

Wisconsin

LPN Workforce Survey 2015 Report



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WCN greatly appreciates the dedicated volunteer researcher, Josie Veal PhD., RN, APNP, Associate Dean, Milwaukee Area Technical College, School of Health Sciences, and the contributions of her institution, Milwaukee Area Technical College, and statistician Jeffrey B. Henriques, PhD, Department of Psychology, University of Wisconsin, Madison.

Their work on this critical report provides comprehensive information on the status of the LPN workforce in Wisconsin and recommends strategies to address future nursing shortages.

Many partner organizations provided expertise in the design, development and delivery of the survey. In particular, the work being done by members of the Data Collaborative of the Wisconsin Council on Medical Education & Workforce (WCMEW), was not only instrumental to the creation of the original survey design in 2011, but also resulted in improvements to the *2015 Wisconsin LPN Survey*.

We are grateful to the Wisconsin Department of Safety and Professional Services for making the survey accessible to the thousands of LPNs in our state, and the Wisconsin Department of Workforce Development, without whose assistance, our work would not be possible. We also wish to thank Wisconsin LPNs for completing the survey, and the care they provide to patients and their families.

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.

Thank you,

Pat Keller, MSN, RN, NEA-BC
President – WCN Board of Directors

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Executive Summary

Wisconsin nurses are required by state legislature (Chapter 106.30) to complete biennial license renewal along with the mandatory completion of the Wisconsin LPN Workforce Survey. The Wisconsin Department of Workforce Development constructed and collected the data, since 2011. All participants were provided with the purpose, methodology, and given the option to complete the survey electronically or by paper format. The total responses from both formats included 12,987 nurses. After data cleaning using exclusionary criteria, the results summarized are based on 11, 158 online responses.

Section I: Introduction

Data from the 2015 Nursing Workforce survey were analyzed.

Section II: State Data Key Findings

Demographics

- There was a slight increase in the percentage of males, nurses' proficiency in another language, and the number of Hispanic, Latino or Spanish nurses. The workforce remains predominately female.
- Largest group practicing LPNs are between the ages of 55 to 64 years old, mean age is 49 years
- Highest reported languages, other than English are Spanish and American Sign Language
- Wisconsin (2014) census data mirror image the population of licensed practical nurses practicing within the nursing workforce

Recommendations

- Collaboration efforts for recruitment and retention strategies should include professional diverse nursing organizations and partnerships with the American Assembly of Men in Nursing.
- Healthcare and educational systems are encouraged to offer opportunities for LPNs to learn and enhance their language proficiency within a healthcare context.
- Policy makers and nursing organizations should continue ongoing monitoring of state trends within the nursing workforce to better prepare for workforce funding, identification of workforce gaps and highlight the need for a diverse pipeline of licensed practical nurses.

Licensure & Education

- Rolling total of eligible first time candidates for Wisconsin board approved LPN programs have declined from 2012 (21,883) to 2nd quarter 2014 (11,190).
- In 2013 and 2015, consistently 23% of the LPN workforce has indicated a plan to pursue further nursing education within two years. However, the highest ranked barriers to pursuing education are cost of lost work and benefits and cost of tuition, materials, and books.
- The highest degree earned for Wisconsin LPNs, is the diploma in nursing ($n= 10,506, 94.2\%$).

- The workforce data from 2011 to 2015, indicate a decline in the number of LPNs that enrolled in associate degree programs.

Recommendations

- Research is needed within the WCTS system to identify trends and correlations among associate degree nursing program students, who are eligible to sit for the LPN licensure exam after the first year of technical courses. This research is helpful to identify the students who sit for the LPN licensure exam and beginning practice as a LPN and determine the timing in continuation of the RN degree.
- Policy makers, nurse leaders, and interdisciplinary health care teams should closely monitor the number of initial and renewal licensure for the LPN population to ensure a viable supply of LPNs within the nursing workforce.
- Explore bridge programs, which lead to the LPN credential for students currently enrolled in health care certificate programs.
- Identify a regional and/or statewide strategy to increase awareness of nursing career opportunities for the license practical nurse.
- Consider online methodology for the theory component of the curriculum; this may benefit working adults and individuals in rural areas in Wisconsin. Create seamless articulation agreements (general education requirements) among schools that do offer the practical nursing program. Ensure that these agreements are visible to potential students within the state.
- Develop and measure the longitudinal effectiveness of funding strategies across multiple entities (state, local, healthcare and educational systems) to reduce barriers to educational attainment.
- Collaborate with economist and business professionals in healthcare to identify the best economical practices for increasing the population of LPNs in the nursing workforce.
- Partner with public and private educational institutions, to develop shared curriculums for general education credits for high schools with existing science, technology, engineering, math (STEM) program and/or health based programs, such as nursing assistant.

Employment

- The Wisconsin LPN workforce hourly wage for 75% of the sample ranged from \$14.75 to \$23.99.
- 2013 and 2015, seventy five percent of Wisconsin licensed practical nurses are actively working as a nurse.
- There was an increase in the percentage of retired licensed practical nurses, between 2013 and 2015. During 2012-2014, a progressive decline exists for the number of newly licensed nurses.
- The three most significant factors for career decisions were: level of personal satisfaction/collegial relationship (22.4%), family/personal issues, and pay (13.8%).

- 56% of LPNs plan to work in their present employment on average for the next 10 to 19 years. These nurses have approximately 9.78 years in their current primary position with an average of 18.39 years of experience.
- The primary function for 85% of LPNs is providing direct patient care (DPC). The LPN average number of years providing DPC is 16.7 years. However, over the next 10 years, approximately 49% of these nurses will leave the bedside providing direct primary care.
- In 2013 and 2015 the majority of LPNs reported geriatric and/or gerontology specialization (48%).
- 30% of unemployed LPNs plan to seek or return to nursing employment while 51% of unemployed nurses were undecided regarding their intentions for employment.

Recommendations

- Retain and hire LPNs, by offering compensation factors that mirror those valued by this population.
 - Job promotion
 - Flexible Hours
 - Compensation/Flex Time offered for education advancement
- Develop collaboration agreements with accredited LPN programs to offer instruction of curriculum and clinical components on site for hospital employees.
- Prepare a highly skilled and trained LPN workforce and augment hands on development of nursing skills in educational programs. Consider non-traditional clinical settings, in addition to the traditional long term care settings
- Influence the culture within the workplace by identifying unique characteristics of the LPN population at the organizational level. LPNs identified career decisions based on satisfaction with these factors: level of personal satisfaction, collegial relationship, family/personal issues and pay.
- Gather key healthcare, economist, and policy experts, to develop a Wisconsin statewide multiregional forecast model to predict supply and demand regionally and statewide (Bienemy, 2015).

Section III: DHS Regional Data Key Findings

Demographics

- Median age is lowest in the southern and northeast regions (47 years) and highest in the western region (52 years).
- The northeast region has the highest percent of females (95.8%) and the western region has the highest percentage of males (6.8%).
- Language proficiency is highest in the southeast region (10.2%) and lowest in the northern region (5.3%).
- In 2013 and 2015, the percentages of Black or African American (17.6%) and Hispanic/Latino, or Spanish ethnicity were highest in the southeastern region (3.7%).

Employment

- Across each region, over 92% of the nurses work as an LPN, while statewide only 75% of these nurses work as an LPN.
- Nurses living in the northeast region reported the lowest percentage of retirements (0.4%). Unemployment rates for nurses seeking employment are >1% across the regions and 3% statewide. Statewide, 6.3% are unemployed and 7% are retired.
- Statewide, LPNs have provided an average of 16.7 years of direct patient care; however the Northern region has the average time for LPNs providing direct patient care as 17.7 years. Statewide and across each region, over 80% of all LPNs provide direct patient care.
- The primary work settings for LPNs in Wisconsin are extended care and ambulatory care

Education

- The highest percentage of enrollment in associate degree nursing programs is in the southern region (13.9%) and the highest enrollment in bachelor of nursing programs is in the southeast region (2.3%). Statewide, 22.7% of LPN plan to pursue further education in nursing by 2017.
- LPNs planning to enroll in further education in the next two years vary from 21.5% in the northern region to 27% in the southeast region.

Section IV: Emergency Preparedness Key Findings

- In Wisconsin, 65% of LPN have received training in emergency preparedness training.
- Statewide, there is <1% LPN membership in the Medical Reserve Corps (MRC) and Wisconsin Emergency Assistance Registry is voluntary

I. Introduction

It remains critical that the nursing workforce in Wisconsin meet the needs of health consumers across the state at multiple levels within the health care delivery system. The Affordable Care Act provision for access to care for all Americans has significant implications in regards to the need for healthcare professionals. The licensed practical nurse (LPN) has a role in caring for clients; and thus there is projected career growth of 25%, according to the Bureau of Labor Statistics (2014). The LPN is needed to assist with implementation of health care reform, decreasing health care disparities, and addressing the care needs of clients in urban, metropolitan and rural areas.

Wisconsin nurses are required by state legislature (Chapter 106.30) to complete biennial license renewal along with the mandatory completion of the Wisconsin LPN Workforce Survey. The Wisconsin Department of Workforce Development constructed and collects the data, since 2011. Through collaboration with the Wisconsin Center for Nursing, key questions, analysis and recommendations for pertinent nursing workforce information are developed and disseminated.

The Wisconsin Center for Nursing sponsored this analysis in partnership with the State of Wisconsin Department of Workforce Development (DWD). This study was reviewed and granted exempt status by the Milwaukee Area Technical College Institutional Review Board.

A. Data Management

Sample & Method

The sample was compromised of nurses who completed the 2015 Wisconsin Licensed Workforce Survey and renewed their license in 2015. All participants were provided with the purpose, methodology, and given the option to complete the survey electronically or by paper format. The total responses from both formats included 12,987 nurses. After data cleaning using exclusionary criteria, the results summarized are based on 11, 158 responses. Experts from nursing organizations and members of the Wisconsin Healthcare Workforce Development contributed to the survey design. The 53-item instrument collected data regarding licensing, education, training, employment, and future educational goals. The survey is inclusive of components of the National Nursing Workforce Minimum Forum of State Nursing Workforce Centers (nursingworkforcecenters.org).

Data Cleaning

This report was a study of the LPN workforce in Wisconsin, which is inclusive of LPNs living and working in Wisconsin and LPNs who maintain licensure in Wisconsin. To strengthen the validity of the data analyzed, the following exclusion criteria was utilized for this data set: LPN's who a) did not work or live in Wisconsin; b) report LPN prior to first degree or certification; c) provided direct patient care for six or more years prior to first degree; d) received first degree or certification received prior to age 16; e) provided direct patient care prior to age 16; f) provided direct care for six or more years prior to first license; h) reports currently working more than 10 jobs; i) obtained first Wisconsin license prior to age 16; j) first US license prior to age 16; h) reported speaking more than four other languages; i) worked more than 84 hours a week in primary job; j) worked more than 72 hours in a week secondary job; and k) worked more than 92 hours a week in both jobs. Data in figures and tables are the number and

percentage of valid responses. When the responses in the cell are five or fewer, an asterisk (*) was used to ensure confidentiality of respondents.

Limitations

This analysis will present current data and review historical trends of data available from the Wisconsin LPN workforce. The analysis presented in this report does have some limitations. To provide validity to the findings, some responses were excluded using a consistent method for data management. The 53-item survey was available in two formats, electronic and paper format. The researcher acknowledges that differing formats can potentially produce differing patterns or responses and there is the potential for survey fatigue related to the questions and format of the survey tool. The timing of the format and the mandatory nature of completion in order to fulfill licensure requirements may also contribute to inaccurate data. Input was received regarding key questions for the LPN workforce and data cleaning methods have been utilized to reduce some of these limitations.

B. Organization of Report

Section I

The introduction section describes the purpose, organization of the report, and data management procedures utilized for the analysis.

Section II.

Section II analysis includes an overview of the Wisconsin licensed practical nurse workforce. Contents include the demographical data, licensure, educational trends, and employment patterns. The number of valid responses varies based on valid responses collected during data collection. Rows may not total 100%, if small cells were suppressed. To ensure confidentiality, when the number of respondents in a cell was too small, an asterisk is noted.

Section III

Section III analysis highlights the Wisconsin licensed practical nurse workforce data, organized by Department of Health Services (DHS) regions. Contents include the demographical data including language diversity, licensure, educational trends, and employment patterns.

Section IV

Section IV provides information regarding emergency preparedness patterns for licensed practical nurses, both statewide and by DHS region. Data provided identifies the number of LPNs that are members of the Medical Reserve Corps (MRC) and the Wisconsin Emergency Volunteer Registry (WEAVR).

Recommendations follow at the end of each section.

II. State of Wisconsin Licensed Practical Nurse Workforce Results

A. Demographics of LPN Workforce

Key Demographic Questions:

What are the demographic characteristics of the LPN population? What are the racial/ethnic demographics by gender of the LPN population?

What is the age distribution of the LPN workforce?

Does the LPN workforce demographics reflect the demographics of the Wisconsin population?

The Wisconsin LPN workforce remains primarily female and Caucasian. The LPN workforce (Table II.1) reflects a slight increase in the percentage of males ($n= 576$, 5.2%), nurses' proficiency in another language ($n= 886$, 7.9%), and the number of Hispanic, Latino or Spanish ethnicity nurses ($n= 243$, 2.2%). The mean age is the same as in 2013 for the workforce (49 years) with the largest group of nurses between the ages of 55 to 64 years old (Figure II.1). In regards to language proficiency of LPNs communicating with clients in Wisconsin, the two highest reported languages are Spanish ($n= 465$, 4.2%) and American Sign Language. There has been a progressive decline in the percentage of American Indian or Alaska Native LPNs from 2011-2015. The 2015-licensed practical nursing workforce does not mirror the gender but is aligned closely in regards to the racial/ethnicity of residents living in Wisconsin (Table II.2). The Wisconsin census (2014) figures reflect a mirror image of the population of practical nurses practicing within the state. PN graduates are the nursing profession's pipeline to building diversity in the nursing workforce (National League for Nursing, 2014).

Figure II.1
Licensed Practical Nurses by Age

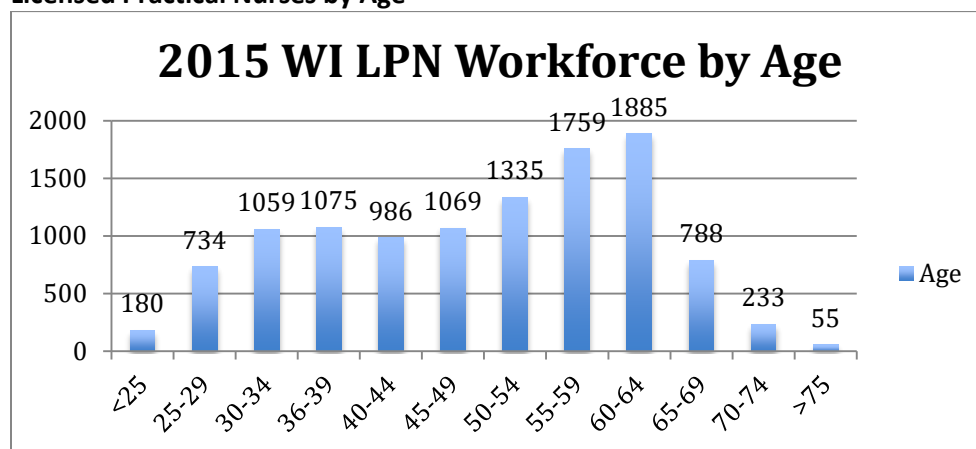


Table II.1
LPN Workforce in State of Wisconsin

Residence and Work Status (N)				
Resides in Wisconsin	10,921			
Resides outside Wisconsin	237			
Works in Wisconsin	8,390			
Works outside Wisconsin	212			
Descriptive Data				
Mean Age of the LPN Workforce	49 years			
Gender	2015 N	2015 %	2013 %	2011 %
o Female	10,582	94.8	95.6	95.5
o Male	576	5.2	4.4	4.5
Race/Ethnicity				
White	10,085	90.4	91.0	91.1
Black or African American	665	6.0	6.3	6.1
Hispanic, Latino, or Spanish Ethnicity	243	2.2	1.9	1.8
Asian	141	1.3	1.3	1.0
American Indian or Alaska Native	45	0.4	1.0	1.1*
Native Hawaiian or Other Pacific Islander	7	0.1	0.1	0.1
Two or more races	215	1.9	1.4	1.5
Proficient in Another Language				
No	10,272	92	92.2	94.7
Yes	886	7.9	7.8	4.8

* 2011 variable label was "Hawaiian"

Table II.2
Demographic Table: 2015 LPN Workforce, 2013 LPN Workforce, 2014 Wisconsin Census Data

	2015 LPN Workforce N	2015 LPN Workforce %	2013 LPN Workforce %	2014 Wisconsin Census Data %*
Gender				
Female	10,582	94.8	95.6	50.3
Male	576	5.2	4.4	49.2
Race/Ethnicity				
White	10,085	90.4	91.0	87.8
Black	665	6.0	6.3	6.6
Hispanic, Latino, or Spanish Ethnicity	243	2.2	1.9	6.5
Asian	141	1.3	1.3	2.6
American Indian or Alaska Native	45	0.4	1.0	1.1
Native Hawaiian or Other Pacific Islander	7	0.1	0.1	Not available
Other (Two or More Races)	215	1.9	1.4	1.8

*U.S. Department of Commerce, U.S. Census Bureau. (2014). *State and county quickfacts*.

Table 11.3
2015 Demographics (Race) by Gender (n= 11, 158)

	Female %	Male %
White	95.3	4.7
Black or African American	92.2	7.8
Hispanic, Latino or Spanish Ethnicity	90.1	9.9
Asian	88.7	11.3
American Indian or Alaska Native	93.3	*
Native Hawaiian or Other Pacific Islander	100	*
Two or More Races	87.9	5.2

*Cells too small to count

Demographic Recommendations

- There remains a need to educate more licensed practical nurses, given the mean age of the nursing workforce. Collaboration efforts for recruitment and retention strategies should include professional diverse nursing organizations and partnerships with the American Assembly of Men in Nursing.
- Within educational systems and healthcare settings, there remains a need for continual increase in a diversity of the practical nurse population, in particular race/ethnicity and gender.
- Healthcare and educational systems are encouraged to offer opportunities for LPNs to learn and enhance their language proficiency within a healthcare context.
 - Given the fluidity of the demographics and language diversity within the United States and the need for diversity within the nursing discipline, nurses providing direct client care who are capable of speaking multiple languages, can be an asset in reducing in congruent messages in the delivery of health care services.
- Policy makers and nursing organizations should continue ongoing monitoring of state trends within the nursing workforce to better prepare for workforce funding, workforce gaps and highlight the need for a diverse pipeline of licensed practical nurses.

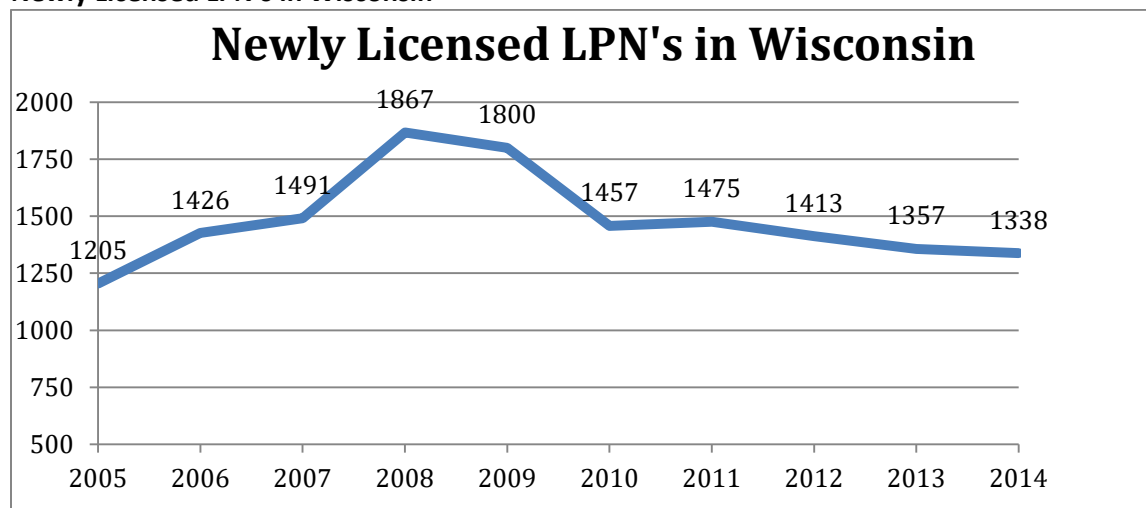
B. Licensure

Key Questions:

How many LPNs are newly licensed in Wisconsin? Does Wisconsin have enough licensed practical nurses to care for Wisconsin consumers?

The Wisconsin Technical College System (WTCS) offers the stand-alone practical nursing program at approximately five colleges. The WTCS programs have state aligned curriculums for all sixteen nursing programs; this provision allows students enrolled in the associate degree nursing program to sit for the National Council Licensure Examination for Practical Nurses after completion of the first year of the technical courses. Despite public and private educational offerings to train practical nurses, since 2011 the state has seen a decline in the number of newly licensed LPN's in Wisconsin. The rolling total of eligible first time candidates for Wisconsin board approved LPN programs have declined from 2012 (21,883) to 2nd quarter 2014 (11,190) (Wisconsin Department of Health and Professional Services, 2013). Between years 2012-2013, there were 56 fewer newly licensed nurses and from 2012-2014 this gap increased to 75 fewer newly licensed nurses, this translates to fewer licensed practical nurses providing direct client care (Figure II.2). To ensure the healthcare workforce maintains sufficient staffing to meet population healthcare needs, the current supply of LPN will not address the future needs of health care consumers in Wisconsin.

Figure II.2
Newly Licensed LPN's in Wisconsin



Licensure Recommendations

Licensure trends indicate a continual decline in the numbers of LPNs seeking new licenses.

- Establish a seamless LPN career pipeline within existing health and non-health care professional programs.
- Explore bridge programs which lead to the LPN credential for students currently enrolled in health care certificate programs

- Conduct research within the WCTS system to identify trends and correlations among associate degree nursing program to identify the students who sit for the LPN licensure exam and beginning practice as a LPN.
 - Although nurses enrolled in the associate degree nursing program within the WCTS can take the practical nursing board exam, it is possible that these students are waiting to take the boards until the completion of the associate degree nursing program. Variables that may contribute to students not taking the PN board examination include: a) timing of the exam (between or during an academic semester); b) perceived inability to maintain academic success and work as a LPN (academic Success); c) time constraints; d) cost of the exam; and e) inconsistent messaging to explain relevancy of this licensure for nurses pursuing an associate degree in nursing.
- Policy makers, nurse leaders, and interdisciplinary health care teams should closely monitor the number of initial and renewal licensure for the LPN population to ensure a viable supply of LPNs within the nursing workforce.

C. Education Patterns

Key Questions:

What educational patterns exist in the LPN population? What are the barriers to pursuing further education?

There was a decrease in the percentage of LPN with no identified plans for further education in nursing ($n= 7,188, 64.4\%$) and an increase in the number of LPNs interested in pursuing further nursing education ($n= 2,533, 22.7\%$) within two years (Table II.4). In 2013 and 2015, consistently 23% of the LPN workforce has indicated a plan to pursue further nursing education within two years. However, the highest ranked barriers to pursuing education are cost of lost work and benefits and cost of tuition, materials, and books (Table II.5). Given that these variables remain as challenges for practical nurses ($n= 10, 818; 61\%$) within Wisconsin who understand academic expectations, it can be seen as a challenge for future non-health students interested in pursuing education in nursing. The highest degree earned for Wisconsin LPNs, is the diploma in nursing ($n= 10, 5016, 94.2\%$). The biannual workforce data from 2011 to 2015 indicate a decline in the number of LPNs that enroll in an associate degree program. This decline merits further analysis, it could possibly be attributed to less LPNs in the workforce and the aging demographics of the workforce (Table II.4).

Table II.4
Plans for Further Education in Nursing

	2015 LPN Workforce Survey n (%)	2013 LPN Workforce Survey n (%)	2011 LPN Workforce Survey n (%)
Enrolled in associate's degree nursing program	1,264 (11.3%)	1,314 (11.7%)	1,663 (12.29%)
Enrolled in bachelor's degree nursing program	131 (1.2%)	96 (0.9%)	156 (1.15%)
Enrolled in graduate degree nursing program	*	*	*
Enrolled in non-degree specialty certification	37 (0.3%)	60 (0.5%)	67 (0.50%)
Plan to pursue further nursing education in the next two years	2,533 (22.7%)	2,608 (23.3%)	2,476 (18.3%)
No plans for additional nursing education	7,188 (64.4%)	7,110 (63.5%)	9,160 (97.7%)

* Cells too small to report or not reported to protect anonymity

Table II.5
Highest Nursing Degree & Barriers to Further Education

	n=	%
Highest Nursing Degree		
Diploma in Nursing	10,506	94.2
Associate Degree in Nursing	640	5.7
Bachelor Degree in Nursing	10	0.1
Master Degree in Nursing	*	*
Doctorate in Nursing	*	*
Barriers to Further Education **		
None	3096	17.7
Commuting distance to educational program	358	2.1
Cost of lost work time & benefits	3843	22.0
Cost of tuition, materials, book, etc.	3879	22.2
Family/Personal reasons	2721	15.6
Lack of flexibility in work schedule	1240	7.1
Limited access to online learning or other online resources	225	1.3
Scheduling of educational programs offered	456	2.6
Concern about my ability to succeed in college	718	4.1
Other, not listed	920	5.3

* Cells too small to report **Two responses could be selected

Education Recommendations

- Identify regional and/or statewide strategies to increase awareness of nursing career opportunities for the license practical nurse.
 - Measure the longitudinal effectiveness of this strategy: enrollment in practical nursing programs and number of resulting new licenses sought through the state.

- Consider online methodology for the theory component of the curriculum; this may benefit working adults. Create articulation agreements (general education requirements) among schools, which do not offer practical nursing programs. Ensure that these agreements are visible to potential students within the state.
 - Establish cohort groups upon admission to the college to promote retention and academic success.
- Develop and measure the longitudinal effectiveness of funding strategies across multiple entities (state, local, healthcare systems & educational systems) to reduce barriers to education attainment.
- Collaborate with economist and business professionals in healthcare to identify the best economical practices for increasing the population of LPNs in the nursing workforce.
- Partner with public and private educational institutions, to develop shared curriculums for general education credits for high schools with existing science, technology, engineering, math (STEM) program and/or health based programs, such as nursing assistant. Develop bridge programs which lead to the LPN credential for students currently enrolled in health care certificate programs

C. Employment Patterns

Key Questions:

What is the employment status of LPNs and intentions among unemployed LPNs?

What are the reasons for employment change, career decisions, and future employment?

What is the current status of LPNs providing direct primary care?

What are the skills based certifications, areas of specialization and expertise for the LPN workforce?

Seventy five percent ($n= 8, 353$) of Wisconsin licensed practical nurses are actively working as a nurse (Table II.6). There was an increase in the percentage of retired licensed practical nurses, between 2013 and 2015. There are approximately 19% of nurses who are not retired and they are not actively working as a LPN.

**Table II.6
Employment Status, Principal Job**

	2015 <i>n= 11,158</i>	2015 %	2013 <i>n= 11,195</i>	2013 %
Actively working as a nurse	8353	74.9	8423	75
Actively working in health care not nursing	765	6.9	730	6.5
Actively working in another field	502	4.5	472	4.2
Unemployed, seeking work in nursing	340	3.0	488	4.4
Unemployed, seeking work in another field	36	0.3	58	0.5
Unemployed, not seeking work	365	3.3	364	3.3
Retired	797	7.1	660	5.9

Table II.7 describes the intentions of LPN's who are currently unemployed and the employment change over the past year for Wisconsin LPNs. Of these 2,554 nurses, 30% plan to seek or return to nursing employment while an even higher percentage ($n= 51\%$, 1,317) of these nurses were undecided regarding their intentions for employment. For 2013 and 2015, most LPNs experienced no employment change over the past year. The cited reasons for employment changes were a new position ($n= 1,504$, 13.5%), no longer working as LPN ($n= 467$, 4.2%) or now employed as an LPN ($n= 332$, 3%). The most important factors for change in employment was retirement and seeking more convenient hours.

Table II.7
Intentions of Unemployed LPNs & Employment Change Factors

Intentions of LPN's who are Currently Unemployed	2015 <i>n</i>= 2,554 (%)	2013 <i>n</i>= 2,593 (%)
Currently seeking employment in nursing	400 (15.7)	533 (20.6)
Plan to return to nursing in the future	388 (15.2)	365 (14.1)
Retired/Unable to return to nursing	334 (13.1)	280 (10.8)
Definitely will not return to nursing, but not retired	115 (1.0)	120 (4.6)
Undecided	1317 (51.6)	1,295 (49.9)
Employment Change Over the Past Year	2015 <i>n</i>= 11,158 (%)	2013 <i>n</i>= 11,195 (%)
No change in employment status	7,322 (65.6)	7,467 (66.7)
Yes, changed number of hours worked	1,087 (9.7)	1,140 (10.2)
New position with the same employer	458 (4.1)	403 (3.6)
New position with the different employer	1,046 (9.4)	841 (7.5)
Was not previously working as LPN, but am now in LPN job role	332 (3.0)	377 (3.4)
Was working as LPN, but am no longer working as LPN	467 (4.2)	537 (4.8)
Other	446 (4.0)	430 (3.8)

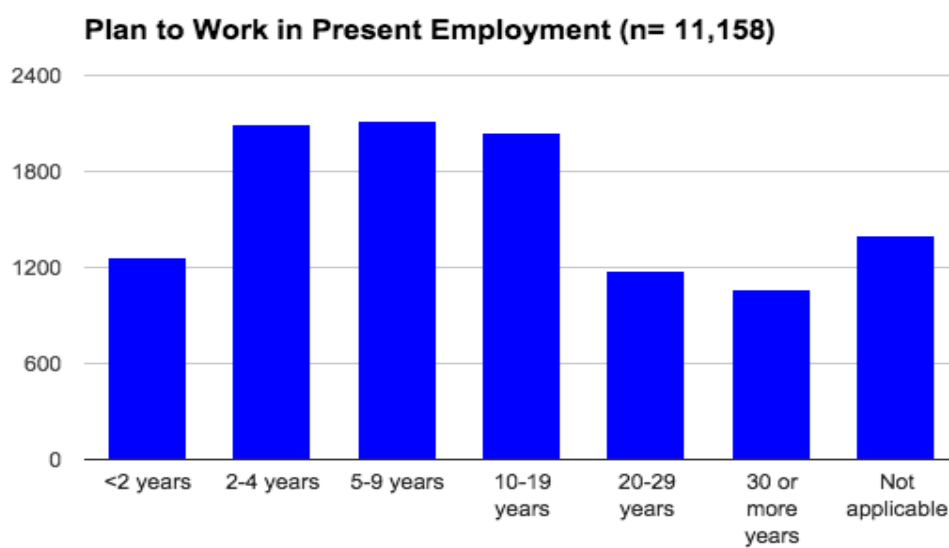
The ten most frequently cited reasons for employment changes are highlighted in table II.8. The highest factors were seeking more convenient hours (4.3%), retirement (4.2%), and dissatisfaction (4.1%).

Table II.8
Most Important Factors for Change in Employment (*n*= 11,158)

	<i>n</i>=	%
Retired	471	4.2
Childcare Responsibilities	225	2.0
Other Family Responsibilities	265	2.4
Salary/medical or retirement benefits	397	3.6
Laid off	153	1.4
Change in spouse/partner situation	104	0.9
Change in financial status	194	1.7
Relocation	195	1.7
Promotion/career advancement	373	3.3
Change in health status	281	2.5
Seeking more convenient hours	477	4.3
Dissatisfaction with previous position	454	4.1
Not applicable	6838	61.3

Figure II.3 illustrates that 56% of nurses plan to work in their present employment on average for the next 10 to 19 years. These nurses have approximately 9.78 years in their current primary position with an average of 18.39 years of experience. This is beneficial for newly trained nurses, which have the opportunity to learn from these nurses that have remained employed with the same employer over several years.

Figure II.3
Plans for Present Employment



For 2015, level of personal satisfaction/collegial relationship (22.4%), family/personal issues and pay (13.8%) were the three most significant factors for career decisions (Table II.9).

Table II.9
Most Important factor in Career Decision Today

	2015 <i>n</i> = 11,158 (%)	2013 <i>n</i> = 11,195 (%)
Retired/Not Working	745 (6.7)	756 (6.8)
Level of Personal Satisfaction/collegial relationships	2,494 (22.4)	2,497 (22.3)
Family/Personal issues	1,540 (13.8)	1,488 (13.3)
Pay	1,535 (13.8)	1,559 (13.9)
Medical benefits	757 (6.8)	885 (7.9)
Retirement Benefits	313 (2.8)	234 (2.1)
Hours/Shift Availability	1,726 (15.5)	1,732 (15.5)
Potential for advancement	456 (4.1)	523 (4.7)
Employer Supported Education Options	148 (1.3)	131 (1.2)
Worksite Location	446 (4.0)	526 (4.7)
Physical Work Requirements	213 (1.9)	191 (1.7)
Physical Disability	182 (1.6)	182 (1.6)
Other	603 (5.4)	491 (4.4)

Check all that apply

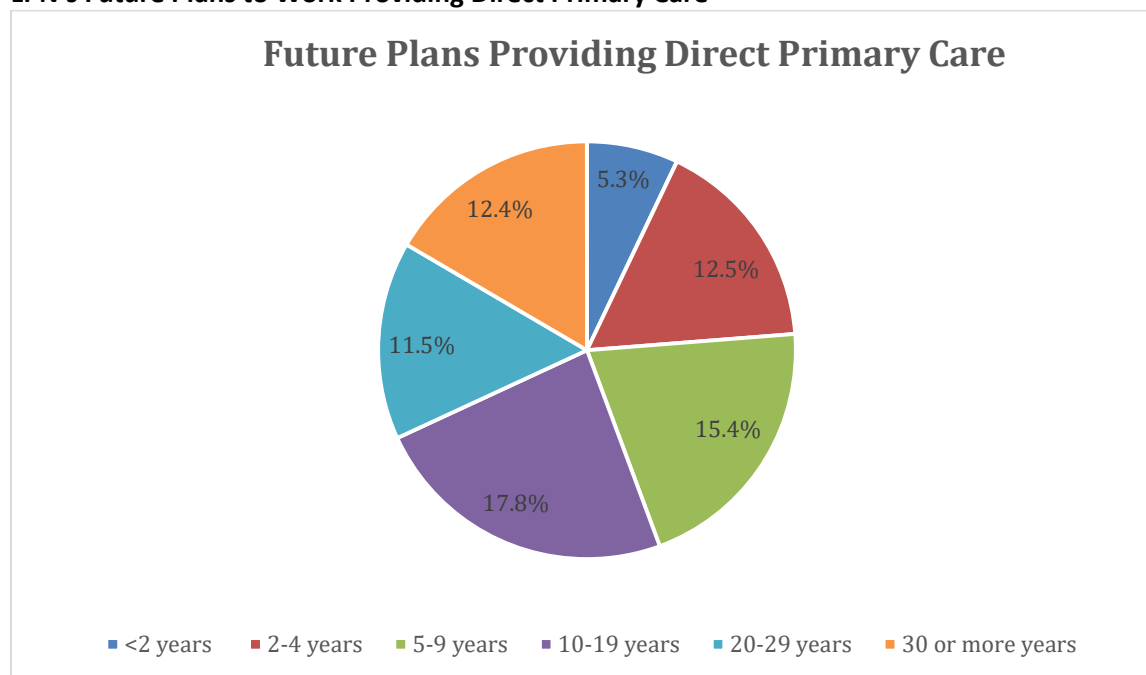
D. Direct Primary Care

The primary function for 85% of nurses who responded, provide direct patient care (Table II.10). Direct patient care is defined as in this survey as, "To administer nursing care one-on-one to patients, the ill, the disabled, or clients in the hospital, clinic or other patiently setting." The LPN average number of years providing DPC is 16.7 years. However, over the next 10 years, approximately 49% of these nurses will leave the bedside providing direct primary care (Figure II.4). The 2013 survey indicated that 40% of the workforce at that time, intended to leave the provision of direct come within a nine year window (Wisconsin Department of Health and Professional Services, 2013).

Table II. 10
Current Role, Primary Function is Direct Patient Care (DPC) (n= 8,604)

	n=	%
Yes	7388	85.9
No, limited DPC	422	4.9
No, Supervise DPC	160	1.9
No, Past DPC provided	462	5.4
No, provided limited DPC in past	69	0.8
No, never provided DPC	103	1.2

Figure II.4
LPN's Future Plans to Work Providing Direct Primary Care



E. Characteristics of Primary Job

Table II.11 describes employment status, category of primary and secondary job, and primary work settings. Most LPNs are regular employees with primary and secondary jobs within nursing and their primary positions are staffed as hourly full-time ($n= 5,100$; 45.7%) and hourly part time ($n= 2,443$; 21%).

Table II.11

Employment Status, Basis, Work Setting, and Job Category: LPNs Who Live and/or Work in Wisconsin

	<i>n</i> =	%
Employment Status (<i>n</i>= 8,604)		
Regular Employee	8069	72.3
Self-Employed	262	2.3
Temporary Employment Agency	118	1.1
Travel Nurse or Traveling Nurse Agency	55	0.5
Volunteer	100	0.9
Employment Basis for Primary Position (<i>n</i>= 8,604)		
Full Time, Salaried	579	5.2
Full Time, Hourly Wage	5100	45.7
Part Time, Salaried	71	0.6
Part Time, Hourly Wage	2343	21.0
Per Diem	412	3.7
Volunteer	99	0.9
Category that Best Describes Your Primary Job (<i>n</i>= 8,685)		
Nursing	7721	69.2
Health Related Services, Outside Nursing	455	4.1
Retail Sales and Services	22	0.2
Nurse Educator	33	0.3
Financial, Accounting, Insurance processing	60	0.5
Consulting	15	0.1
Other	298	2.7
Not Working	81	0.7
Primary Work Settings for Wisconsin LPNs (<i>n</i>= 8604)		
Hospital	820	9.5
Extended Care	3623	42.1
Ambulatory Care	2556	29.7
Home Health	603	7.0
Public Health	335	3.9
Academic Education	667	7.8
Category that Best Describes Your Secondary Job (<i>n</i>= 942)		
Nursing	814	7.3
Health Related Services, Outside Nursing	71	0.6
Retail Sales and Services	8	0.1
Nurse Educator	*	*
Financial, Accounting, Insurance processing	*	*
Consulting	*	*
Other	42	8.4

* Cells too small to report or not reported to protect anonymity

F. Specialization and Certifications

The LPN workforce has specialized education and training (Table II.12). In 2013 and 2015 the majority of licensed practical nurses reported geriatric and/or gerontology specialization ($n= 5,403$, 48%).

Table II.12
Areas of Specialization or Expertise, 2 years or more ($n= 11,158$)

	<i>n</i> =	%
Acute Care/Critical Care/Intensive Care	1,086	9.7
Adult Health	3,175	28.5
Addiction/AODA/Substance Abuse	659	5.9
Anesthesia	43	0.4
Cardiac Care	803	7.2
Community Health	723	6.5
Corrections	483	4.3
Clinical Expertise (none)	1,147	10.3
Clinical Expertise (none of the above areas)	1,626	14.6
Dialysis/Renal	431	3.9
Emergency/Trauma	617	5.5
Family Health	1,917	17.2
Geriatrics/Gerontology	5,403	48.8
Hospice/Palliative Care	2,334	20.9
Home Health	1,988	17.8
Labor and Delivery	326	2.9
Maternal Child Health	355	3.2
Medical-Surgical	1845	16.5
Neonatal Care	160	1.4
Obstetrics/Gynecology	738	6.6
Oncology	401	3.6
Occupational Health	413	3.7
Psychiatric/Mental Health	1273	11.4
Pediatrics	1359	12.2
Public Health	234	2.1
Respiratory Care	769	6.9
Rehabilitation	1605	14.4
Surgery/Pre-op/Post-op/PACU	682	6.1
School Nurse	355	3.2
Women's Health	716	6.4

Figure II. 5
Skill Based Certifications



Compensation

Compensation information included salary and available benefits. The Wisconsin LPN workforce, hourly wage for 75% of the sample ranged from \$14.75 to \$23.99 dollars per hour (Figure II.6). LPNs were instructed to identify compensation components of their principal job (Figure II.7).

Figure II.6
Approximate Hourly Wage

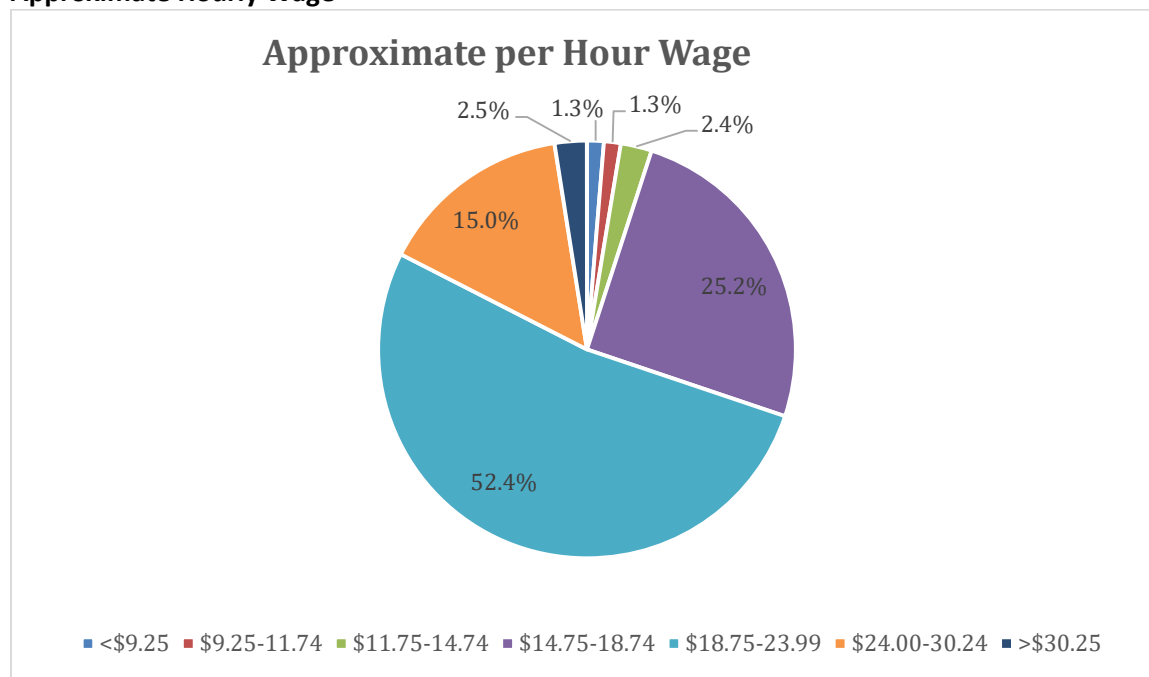
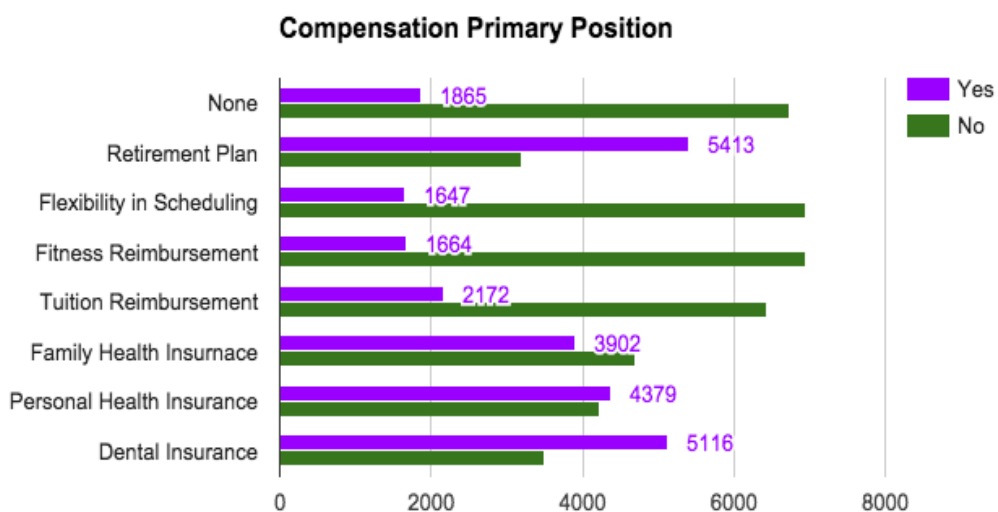


Figure II.7
Compensation Primary Job (n= 11,158)

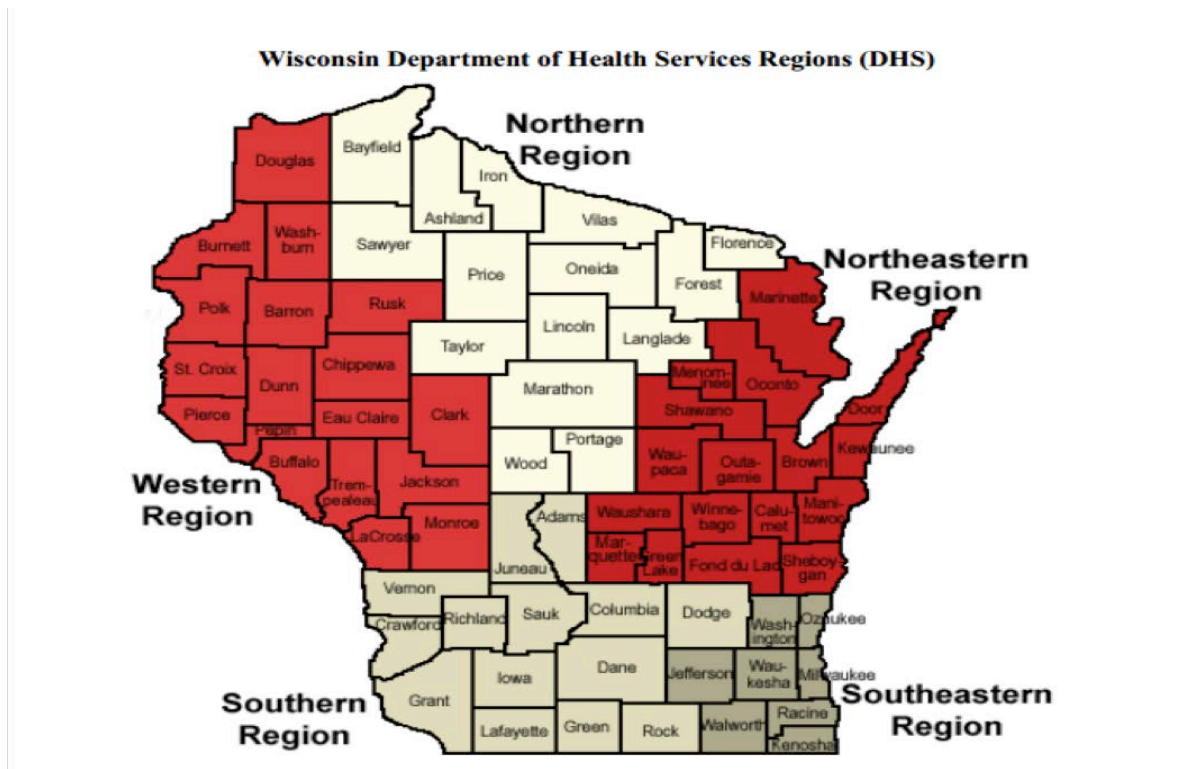


Employment Recommendations

- 30% of unemployed LPNs plan to seek or return to nursing employment while 51% of unemployed nurses were undecided regarding their intentions for employment. Employers have the opportunity to retain nurses if compensation factors mirror those values by this population.
 - Job promotion
 - Flexible Hours
 - Compensation/Flex Time offered for education advancement
- Gather key healthcare, economist, and policy experts to develop a statewide multiregional Forecast Model to predict supply and demand regionally and statewide (Bienemy, 2015)
- Create collaboration agreements with accredited nursing programs to offer instruction of curriculum and clinical components on site for hospital employees.
- Employers have the opportunity to influence the culture within the workplace. Identify unique characteristics of the LPN population at the organizational level. LPNs have identified career decisions are based on satisfaction with these factors: level of personal satisfaction, collegial relationship, family/personal issues and pay.

III. Licensed Practical Nurse Workforce Analyzed by Department of Health Services Region

The five Department of Health Services (DHS) regional data is provided with a map of the regions. The counties within each region are presented. Data from the statewide aggregate allows for analysis at the regional and state level. Key findings are presented in detail.



Southern Region Counties	Southeastern Region counties	Northeastern Region Counties	Western Region Counties	Northern region Counties
Adams	Jefferson	Brown	Barron	Ashland
Columbia	Kenosha	Calumet	Buffalo	Bayfield
Crawford	Milwaukee	Door	Burnett	Florence
Dane	Ozaukee	Fond Du Lac	Chippewa	Forest
Dodge	Racine	Green Lake	Clark	Iron
Grant	Walworth	Kewaunee	Douglas	Langlade
Green	Washington	Manitowoc	Dunn	Lincoln
Iowa	Waukesha	Marinette	Eau Claire	Marathon
Juneau		Marquette	Jackson	Oneida
Lafayette		Menominee	La Crosse	Portage
Richland		Oconto	Monroe	Price
Rock		Outagamie	Pepin	Sawyer
Sauk		Shawano	Pierce	Taylor
Vernon		Sheboygan	Polk	Vilas
		Waupaca	Rush	Wood
		Waushara	St. Croix	
		Winnebago	Trempealeau	
			Washburn	

Data from the regions may not total the state level data. Based on the survey sequencing, not all nurses were asked all questions related to the variables, meaning questions were posed based on prior answers. An asterisk was used in small cells and allows for anonymity and confidentiality among these respondents.

A. Demographic of LPN Workforce by Region

Table III.1 presents the Wisconsin LPN workforce demographic information, organized by DHS regions. The median age is lowest in the southern and northeast regions (47 years) and highest in the western region (52 years). Statewide, the median age of LPN's is 49 years. The northeast region has the highest percent of females ($n= 2,187$, 95.8) and the western region has the highest percentage of males ($n= 37$, 6.8%).

Table III.1

Demographic Information for Department of Health Services Regions Compared with State of Wisconsin (State $n= 11, 158$; Regional $n= 8,376$)

	State $n = 11,158$		Southern $n = 1,585$		Southeast $n = 2,748$		Northeast $n = 2,283$		Western $n = 547$		Northern $n = 1,213$	
	n	%	n	%	n	%	n	%	n	%	n	%
Descriptive Data												
Median Age	49		47		51		47		52		50	
Gender												
Female	10,582	94.8	1,504	94.9	2,596	94.5	2,187	95.8	510	93.2	1,158	95.5
Male	576	5.2	81	5.1	152	5.5	96	4.2	37	6.8	55	4.5
Race/Ethnicity **												
White	10,085	90.4	1,483	93.6	2,132	77.6	2,183	95.6	529	96.7	1,179	97.2
Black or African American	665	6.0	40	2.5	484	17.6	16	0.7	*	*	9	0.7
Asian	141	1.3	22	1.4	41	1.5	32	1.4	6	1.1	10	0.8
American Indian Or Alaska Native	45	0.4	*	*	6	0.2	23	1.0	*	*	*	*
Native Hawaiian or Other Pacific Islander	7	0.1	*	*	*	*	*	*	*	*	*	*
Two or More Races	215	1.9	38	2.4	84	3.1	28	1.2	7	1.3	12	1.0
Hispanic, Latino or Spanish Ethnicity	243	2.2	38	2.4	102	3.7	37	1.6	*	*	10	0.8

* Cells too small to report or not reported to protect anonymity

** Participants instructed to select all that apply. Cells will not sum to total number.

Language proficiency is highest in the southeast region ($n= 279$, 10.2%) and lowest in the northern region ($n= 65$, 5.3%).

Table III.2

Number of Other Languages Spoken for Department of Health Services Regions Compared with State of Wisconsin (State $n= 11, 158$; Regional $n= 8,376$)

	State $n=11,158$		Southern $n= 1,585$		Southeast $n= 2,748$		Northeast $n= 2,283$		Western $n= 547$		Northern $n= 1,213$	
	n	%	n	%	n	%	n	%	n	%	n	%
Languages spoken other than English												
No other languages	10,272	92.1	1,453	91.7	2,465	89.7	2,122	92.9	501	91.6	1,148	94.6
One	780	7.0	116	7.3	250	9.1	142	6.2	39	7.1	59	4.9
Two	91	0.8	13	0.8	29	1.1	16	0.7	7	1.3	5	0.4
Three	12	0.1	*	*	*	*	*	*	*	*	*	*

* Cells too small to report or not reported to protect anonymity

B. Employment Patterns of LPNS in Wisconsin by Region

Across each region, over 92% of the nurses work as an LPN, while statewide only 75% of these nurses work as an LPN. Statewide, ($n= 705$, 6.3%) are unemployed and 7% are retired. Nurses living in the northeast region reported the lowest percentage of retirements ($n= 9$, 0.4%). Unemployment rates for nurses seeking employment are >1% across the regions and 3% statewide.

Table III.3

Employment Status of LPN's Who Live and/or Work in WI (Statewide: $n= 11,158$; Regional: $n= 8376$)

	State $n=11,158$		Southern $n= 1,585$		Southeast $n= 2,748$		Northeast $n= 2,283$		Western $n= 547$		Northern $n= 1,213$	
	n	%	n	%	n	%	n	%	n	%	n	%
Working as a LPN	8,353	74.9	1459	92.1	2,533	92.2	2,136	93.6	477	87.2	1,124	92.7
Working in healthcare, not nursing	765	6.9	85	5.4	145	5.3	100	4.4	48	8.8	52	4.3
Working in another field	502	4.5	24	1.5	26	0.9	25	1.1	10	1.8	15	1.2
Unemployed, seeking work in nursing	340	3.0	*	*	21	0.8	7	*	5	0.9	*	*
Unemployed, not seeking work	365	3.3	*	*	5	0.2	6	0.3	*	*	*	*
Retired	797	7.1	12	0.8	18	0.7	9	0.4	*	*	13	1.1

* Cells too small to report or not reported to protect anonymity

Table III.4 provides data on the LPNs experience in providing direct patient care. Statewide, LPNs have provided an average of 16.7 years of direct patient care; however the Northern region has the longest average time for LPNs providing direct patient care (17.7 years). Statewide and across each region, over 80% of all LPNs provide direct patient care.

Table III. 4
Provision of Direct Patient Care in Primary Nursing Position (State 8,604; Regional 8,376)

	State		Southern		Southeast		Northeast		Western		Northern	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Current LPN providing DPC	7,388	85.9	1,368	86.3	2,350	85.5	1,983	86.9	449	82.1	1,063	87.6
Limited DPC	422	4.9	82	5.2	132	4.8	107	4.7	36	6.6	52	4.3
Supervise DPC	160	1.9	23	1.5	62	2.3	38	1.7	12	2.2	18	1.5
Provided DPC in Past	462	5.4	88	5.6	150	5.5	108	4.7	33	6.0	63	5.2
Limited DPC in past	69	0.8	11	0.7	25	0.9	16	0.7	*	*	6	0.5
Never provided DPC	103	1.2	13	0.8	29	1.1	31	1.4	13	2.4	11	0.9
Years as LPN working DPC (mean)	16.7		15.2		17.0		13.7		16.0		17.7	

The primary work settings for over 55% of LPNs in Wisconsin are extended care and ambulatory care (Table III.5). These percentages are even higher across the state regions for employment in extended and ambulatory care.

Table III. 5
Primary Work Setting of LPN's Who Work in WI (State: *n* = 8,604; Regional: *n* = 8,376)

	State <i>n</i> = 8604		Southern <i>n</i> = 1585		Southeast <i>n</i> = 2748		Northeast <i>n</i> = 2283		Western <i>n</i> = 547		Northern <i>n</i> = 1213	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Primary Place of Employment												
Hospital	820	9.5	135	8.5	264	9.6	244	10.7	43	7.9	110	9.1
Extended Care	3,623	32.5	617	38.9	1,325	48.2	843	36.9	263	48.1	495	40.8
Ambulatory Care	2,556	22.9	532	33.6	594	21.6	813	35.6	144	26.3	416	34.3
Home Health	603	5.4	100	6.3	247	9.0	124	5.4	35	6.4	73	6.0
Public Health	335	3.0	61	3.8	127	4.6	92	4.0	17	3.1	31	2.6
Other	667	6.0	140	8.8	191	7.0	167	7.3	45	8.2	88	7.3

C. Education Patterns of LPNs in Wisconsin by Region

Table III.6 features information regarding the LPN workforce plans for future education. The highest percentage of A.DN enrollment is in the southern region ($n= 216$, 13.9%) and the highest enrollment for BSN is in the southeast region ($n= 64$, 2.3%). LPNs planning to enroll in further education in the next two years vary from 21.5% in the northern region to 27% in the southeast region. Across regions and statewide, the highest current nursing education enrollment is within the associate degree program. Statewide, 22.7% of LPN plan to pursue further education in nursing by 2017.

Table III. 6
Plans for Future Nursing Education (Statewide: $n = 11,158$; Regional: $n= 8,376$)

	State $n = 11,158$		Southern $n = 1,585$		Southeast $n = 2,748$		Northeast $n = 2,283$		Western $n = 547$		Northern $n = 1,213$	
	n	%	n	%	n	%	n	%	n	%	n	%
Enrolled in A.D.N. program	1,264	11.3	216	13.9	358	13.0	261	11.4	70	12.8	144	11.9
Enrolled in B.S.N. program	131	1.2	21	1.3	64	2.3	13	0.6	5	0.9	9	0.7
Enrolled in graduate degree program	5	*	*	*	*	*	*	*	*	*	*	*
Enrolled in non-degree specialty certification	37	0.3	12	0.8	11	0.4	*	*	*	*	*	*
Plan to enroll in further nursing education in the next two years	2,533	22.7	420	26.5	741	27.0	558	24.4	140	25.6	261	21.5
No plans for additional nursing education	7,188	64.4	915	57.7	1,571	57.2	1,447	63.4	330	60.3	799	65.9

* Cells too small to report or not reported to protect anonymity

** Participants instructed to select all that apply. Cells will not sum to total number

IV. Emergency Preparedness

In Wisconsin, 65% of LPN have received training in emergency preparedness training. These nurses responded to questions regarding emergency training, who provided the training, and if the emergency skills have been actively been utilized to provide care (Table IV. 1). Statewide, there is <1% LPN membership in the Medical Reserve Corps (MRC) and Wisconsin Emergency Assistance Registry is voluntary.

Table IV. 1

Demographic Information for Department of Health Services by Region of Residence Compared with State of Wisconsin for LPNs Who Live and/or Work in Wisconsin (State $n= 11, 158$; Regional $n= 8,376$)

	State $n = 11,158$		Southern $n = 1,585$		Southeast $n = 2,748$		Northeast $n = 2,283$		Western $n = 547$		Northern $n = 1,213$	
Received Training In emergency training preparedness, ICS or Hazardous Materials												
Yes, Employer	6,314	56.6	952	60.1	1,684	61.3	1,427	62.5	326	59.6	794	65.5
Yes, Voluntary Organization	468	4.2	64	4.0	94	3.4	95	4.2	31	5.7	56	4.6
Yes, Other	629	5.6	83	5.2	122	4.4	86	3.8	40	7.3	71	5.9
No	3,943	35.3	512	32.3	895	32.6	710	31.1	164	30.0	314	25.9
Have applied training in emergency responses **												
Yes, Participated in emergency exercises in 2 years	3,807	34.1	622	39.2	1,038	37.8	865	37.9	192	35.1	495	40.8
Yes, Responded to actual incident or disaster in last 2 years	424	3.8	84	5.3	119	4.3	73	3.2	28	5.1	41	3.4
No	7,062	63.3	905	57.1	1,633	59.4	1,371	60.1	332	60.7	687	56.6
Are you a member of:												
WEAVR	83	0.7	11	0.7	12	0.4	17	0.7	7	1.3	12	1.0
MRC	*	*	*	*	*	*	*	*	*	*	*	*

* Cells too small to report or not reported to protect anonymity

** Respondents allowed to choose more than one option. Does not sum total number of participants.

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