLN National Survey for the latest academic year reported that males comprised 14% and 15% of baccalaureate and ADN programs, respectively (NLN, 2014); Wisconsin continues to hover at 10%.

The diversity of the student population based on race and ethnicity is significantly greater in ADN programs, 29.6% compared to BSN programs 15.6%.

A decrease was noted in PhD student graduates, from 25 in 2010-2011 to 19 in 2011-2012, and a significant drop in new PhD student enrollment, from 36 in 2010-2011 to 7 in 2011-2012.

An increase was noted in DNP student graduates and a significant increase in new DNP student enrollment, especially in DNP/NP which increased from 69 to 722.

The gender and race and ethnicity profile for nursing faculty is very different than the profile of students. Across all programs, faculty are predominantly female (95%) and Caucasian (93.5%).

### *Recommendations*

1. Continue efforts to increase the response rate to 100%. Increasing the response rate of participating nursing education institutions will allow for clearer analysis of changes in student enrollment patterns and faculty characteristics. The data missing from the nursing programs across the state at the ADN and BSN levels continues to make interpretation of what may be emerging student enrollment patterns difficult.
2. Monitor the changes that were reported in faculty characteristics for potential impact on the delivery of nursing programs.
3. Evaluate potential strategies to address the factors limiting enrollment, especially related to limited clinical sites for pre-licensure and advanced practice nursing programs.
4. Encourage development of pathways for students from diverse backgrounds to become nursing faculty.
5. Monitor the development of relatively new educational programs, such as the DNP and CNL, that reflect preparation for emerging nursing roles.

6. Encourage and support BSN completion in Wisconsin. There appears to be an increase in the number of ADN graduates in the state; although, this could be the result of new programs or underreporting of BSN programs.
7. Continue to assess the factors that limit diversity, especially within BSN programs, and evaluate potential strategies to promote inclusion.
8. Evaluate potential strategies to address the factors limiting enrollment for male students across all nursing programs.
9. Support collaboration with workforce centers to create a standardized educational survey to improve the data reliability and help unify the national workforce data set.



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