



Wisconsin Nursing Education and Nurse Faculty: 2010 Survey Results

Susan Dean-Baar, PhD, RN, FAAN

Ann Cook, PhD, RN

Christine Laurent, MSN, RNC



Wisconsin Center for Nursing
<http://www.wicenterfornursing.org>

Executive Summary

This report presents the findings from the 2010 Survey of Nursing Programs in Wisconsin, sponsored by the Wisconsin Center for Nursing (WCN). These findings create a profile of nursing education programs at the present time and the foundation for identifying and analyzing trends over time. Surveyors identified 41 nursing education institutions at the outset and are aware of the introduction of new programs since the survey was conducted. Such growth is seen in other states and is likely to continue in Wisconsin.

Key findings in the 2010 survey include:

- Survey response rate was 70.7%
- The findings underrepresent the capacity and enrollment in Wisconsin nursing education programs because of the response rate and what appears to have been some confusion over the labels of some of the survey categories; other confounding factors included the limitations of self-reporting, absence of caps on enrollment in some programs, and competing requests to complete complicated surveys from other organizations
- Wisconsin nursing programs are preparing and graduating large numbers of nurses at the graduate and undergraduate levels, and it appears that there is currently sufficient capacity to meet demand in graduate programs
- Deans and directors identified barriers to growing nursing programs; limited clinical sites, insufficient campus resources, and lack of funds to hire faculty were named most frequently
- Institutions reported an increase in the number of faculty retirements coupled with reported growth plans for faculty
- Wisconsin nursing student demographic characteristics mirrored the population of Wisconsin as well as national distributions
- Associate degree nursing students were the most ethnically diverse of the nursing programs in the state
- Faculty demographics were not consistently reflective of the student population across programs in either gender or ethnic distribution

WCN makes the following recommendations:

- *Continue work needed to attain the desired 100% response rate*
- *Collaborate with other state and national agencies to encourage the use of the national nursing education data set*
- *Monitor barriers to nursing education programs and cooperate with appropriate constituencies to promote access to clinical sites, campus funds, and qualified faculty in sufficient numbers*
- *Monitor the impact of DNP, CNL, and other emerging nursing roles*

- *Anticipate and monitor faculty retirement trends*
- *Develop strategies to promote diversity within the nursing student and faculty populations*

Nursing education data comprise an important component of the nursing workforce picture. WCN remains firmly committed to facilitating collection and analysis of education, supply, and demand data. This and future surveys will reveal trends in all three components and must be monitored closely to derive meaningful and ongoing conclusions and recommendations.

Background

The 2010 Survey of Nursing Programs in Wisconsin is the inaugural effort by the Wisconsin Center for Nursing (WCN) to collect and analyze comprehensive data that accurately reflect the status of nursing education programs in the state. Collected on a yearly basis, these data will serve to reflect trends in student enrollment, program capacity, faculty recruitment and retention, and other important variables. 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. (2009 WISCONSIN ACT 28 Wisconsin State Statute 106.30 Nursing Workforce Survey & Grant)

National Perspective

Nurses play a key role in the delivery of safe, high quality, affordable, accessible healthcare. Nursing education programs prepare graduates at all levels to enter the nursing work force. With the advent of substantive healthcare reform and a call for radical transformation of nursing education (Benner, Sutphen, Leonard, & Day, 2010), nursing education programs across the U.S. will be required to adapt nimbly to produce graduates in sufficient number and with sufficient knowledge and skills to meet increasingly complex healthcare needs throughout the nation.

National thought leaders have called for policy that ensures an adequate, well-prepared nursing workforce and that addresses the growing specter of faculty shortages (National League for Nursing, 2011). The recently released Institute of Medicine (IOM) report, *The Future of Nursing: Leading Change, Advancing Health* (2011), endorses lifelong learning, bachelor's preparation for 80 percent of nurses, and double the number of nurses with doctorates by 2020. As Kathleen Potempa, RN, PhD, FAAN, president of the American Association of Colleges of Nursing (AACN), recently affirmed, "We know that times are tough economically, but schools of nursing--and certainly our members--are dedicated to achieving the goals for a better educated workforce at the baccalaureate level and at a higher degree level through the doctorate" (Larson, September 16, 2011).

Evidence suggests that interest at the national level among prospective nursing students remains strong. Data from the AACN reveal that "the number of completed applications to entry-level baccalaureate nursing programs almost doubled between 2004 and 2010, increasing from 122,194 to 242,013 (Larson, September 16, 2011). Questions remain, however, whether the capacity of educational programs is sufficient to accommodate the number of qualified applicants and what will be done when the burgeoning numbers of "graying" faculty retire in the near future.

Wisconsin Perspective

Past efforts in Wisconsin to systematically gather and analyze nursing workforce data, including nursing education, have been largely ineffectual. Survey response has been inconsistent, survey tools have been inadequate, and ownership of responsibility to conduct surveys has been vague. With the creation of the Wisconsin Center for Nursing in 2005, and the granting of DWD funds from nurse licensure renewal fees to support its work, the 2010 Survey of Nursing Programs in Wisconsin sets a new standard for systematic data collection and analysis. WCN cooperates closely with the Wisconsin Association Degree Nursing Education Administrators (WADNEA), the Wisconsin Association of Collegiate Schools of Nursing (WACSN), and the Wisconsin League for Nursing (WLN) to monitor the status of nursing education in Wisconsin and to anticipate, plan for, and meet the needs of students, educators, employers, and state residents.

In 2010 WCN instituted plans to lead the state's response to the 2010 IOM report and address the 12 recommendations therein. One of the IOM key messages was especially salient to the mission of the WCN: "Effective workforce planning and policy making require better data collection and an improved information infrastructure" (IOM, 2011, p.8). In 2011 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. Nursing education data from this and future surveys will be imperative to providing an accurate profile of nursing education programs in Wisconsin.

WCN is a member of the Forum of National Nursing Workforce Centers. The Forum has developed data collection instruments intended for national adoption. The Minimum Nurse Education Program Dataset was used as a template for the creation of the Wisconsin survey; as recommended by the Forum, nursing education surveys will be conducted on an annual basis.

Wisconsin is a state comprised of both rural and urban populations, large geographic area, top notch healthcare systems, ethnic and racial diversity, and an array of nursing education programs, from LPN through doctoral levels of preparation. The purpose of this survey was to determine the capacity of nursing programs in the state, describe the characteristics of nursing students and faculties, and assess the alignment of nursing programs with state demographics. There is currently no satisfactory, systematic method to evaluate either the need for additional nursing programs or the capacity of current programs. Findings from both current and subsequent surveys will provide trended data to assist policy makers, educators, prospective students, and employers to make informed decisions and rational plans regarding nursing education in Wisconsin.

Data Source

Data for this report are from the 2010 Wisconsin Center for Nursing Survey of Nursing Programs. This was the first comprehensive survey of educational programs conducted in the state of Wisconsin. The survey was distributed to the dean or director 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 a total of 41 nursing education institutions in February 2011. Three follow up requests were sent to deans and directors and two extensions to the original deadline were made to improve the response rate. Deans and directors were asked to provide data on current students and faculty as of the fall 2010 census date for their institution as well as program capacity data for academic year 2009-2010.

The overall response rate for the 2010 Survey of Nursing Programs was 70.7% with 29 of the 41 programs providing data. The programs were divided into three categories by the highest degree awarded by the institution: ADN (n=19), BSN (n=10), and graduate degree (n=12). Response rates varied by category; 13 (68.4%) of the institutions where an ADN was the highest degree awarded completed surveys, 4 (40 %) of the institutions where a BSN was the highest degree awarded completed surveys, and 12 (100%) of the institutions awarding graduate degrees completed surveys.

Caution is needed in using the data because of the overall response rate and because some institutions provided only partial data (e.g. reported pre-licensure data but not graduate data). Both faculty and student data are underreported because of the lack of data from almost 30% of the programs in the state. Data regarding students in graduate programs are the most complete.

Results

Program, Curriculum Options, and Accreditation

Table 1 describes the programs and curriculum options reported by the participating institutions in the 2010 Survey of Nursing Programs. Because only one institution reported on data for an LPN program, this report does not include an analysis of LPN student enrollment. Of the 29 programs participating in this year's survey there was an even split of programs reporting on ADN programs (n=14) and pre-licensure BSN programs (n=14).

The most common post-licensure program offered was a RN-BSN program with eleven institutions reporting offering this program to associate degree RN's returning to school. Ten institutions reported offering a master's in nursing, five offering a doctorate in nursing, and six offering certificate programs were noted. Twelve advanced practice clinical masters programs were offered with seven nurse practitioner programs, four clinical nurse specialist programs, and one nurse midwifery program. An additional twelve non-clinical track master's programs were identified with seven nurse educator programs and five nurse leadership/management programs noted with two of these reporting a MSN/MBA program also available. In addition two institutions reported data on master's level clinical nurse leader programs. Five institutions reported offering doctoral programs in nursing with three programs offering both a PhD and a DNP and two programs offering a DNP.

Table 1. Programs and Curriculum Options Reported by Respondents in 2010

	Number of Responses
Pre-licensure Programs	
LPN Programs	1
Generic/Traditional Curriculum	1
ADN Programs	14
Generic /Traditional Curriculum	14
Bridge Curriculum	7
Pre-licensure BSN Programs	14
Generic /Traditional Curriculum	14
2 nd Degree Curriculum	3
Pre-licensure MSN Programs	2
Post-licensure and Certificate Programs	
RN-BSN Program (Post-licensure)	11
MSN Programs	12
Nurse Practitioner (NP) Curriculum	8
Clinical Nurse Specialist (CNS) Curriculum	5
Nurse Midwifery Curriculum	1
Nurse Educator Curriculum	7
Leadership/Management Curriculum	5
Clinical Nurse Leader Curriculum	2
Doctoral Programs	5
PhD Curriculum	3
DNP Curriculum	5
Certificate Programs	6
Nurse Educator	4
Nurse Practitioner	2
CNS/MSN to NP	3
NP to CNS	1
Other	2

All institutions responding to the 2010 Survey of Nursing Programs that were eligible for accreditation reported that they were accredited. All of the ADN programs reported accreditation through the National League for Nursing Accrediting Commission (NLNAC) and all but two baccalaureate or higher degree institutions reported accreditation through the Commission on Collegiate Nursing Education (CCNE) (Table 2). One baccalaureate and higher degree program reported NLNAC accreditation and one program is in the accreditation application process.

Table 2. Accreditation Status in 2010 by Program Type

Accreditation Status	ADN N (%)	BSN N(%)	Pre-licensure MSN N(%)
Not accredited		1 (6.3%)	
Accredited by NLNAC and/or CCNE	14 (100%)	15 (93.8%)	2 (100%)
Accreditation Type			
NLNAC accredited	14 (100%)	1 (6.3%)	
CCNE accredited		14 (87.5%)	2 (100%)

Program Capacity

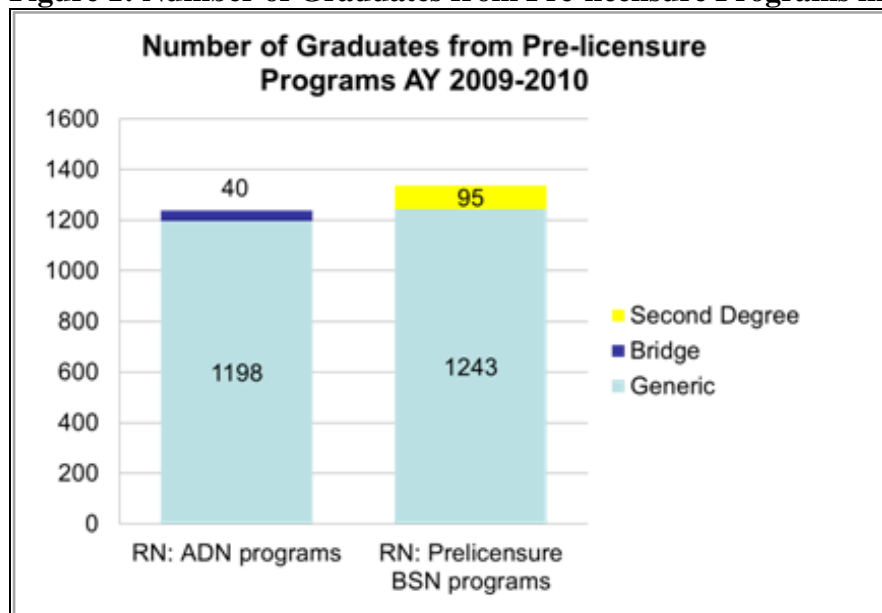
Table 3 depicts the capacity of various types of pre-licensure nursing education programs in the academic year 2009-2010. In all cases the reported number of available student seats was less than the number of qualified applicants, the number of qualified applicants was greater than the number of students admitted, and the number of students admitted was greater than the number of students who actually enrolled. Applicants to associate degree and baccalaureate nursing were similar in number. However, the percent of rejected applications for associate degree programs (60.5%) was far greater than the percent rejected from baccalaureate programs (38.1%). In total, there were 7571 qualified applicants to pre-licensure programs, while fewer than half (3172) of those entered as new enrollees. One explanation is that students apply to multiple programs. The number of new enrollees to ADN and ADN bridge programs was less than the number of available student seats reported. It is not clear what factors contribute to this. A different picture emerges with the BSN generic programs where more students enrolled as new BSN generic students than there were reported seats available; accounting for this fact is that some programs reported no limit on the number of possible admissions. In the future, it is anticipated that the number of BSN second degree and pre-licensure master's students may grow as these programs expand.

Table 3. Program Capacity Measures for Pre-licensure Programs, AY 2009-2010

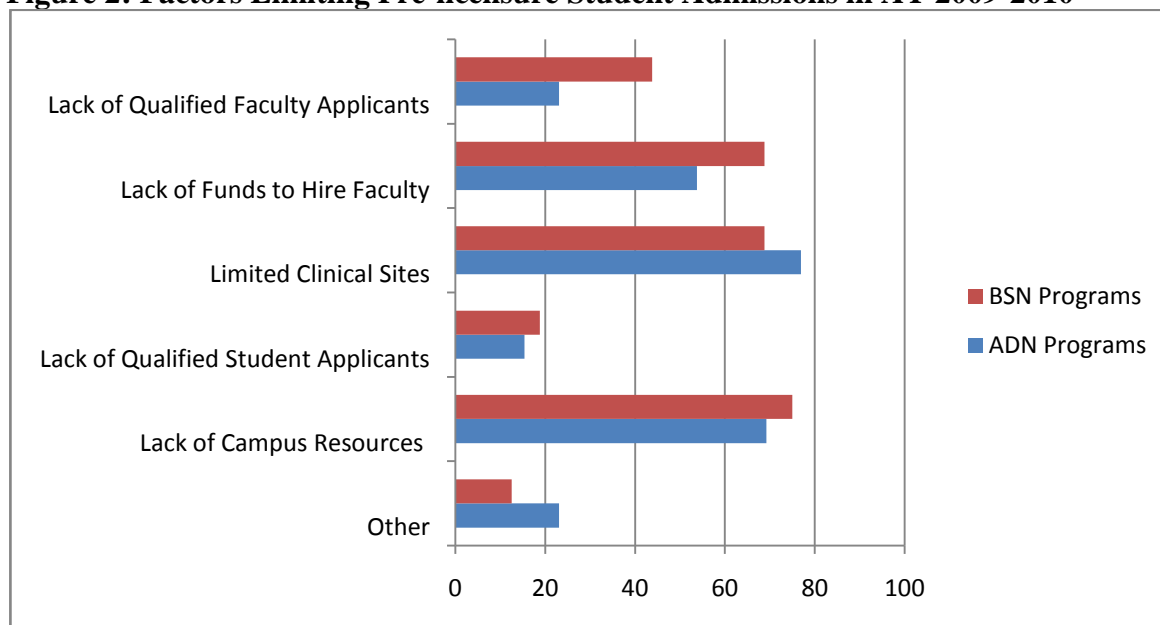
	ADN Generic	ADN Bridge	BSN Generic	BSN 2nd Degree	Pre- licensure Master's
# of QUALIFIED applicants	3749	157	3407	240	18
# of student SEATS	1613	111	1133	99	16
# of students ADMITTED	1480	103	2144	132	15
# of rejected applications	2269	54	1263	108	3
% of rejected applications	60.5%	34.4%	38.1%	45.0%	16.7%
# of NEW enrollees	1388	100	1574	99	11
# of SEATS left VACANT	225	11	-441*	0	5

* Some schools reported having no limit on # of seats

Figure 1 shows that there were 2576 graduates from pre-licensure programs during the AY 2009-2010. Slightly over 48% of these new graduates were from ADN programs, the remaining 52% were from BSN programs. Nearly 95% of graduates were from generic/traditional programs, while 1.6% of the students were from ADN bridge programs with 3.7% from BSN second degree programs.

Figure 1: Number of Graduates from Pre-licensure Programs in AY 2009-2010

Deans and Directors of nursing programs provided information related to the factors limiting pre-licensure student admissions in AY 2009-2010, shown in Figure 2. Limited clinical sites, lack of campus resources, and lack of funds to hire faculty were listed as the most problematic issues. Seventy-five percent of BSN programs reported lack of campus resources as compared to 69% of ADN programs. Seventy-seven percent of ADN programs reported limited clinical sites, as compared to 69% of BSN programs. Lack of funds to hire faculty was ranked 3rd most problematic issue for 54% of ADN programs and 69% of BSN programs. Lack of qualified faculty applicants was listed as the 4th most problematic issue by 23% of ADN programs and 44% of BSN programs. Lack of qualified student applicants were listed by 15% of ADN programs and 19% of BSN programs. Finally, two of the ADN programs listed reaching program capacity as a factor limiting student admissions while one listed a lack of RN positions in the area.

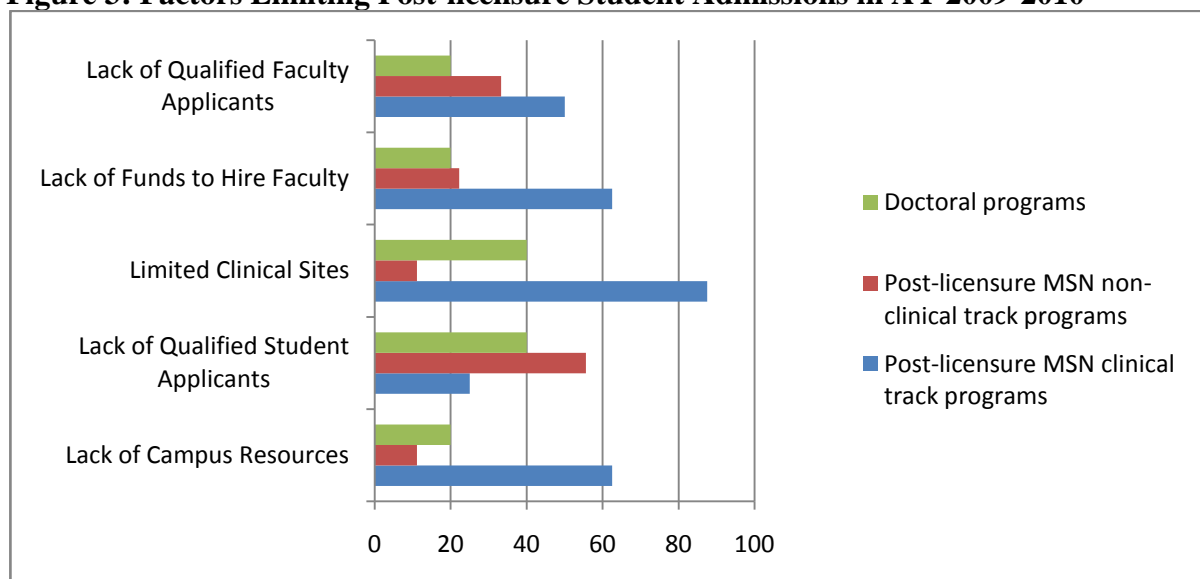
Figure 2: Factors Limiting Pre-licensure Student Admissions in AY 2009-2010

In Table 4, survey findings indicated that RN to BSN programs had slightly greater capacity than the number of candidates applying and enrolling; only 1.9% of RN to BSN applicants were rejected. With the call from the Institute of Medicine (2011) to increase the number of baccalaureate-prepared nurses to 80% by 2020, applications to RN to BSN programs are anticipated to increase. The question is whether programs will be able to increase their capacity concurrently. Most types of master's programs appeared to have greater capacity than numbers of students enrolling (e.g., CNM, CNL, and CNS). Applications to and enrollment in NP programs were high; future numbers will likely be complicated by the transition from master's to doctoral level of preparation for advance practice nurses (NPs, CNSs). Responses for the category Other Post-licensure Clinical Programs may be obfuscated by the fact that there are some institutions in the state providing combination-type masters programs (e.g., clinical nurse specialist plus educator). Future surveys will need to be explicitly clear in this regard. Nurse educator enrollment was at less than capacity; the ability to meet growing faculty needs may come into question. PhD and DNP enrollments were low in number but at current capacity. All areas of post-licensure education are likely to be affected as individuals and programs respond to recommendations from the IOM report (2011). Since these findings are derived from self-reported data, interpretation should be done cautiously. Of special concern is the number of student seats; some institutions have no caps on enrollment, and in other cases it is possible that those numbers were underreported.

Table 4. Program Capacity Measures for Post-licensure Programs, AY 2009-2010

	RN-BSN	CNS	CNM	NP	CNL	Clinical Other	Nurse Educator	Leadership/Management	PhD	DNP
# of QUALIFIED applicants	623	4	4	206	6	175	76	29	20	80
# of student SEATS	340	25	8	165	27	154	121	20	20	72
# of students ADMITTED	611	3	4	181	6	133	75	29	18	77
# rejected applications	12	1	0	25	0	42	1	0	2	3
% rejected applications	1.9%	25.0 %	0	12.1 %	0	24.0%	1.3%	0	10.0 %	3.8%
# of NEW enrollees	506	3	1	129	3	63	47	9	16	51
# of students GRADUATED	285	11	2	140	9	38	39	20	29	10

Deans and directors of nursing programs were asked to provide factors related to limiting post-licensure student admissions (Figure 3) and these are similar to those factors reported for the pre-licensure programs. The most problematic issue for MSN clinical track programs is limited clinical sites (88%). Lack of funds to hire faculty (63%) and lack of campus resources (63%) were also reported by the MSN clinical track programs. Doctoral programs reported limited clinical sites (40%) and lack of qualified student applicants (40%) as barriers to program expansion. By comparison, a lack of qualified student applicants was more of an issue for the post-licensure programs than the pre-licensure ones.

Figure 3: Factors Limiting Post-licensure Student Admissions in AY 2009-2010

As displayed in Table 5, there were 8818 students enrolled in undergraduate nursing programs in 2010, ranging from associate degree to baccalaureate degree and also including pre-licensure master's students and RN to BSN enrollees. Licensed practical nurse (LPN) enrollment data were not reported here because of insufficient survey response. A total of 1260 students in graduate nursing programs (master's and doctoral) were enrolled as well. The nurse educator track accounted for 12.9% of master's students,

but this number was nearly equivalent to those enrolled in non-specific clinical master's tracks (13.6%). Nurse practitioners comprised by far the largest proportion of master's enrollees (56.9%). PhD students outnumbered DNP students (59.4% to 40.5%). It remains to be seen whether these enrollments are sufficient in number and curriculum track to meet anticipated nursing needs in Wisconsin, from direct patient care to nurse faculty, administrative, and investigator roles, from inpatient to ambulatory care and community settings, and from urban to rural locales.

Table 5. Enrollment of Students by Curriculum Track, 2010

Curriculum Track	Enrollment Fall 2010	Curriculum Track	Enrollment on Fall 2010
Generic/traditional ADN	3131	MSN: CNS	70
Bridge ADN	65	MSN: CNM	26
Total ADN	3196	MSN: NP	573
Generic/traditional BSN	4393	MSN: Nurse anesthetist	0
2 nd degree BSN	171	MSN: CNL	11
Total pre-licensure BSN	4564	MSN: Nurse educator	130
Pre-licensure MSN	20	MSN: Management/leadership	56
RN to BSN	1038	MSN: other post-licensure clinical	137
		MSN: other post-licensure non-clinical	3
		Total MSN	1006
		Doctoral: PhD	151
		Doctoral: DNP	103
		Doctoral: Other	0
		Total Doctoral	254

Student Profile

Figure 4 shows the race and ethnicity of nursing students by program. According to the 2010 census, Wisconsin's population is 86.2% white (U.S. Census Bureau, 2011b) which closely approximates the racial and ethnic makeup of the students in all nursing programs except the doctoral programs (77.17%). It is important to note that 5.12% of doctoral students were reported as "other" and 7.1% were reported as "unknown" race and ethnicity. ADN programs had 7% Black/African American students which is somewhat higher than the state, reported at 6.3% (U.S. Census Bureau, 2011b). RN-BSN and doctoral programs had slightly less numbers of Black students at about 5% each, with even fewer numbers in pre-licensure BSN (3.12%) and MSN programs (2.41%). Wisconsin reported 5.9% of its population is Hispanic (U.S. Census Bureau, 2011b); of the Wisconsin nursing programs, the pre-licensure programs came closest to this percentage, reporting 4.5% of their students as being Hispanic. The Wisconsin ADN programs had far fewer numbers of Asian students (0.7%) than the state population (2.3%); however, the RN-BSN (2.4%), MSN (2.51%), and Doctoral programs (2.76%) closely approximated the state data, with the pre-licensure programs exceeding those numbers (3.9%). American Indian and Alaskan Natives were underrepresented across Wisconsin nursing programs when compared to the 1% that makes up the Wisconsin population (U.S. Census Bureau, 2011b), with doctoral nursing programs reporting the highest percentage of this group at 0.79%. Wisconsin does not report a figure for Native Hawaiian and Other Pacific Islanders, but three of the Wisconsin nursing programs (ADN, Pre-licensure BSN, and RN-BSN) report numbers of students that closely approximated the 0.2% reported for the nation as a whole (U.S. Census Bureau, 2011a).

It is important to note that significant numbers (9.83%) of nursing students were reported as "unknown" in the MSN programs. The U.S. census data offers a category "Persons Reporting Two or More Races" which accounts for nearly 2% of the state and 3% of the U.S. population (U.S. Census Bureau, 2011a; 2011b). It is possible that in the future there will need to be similar reporting categories for the Wisconsin Center for Nursing Survey of Nursing Programs to best reflect the state's ethnicity. The National League for Nursing (NLN, 2008) reported national data that reveal slow but steady increases in numbers of nursing students who were members of racial or ethnic minorities across pre-licensure programs. It will be interesting to track Wisconsin race and ethnicity data to see if future surveys reveal similar trends.

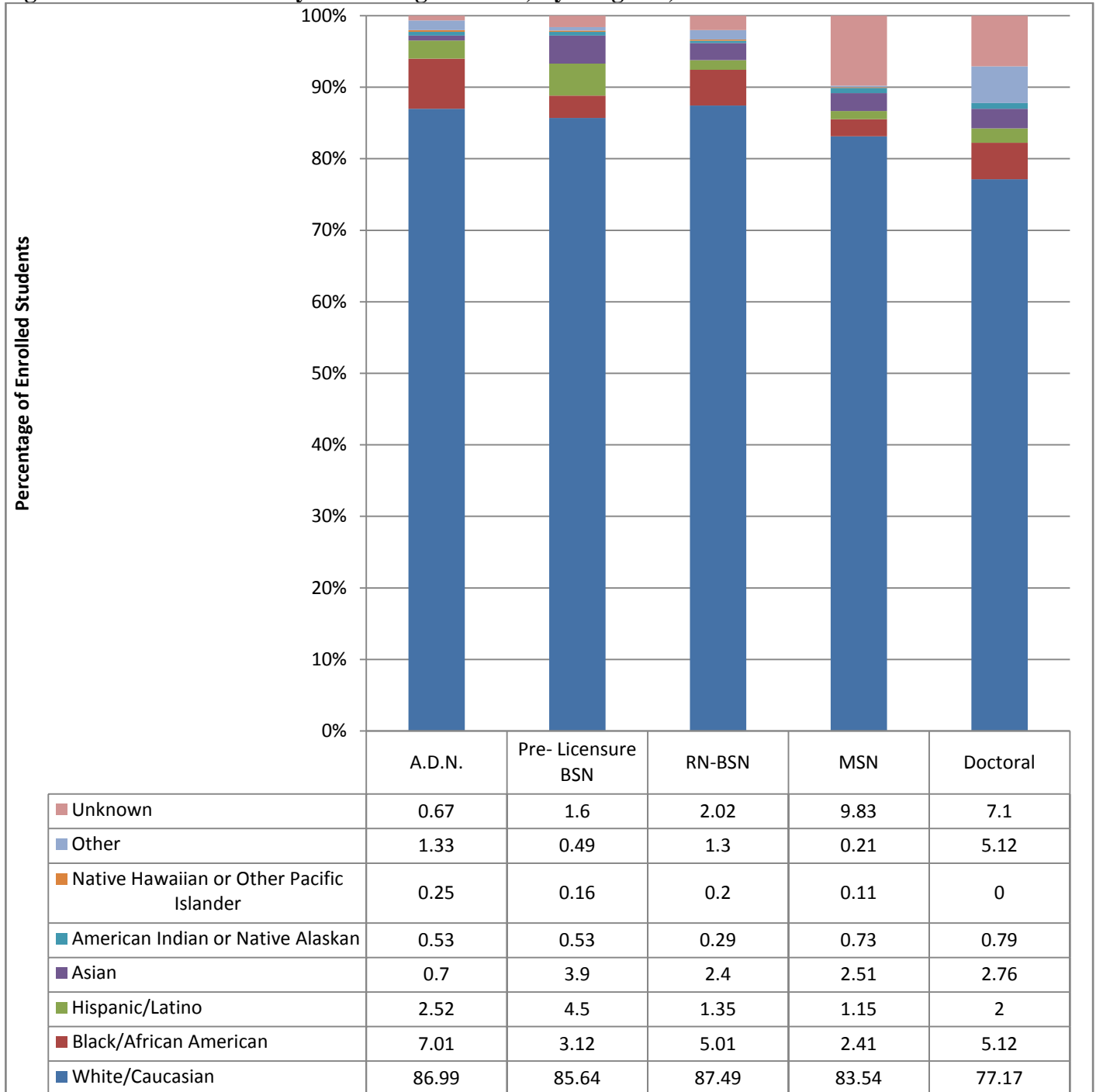
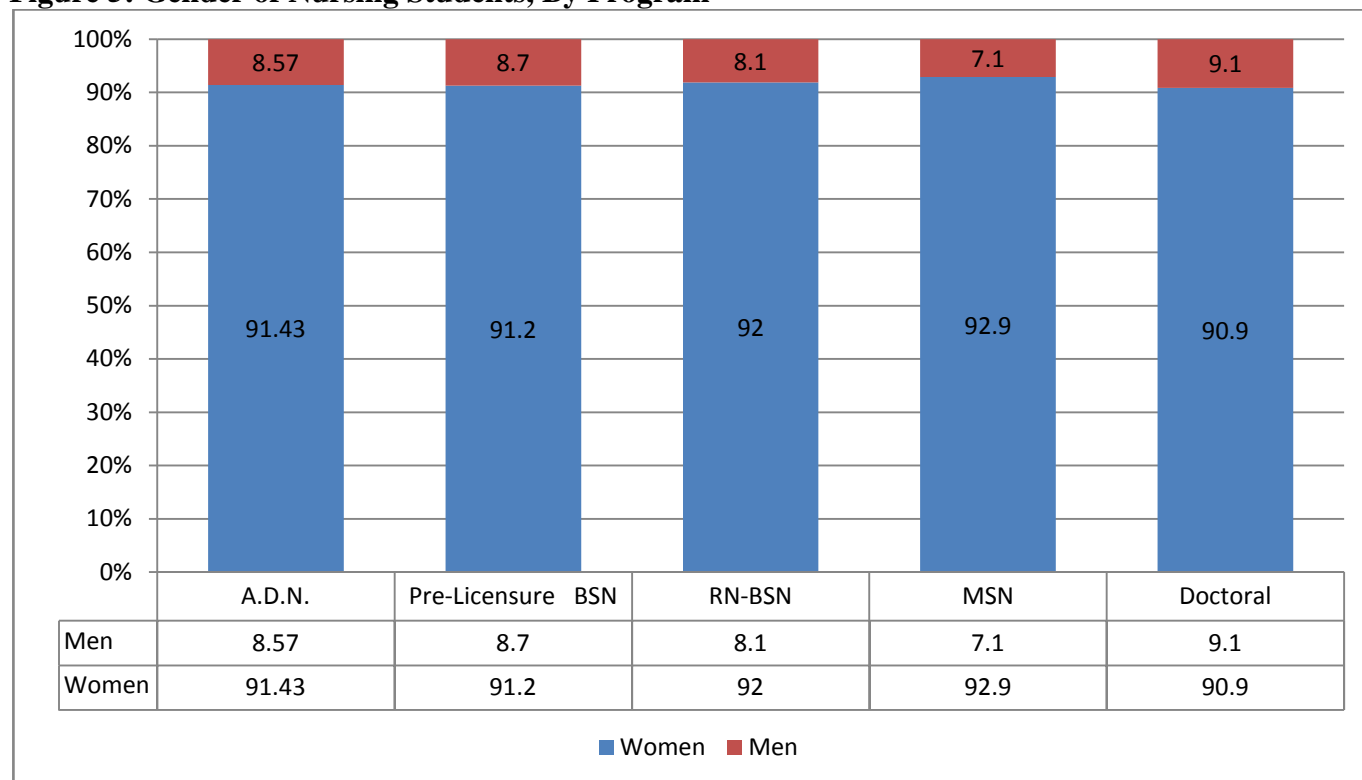
Figure 4: Race and Ethnicity of Nursing Students, By Program, AY 2009-2010

Figure 5 shows that Wisconsin nursing students were predominately female across programs. MSN programs reported the smallest numbers of male students (7.1%) while doctoral programs reported the largest numbers of male students (9.1%). The NLN survey for the 2009-2010 academic year reported that nationally pre-licensure programs are made up of 13% males (NLN, 2011); the WCN data indicate that Wisconsin has room for improvement there.

Figure 5: Gender of Nursing Students, By Program



Faculty Information

The 2010 Survey of Nursing Programs asked institutions to report on the number of full and part time faculty as well as other faculty position related information and faculty characteristics to begin to build a profile on nursing faculty in Wisconsin. This information will provide baseline data that will be used to track trends over time. In the fall term of 2009-2010 the 29 institutions completing the survey reported a total of 562 full-time and 339 part-time faculty (Table 6). Programs were categorized by the highest degree they offered and are reported as ADN institutions (n=13) and BSN and higher institutions (n=16). ADN institutions reported that 81.4% of faculty were full time, while BSN and higher institutions reported only 52% of faculty being employed full time.

Table 6. Filled and Vacant Faculty Positions by Institution Type

Institution Type	Filled Faculty Positions		Vacant Faculty Positions	
	Full-time	Part-time	Full-time	Part-time
ADN	258	59	2	2
BSN and higher	304	280	33	4
Totals	562	339	35	6

The vacancy rate for full time faculty in BSN and higher institutions was 9.8% compared with a much lower full time vacancy rate in ADN institutions of 0.8%. The overall vacancy rate across all institutions and full and part time positions was 4.4%.

Institutions were also asked to report the number of additional full time faculty positions they would add if funding were available. ADN institutions reported an additional 14 positions would be added and BSN and higher institutions reported an additional 45 positions would be added. Vacancy rates that incorporate the perceived need for faculty as well as current actual vacant positions showed a very different picture. When perceived need for additional full time faculty positions were combined with current actual vacant full time positions, the vacancy rates increased to 5.8% for ADN institutions and to 20.4% for BSN and higher institutions.

ADN programs had 10.41 students per full-time faculty member, and BSN programs had 17.5 students per full-time faculty member. This result needs to be interpreted cautiously since the survey did not ask for the faculty FTE in each institution and there are significantly more part-time faculty in BSN and higher programs. A student to faculty FTE ratio might provide a more meaningful comparison. In the future, the ratios will be impacted by alterations in faculty vacancies and student enrollments in nursing programs.

Institutions were asked to report on the new faculty hired in 2009-2010 (Table 7). Two-thirds of new hires in both ADN and BSN and higher programs were part-time faculty. Very different profiles emerged for the length of time needed to fill vacant positions in ADN and BSN and higher programs. The average length of time to fill a full time position in an ADN institution was 6.7 weeks compared to more than four months in BSN and higher programs. Differences were also noted in the average time to fill part time positions with ADN positions filled in less than three weeks while BSN and higher positions required ten weeks.

Table 7. New Faculty Hired in Academic Year 2009-2010, by Institution Type

Institution Type	Number of New Faculty Hired		Average Weeks to Fill Faculty Vacancies	
	Full-time	Part-time	Full-time	Part-time
ADN	11	22	6.7	2.8
BSN and higher	34	79	17.7	10.1
Totals	45	101	12.2	6.5

The survey also asked for information on the number of full time faculty leaving their position for any reason during the 2009-2010 year. A total of 69 full time faculty were reported to have left positions with the majority of separations reported in the BSN and higher programs (52). The turnover rate was 12.3%

across all programs and was lower for ADN programs (6.6%) than BSN and higher programs (17.1%)¹. Retirement was the reason for separation for 16 of these faculty. Institutions reported that they anticipate 143 retirements over the next five years. BSN and higher programs anticipate 84 retirements over this time period and ADN programs report slightly less with 59 anticipated retirements. The number of anticipated retirements compared to actual retirements in 2009-2010 suggests that the rate of annual retirements will be accelerating over the next few years.

The education distribution for faculty member employed in the fall of 2010 is described in Table 8. Significantly more full-time faculty were prepared at the doctoral level in BSN and higher programs (48.3%) than in ADN programs (5.8%). In ADN programs the majority of full-time faculty were prepared at the master's level (78.8%). For part-time faculty the majority were prepared at the master's level in both ADN (79.7%) and BSN and higher programs (82.7%)

Table 8. Full and Part-time Faculty Education Distribution, by Institution Type

	ADN Institutions	BSN + Institutions
Full-time Faculty	%	%
Doctorate in Nursing	2.6	36.8
Non-nursing Doctorate	3.2	11.5
Masters in Nursing	78.8	49.7
Non-nursing Masters	0	0.7
Bachelors in Nursing	15.4	1.3
Non-nursing Bachelors	0	0
Diploma or AS in Nursing	0	0
Part-time/Adjunct Faculty	%	%
Doctorate in Nursing	0	8.8
Non-nursing Doctorate	0	3.4
Masters in Nursing	78.1	80.8
Non-nursing Masters	1.6	1.9
Bachelors in Nursing	18.8	5.0
Non-nursing Bachelors	0	0
Diploma or AS in Nursing	1.6	0

The race and ethnicity of faculty across programs is different than the profile of students and the state of Wisconsin with 94.5% of faculty reported as white, 3.5% Black/African-American, and less than 1% in any of the other categories. Figure 6 shows the age distributions of Wisconsin full-time nursing faculty by program type. It can be seen that 38.49% of BSN and higher institutions had faculty age 56 or more, as compared to the ADN institutions that had only slightly more than 24% of their faculty that age. This is likely to mean that BSN and higher institutions will experience more faculty retirements in the near future with fewer numbers of younger faculty to replace them.

¹ Turnover rate was computed as (#of AY 2009-2010 separations/# of filled positions as of fall 2010)*100.

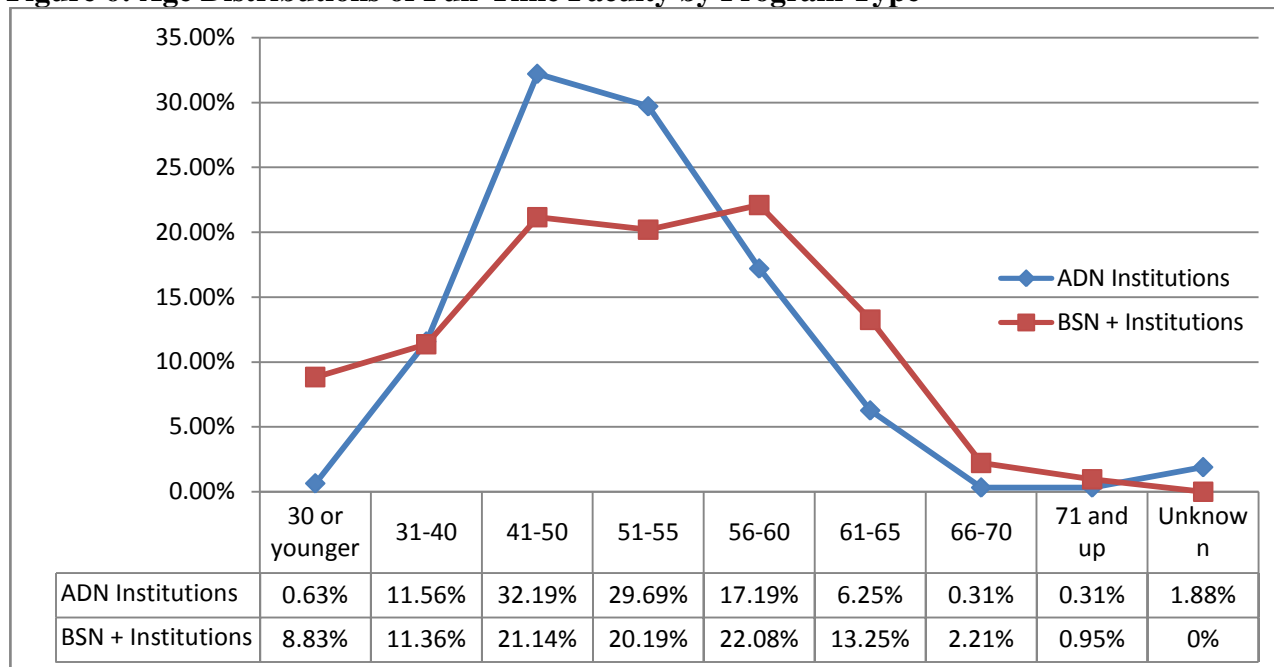
Figure 6: Age Distributions of Full-Time Faculty by Program Type

Table 9 shows the number of full-time and part-time budgeted faculty positions that are anticipated to be added over the next two years. It is projected that a total of 77 positions will be added over the next two years. The greatest growth is anticipated in BSN and higher programs. The full-time positions that are expected were less than the number of positions described earlier that institutions reported were needed to meet current student needs.

Table 9. New Faculty Positions Expected Over Next Two Academic Years

	ADN Institutions	BSN + Institutions
New Full-time Positions Expected	5	36
New Part-time Positions Expected	6	30
Total New Faculty Members Needed	11	66
% Growth Over Current Positions	3.5%	11.3%

Conclusions and Recommendations

The 2010 Survey of Nursing Programs has proven to be a strong first attempt at assessing the status of nursing education in the state. Continued work is needed, however, to attain the desired 100% response rate. It is clear there is confusion around the naming of some of the survey categories, such as the CNS-nurse educator combination offered by some programs but which is not adequately captured in the response choices presented. The 2011 survey instrument needs to be designed to reduce this confusion. Moreover, while few would likely argue the importance of nursing education data collection and analysis for Wisconsin programs, it is equally likely there is a fair amount of “survey fatigue” for deans, directors, or other administrative personnel encumbered with completing multiple similar surveys each year for various constituencies. WCN should work with other state and national agencies to encourage the use of the national nursing education data set, the benefits of which include increased consistency and decreased reporting burden.

Findings for Licensed Practical Nurse (LPN) programs were not included here because only one institution reported data. It will be imperative in future surveys to attain optimum responses for LPN programs so that a complete picture of the status of nursing education for all levels of programs can be compiled.

Findings show that Wisconsin nursing programs are preparing and graduating large numbers of nurses at the graduate and undergraduate levels, and it appears that there is currently sufficient capacity to meet demand in graduate programs. There are more qualified applicants than seats in the pre-licensure programs. However both graduate and pre-licensure student capacity data needs to be analyzed in the context of employer demand in order to determine the degree to which capacity needs to be increased in each type of programs. The survey tool itself followed the recommendations of the National Nursing Workforce Minimum Datasets: Education (Forum of State Nursing Workforce Centers, 2009), however as indicated above, there are areas for improvement in the labeling of categories that would reduce confusion while capturing the variety of programs. Because some institutions place no upper limits on their enrollments, program capacity must be interpreted critically.

Barriers to growing nursing programs were identified, and these were problematic. Concerted, creative efforts are needed to increase the availability of clinical sites, improve and expand campus resources, and assure the ability to hire faculty in order to meet current and future healthcare needs of the citizens of Wisconsin.

It is anticipated that more baccalaureate and doctorally prepared nurses will be needed in the state. The capacity to educate these nurses currently exists. What is not known is future need. It is also unclear what the effect of emerging nursing roles and preparations, such as the Doctorate of Nursing Practice (DNP) and Clinical Nurse Leader (CNL), will be on existing master's prepared nurses. Neither is it known precisely what the field will require, i.e., what will be the most appropriate mix of nurses prepared at what level to meet what needs?

Institutions reported an increase in the number of faculty retirements. These figures coincided with reported growth plans for faculty. It will be very important to monitor these trends to assure sufficient numbers of appropriately prepared nursing faculty, especially in light of data that showed institutions struggling financially to fill those faculty positions at present.

Wisconsin nursing student demographic characteristics mirrored the population of Wisconsin as well as national distributions. Associate degree nursing students were the most ethnically diverse of the nursing programs in the state. However, faculty demographics are not consistently reflective of the student population across programs in either gender or ethnic distribution. Efforts must continue to increase the diversity of Wisconsin nursing students and nursing faculty and to guarantee student to nursing education pathways.

Nursing education data comprise an important component of the nursing workforce picture. WCN remains firmly committed to facilitating collection and analysis of education, supply, and demand data. This and future surveys will reveal trends in all three components and must be monitored closely to derive meaningful and ongoing conclusions and recommendations.

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