Wisconsin 2023 LPN Survey



Jeffrey Henriques, PhD Kristin Merss, BSN, RN





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In appreciation,

Erika Cólon, BSN, RN President – Wisconsin Center for Nursing, Inc.

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Executive Summary

The seventh biennial *Wisconsin 2023 LPN Workforce Survey* was electronically completed by 8,118 licensed practical nurses (LPNs). This is a significant decrease from the 10,285 LPNs who completed the survey in 2021, reflecting a 25% decrease in Wisconsin's LPNs in just 2 years. The number of LPNs completing the inaugural survey in 2011 was 14,165.* Between 2011 and 2023, the number of LPNs licensed in Wisconsin declined by 43%. After data cleaning, 359 surveys were eliminated leaving, 7,845 surveys for the 2023 final analysis. All LPNs renewing their licenses in Wisconsin were included, regardless of whether they were working in Wisconsin.

*Nine duplicate surveys were removed from the 2023 survey count. No data are available on the number of duplicate surveys in 2011).

The biennial LPN workforce survey is required by the Wisconsin State Legislature (Chapter 106.30) and conducted by the Wisconsin Department of Health and Professional Services in collaboration with the Wisconsin Department of Workforce Development and the Wisconsin Center for Nursing (WCN). The Wisconsin Department of Workforce Development created the survey, which was first implemented in 2011. All LPNs completing the survey were provided with a statement describing the purpose and methodology of the survey and were given the option of completing the survey electronically or in paper format.

Organization of Report

Section I: Introduction

Section I describes how survey data were managed and the justification for eliminating some surveys from the final analysis. For example, surveys from LPNs neither living nor working in Wisconsin (n = 158) were not included in the following analysis. Other reasons for survey elimination are detailed in Table 1. Following data cleaning and exclusion of those living and working outside the state, 7,845 completed surveys were included in the analyses for this report. This is notably lower than 2021. Excluding the duplicates, there were 10,285 responses in 2021 (note that 9,590 were included in analysis after other exclusionary criteria were applied), while in 2023, 8,118 were included after dupliates (n = 9) were removed. This continues a steady and notable decrease in Wisconsin's LPN workforce since 2011.

Section II: State Data Key Findings

A. LPN Workforce Demographics

- The most salient information from the 2023 survey is the continuing decreasing size of Wisconsin's LPN workforce. Since 2011, there has been a steady decline resulting in a cumulative decrease of over 40%.
- Wisconsin's LPN workforce remains predominately White and female. Male LPNs increased from 5.7% in 2021 to 6.0% in 2023. Male LPNs recorded from the initial 2011 survey was 4.5%. This represents a 5% increase in the percentage of male nurses over the past 2 years and a 33% increase since the survey was initiated in 2011.

- The mean age of LPNs licensed and working in Wisconsin decreased from 49.2 years in 2021 to 48.3 years in 2023.
- In terms of workforce diversity, LPNs identifying as White saw a decrease from 87.7 in 2021 to 83.6 in 2023. The percentage of LPNs identifying as Black/African American increased from 7.7% to 9.4% between 2021 and 2023. Compared to the first LPN survey in 2011, where 6.1% identified as Black/African American, the current percentage reflects a 10-year 54% increase.
- A most significant change in LPN racial/ethnic identification is LPNs identifying as Hispanic/Latino/Latinx. This percentage increased from 3.5% in 2021 to 7.5% in 2023. Between 2011 and 2023, there was a 322% increase in LPNs identifying as Hispanic/Latino/Latinx.
- Based on 2020 U.S. Census Bureau data, the Wisconsin population identifying as Hispanic/Latino/Latinx has increased from 6.1% in 2010 to 7.6% in 2020.
- The percentage of LPNs identifying as members of ethnic/racial groups is increasingly well aligned with the demographic characteristics of the Wisconsin's population.
- In the case of LPNs who identify as Hispanic/Latino/Latinx, the increase in LPNs identifying as Hispanic/Latino/Latinx has also kept pace with an increase in the percentage of Wisconsin residents identifying as Hispanic/Latino/Latinx.
- Data from the 2023 LPN survey indicate a more than doubling of LPNs with second language fluency, from 6.6% in 2021 to 15.7% in 2023. This represents a 227% increase in second language fluency since the initial survey in 2011 (4.8%).*
- The percentage of LPNs licensed in Wisconsin who are currently working in Wisconsin increased significantly from 81.4% in 2021 to 97.2% in 2023; although, the total number decreased significantly from 7,803 to 4,617 in the same 2 years.
- The percentage of LPNs licensed in Wisconsin but not currently working as a nurse dropped significantly from 24.6% in 2021 to 17.5% in 2023.
- Work flexibility, pay, and benefits continue to create barriers for LPNs licensed in Wisconsin to return to LPN work. The significance of pay/benefits has increased since the 2021 survey.

Recommendations

- A state-supported review of the significant decline in LPNs in Wisconsin is urgently needed to identify the contributing factors and reverse the continuing loss. Some care environments, such as long-term care, rely primarily on LPNs and will be hardest hit by this continuing loss. Inability to recruit staff (primarily LPNs) is a major contributing factor to the increasing closures of Wisconsin nursing homes. Many of these closures have occurred in rural communities, making long-term care inaccessible to people living in these communities (Leys, 2023).
- Schools of nursing have made considerable efforts to recruit a workforce that reflects the demographic characteristics of Wisconsin's population. The 2023 survey suggests that these efforts have led to significant improvements. Sustaining these changes

^{*}The question format related to language fluency has been changed, which could influence the accuracy of comparisons made with previous percentages.

through sharing successful strategies across and beyond the state could be facilitated through a clear understanding of best practices used successfully to advance cohort diversity. Opportunities should be created for successful programs to share their strategies for recruiting diverse cohorts, including an accessible collection of best practices.

- Efforts to recruit nurses who speak a second, non-English language and to provide opportunities for nursing students and practicing nurses to gain language skills and cultural knowledge that match Wisconsin's population should be adopted by all programs.
- A systematic effort to collect data on whether/where practicing LPNs actually use their second language fluency during patient care encounters is needed. This could include documenting areas where second language skills are needed but lacking.
- Increasing immersion experiences in communities that speak a language other than English, to supplement courses in second languages, should be encouraged and supported.

B. Education Patterns

- Most LPNs (84.2%, n = 7,232) hold an LPN diploma/certificate as their highest nursing degree. The percentage is virtually unchanged from the 2021 survey.
- Consistent with prior surveys, about one-third of LPNs are either enrolled in or planning to enroll in some form of advanced or continuing education within the next 2 years.
- Financial issues are the primary barriers to LPNs furthering their education. The three highest ranked barriers to pursuing further education were (1) cost of lost work time and benefits; (2) cost of tuition, materials, and books; and (3) family/personal reasons. These are unchanged from prior years.

Recommendations

- As most LPNs do not indicate plans to pursue either certification or a higher degree, it
 will be important for employers to encourage and support continued education
 relevant to their work setting. It would also be important to review access to
 continuing educational opportunities across the state, including certification in
 specialty areas, and to address continuing education access barriers. This is
 particularly a concern with the low rate of certification in geriatric nursing, as most
 LPNs are working in extended care but do not hold certification in geriatric nursing
 care.
- Some efforts have been made to increase accessibility for LPNs transitioning to higher degrees. It would be useful to collect information on LPN attitudes toward and experience in these programs and program accessibility across the state.
- Research has confirmed the positive impact of advanced knowledge on patient outcomes. Both employers and educators in LPN programs should be conveying this information to LPN students and practicing LPNs to encourage engagement in continuing education.

• Considering the well documented impact of advanced knowledge on improving patient outcomes (Aiken et al., 2003), the ideal ratio of LPNs to RNs should be determined and a plan developed to achieve that ratio.

B. Employment Patterns

- The number and percentage of LPNs not currently working but looking for work in another field has increased significantly from 45 in 2021 to 159 in 2023. Prior to 2021, this percentage had been quite steady.
- The percentage of LPNs actively working as a nurse rose from 75.3% in 2021 to 82.5% in 2023. However, despite the increased percentage of LPNs actively working as a nurse in 2023, the actual number of LPNs currently working as a nurse in 2023 (6,469) was down compared to 2021 (7,219).
- The percentage of retired LPNs has seen a reversal from the earlier upward trend: 5.9% in 2013 to 8.9 % in 2021, with a sharp decline in 2023 to 5.3%. This may indicate fewer retired LPNs renewing their license.
- Most LPNs described their primary job as full-time, earning an hourly wage (n = 2,918, 61.4%), consistent with 2021.
- As in previous years, extended care is the most common primary work setting for LPNs (37.3%). Of note, extended care as the primary work setting identified by LPNs decreased significantly between the 2019 and 2021 surveys. During the same time, hospital as a work setting saw a significant increase. This was likely related to the COVID-19 pandemic, as hospitals temporarily reversed the national trend to hire only RNs or BSNs. The current percentage (37.3%) reflects a small increase from 2021 in the direction of extended care, while the hospital work setting saw a comparable decrease.
- Ambulatory care was the second most common setting, similar in percentage to prior years.
- Similar to prior years, the top four reasons for LPNs to change their place of employment were (1) seeking increased salary and benefits, (2) dissatisfaction with previous position, (3) seeking promotion/career advancement, and (4) seeking more convenient hours. While these are the same top four reasons that were selected in the 2021 survey, salary/benefits and dissatisfaction with previous position were reversed in the order of importance. Dissatisfaction with previous position decreased between the 2021 and 2023 surveys.
- In 2021, 62% of LPNs earned \$45,000 or less annually. Those earning \$45,000 or less dropped to 45% in the 2023 survey. This reflects a real increase in income for LPNs between 2021 and 2023 and is consistent with the high percentage who described changing work position to increase pay or benefits.
- The percentage of LPNs planning to leave direct patient care within the next 10 years (44.5%) remains unchanged from 2021.
- As in prior surveys, IV therapy was the most frequently identified certification obtained by LPNs (1,052, 13.4%). Although extended care is the most common work site for LPNs, certification in geriatrics was only identified by 4.4% (n = 343) of all LPNs.

• 35.9% (2,820) of LPNs reported currently holding a leadership position, down from 41.7% in 2021.

Recommendations

- The combination of fewer LPNs renewing or acquiring their license and the number who are looking for work in another field (outside nursing) raises serious concerns about the future availability of LPNs in Wisconsin. More needs to be known about the reasons LPNs are increasingly looking for work outside nursing and to put measures in place to retain LPNs working as nurses.
- Most LPNs (73.3%) described having no current certification. Over 1,000 LPNs selected certification in IV therapy, and over 500 LPNs selected *other* certifications, non-specified area. Only 343 of responding LPNs confirmed having certification in geriatric nursing. Considering the primary workplace for LPNs has been and continues to be extended care, encouraging and supporting certification in geriatric nursing is crucial. Employer support for and accessibility to continuing education in geriatric care needs much greater emphasis.
- Managing patients is becoming more complex, with increasing comorbidities among
 patients. Opportunity for LPNs to obtain/improve their clinical skills in specialty
 areas through continuing and higher education is critical.

Section III: LPN Workforce by DHS Region

A. LPN Workforce Demographics by DHS Region

- Median age for LPNs in Wisconsin is 47, unchanged from the previous survey.
- Median age in the Southeast region is also unchanged at 49.
- Median age in the Northeast and Northern regions fell between 2021 and 2023. The Northeast region experienced a 2-year drop in median age, now 44, while the Northern region decreased from 47 to 46.
- Median age increased in the Southern (2-year increase) and Western (1-year increase) regions. The oldest median age (50) was seen in the Southern region.

B. LPN Workforce Employment Patterns by DHS Region

- The percentage of LPNs who reported currently working as a nurse ranged from 81.3% in the Northern region to 89.4% in the Southeastern region. This is consistent with 2021 survey results.
- LPNs not currently working but seeking a nursing position ranged from 0.3% in the Western region to 1.1% in the Northern region.

C. LPN Workforce Education Patterns by DHS Region

- The Western region of Wisconsin had the highest percentage (10.5%) of LPNs with an associate degree. This is down slightly from 11% in the 2021 survey.
- The Northeast region had the lowest percentage of LPNs (6.2%) with an associate degree.

Section IV: Emergency Preparedness

70% of LPNs across Wisconsin reported having participated in an emergency preparedness training, up from 52% in 2021 and up from 47% at the time of the initial survey in 2011.

Recommendations

There has been a substantial increase in emergency preparedness of LPNs; although, few have used their training in actual emergencies. Employers continue to provide most of the training. Some review of training programs, with the goal of standardizing content, should be considered.

Section I. Introduction

LPNs play an important role in maintaining the health of Wisconsin's citizens. The *Wisconsin 2023 LPN Workforce Survey Report* provides information on all LPNs renewing their licenses to practice in Wisconsin. In 2023, 8,118 LPNs completed the survey. The data provide an overview of demographic characteristics, work settings, intentions regarding continued work and further education, and variations by regions of the state.

The analysis presented in this report is sponsored by the Wisconsin Center for Nursing, in partnership with the State of Wisconsin Department of Workforce Development (DWD). The purpose of this report is to provide an overview of the currently licensed LPN workforce in Wisconsin, to identify trends, and to recommend strategies for improving the capacity and quality of Wisconsin's LPN workforce. This study was determined to be exempt by the University of Wisconsin-Madison, Health Sciences Institutional Review Board.

Data Management

Sample and Methods

All LPNs who renewed their licenses in 2023 were required to complete the *Wisconsin LPN Workforce Survey*, as detailed in Wisconsin statute (Chapter 106.30). LPNs completed the survey electronically and were provided with information regarding the purpose of the survey, as well as the methodology used. The survey seeks information on demographics, education and training, employment, and future plans, including a regional breakdown.

Data Cleaning

A total of 8,127 LPN survey responses were received in 2023. Table 1 lists data sources that were excluded and the rationale for exclusion. Final data analysis included 7,845 surveys. Tables throughout this report vary in response rates (*n* values). Variation in number of responses (*N*) occurred based on respondents sometimes skipping survey questions. Some questions had a particularly low response rate, raising questions about those particular analyses. We conducted the analysis for each question based on LPNs responding to each question.

Table 1. Excluded Responses

Electronic Responses Received	8,127
Excluded Responses	
Duplicate cases	9
Does not live or work in Wisconsin	158
Received first degree or certification prior to age 16	12
Received first degree or certification after age 65	2
Provided direct care prior to age 16	41
Over age 85 and still working	1
First WI license prior to age 16	10
First US license prior to age 16	12
Born after first WI license	1
Born after first US license	3
Reports currently working more than 10 jobs	1
Works excessive hours in primary job, secondary job, or both	109
Total Exclusions	359
Final number if each discrepant data point was unique	7,768
Number of respondents in clean WI Only LPN Data	7,845

Limitations

All surveys are subject to some misinterpretation. That is, question interpretations made by LPNs completing the survey are sometimes misaligned with the intent of the question, which can yield inaccurate data leading to inaccuracies in the findings. Finally, LPNs completing the survey sometimes chose not to respond to a question, which resulted in missing data.

Section II: State Data Key Findings

A. LPN Workforce Demographics (N = 7,845)

Key Demographics Questions

- What is the age distribution of the LPN workforce?
- What are the demographic characteristics of the Wisconsin LPN population?
- What are the gender, racial, and ethnic characteristics of Wisconsin LPNs?
- Does the LPN workforce reflect the demographic characteristics of Wisconsin?

Most LPNs who hold a Wisconsin license either reside in or have a primary and/or secondary job in the State of Wisconsin (97.2%). Table 2 provides a general demographic description of Wisconsin's LPNs, illustrating that LPNs in Wisconsin continue to be mostly female (93.8%) and White (83.6%).

Table 2. LPNs Licensed in Wisconsin

Residence (<i>N</i> = 7,839)	n	%	
Wisconsin	7,596	96.8	
Outside Wisconsin	243	3.1	
Work Status			
Works in Wisconsin	4,617	97.2	
Works outside Wisconsin	134	2.8	
Not currently employed	780	9.9	
Gender $(N = 7,845)$			
Female	7,358	93.8	
Male	472	6.0	
Other (non-binary)	15	0.2	
Second Language Fluency ($N = 7$,845)		
No language other than English	6,613	84.3	
One language other than English	1,022	13.0	
Two or more language	210	2.7	
Race/Ethnicity ($N = 7,845$)			Wisconsin ^{1,2}
(14 – 7,043)			Population (%)
White	6,680	83.6	80. 1
Black or African American	750	9.4	6.6
American Indian or Alaska	115	1.4	1.2
Native			
Asian	199	2.5	3.2
Native Hawaiian or Other	11	0.1	0.0
Pacific Islander			
Other	233	2.9	3.1
Hispanic, Latino, or Latinx $(N =$	7,845)		
Yes	7,253	7.6	7.6
No	592	92.5	

Age		
Mean	48.3	
SD	13.5	
Min	19.0	
Max	92.0	

¹U.S. Census Bureau (2020).

As in many other states, Wisconsin's cultural and linguistic diversity continues to increase (see Table 3). Spanish is the non-English language spoken by the largest number of Wisconsin residents (261,122) followed by Hmong (38,938). Several other languages are also spoken by Wisconsin residents, particularly among those who are foreign born (Deloitte Consulting, 2019). Although the exact number is unknown, many Wisconsin residents speak English *less than well* (generally referred to as limited English proficiency [LEP]; Ledesma, 2016). Based on a 2019 Wisconsin demographics report, 8.75% of Wisconsin residents speak a language other than English (Deloitte Consulting, 2019). Language differences between patients and providers have documented negative effects on care, including decreased overall quality of care, decreased patient and provider satisfaction, increased likelihood of adverse events, and poor patient outcomes (Al Shamsi et al., 2020). Therefore, ensuring adequate patient/provider communication for non-English speaking or LEP Wisconsin residents relies on access to providers who are fluent in their language.

The Native American population in Wisconsin continues to increase. Wisconsin is currently home to 11 federally-recognized tribes and several others that have not been federally recognized (Wisconsin Department of Health Services, 2008). Each of these tribes has its own language, spiritual beliefs, and health practices.

- Data from the 2023 LPN Workforce Survey document 15.7% of LPNs with fluency in two or more languages other than English. This percentage exceeds the 3.5% of Wisconsin's population who report speaking English less than well. Fifty-nine percent of those in the general Wisconsin population who speak English less than well are Spanish speaking, 19% speak a Hmong dialect, and just under 5% speak Chinese/Mandarin (Wisconsin LEP Data by County, 2014). However, there are no data on the alignment of settings where LPNs are fluent in a second language and where patients speak a non-English language. Nor are there any data on how the settings where particular languages are spoken by LPNs align with the particular language spoken by Wisconsin residents using that healthcare setting. Without this information, it is not possible to determine the extent to which fluency in a second language is helpful for Wisconsin patients with limited English language proficiency. Important unanswered questions include:
 - o To what extent are LPNs who speak a second language working in areas and with patient populations where those languages are spoken?
 - What percentage of second languages corresponds to Wisconsin's LEP population, the languages most commonly spoken by those who speak English less than well.

² QuickFacts data are derived from: Population Estimates, American Community Survey, Census of Population and Housing, Current Population Survey, Small Area Helath Insurance Estimates, Small Area Income and Poverty Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits.

^{*}This number is not zero, but the number is so small that when rounded, it is close to zero.

- o To what extent are nurses working with these culturally diverse populations able to provide care that is culturally sensitive.
- Are LPNs encouraged to learn a second language that is commonly spoken in Wisconsin?
- Do training programs for LPNs include training in how to provide care to culturally diverse groups or to gain the skills necessary to recognize and adapt to cultural differences relevant to patient care delivery.

Table 3 illustrates demographic trends in Wisconsin LPNs over time. In terms of gender, the percentage of male LPNs continues a slow but steady rise, having increased from 4.4% in 2013 to 6.0% in 2023. In terms of race/ethnicity, the percentage of White LPNs has slightly declined from 2021, the third such decline since 2015. This continues to reflect a higher percentage than the overall Wisconsin population. The percentage of Black/African American LPNs has now surpassed the percentage of Wisconsin residents identifying as Black or African American. LPNs identifying as Asian increased slightly, but steadily, between 2013 and 2023. This percentage continues to fall short of the percentage of Wisconsin residents identifying as Asian. LPNs identifying as Hispanic, Latino, or Latinx has increased from 1.9% in 2013 to 7.5% in 2023, for the first time aligned with the overall Wisconsin population. Studies have confirmed that providers identifying as a member of a minority group are more likely to work with the underserved. This suggests that observed changes in LPN demographics have the potential to improve service delivery to underserved groups as populations (Xierali et al., 2018).

Table 3. Demographics Yearly Comparison

	2015	2017	2019	2021	2023
	%	%	%	%	%
Gender					
Female	94.8	94.7	94.6	94.1	93.8
Male	5.2	5.3	5.4	5.7	6.0
Other (non-binary)	-	-	-	0.2	0.2
Race					
White	90.4	89.5	87.7	87.7	85.1
Black or African American	6.0	6.2	6.4	7.7	9.6
Asian	1.3	1.6	1.7	2.0	2.5
American Indian or Alaska Native	0.4	0.6	0.6	1.3	1.5
Native Hawaiian or Other Pacific Islander	0.1	0.0^*	0.1	0.2	0.1
Other	-	-	-	-	3.0
Two or more races	1.9	2.2	1.9	-	-
Ethnicity					
Hispanic, Latino, or Latinx	2.2	2.4	2.8	3.5	7.5

^{*}This number is not zero, but the number is so small that when rounded, it is close to zero.

Demographic Recommendations

- The reported increase in second language fluency is an important achievement. It is unclear whether schools are deliberately recruiting LPNs with second language fluency or more LPNs are becoming fluent in a second language. Information is needed on the specific languages spoken by LPNs, their actual fluency levels, and their opportunities to use the second language during patient care. Difficulty communicating with providers has a profound negative impact on patient experience and outcomes and is an important continuing barrier to care for ethnic minority, rural, and economically disadvantaged populations.
- Nurses and other health professionals are most likely to work in communities similar to those where they grew up (Walker et al., 2012; Xiareli et al., 2018). This suggests that workforce gaps are most effectively addressed by recruiting health professionals from among the underserved populations most effected by a shortage of providers familiar with their culture. The increasing alignment between ethnic identity of LPNs and those of the general Wisconsin population is likely to improve the provision of culturally congruent care.

B. Education Patterns

Key Education Questions

- What is the educational credential distribution pattern of Wisconsin LPNs?
- What are the barriers to continuing or advancing education?
- What are the educational plans of LPNs in Wisconsin?

Table 4 illustrates the highest degree earned by Wisconsin LPNs, both in nursing and non-nursing fields. The majority of Wisconsin's LPNs (84.2%) earned a practical or vocational diploma as their highest nursing degree.

Table 4. Highest Degree Earned

Nursing Degree (N = 7,685)	n	%
Practical or Vocational Nursing Diploma	6,471	84.2
Diploma in Nursing	761	9.9
Associate Degree in Nursing	432	5.6
Bachelor of Science in Nursing	18	0.2
Masters of Science in Nursing	0*	0.0
Doctorate in Nursing	0*	0.0
Non-Nursing Degree $(n = 7,694)$		
Practical or Vocational Nursing Diploma	6,119	79.5
Diploma in Nursing	716	9.3
Associates	566	7.4
Bachelors	246	3.2
Masters	43	0.6
Doctorate	*	0.0

^{*}This number is not zero, but the number is so small that when rounded, it is close to zero.

Table 5 represents barriers to further education identified by LPNs. The most commonly selected barrier was cost of lost work time and benefits (30.6%), closely followed by cost of tuition, materials, books, etc. (28.6%). Family/personal barriers as a reason not to pursue further education decreased in relative importance from the prior survey. Respondents could select all relevant options.

Table 5. Barriers to Further Education

Barrier (N = 7,845)*	n	%
Cost of lost work time and benefits	2,401	30.6
Cost of tuition, materials, books, etc.	2,246	28.6
No plans to pursue higher education	2,205	28.1
Family/personal reasons	1,510	19.2
None	1,302	16.6
Lack of flexibility in work schedule	930	11.9
Other, not listed	288	3.7
Scheduling of educational programs offered	274	2.8
Limited access to online learning or other online	221	2.8
resources	<i>44</i> 1	2.0
Commuting distance to educational program	190	2.4

^{*} Participants could select more than one response.

Table 6 reflects LPNs' plans to enroll in continuing education. As in prior years, the majority of LPNs reported no plans for continuing education or obtaining an advanced nursing degree. A very small percentage (0.4%, n = 31) reported being enrolled in a certification program. This percentage is consistent with prior years. Plans to enroll in further education is consistently about twice the percentage of LPNs actually enrolling in an educational program. Compared with the initial survey in 2011, a significantly lower percentage of LPNs are currently enrolled in an associate degree program (14.9% versus 9.8%) and significantly fewer have plans to enroll in any type of educational program (34.8% versus 20.3%). In each case, the number and percentage planning to enroll is twice the number and percentage actually enrolled. This has been a stable finding since 2011.

Table 6. Plans for Further Education in Nursing

Educational Plans	2015 n (%)	2017 n (%)	2019 n (%)	2021 n (%)	2023 n (%)
No plans for additional nursing studies	7,188 (64.4)	6,679 (64.5)	6,352 (66.4)	6,321 (65.9)	5,291 (67.4)
Plans to pursue further education in nursing within 2 years	2,533 (22.7)	2,292 (22.1)	1,977 (20.7)	1,957 (20.4)	1,591 (20.3)
Enrolled in an associate program	1, 264 (11.3)	1,230 (11.9)	1,084 (11.3)	1,111 (11.6)	767 (9.8)
Enrolled in a bachelor's program	131 (1.2)	103 (1.0)	112 (1.2)	161 (1.7)	155 (2.0)
Enrolled in non- degree specialty certification	37 (0.3)	47 (0.5)	38 (0.4)	32 (0.3)	31(0.4)
Enrolled in a graduate degree nursing program	*	5 (0.0)	5 (0.1)	8 (0.1)	10 (0.1)

^{*}Value too small to report (*n* less than 5).

Education Recommendations

- The knowledge needed to provide care is complex and rapidly evolving. The ability to provide high quality care is highly dependent on continued learning, which requires both professional development opportunities and employer support and encouragement. The discrepancy between LPNs who plan to further their education and those who actually do suggests greater attention should be devoted to addressing the barriers they have identified.
- Information on the documented patient impact of increased knowledge and the importance of continuing education should be included as part of LPN training programs.
- Nurse residency programs should be considered for LPNs, particularly in specialty areas where certification is low.

• LPNs play a vital role in healthcare delivery. However, there are differing opinions about their roles across healthcare delivery settings and the ideal mix of RNs and LPNs in general or in specific environments. To make recommendations about whether or to what extent LPNs should be encouraged to enroll in higher degree programs, it would be important for the profession to consider the role of LPNs where they are needed and to develop a long-term plan related to continuing education and degree achievement. These conversations are increasingly urgent as the number of LPNs continues to decline.

C. Employment Patterns

Key Employment Patterns Questions

- What is the employment status of LPNs licensed in Wisconsin?
- What are the intentions of unemployed LPNs?
- What are the reasons given for employment change, future employment plans, and career decisions?
- How many LPNs are currently providing direct patient care?
- What are the specialty certifications held by LPNs?
- How many currently licensed LPNs are retired from the workforce?

Table 7 illustrates the current employment status of LPNs. The percentage of LPNs renewing their license who are actively working as a nurse increased notably from 75% in 2021 to 82% in 2023. The percentage of LPNs licensed in Wisconsin reporting their status as retired decreased between 2021 and 2023 from 8.9% to 5.3%. This is close to the percentage LPNs who reported being retired (5.9%) in 2013. The number of LPNs who reported being unemployed but seeking work in nursing saw a dramatic drop (282 in 2021, 25 in 2023.) from all prior surveys. The number and percentage of LPNs not working but looking for work in another field has seen a very significant increase from 45 in 2021 to 159 in 2023. Prior to 2021, this percentage had been quite steady.

Table 7. Employment Status Principal Job

Employment	2015	2017	2019	2021	2023
	n (%)				
Working as a nurse	8,353 (74.9)	8,033 (77.6)	7,427 (77.6)	7,219 (75.3)	6,469 (82.5)
Working in healthcare, not nursing	765 (6.9)	590 (5.7)	533 (5.6)	551 (5.7)	373 (4.8)
Working in another field	502 (4.5)	376 (3.6)	323 (3.4)	318 (3.3)	223 (2.8)
Not working, not seeking work	365 (3.3)	304 (2.9)	271 (2.8)	316 (3.3)	180 (2.3)
Not working, seeking work in nursing	340 (3.0)	251 (2.4)	214 (2.2)	282 (2.9)	25 (0.3)
Not working, seeking work in another field	36 (0.3)	40 (0.4)	38 (0.4)	45 (0.5)	159 (2.0)
Retired	797 (7.1)	762 (7.4)	762 (8.0)	858 (8.9)	416 (5.3)

Table 8 indicates a significant incrase in LPNs who would not consider returning to work, from 11 in 2021 to less than 142 in 2023. Greater flexibility in work hours and improved pay continue to be the greatest obstacles for returning to work. Considering the general nursing shortage and the significant decrease in LPNs licensed in Wisconsin, finding ways to address these two barriers is vital.

Table 8. Employed in Non-Nursing - Factors Influencing Return to Employment in Nursing (N = 1,376)

Factors influencing return to nursing*	n	%
Improved pay	468	34.0
More or flexible hours	467	33.9
Work environment	433	31.5
Other	365	26.5
Worksite location	271	19.7
Shift	233	16.9
Modified physical requirements of the job	187	13.6
Improved healthcare benefits	182	13.2
Improvement in my health status	162	11.8
Retirement benefits	156	11.3
I would not consider returning	142	10.3
Opportunity for career advancement	134	9.7
Affordable childcare at or near work	59	4.3

^{*}Respondents could select more than one response.

Table 9 illustrates trends in LPNs' change in employment status over the previous 6 years. The percentage reporting no change in employer or work hours increased significantly from 2021, returning to a level close to those prior to pandemic years. Working more hours or fewer hours were the most frequently selected reasons for change in work status. Almost 20% of LPNs experienced a work status change in the form of increased hours worked. The percentage of LPNs who were not working as an LPN last year, but are now working in an LPN position, was up significantly from 3.8% to 11.8%. The percentage of LPNs remaining with the same employer, but taking a new position, remained constant compared to the 2021 survey.

Table 9. Employment Status Change Over the Past Year (N = 7,845)

Status Change	2017 n (%)	2019 n (%)	2021 n (%)	2023 n (%)
No change in employment status	6,760 (65.3)	6,260 (65.4)	3,327 (34.7)	4,952 (63.1)
New position with new employer	1,040 (10)	950 (9.9)	1,000 (10.4)	986 (12.6)
New position with same employer	403 (3.6)	370 (3.9)	782 (8.2)	653 (8.3)
Not previously working as LPN, but now in LPN job	377 (3.4)	308 (3.2)	360 (3.8)	929 (11.8)
Was working as LPN, but no longer working as LPN	537 (4.8)	362 (3.9)	544 (5.7)	447 (5.7)
Work MORE hours in a typical week than I did in a typical week last year	-	-	3,083 (32.1)	1,589 (20.3)
Work FEWER hours in a typical week than I did in a typical week last year.	-	-	1,757 (18.3)	1,089 (13.9)

Table 9 (continued)

Has your job status changed? $(N = 7,845)$	n	%
I AM WORKING as an LPN now, but last year I WAS NOT working as an LPN.	447	5.7
I AM WORKING as an LPN now, and last year I WAS working as an LPN.	5,620	71.6
I am NOT WORKING as an LPN now, but last year I WAS working as an LPN.	929	11.8
I am NOT WORKING as an LPN now, and last year I WAS NOT working as an LPN.	849	10.8
Has your position changed? $(N = 7,845)$	n	%
Not applicable; Not currently working.	792	10.1
I have the SAME position with the SAME employer as I had last year.	4,952	63.1
I have a DIFFERENT position with the SAME employer as I had last year.	653	8.3
I have a DIFFERENT position with a DIFFERENT employer than the one I had last year.	986	12.6
I have the SAME position with a DIFFERENT employer than the one I had last year.	462	5.9
Have your hours changed? $(N = 7,845)$	n	%
Not applicable; Not currently working.	792	10.1
I work MORE hours in a typical week than I did in a typical week last year.	1,589	20.3
I work the SAME NUMBER of hours in a typical week than I did in a typical week last year.	4,375	55.8
I work FEWER hours in a typical week than I did in a typical week last year.	1,089	13.9

Table 10 lists the reasons given by LPNs for employment changes. The top reasons were: (1) salary/medical or retirement benefits, (2) dissatisfaction with prior employer, (3) promotion or career advancement, and (4) seeking greater flexibility in work hours. Salary/benefits and dissatisfaction with employer stood out as the most frequent reasons given. These are similar to prior years; although, seeking promotion was much more frequently cited in the 2021 survey.

Table 10. Most Important Factor for Change of Employment (N = 3,259)

Factor	2017 n (%)	2019 n (%)	2021 n (%)	2023 n (%)
Retired	288 (8.0)	278 (8.4)	24 (1.6)	245 (7.5)
Dissatisfaction with previous position	404 (11.3)	421 (12.7)	262 (17.0)	374 (11.5)
Salary/medical or retirement benefits	372 (10.3)	288 (8.7)	182 (11.8)	420 (12.9)
Seeking more convenient hours	391 (10.9)	385 (11.6)	163 (10.6)	281 (8.6)
Promotion/career advancement	333 (9.3)	285 (8.6)	257 (16.7)	294 (9.0)
Change in health status	192 (5.3)	160 (4.8)	30 (1.9)	191(5.9)
Childcare responsibilities	167 (4.6)	140 (4.2)	50 (3.2)	184 (5.6)
Other family responsibilities	167 (4.6)	173 (5.2)	67 (4.4)	173 (5.3)
Relocation/moved to a different area	175 (4.9)	144 (4.4)	89 (5.8)	133 (4.1)
Change in financial status	138 (3.8)	111 (3.4)	62 (4.0)	137 (4.2)
Change in spouse/partner work situation	172 (2.0)	68 (2.1)	23 (1.5)	61 (1.9)
Laid off	76 (2.1)	68 (2.1)	43 (2.8)	44 (1.4)
Returned to school	-	-	92 (6.0)	282 (8.7)
Other	-	-	195 (12.7)	440 (13.5)

Figure 1 represents LPNs' plans to continue working their present type of work by number of years intended to continue. Only one-third of LPNs (33.4%) plan to continue in their present type of work for 5 years.

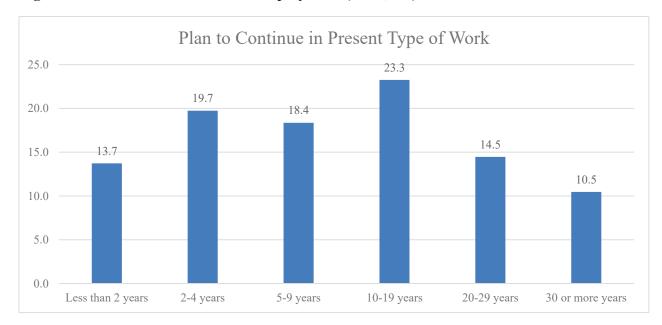


Figure 1. Plan to Work in Present Employment (n = 7,053)

Figure 2 shows the breakdown in years that LPNs plan to work in their current positions. Based on Figure 2, LPNs working in extended care are more likely to continue working in extended care than are LPNs currently employed in a hospital setting. Correspondingly, a greater percentage of LPNs working in hospitals report planning to leave in the next 4 years.

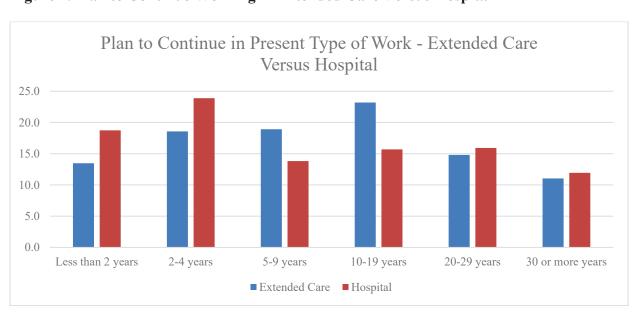


Figure 2. Plan to Continue Working in Extended Care Versus Hospital

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Figure 3 illustrates LPNs' plans to work in their present position by urban and rural work setting. Overall, plans to stay in present position are similar between LPNs working in rural and urban settings.

Figure 3. Plan to Work in Present Type of Work by Urban or Rural Work Setting (n = 1,527)

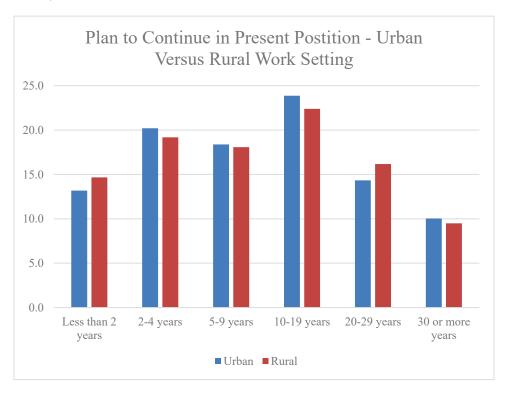


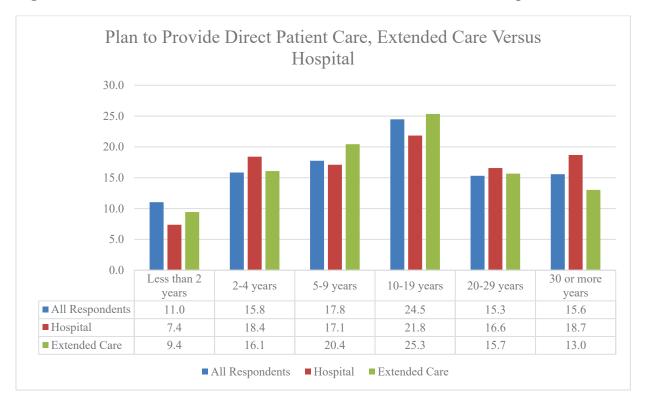
Table 11 illustrates the number and percentage of LPNs who plan to continue working in direct patient care for varying lengths of time.

Table 11. Plan to Continue Providing Direct Patient Care

Plan to Continue Providing Direct Patient Care (N = 6,344)	n	0/0
Less than 2 years	610	9.6
2-4 years	1,019	16.1
5-9 years	1,196	18.9
10-19 years	1,609	25.4
20-29 years	1,025	16.2
30 or more years	885	14.0

Figure 4 represents LPNs' current plans for continuing in hospital and extended care work. The figure suggests little difference between the plans of LPNs working in extended care and those working in hospitals. Relatively comparable across all three settings, it is notable that almost half of LPNs plan to continue in their current setting for less than 10 years.

Figure 4. Plan to Provide Direct Patient Care, Extended Care Versus Hospital



Characteristics of Primary Job

Table 12 documents that the majority of LPNs are regular employees, with the majority working full-time for an hourly wage. These percentages are consistent with surveys from prior years.

Table 12. Characteristics of Primary Job

Employment Status ($N = 7,845$)	n	%
Regular employee	4,240	89.2
Self-employed	151	3.2
Temporary employment agency	95	2.0
Travel nurse or traveling nurse agency	208	4.4
Volunteer	62	1.3
Current Employment Status (N = 7,845)	n	%
Working as a nurse	6,469	82.5
Working in healthcare, not nursing	373	4.8
Working in another field	223	2.8
Not working, seeking work in nursing	180	2.3
Not working, seeking work in another field	25	0.3
Not working, not seeking work and not retired	159	2.0
Retired	416	5.3
Employment Basis for Primary Position ($N = \frac{1}{2}$	4,756)	
Full-time, salaried	418	8.8
Full-time, hourly wage	2,918	61.4
Part-time, salaried	38	0.8
Part-time, hourly wage	996	20.9
Per diem (called as needed)	326	6.9
Volunteer	60	1.3

Table 13 reflects Wisconsin LPNs' primary and secondary places of work. Extended care remains the most common primary work setting, with hospital work setting dropping a nearly equivalent percentage.

Table 13. Employment Category

Best Describes Your Primary Place of Work (N = 4,756)	n	0/0
Hospital (medical/surgical, AODA/psychiatric,	446	9.4
long-term acute care)		
Extended Care (AFH, CBRF, and RCAC)	1,776	37.3
Ambulatory Care (employee health, outpatient	1,326	27.9
care, clinics, surgery center)		
Home Health (private home)	366	7.7
Correctional Care	227	4.8
Community/Public Health	112	2.4
Other*	503	10.6
Best Describes Your Primary Place of Work $(N = 4,756)$	n	%
Nursing	3,988	83.9
Health-related services outside of nursing	327	6.9
Retail sales and services	32	0.7
In-service or patient educator	27	0.6
Financial, accounting, and insurance processing staff	50	1.1
Consulting	17	0.4
Other	315	6.6
Best Describes Your Secondary Place of Work $(N = 793)$	n	0/0
Nursing	506	63.8
Health-related services outside of nursing	84	10.6
Retail sales and services	39	4.9
In-service or patient educator	*	0.1
Financial, accounting, and insurance processing staff	7	0.9
Other	156	19.7

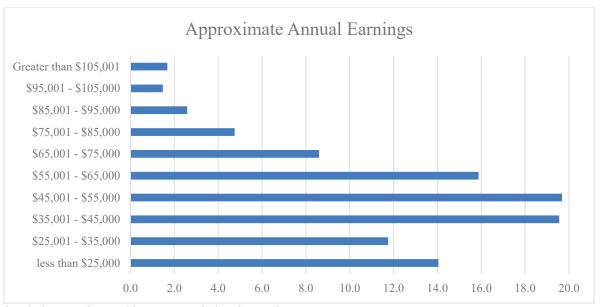
Note. AODA – Alcohol or drug abuse; AFH – adult family homes; CBRF – community-based residential facilities; RCAC – residential care apartment complexes

^{*}Other includes call center/tele-nursing; government agency other than public/community health or corrections; non-governmental health policy, planning or professional organization; insurance company claims/benefits; sales (pharmaceutical, medical devices, software, etc.); self-employed/consultant; other.

Compensation

Figure 5 summarizes annual earnings for LPNs. Almost half (45.4%) of LPNs make less than \$45,000 annually. This percentage is down from 2021 survey when 62% of LPNs reported earning less than \$45,000 annually.

Figure 5. Approximate Annual Earnings (N = 4,756)

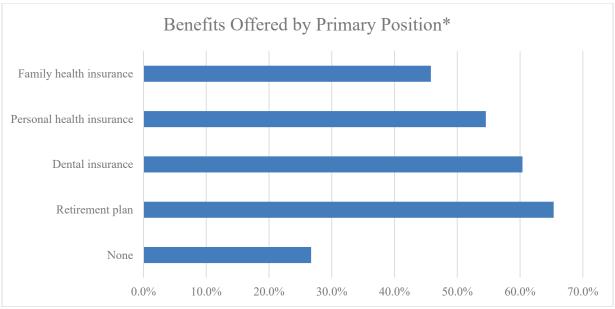


^{*}Includes overtime and bonuses; excludes sign-on bonuses.

Compensation from Primary Job

Figure 6 shows the benefits offered to LPNs at their principal place of work. Slightly more than one-quarter of LPNs (26.7%) reported not receiving any benefits, similar to 2021 survey findings.

Figure 6. Benefits Offered in Primary Position (N = 4,756)



^{*}Respondents could select more than one response.

Specialization and Certification

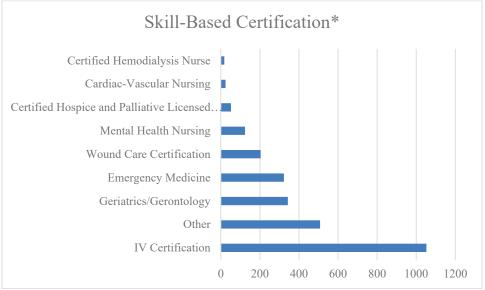
Table 14 shows the clinical expertise reported by LPNs in Wisconsin. Respondents could select multiple options. The highest single percentage of expertise was in geriatrics/gerontology (42.1%), followed by adult health (20.2%) and hospice/palliative care (17.6%).

Table 14. Clinical Expertise (N = 7,845)

Clinical Expertise	n	%
Geriatrics/Gerontology	3,305	42.1
Adult Health	1,587	20.2
Hospice Care/Palliative Care	1,380	17.6
Family Health	1,309	16.7
None	1,183	15.1
Home Health	1,105	14.1
Other, not listed	1,104	14.1
Rehabilitation	1,031	13.1
Medical - Surgical	760	9.7
Pediatrics	687	8.8
Psychiatric / Mental Health	606	7.7
Acute Care/Critical Care/Intensive Care	577	7.4
Corrections	433	5.5
Addiction/AODA/Substance Abuse	412	5.3
Women's Health	400	5.1
Community Health	392	5.0
Obstetrics/Gynecology	365	4.7
Cardiac Care	359	4.6
Respiratory Care	328	4.2
Emergency/Trauma	291	3.7
Occupational Health/Employee Health	261	3.3
Surgery/Pre-op/Post-op/PACU	261	3.3
School Health (K-12 or post-secondary)	243	3.1
Oncology	215	2.7
Dialysis/Renal	189	2.4
Public Health	170	2.2
Maternal-Child Health	145	1.8
Labor and Delivery	117	1.5
Nephrology	65	0.8
Neonatal Care	49	0.6
Anesthesia	15	0.2

Figure 7 lists the certifications reported by LPNs. IV therapy was selected by the greatest number of LPNs, as in prior surveys. A much smaller number/percentage of LPNs reported having achieved certification in geriatrics/gerontology, despite this being the highest level of expertise reported in Table 14. Most LPNs (73.3%) reported having no certification.

Figure 7. Skill-Based Certification (N = 7,845)



^{*5,754} selected no current skill-based certification.

Leadership Positions

Table 15 illustrates the percentage of LPNs who reported holding a leadership position (by total and by identified ethnicity). There was a decrease in LPNs describing their position as leadership, from 47% in 2021 to 35.9% in 2023. The majority of LPNs who reported being in leadership positions were white (80.4%), followed by Black (13.8%).

Table 15. Leadership Characteristics of LPNs Working as Nurses

Leadership	n	%
Holds leadership position $(n = 7,845)$		
Yes	2,820	35.9
No	5,025	64.1
Race/ethnicity by reported leadership position $(n = 2,882)$		
White/Caucasian	2,268	80.4
Black or African American	388	13.8
Asian	50	1.8
American Indian/Alaska Native	77 *	2.7
Native American/Other Pacific Islander		0.1
Other C. L. (1917) (1918)	96	3.4
Gender (holding leadership position) $(n = 2,820)$	2.602	02.2
Female	2,602	92.3
Male	212	7.5
Non-binary Fluency in language other than English	6	0.2
Hold leadership position	541	19.2
Do not hold leadership position	691	13.7
Highest nursing degree earned $(n = 2,750)$	091	13.7
Diploma in nursing	2,238	81.4
Associate degree in nursing	327	11.9
Bachelor's degree in nursing	174	6.3
Master's degree in nursing	10	0.4
Type/location of leadership position ($n = 3,127$)		
Work area (e.g., charge nurse, team leader, unit manager)	2,309	81.9
Organizational level (e.g., dean, chief nursing officer, director)	161	5.7
Chair of major committee in organization of yourprimary position	34	1.2
Governance board (e.g., board of trustees/board of directors)	31	1.1
Public official (e.g., county board of supervisors, state legislator)	9	0.3
Leadership role in a professional association (e.g., task force, committee chair)	168	6.0
Other	415	14.7
Demographic characteristic by leadership position		
Mean age	49.0	
Mean years working as LPN	17.5	
Mean hours per week in primary job	36.2	
Mean total hours per week in primary and secondary jobs	38.2	
Mean number of certifications	1.1	
Mean years worked as an LPN providing direct patient care	15.4	
Mean number of separate nursing jobs currently held	1.3	

^{*}Too small to report (>5) or not reported to protect anonymity. *Note*. Respondents may hold more than one position.

Table 16 integrates gender and leadership to illustrate the number/percentage of Black, Hispanic, and male nurses who indicated working as a nurse while holding a leadership position. This is consistent with a long-standing national trend for males occupying a higher percentage of leadership positions than their percentage in the workforce (Smith et al., 2021).

Table 16. Leadership Position by Black, Hispanic, and Male Working as a Nurse

Category	Holds Leadership Position n (%)	No Leadership Position n (%)	Total
Black or African American	388 (51.7)	362 (48.3)	750
Hispanic/Latino	204 (34.5)	388 (65.5)	592
Male	183 (44.0)	233 (56.0)	416

Figure 8 documents plans for continued work in their current work setting for LPNs holding leadership positions.

Figure 8. LPNs in Leadership Positions Plans to Continue in Current Employment (N = 2,655)

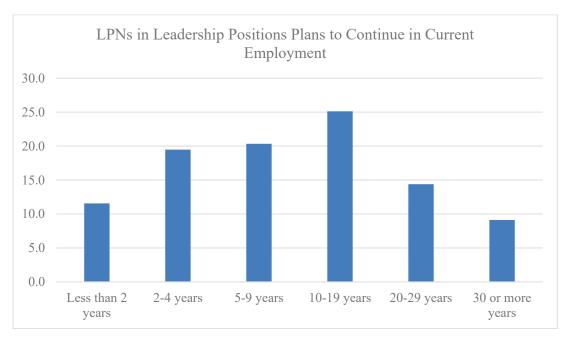


Figure 9 shows the percentage of LPNs working in rural regions. This percentage dropped between 2019 and 2021 (pandemic years) but has rebounded in the 2023 survey to pre-2021 levels.

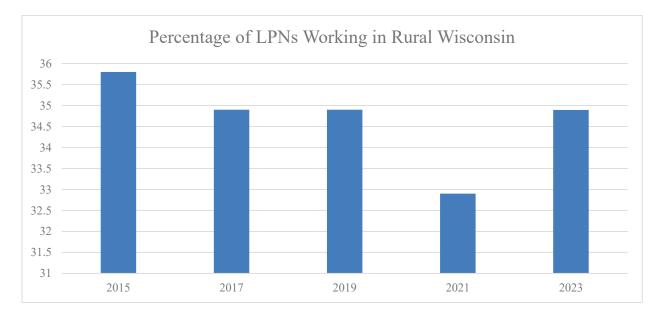


Figure 9. Percentage of LPNs Working in Rural Wisconsin

Employment Recommendations

- The number of LPNs has continued to decrease. This is a concerning trend, considering the current shortage and the increasing age of Wisconsin's population.
- The decrease in LPNs renewing their license and reporting *retired* suggests that LPNs who are retired are less likely than in previous years to renew their licenses.
- Since LPNs are predominantly providing direct care in extended care facilities, these settings will be the most negatively affected by a continuing decrease in the number of LPNs. The continuing shortage in extended care, and the pending CMS staffing requirements, will increase demand for LPNs as the supply decreases. In addition to the staffing shortages projected, the number and care complexity of individuals receiving care in extended care settings is also increasing. This suggests an urgent need to increase the skill level (certifications in geriatrics/gerontology) and the number of LPNs available to work in extended care. Clear plans need to be developed to increase access to pathways that will result in better preparation for the work demands.
- The difficulty recruiting and retaining a sufficient workforce in rural extended care facilities has already led to increased closings of rural extended care facilities.
- The increase in work hour flexibility as a main reason for leaving a job suggests the need for a greater focus in scheduling.

Section III. LPN Workforce by DHS Region

This section provides an overview of workforce issues in the five Department of Health Services (DHS) regions, as well as comparisons across the DHS regions. Figure 10 and Table 17 display the counties within each DHS region.

Figure 10. DHS Regions of the State



Source: Wisconsin Department of Health Services (https://www.dhs.wisconsin.gov/aboutdhs/regions.htm)

Table 17. Wisconsin Counties by DHS Region

Southern	Southeastern	Northeastern	Western	Northern
Region	Region	Region	Region	Region
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	

A. LPN Workforce Demographics by DHS Region

Table 18 shows LPN demographics by region across the state. LPNs in Wisconsin continue to be mostly White and female. Since the 2021 survey, the Southeastern region of the state showed a noticeably higher percentage (23.8%) and a slight increase in number of Black/African American LPNs, compared to the other regions of the state. Both the Northern and Northeastern regions recorded a median age slightly younger than the state median age. The Northeastern region was the youngest, with a mean age of 45.5 years.

Table 18. LPN Workforce by DHS Region and State

Demographic	Stat $n=4$,		Sout n =		South n = 1.		North n = 1			stern 631		thern 273
Mean Age	47.	6	48	3.8	48.	.9	45	.5	4	-8	47	7.1
Median Age	47		5	0	49)	4	4	4	.8	4	16
Gender	n	%	n	%	n	%	n	%	n	%	n	%
Female	4,305	93.7	692	93	1,407	94	1,358	94.0	593	94.0	255	93.4
Male	278	6.0	46	6.2	95	6.3	87	6.0	34	5.4	16	5.9
Non-binary	12	0.3	*	*	*	*	*	*	*	*	*	*
Race												
White/Caucasian	6,743	86.9	681	91.9	1,060	70.4	1,343	92.9	606	96.0	262	96.0
Black/African American	439	9.6	37	5.0	358	23.8	34	2.4	9	1.4	1	0.4
American Indian/ Alaska Native	79	1.7	12	1.6	21	1.4	31	2.1	9	1.4	6	2.2
Asian	87	1.9	9	1.2	40	2.7	26	1.8	8	1.3	4	1.5
Native Hawaiian/ Other Pacific Islander	7	0.2	*	*	*	*	*	*	*	*	*	*
Other	127	2.8	14	1.9	66	4.4	33	2.3	10	1.6	4	1.5
Ethnicity					_		_					
Hispanic/Latino	369	8.0	58	7.8	162	10.8	98	6.8	32	5.1	19	7.0

^{*} Too small (less than 5 people) to report or not reported to protect anonymity.

Table 19 shows LPNs who reported fluency in a language other than English. The Southeastern region showed the highest percentage of LPNs reporting fluency in a language other than English (17.3%). Reported second language fluency increased significantly in all regions of the state.

Table 19. Fluency in a Language Other than English by DHS Region and State

Languages Spoken	Sta n = 4			thern 741	Sout! <i>n</i> = 1	heast ,505	Nort n = 1			stern 631		thern = 273
	n	%	n	%	n	%	n	%	n	%	n	%
Has fluency in one language other than English	609	13.3	83	11.2	260	17.3	175	12.1	60	9.5	31	11.4
Has fluency in two or more languages other than English	127	2.8	16	2.2	56	3.7	39	2.7	10	1.6	6	2.2

¹State data include only those LPNs who work in Wisconsin.

B. LPN Workforce Employment Patterns by DHS Regions

Table 20 displays the employment status of LPNs across the state and broken down by regions. Most LPNs reported their status as currently working as an LPN (87.8%), down slightly from the 2021 survey.

Table 20. Employment Status of LPNs Who Live and/or Work in Wisconsin

Employment Status	State ¹ n = 4,595		Southern n = 741		Southeast <i>n</i> = 1,505		Northeast n = 1,545		Western n = 671		Northern n = 273	
x 0	n	%	n	%	n	%	n	%	n	%	n	%
Working as an LPN	4,036	87.8	661	89.2	1,345	89.4	1,260	87.2	548	86.8	222	81.3
Working in healthcare,not nursing	284	6.2	36	4.9	82	5.4	98	6.8	38	6.0	30	11.0
Working in another field	179	3.9	29	3.9	42	2.8	58	4.0	36	5.7	14	5.1
Not working, seekingwork in nursing	27	0.6	4	0.5	12	0.8	6	0.4	2	0.3	3	1.1
Not working, seekingwork in another field	3	0.1	1	0.1	1	0.1	1	0.1	0	0.0	0	0.0
Not working, notseeking work, not retired	20	0.4	3	0.4	6	0.4	10	0.7	1	0.2	0	0.0

^{*}Too small to report (less than 5 people) or not reported to protect anonymity.

Table 21 represents LPNs reporting currently providing direct patient care. Although relatively consistent across the state, there is a decrease in the percentage of LPNs working in direct patient care across all regions.

Table 21. Provision of Direct Patient Care in Primary Nursing Position

Employment Status	Sta n = 4		Sout n = 7		South n = 1		North n = 1		Wes $n = 6$			thern 273
	n	%	n	%	n	%	n	%	n	%	n	%
Currently providing DPC*	3,946	85.9	634	85.6	1,323	87.9	1,234	85.4	530	84.0	225	82.4
Not currently providing DPC*	649	14.1	107	14.4	182	12.1	211	14.6	101	16.0	48	17.6

¹State data includes only those LPNs who work in Wisconsin.

^{*}Direct patient care

Primary Work Setting of LPNs Across DHS Regions

■ Hospital

■ Home Health (Private Home)

■ Other (Insurance, call center etc.)

As in prior years, extended care and ambulatory care continue to be the primary work settings for LPNs; although, there is regional variation in distribution between these two settings. While extended care was the most common place of work for LPNs across the state, the Northeastern and Western regions reported a greater percentage of LPNs working in ambulatory care than in the other regions. The Southeastern region reported the highest proportion of LPNs working in extended care.

Primary Work Setting of LPNs Who Work in Wisconsin

45.0%
40.0%
35.0%
25.0%
20.0%
15.0%
10.0%
Southern Southeastern Northeastern Western Northern Total

■ Extended Care

■ Community/Public Health

■ Ambulatory Care

Correctional Care

Figure 11. Primary Work Setting of LPNs Who Work in Wisconsin

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C. LPN Workforce Education Patterns by DHS Region

The majority of LPNs in Wisconsin reported their highest nursing degree as a practical or vocational nursing diploma. The Western Region reported the highest percentage of LPNs who also had an associate degree.

Table 22. Highest Degree Earned by DHS Region

Degree	State ¹ $n = 4,513$		Southern <i>n</i> = 723		Southeast <i>n</i> = 1,476		Northeast n = 1,430		Western n = 617		Northern n = 267	
	n	%	n	%	n	%	n	%	n	%	n	%
Practical or vocational nursing diploma	3,590	79.5	581	80.4	1,126	76.3	1,194	83.5	472	76.5	217	81.3
Diploma in nursing	394	8.7	54	7.5	183	12.4	93	6.5	50	8.1%	14	5.2
Associate degree	341	7.6	56	7.7	106	7.2	89	6.2	65	10.5	25	9.4
Bachelor's	156	3.5	23	3.2	48	3.3	50	3.5	25	4.1	10	3.7
Master's	30	0.7	8	1.1	13	0.9	3	0.2	5	0.8	1	0.4
Doctorate	*	*	*	*	0	0.0	*	*	0	0.0	0	0.0

¹State data includes only those LPNs who work in Wisconsin.

^{*}Too small to report (less than 5 people) or not reported to protect anonymity.

Section IV. Emergency Preparedness

Table 23 illustrates LPNs holding membership in the Medical Reserve Corps (MRC) or Wisconsin Emergency Assistance Volunteer Registry (WEAVR). MRC is a search and rescue team in Northern Wisconsin that strives to support first responders, hospitals, and public health during emergencies. WEAVR is a voluntary, web-based system that assists with filling critical roles during public health emergencies (Wisconsin DHS, 2017). Despite the COVID-19 pandemic, very few LPNs in Wisconsin reported membership in either MRC or WEAVR.

Table 23. Emergency Preparedness Training

Membership in Organization	WEAVR n (%)	MRC n (%)
Yes	147 (1.9)	7 (0.1)
No	7,698 (98.1)	7,838 (99.9)

Figures 12 and 13 reflect those LPNs who reported emergency response training by source and the application of training in exercise or emergency response, as broken down by region. Employers continue to be, by far, the greatest providers of emergency response training. Voluntary organizations as a source of training increased slightly over the 2021 survey, seen mostly in the Northern region. There was a notable increase in the percentage of LPNs who reported applying their training in an exercise, while less than 5% reported applying emergency response training in an actual emergency (Figure 14), down slightly from the prior survey.

Figure 12. Training in Emergency Response by DHS Region

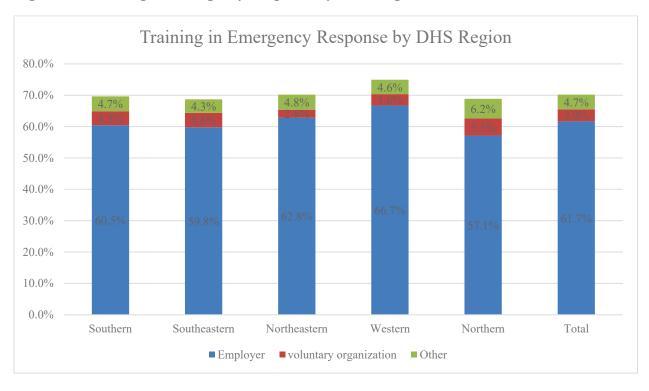
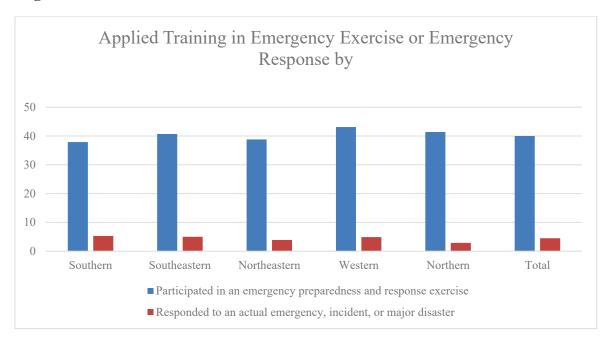


Figure 13. Applied Training in Emergency Exercise or Emergency Response by DHS Region



Emergency Preparedness Recommendations

- Support and encourage LPNs to volunteer with WEAVR and/or MRC, as appropriate by region.
- Support the significant increase in emergency preparedness trainings for LPNs, including supporting employers by providing resources, tools/toolkits, and clear guidance for providing emergency response training.

References

- Aiken, L., Clarke, S., Cheung, R., Sloane, D., & Silber, J. (2003). Educational levels of hospital nurses and surgical patient mortality. *Journal of the American Medical Association*, 290(12), 1617–1623. https://doi.org/10.1001/jama.290.12.1617
- Al Shamsi, H., Almutairi, A., Al Mashrafi, S., & Kalbani, T. (2020). Implications of language barriers for healthcare: A systematic review. *Oman Medical Journal*, *35*(2), e122. https://doi.org/10.5001/omj.2020.40
- Deloitte Consulting. (2019). Data USA, Wisconsin state. https://datausa.io/profile/geo/wisconsin
- Ledesma, D. (2016). *Understanding the demographic composition of Wisconsin's largest linguistic communities of LEP individuals*. University of Wisconsin Extension. https://cdn.shopify.com/s/files/1/0145/8808/4272/files/N4125.pdf
- Leys, T. (2023, February 21). Wave of rural nursing home closures grows amid staffing crunch. Watch. https://wisconsinwatch.org/2023/02/wave-of-rural-nursing-home-closures-grows-amid-staffing-crunch/
- Smith, B., Rojo, J., Everett, B., Montayre, J., Sierra, J., & Salamonson, Y. (2021). Professional success of men in the nursing workforce: An integrative review. *Journal of Nursing Management*, 29(8), 2470–2488. https://doi.org/10.1111/jonm.13445
- U.S. Census Bureau. (2020). *Wisconsin state profile*. https://www.census.gov/library/stories/state-by-state/wisconsin-population-change-between-census-decade.html
- Walker, K. O., Moreno, G., & Grumbach, K. (2012). The association among specialty, race, ethnicity, and practice location among California physicians in diverse specialties. *Journal of the National Medical Association*, 104(1-2), 46–52. https://doi.org/10.1016/s0027-9684(15)30126-7
- Wisconsin Center for Nursing. (2012). 2011 Wisconsin LPN survey report. https://wicenterfornursing.org/rn-lpn-survey-reports/
- Wisconsin Center for Nursing. (2014). 2013 Wisconsin LPN survey report. https://wicenterfornursing.org/rn-lpn-survey-reports/
- Wisconsin Center for Nursing. (2016). 2015 Wisconsin LPN report. https://wicenterfornursing.org/rn-lpn-survey-reports/
- Wisconsin Center for Nursing. (2018). 2017 Wisconsin LPN report. https://wicenterfornursing.org/rn-lpn-survey-reports/
- Wisconsin Department of Health Services. (2008, January). *Wisconsin minority health report* 2001–2005. Wisconsin Department of Health and Family Services. https://www.dhs.wisconsin.gov/publications/p4/p45716.pdf

- Wisconsin Department of Health Services. (2017). *Wisconsin emergency assistance volunteer registry (WEAVR)*. https://www.dhs.wisconsin.gov/preparedness/weavr/index.htm
- Wisconsin LEP Data by County. (2014). 2014 American community survey. https://www.wicourts.gov/services/public/docs/wilepdatacounty2014acs.pdf
- Xierali, A., Imam, M., & Nivet, M. (2018). The racial and ethnic composition and distribution of primary care physicians. *Journal of Health Care for the Poor and Underserved*, 29(1), 556–570. https://doi.org/10.1353/hpu.2018.0036

