# Wisconsin
# 2018 RN
## Workforce Survey

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**Introduction**

Registered nurses (RNs) comprise a large and essential component of the health professions workforce in Wisconsin. The practice of RNs is regulated by the State of Wisconsin, which requires renewal of the RN license every two years. Since 2010, RNs have been mandated by Wisconsin State Statute (WSS 106.30) to complete a survey to gather information important to health professions workforce planning as part of the RN license renewal process. This report presents the findings from the analysis of the *Wisconsin 2018 RN Workforce Survey* administered by the State of Wisconsin Department of Workforce Development (DWD).

**Methods**

By the end of February 2018, 90,143 RNs completed the survey. Of these, 88,932 completed the survey online and 1,211 completed the survey in paper format. Due to resource restrictions, data from the RNs who completed the survey in paper format were not included in the database used for the analyses reported here. After exclusion criteria were applied during data cleaning processes to assure data validity, the final sample for the 2018 report was 79,750 RNs living and/or working in Wisconsin. The sample size for analysis of the responses from specific questions may vary due to missing data or other parameters relevant to the specific analysis.

**Key Findings – Overall**

**Demographics**

- The number of nurses who renewed their RN licenses in Wisconsin increased by 2,699, from 87,444 in 2016 to 90,143 in 2018, a 3.1% increase.
- Consistent with previous surveys, the majority of RNs report being female (92.5%), White (94.2%), and Wisconsin resident status (96.7%).
- The number reporting being male (5,945) increased by 9.2% from 2016 (5,443). At 7.5% of the total, males continue to be substantially underrepresented in the workforce compared to the overall population.
- The average age of RNs completing the 2018 survey was 46.4 years, consistent with the average age in 2016 of 46.8 years.
- The number of RNs in the diverse race/ethnicity category increased to 5,642 from 4,795 in 2016, a 17.7% increase.
- The proportion of the Wisconsin RN workforce identified as racially or ethnically diverse was 7.1%, well below the national benchmark for diversity of 25% (National Advisory Council on Nurse Education and Practice [NACNEP], 2013).

**Education**

- The proportion of RNs who reported the bachelor's in nursing as their highest degree was 47.6%, a slight increase from 2016 (46.1%). In 2018, the proportion of RNs working as a nurse with a bachelor's or higher degree in nursing was reported at 60.4%, below the Institute of Medicine (IOM, 2011) target of 80% by 2020.
- Most (68.5%) RNs do not intend to further their education, similar to the 2016 survey (67.8%).
- The total number of RNs with doctoral degrees (any field) was 1,179, a 37.6% increase from 2016 (857). This number has more than doubled from 2010, when the number was

516, thus meeting the IOM (2011) recommendation to double the number of nurses with a doctorate by 2020.

- The increase in nurses with doctoral degrees is almost entirely due to the increase in RNs reporting having earned the Doctor of Nursing Practice (DNP) degree, which increased from 422 to 720 between 2016 and 2018, and not to other doctoral degrees (including the PhD), which only increased by 24 from 435 in 2016 to 459 in 2018.

## Employment

- Overall, 89.5% of the respondents were employed, and 85.4% reported employment as a nurse, a small increase from 2016 (82.7%).
- The majority (52.0%) of nurses continue to report that their primary place of work is a hospital and 78.4% report working in a direct care position.
- The most notable shifts in employment between 2016 and 2018 were increases in the numbers employed as advanced practice registered nurses (APRN) (+ 497) and decreases in the numbers employed as nurse faculty (- 53) and in leadership positions, including nurse managers, administrators, and nurse executives (- 284).

## Implications for Practice, Education, and Policy

Progress is being made in increasing the overall size and diversity of the workforce. However, the pace of progress in increasing diversity is slow, and it is not clear that the rate of increase is sufficient to keep up with increasing health care demands and increasing RN retirements over the next decade. To attain a more diverse workforce, academic programs should recruit and retain a diverse student body through the use of evidence-based, holistic admissions procedures; increase attention to climate and inclusion issues for men, first generation students, and racial/ethnically underrepresented students; and increase student financial supports. The low numbers of Wisconsin nurses prepared to teach is concerning and contributes to the challenges of graduating sufficient numbers of professional nurses who can become RNs. Special efforts are needed to increase the number of nurses attaining doctoral degrees with the intent to teach and do research. With the proportion of RN licensees working in nursing already very high, it is vital that employers support the workforce to keep nurses fully engaged using residency programs for new graduates, salary, benefits, and workplace climate initiatives as tools. Policymakers can assist academic programs and employers through financial supports and incentives, such as faculty and nurse scholarship and loan forgiveness programs.

### Key Findings – State Regions

- RNs in the Northern region reported the highest average age (47.5 compared to 46.4 overall) and highest proportion of male gender (8.5% compared to 7.4% overall).
- The greatest racial/ethnic diversity was reported in the Southeast region (8.3% diverse compared to 5.1% overall).
- Employed RN to population ratios were highest in the Southern and Southeastern regions (11.8/1,000 population) and lowest in the Northeastern region (10.5/1,000).
- In all regions, 22.5% of the RN workforce report intentions to leave direct patient care in less than five years, and over 40% report that intention in less than 10 years.
- The proportion of RNs with a bachelor's or higher degree in nursing was highest in the Southeastern region (65.4%) and lowest in the Northern region (46.6%).

- The number of RNs enrolled in bachelor degree completion programs increased from 3,307 in 2016 to 3,723 in 2018; the increase was most notable in the Northeastern region, where the number increased by 56.5%, from 614 in 2016 to 961 in 2018.

**Implications for Regional Practice, Education, and Policy**

Geographic variation in characteristics of the RN workforce across regions in Wisconsin reflects the locations of employers and nursing education programs, as well as population demographics. Given the urban/rural disparity in RNs with bachelor level education, policymakers, educators, and employers will need to collectively find ways to improve access to bachelor education and RN to BSN completion programs for RNs living in more rural regions of the state. Some options to consider include education program expansion, technology enhancements, incentives, scholarships, and loan forgiveness programs. Employers may be able to improve recruitment and retention of bachelor-prepared nurses through raising salaries and benefits and by working with local communities to address housing issues.

**Key Findings – Advanced Practice Registered Nurses**

- There are 5,623 APRNs licensed in Wisconsin. Of those, 4,896 report working as an APRN in the state, representing 6.3% of the RN workforce in Wisconsin, up from 5.9% in 2016.
- 71.2% (3,557) of APRNs are advanced practice nurse prescribers (APNPs).
- The primary population focus areas for their care reported by APRNs were families/lifespan (44.4%), adult/older adults (36.7%), children (6.3%), women (6.6%), mental health (4.0%), and neonate/infants (1.9%).
- The average age of APRNs is 45.9; 89.2% are female; and 6.1% report racial/ethnic diversity.
- Regional variation in APRNs with prescriptive authority was reported, with the highest proportion in the Southeastern region (39.6%) and the lowest in the Northern region (8.3%).
- A notable change from 2016 was in the proportion of APRNs with DNP degrees, increasing from 6.6% in 2016 to 9.8% in 2018.

**Implications for APRNs**

While the overall number of APRNs working in Wisconsin continues to increase, the proportion of APRNs in the RN workforce still lags behind recommended national goals. The number of APRNs in some specialty areas, such as psychiatric/mental health, and in some regions of the state remains well below the number needed to address rising health care needs. Sustained effort will be required to increase the number of APRNs in order to meet health care demands. Scholarships and loan forgiveness programs can help increase access to the advanced education required for APRN roles. Policy barriers to full scope of practice for APRNs continue in Wisconsin, creating a disincentive for APRNs to migrate or remain in the state to practice. These barriers should be addressed in order to recruit and retain adequate numbers of APRNs, as well as to extend access to health care in the state. The increase in proportion of APRNs with a DNP reflects the increased number of DNP programs for advanced practice roles. Because DNP education program accreditation criteria require faculty providing clinical education in DNP programs be certified to practice, increased collaboration between education and practice institutions to allow more shared practice opportunities is needed. In addition, loan forgiveness programs for faculty with DNP can help support DNP who choose faculty positions at often

lower salary rates. Finally, collaboration among health workforce planning groups in the state is needed to adequately forecast demand for APRNs in the future.

## Key Findings – Leadership Roles

- 47.2% of respondents reported holding one or more leadership role. Of those reporting a leadership role, 90.1% reported roles in their primary work area (e.g., charge nurse, team leaders, or unit manager), and 10.3% reported organizational level leadership roles (e.g., director, chief nursing officer, or dean).
- Leadership through serving on a governance board was reported by 546 (1.9%), as a public official by 162 (0.6%), and as a committee chairperson by 1,837 (6.3%).
- Higher proportions of RNs reporting leadership roles in their work areas hold bachelor's degrees (48.8%) compared to associate degrees (38.0%).
- Barriers to engaging in leadership include lack of interest (57.0%), having other personal priorities (24.9%), and lack of opportunity (16.6%).
- Over half (53.6%) of organizational level nurse leaders intend to work in their current type of employment for less than 10 years.
- A notable change from 2016 is the decline in nurses serving on governance boards (844 in 2016 compared to 546 in 2018).

## Implications for Leadership

The findings point to the ongoing need for leadership development programs and leadership succession planning in organizations. Academic programs could ensure that nurses graduate from bachelor and associate degree programs with competency for leadership roles at the primary work area level, and nurse residency programs could ensure that leadership competencies are further developed and applied. Graduate faculty could include organization, system, and academic leadership concepts and content in higher level nursing education programs. Emphasis on formal succession planning is needed across organizations, given the high proportion of organizational level nurse leaders who intend to leave those positions in the near term. It is concerning that these data show that Wisconsin is not advancing toward meeting national recommendations for increasing the number of nurses on decision-making boards and commissions (IOM, 2011). More coordinated efforts to promote this type of leadership with nurses and organizations will be needed to make progress toward this national goal.

## Key Findings – Nurse Faculty

- 1,057 respondents reported their primary position at their principal place of work was "nurse faculty." Working as nurse faculty in education settings (universities, technical colleges, or hospitals/health systems) was reported by 900 respondents.
- Of the 1,057 nurse faculty working in all settings, 95% reported being female, 7.2% were categorized as racial/ethnically diverse, and the mean age was 50.6 years.
- Most nurse faculty working in all settings are prepared at the master's level (57.8%), and 206 (19.5%) faculty hold a doctoral degree (any field).
- 32.7% of faculty in all settings intend to stay in their current type of employment for less than five years, and 56% reported the intent to stay for less than 10 years.
- Notable changes from 2016 to 2018 include small increases in the overall numbers of faculty in education settings (825 to 900), the number of faculty who are men (37 to 53), and in the proportion of faculty who are categorized as diverse (5.9% to 7.2%).

- The number of faculty with doctoral degrees increased from 2016 (171) to 2018 (206), with all the increase attributable to faculty with the DNP (57 in 2016 and 85 in 2018) compared to the PhD (81 in 2016 and 80 in 2018).

**Implications for Faculty and Nursing Education**

Recent investments in nursing education and faculty supports in Wisconsin may be beginning to have a positive impact on the size and diversity of nursing faculty. The increase in DNP-prepared faculty corresponds with the increase in programs preparing APRNs. Given that the focus of the DNP is on advanced practice rather than nursing education, schools may want to provide opportunities for DNP students to prepare for nurse educator roles in addition to advanced practice roles. The lack of any increase in PhD-prepared faculty in the state over two years is concerning, given the importance of research in addition to teaching roles for faculty. With more than half of current faculty intending to stay in their current positions for less than 10 years, considerable increased effort to support the faculty pipeline is needed. Such support could include scholarships, loan forgiveness programs, and more support for PhD education.

## Recommendations for Future Surveys and Nurse Workforce Data

Data collected through the *Wisconsin RN Workforce Survey* are essential for developing strategic priorities for workforce planning. Data that are consistently collected over time can be used to understand trends, to forecast future needs, and to evaluate the effectiveness of efforts to strengthen the workforce. Although RN survey data have now been collected every two years since 2010, survey changes make trend analysis challenging. Making the survey datasets more readily available to researchers would increase the use of the data and enhance the value of the survey.

Reliability of data collected through the survey could be improved by adding more standard definitions. For example, the terms *nurse faculty* and *nurse educator* as used in the survey refer to different roles. Some respondents may understand these terms to mean the same thing. Having clear definitions and consistent use of terms in the survey would improve the quality of data collected and reduce errors in interpretation of the results. Improved survey administration technology could be employed to help reduce the potential for errors during survey completion and reduce the number of responses excluded from the analysis.

The Minimum Nurse Supply Dataset is published by the National Forum of State Nursing Workforce Centers. Questions on the *Wisconsin RN Workforce Survey* should be reviewed and potentially revised to align with the recently updated national dataset to allow for comparison of nursing workforce issues across states and at the national level.

# Section I. Introduction

Registered nurses (RNs) comprise a large and essential component of the health professions workforce in Wisconsin. The practice of RNs is regulated by the State of Wisconsin, which requires renewal of the RN license every two years in order to practice in the state. Since 2010, RNs have been mandated by Wisconsin State Statute (WSS 106.30) to complete a survey to gather information important to health professions workforce planning as part of the RN license renewal process. This report presents the findings from the analysis of the *Wisconsin 2018 RN Workforce Survey* administered by the State of Wisconsin DWD. A copy of the survey can be found in Appendix A.

The Wisconsin Center for Nursing (WCN), in partnership with DWD, contracted with a research team from the University of Wisconsin-Madison (Principal Investigator, Dr. Susan Zahner) to complete an analysis of the survey data and to produce this report of the findings. The project was determined to be exempt from review by the UW-Madison Minimal Risk Institutional Review Board (Health Sciences).

By the end of February 2018, 90,143 RNs completed the biennial survey. Of these, 88,932 completed the survey online and 1,211 completed the survey in paper format. Due to resource restrictions, data from the RNs who completed the survey in paper format were not included in the analysis. Exclusion criteria were used to identify and remove from the analysis RNs who do not live or work in Wisconsin. In addition, questionable responses, such as dates of licensure or degree or certification receipt that were impossible or highly unlikely given the date of birth or number of hours in a day or week, were not included in the final analysis. Table 1 displays the exclusion criteria and effect on the sample after they were applied. After data cleaning was complete, the final sample for the analysis was responses from 79,750 RNs living and/or working in Wisconsin.

**Table 1. Exclusion Criteria and Excluded Responses**

| Electronic Responses Received (*n* = 88,932) | |
|---|---|
| **Exclusion Criteria** | **Excluded** |
| Does not live or work in Wisconsin | 8,293 |
| Date U.S. or Wisconsin RN license obtained prior to or at date of birth | 5 |
| RN license prior to first degree | 252 |
| First U.S. or Wisconsin license prior to age 16 | 65 |
| Provided direct care for 10 or more years prior to first degree | 153 |
| Received first degree prior to age 16 | 44 |
| Provided direct care prior to age 16 | 47 |
| Currently working more than 10 jobs | 37 |
| Working excessive hours in primary job, secondary job, or both | 257[a] |
| Received first degree after age 70 | 4 |
| First U.S. or Wisconsin license after age 75 | 12 |
| Working or looking for work after age 85 | 11[b] |
| Reports having one or more jobs but reports not working | 369 |
| **Usable Responses** | **79,750** |

*Note*. Respondents may have reported data that met exclusion criteria in more than one category.
[a]Respondents who selected that they worked more than 84 hours weekly in a primary job, 72 hours weekly in a secondary job, and/or 92 hours weekly in both primary and secondary jobs were excluded. [b]The working or unemployment exclusion age was changed from 75 years of age to 85 years of age in the 2016 analysis; it provides an enriched view of the current state of the nurse workforce.

This report presents the 2018 survey results and analysis in the following sections:

- Section II: Wisconsin RN Workforce Demographics
- Section III: Geographic Distribution of Wisconsin RNs
- Section IV: Advanced Practice Registered Nurses
- Section V: Nurses in Leadership Roles
- Section VI: Nurse Faculty

Each section includes a short discussion of the results in light of state and national RN workforce issues and makes comparisons to the 2016 Wisconsin RN Survey report (Zahner, Pinekenstein, Henriques, & Rainbow, 2017), when possible, to highlight notable changes.

A summary of key findings is presented in the *2018 Wisconsin RN Survey At a Glance,* included in Appendix B. Although some analyses in this full report are the same as those presented in the *At a Glance* summary report, many are not because they are based on different subsamples of respondents. A summary of key findings related to nurse faculty is included in Appendix C.

**Data Management**

Data are reported as the number of valid respondents, the percentage of valid responses, or the mean (average) as appropriate. When the number of valid responses was so small (five respondents or less) as to risk the identity of the respondent, results were not reported and an asterisk in used in the data field.

**Limitations**

Newly licensed RNs in Wisconsin are not included in this analysis because they did not complete the 2018 biennial RN re-licensure survey. The report also excludes RNs who completed the survey in paper form. Therefore, the total number of licensed RNs reported here undercounts all RNs living and/or working in the state. As with all surveys, errors made by respondents at time of completion of the survey may have led to missing, incorrect, or incomplete responses. Trend analysis was limited due to changes in survey questions over time and limited access to prior years' datasets.

# Section II. Wisconsin RN Workforce Demographics

An overview of the demographics of Wisconsin's RN workforce is provided in Table 2. The majority of RNs licensed in Wisconsin live in the state (96.7%), are female (92.5%), and identify as White (94.2%). The average age of RNs who maintain a license in Wisconsin is 46.4 years. The majority (88.6%) of the RN workforce are between 25 years and 64 years of age. Less than half (47.5%) of RNs are 44 years and younger, while just over half (52.5%) are 45 years and older.

**Table 2. Wisconsin RN Workforce Demographics ($n$ = 79,750)**

|  | $n$ | % |
|---|---|---|
| **Residence** | | |
| Wisconsin | 77,111 | 96.7 |
| Outside Wisconsin | 2,639 | 3.3 |
| **Gender** | | |
| Female | 73,805 | 92.5 |
| Male | 5,945 | 7.5 |
| **Age** | | |
| Mean age (*SD*) | 46.4 (13.4) | |
| Range | 21 to 89 years | |
| **Age Distribution (years)** | | |
| < 25 | 1,349 | 1.7 |
| 25 – 34 | 18,042 | 22.6 |
| 35 – 44 | 18,428 | 23.1 |
| 45 – 54 | 15,818 | 19.8 |
| 55 – 64 | 18,437 | 23.1 |
| 65 – 74 | 7,033 | 8.8 |
| ≥ 75 | 643 | 0.8 |
| **Primary Racial Identity** | | |
| White | 75,118 | 94.2 |
| Black | 1,562 | 2.0 |
| Asian | 1,417 | 1.8 |
| Native Hawaiian or other Pacific Islander | 85 | 0.1 |
| American Indian or Native Alaskan | 303 | 0.4 |
| Multiracial | 1,265 | 1.6 |
| **Hispanic/Latino Ethnicity** | | |
| Yes | 1,587 | 2.0 |
| No | 78,163 | 98.0 |

*Note.* Table 2 includes responses to survey questions 63 – 66 and 68.
*Note. SD* = standard deviation

## Language Proficiency

Most nurses in Wisconsin speak only English (71,724, 89.9%), while 7,253 (9.1%) speak one other language, and 773 speak two or more other languages. The majority of RNs who are proficient in a second language report speaking Spanish (5.8%).

**Table 3. Linguistic Ability***

|  | *n* | % |
|---|---|---|
| **Language Proficiency** | | |
| English language only | 71,724 | 89.9 |
| One other language | 7,253 | 9.1 |
| Two or more other languages | 773 | 1.0 |
| **Language Spoken** | | |
| Spanish | 4,718 | 5.8 |
| Filipino, Tagalog | 400 | 0.5 |
| German | 624 | 0.8 |
| French | 446 | 0.6 |
| Russian | 225 | 0.3 |
| Hmong | 445 | 0.6 |
| Hindi | 162 | 0.2 |
| Polish | 150 | 0.2 |
| American Sign Language | 532 | 0.7 |
| Other | 1,251 | 1.6 |

*Note*. Table 3 includes responses to survey question 67.
*Respondents could choose more than one response.

**Employment Patterns of RNs in Wisconsin**

Table 4 displays information pertaining to the employment status of Wisconsin RNs in 2018. The majority (89.5%) of respondents were employed, and of those employed, the majority worked as a nurse (85.4%). Over 3,000 RNs were not employed as a nurse and reported working in another health field (2,115, 2.7%) or outside of health care (1,105, 1.4%).

Just over 10% of RNs (8,398, 10.5%) were not employed at the time of the survey. The greatest proportion are retired (5,431, 6.8%), followed by RNs who were not seeking work (1,844, 2.3). The remaining RNs who were not employed were either seeking work in nursing (993, 1.2%) or in another field (130, 0.2%).

**Table 4. Employment Status of RNs in Wisconsin (*n* = 79,750)**

|  | *n* | *%* |
|---|---|---|
| **Employed** | **71,352** | **89.5** |
| Employed as a nurse | 68,132 | 85.4 |
| Employed in health field, not as a nurse | 2,115 | 2.7 |
| Employed in another field | 1,105 | 1.4 |
| **Not Employed** | **8,398** | **10.5** |
| Retired | 5,431 | 6.8 |
| Unemployed, seeking work in nursing | 993 | 1.2 |
| Unemployed, seeking work in another field | 130 | 0.2 |
| Unemployed, not seeking employment | 1,844 | 2.3 |

*Note.* Table 4 includes responses to survey question 11.

**Primary Position Characteristics**

Table 5 displays characteristics of RNs' primary places of work. More than half of RNs work in a hospital (52.0%), with a permanent position (98.3%), as a staff nurse (61.9%), and provide direct patient care (78.4%). Nurses work on average 36 hours each week, and approximately 47 weeks in each year. Nearly 20% (12,737, 19.4%) of nurses work in ambulatory care settings, while 8.8% work in nursing homes or extended care, 5.4% in home health, 3.7% in public or community health, and  2.8% in education.

Survey responses show that RNs licensed in Wisconsin are employed in all states except Virginia and are also working in Puerto Rico and Guam. The largest group of RNs working outside the state are in Minnesota (4.4%; 3172) and Illinois (2.5%; 1834). A greater proportion of RNs employed with consulting firms work outside of Wisconsin (3.1%) than within the state (0.8%). Similarly, more RNs licensed in Wisconsin but working out of state are employed as nurse executives (2.5%) and nurse faculty (2.3%) than in state (executives 1.1%; nurse faculty 1.8%). Appendices D and E include additional information about where and types of roles for RNs with a Wisconsin license who are working outside the state.

For those RNs whose primary position was not a staff nurse, the three positions with the greatest number of nurses were nurse managers (6.8%), case managers (8.9%), and APRNs (7.5%). The proportion of RNs working as administrators (1.4%), nurse executives (1.1%), nurse faculty (1.8%), or nurse researchers (0.4%) were notably lower than other positions.

Over 1,000 RNs who live and work in Wisconsin are employed in a temporary position for a staffing or travel agency or similar position. Additional analyses examined patterns among RNs licensed in Wisconsin and who worked in telehealth or for call centers (Appendix F). Approximately two times the number of RNs in these positions work outside of Wisconsin, regardless of state of residence. Of the 618 who work in Wisconsin, 97.1% (600) also live in Wisconsin. For those working out of state (1,228), only 3.3% reside in Wisconsin. For additional details on RNs working in call centers or telehealth, see Appendix F.

A greater proportion of RNs are paid hourly (71.7%) than salaried (27.1%). Of those who reported working more than scheduled hours, the majority did so voluntarily (52.7%), while 22.0% did so as part of a salaried position. Most RNs reported they received benefits as part of their compensation packages (89.2%).

**Table 5. Characteristics of Primary Position at Principal Place of Work (*n* = 65,828)**

| | *n* | % |
|---|---|---|
| **Principal Place of Work** | | |
| Hospital | 34,199 | 52.0 |
| Ambulatory care | 12,737 | 19.4 |
| Nursing home or extended care | 5,816 | 8.8 |
| Home health | 3,570 | 5.4 |
| Public health or community health | 2,449 | 3.7 |
| Education | 1,845 | 2.8 |
| Other | 5,212 | 7.9 |
| **Primary Position Description** | | |
| Staff nurse | 40,736 | 61.9 |
| Nurse manager | 4,452 | 6.8 |
| Case manager | 5,855 | 8.9 |
| Advanced practice nurse | 4,940 | 7.5 |
| Administrator | 895 | 1.4 |
| Consultant or contract | 716 | 1.1 |
| Nurse executive | 735 | 1.1 |
| Nurse faculty | 1,159 | 1.8 |
| Nurse researcher | 255 | 0.4 |
| Staff, other non-medical | 179 | 0.3 |
| Manager, other non-medical | 108 | 0.2 |
| Other | 5,798 | 8.8 |
| **Primary Position is Temporary/External Pool/Travel/Staffing Placement** | | |
| Yes | 1,104 | 1.7 |
| **Primary Position is Self-Employment** | | |
| Yes | 1,118 | 1.7 |

| | *n* | % |
|---|---|---|
| **Compensation in Primary Position** | | |
| Paid hourly | 47,209 | 71.7 |
| Paid salary | 17,847 | 27.1 |
| Volunteer | 772 | 1.2 |
| **Compensation Benefits (could select more than one)** | | |
| Retirement plan | 55,668 | 84.6 |
| Dental insurance | 51,057 | 77.6 |
| Personal health insurance | 46,342 | 70.4 |
| Family health insurance | 42,651 | 64.7 |
| None | 7,080 | 10.8 |
| **Primary Function is Providing Direct Patient Care** | **51,593** | **78.4** |
| **Reason to Work More than Scheduled Hours** | | |
| Salaried position | 14,473 | 22.0 |
| Agreed as part of employment | 5,230 | 7.9 |
| Required (not on call) | 3,988 | 6.1 |
| Required (on call) | 7,429 | 11.3 |
| Voluntarily agreed | 34,708 | 52.7 |
| **Time Worked** | **Mean** | *SD* |
| Hours worked per week in primary and secondary jobs | 36.0 | 11.9 |
| Weeks worked in calendar year 2017 (including paid vacations) | 47.6 | 10.4 |

*Note*. Table 5 includes responses to survey questions 23, 25, 28-33, 35, 36

## Future Intentions for Employment

Table 6 displays responses by the length of time RNs who work in direct patient care plan to continue providing direct patient care by mean age, mean years of direct care experience, and number of total weekly hours worked. Over fifty percent (56.6%) of respondents indicated they intend to remain in a direct care positions for 10 years or longer. However, 22.5% (25,118) of RNs plan to leave direct care in less than five years. On average, those nurses who intend to continue providing direct care for more years are younger, work more hours, and have fewer years of experience.

**Table 6. Intent to Continue Providing Direct Patient Care (*n* = 59,090)**

| Years | *n* | % | Mean Age | Mean Years as RN in Direct Patient Care | Hours Worked between Primary and Secondary Job |
|---|---|---|---|---|---|
| < 2 | 4,516 | 7.6 | 52.1 | 22.0 | 32.5 |
| 2 – 4 | 8,825 | 14.9 | 49.7 | 19.6 | 33.8 |
| 5 – 9 | 12,357 | 20.9 | 48.1 | 17.8 | 35.9 |
| 10 – 19 | 15,318 | 25.9 | 43.9 | 14.0 | 36.3 |
| 20 – 29 | 9,911 | 16.8 | 37.8 | 9.6 | 36.3 |
| ≥ 30 or more | 8,163 | 13.8 | 31.4 | 5.3 | 36.4 |

*Note.* Table 6 includes responses to survey questions 20, 21, 29, 30, 45, 46.

Table 7 displays the responses of RNs asked about how long they intend to continue in their current type of employment. The number of nurses intending to continue in their current employment for less than two years is 9,487 (13.2%). Within nine years, over half (56.1%) of RNs could leave their current type of employment. The mean ages of those indicating intent to stay in their current employment less than 10 years ranges from 45.7 to 49.1 years.

**Table 7. Intent to Continue in Current Employment (*n* = 71,664)**

| Years | *n* | % | Mean Age | Mean Years as RN in Direct Patient Care | Hours Worked between Primary and Secondary Job |
|---|---|---|---|---|---|
| < 2 | 9,487 | 13.2 | 45.7 | 14.9 | 33.9 |
| 2 – 4 | 15,631 | 21.8 | 45.9 | 15.0 | 35.0 |
| 5 – 9 | 15,125 | 21.1 | 49.1 | 17.3 | 36.8 |
| 10 – 19 | 15,396 | 21.5 | 47.1 | 15.4 | 37.6 |
| 20 – 29 | 9,365 | 13.1 | 39.7 | 10.6 | 37.3 |
| ≥ 30 | 6,660 | 9.3 | 32.7 | 6.1 | 37.1 |

*Note.* Table 7 includes responses to survey questions 17, 29, 30, 45, 46.

## Specialized Clinical Knowledge Required in Primary Position

Table 8 displays the breadth of clinical specialty knowledge and experience respondents reported was required for their primary position. The areas of expertise most frequently reported by RNs were medical/surgical (30.4%), acute care/critical care/intensive care (24.8%), adult health (19.7%), and geriatrics/gerontology (19.5%). Eight specialty areas were represented by less than 5.0% of the RN workforce. These include: addiction, AODA, and substance abuse (4.2%);

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anesthesia (2.4%); correctional health (2.2%); dialysis (4.0%); occupational or employee health (2.7%); parish and faith community (1/1%); public health (4.0%); and school health (2.7%). Certification data can be found in Appendix G.

**Table 8. Clinical Specialty Knowledge and Experience (*n* = 79,750)**

|  | *n* | *%* |
|---|---|---|
| **Current Practice in Primary Position** | | |
| Acute care/critical care/intensive care | 19,765 | 24.8 |
| Adult health | 15,708 | 19.7 |
| Addiction/AODA/substance abuse | 3,335 | 4.2 |
| Anesthesia | 1,934 | 2.4 |
| Cardiac care | 13,287 | 16.7 |
| Community health | 6,105 | 7.5 |
| Correctional health | 1,724 | 2.2 |
| Dialysis | 3,219 | 4.0 |
| Emergency care | 11,106 | 13.9 |
| Family health | 6,769 | 8.5 |
| Geriatrics/gerontology | 15,584 | 19.5 |
| Home health | 9,102 | 11.4 |
| Hospice care or palliative care | 9,611 | 12.1 |
| Labor and delivery | 5,553 | 7.0 |
| Maternal and child health | 5,349 | 6.7 |
| Medical-surgical | 24,243 | 30.4 |
| Neonatal care | 4,489 | 5.6 |
| Obstetrics-gynecology | 5,715 | 7.2 |
| Occupational or employee health | 2,143 | 2.7 |
| Oncology | 6,192 | 7.8 |
| Pediatrics | 8,628 | 10.8 |
| Parish or faith community | 852 | 1.1 |
| Psychiatric or mental health | 6,515 | 8.2 |
| Public health | 3,226 | 4.0 |
| Rehabilitation | 5,573 | 7.0 |
| Respiratory care | 2,645 | 3.3 |
| School health | 2,136 | 2.7 |
| Surgery/pre-op/post-op/PACU | 11,607 | 14.6 |
| Women's health | 4,914 | 6.2 |
| Other | 12,102 | 15.2 |
| None of the above | 4,614 | 5.8 |

*Note.* More than one response possible. *Note.* Table 8 includes responses from survey question 14.
*Note.* Percentages do not total 100 since respondents could select more than one category.

**Educational Patterns of RNs in Wisconsin**

Academic preparation for RN licensure can be achieved through a number of different educational pathways and degree programs. Table 9 displays the academic backgrounds reported by survey respondents. Most respondents (74.2%) received their most recent degree from a university or college located in Wisconsin.

The highest proportion of RNs reported earning a bachelor's in nursing (BSN, 47.6%) as their highest nursing degree. The remaining RNs reporting a diploma in nursing (5.2%), an associate degree in nursing (ADN, 34.7%), a master's in nursing (MSN, 11.1%), or a doctoral degree in nursing (1.2%) as their highest nursing degree. Of those with a doctoral degree in nursing (1,010), 71.3% have a DNP and 25.6% have a PhD in nursing. Overall, 1.5% of RNs (1,179) reported attaining a doctoral degree in any field.

The proportion of Wisconsin RNs who report attaining a bachelor's or higher degree in nursing was 59.9%. The proportion of Wisconsin RNs who report working as a nurse and attaining a bachelor's degree or higher in nursing was 60.4%, below the IOM (2011) goal of 80% of RNs with a bachelor's degree by 2020 (data not shown).

While most RNs do not plan to pursue further education (68.4%), 21.2% of respondents do plan to pursue further education within the next two years. Of those who are currently enrolled in a certificate or degree program (8,291), most are pursuing a BSN (3,868, 46.7%) or an MSN (2,289, 27.6%). Relatively few RNs reported enrollment in a PhD in nursing program (113, 1.4%) or a PhD in a related field (58, 0.7%).

The respondents reported a number of barriers to pursuing further education. The most frequently selected barriers were cost of tuition and fees (49.6%), family/personal reasons (33.2%), and cost of lost work time and benefits (24.3%). Commuting distance (2.3%) and limited access to online learning or other resources (0.9%) were reported by the fewest RNs as barriers to further education.

**Table 9. Educational Preparation for Nursing Practice (*n* = 79,750)**

|  | *n* | *%* |
|---|---|---|
| **Location of Most Recent Educational Degree** | | |
| Wisconsin | 59,179 | 74.2 |
| Not Wisconsin | 20,571 | 25.8 |
| **Highest Nursing Degree** | | |
| Practical or vocational nursing diploma | 108 | 0.1 |
| Diploma in nursing | 4,121 | 5.2 |
| ADN | 27,617 | 34.7 |
| BSN | 37,884 | 47.6 |
| MSN | 8,811 | 11.1 |
| DNP | 720 | 0.9 |
| DNS[a] or ND[b] | 31 | 0.0 |
| PhD in nursing | 259 | 0.3 |
| **Highest Degree Earned** | | |
| Practical or vocational nursing diploma | 97 | 0.1 |
| Diploma | 3,788 | 4.7 |
| AD | 26,503 | 33.2 |
| BS | 37,932 | 47.6 |
| MS | 10,260 | 12.9 |
| Doctoral degree, any field | 1,179 | 1.5 |
| **Plans for Further Education** | | |
| No plans | 54,536 | 68.4 |
| Enrolled in BSN | 3,868 | 4.9 |
| Enrolled in MSN | 2,289 | 2.9 |
| Enrolled in MS in related health field | 372 | 0.5 |
| Enrolled in DNP | 885 | 1.1 |
| Enrolled in PhD in nursing | 113 | 0.1 |
| Enrolled in PhD in related field | 58 | 0.1 |
| Enrolled in non-degree certificate program | 706 | 0.9 |
| Plan to pursue further education with next 2 years | 16,923 | 21.2 |
| **Barriers to Pursuing Additional Education[*]** | | |
| Commuting distance | 1,804 | 2.3 |
| Cost of loss of work and benefits | 19,381 | 24.3 |
| Cost of tuition and fees | 39,548 | 49.6 |
| Family or personal reasons | 26,449 | 33.2 |
| Lack of flexibility in work schedule | 8,014 | 10.0 |
| Limited access to online learning or other resources | 720 | 0.9 |

|  | n | % |
|---|---|---|
| Schedule of educational programs offered | 2,030 | 2.5 |
| None identified | 20,698 | 26.0 |
| Other | 5,969 | 7.5 |

*Note.* Table 9 includes responses to questions 4 – 7.
[a]Doctor of Nursing Science. [b]Nursing doctorate.
[*]Respondents could check two challenges.

Attaining graduate education in nursing has benefits to the RN and to society and is required for working in some nursing roles. Table 10 displays the average age of RNs when the first degree in nursing was earned and when subsequent nursing degrees were earned (if any). The largest proportion of RNs who attained a subsequent higher degree started by earning a BSN (42.3%), while the smallest proportion entered via a direct entry master's program (0.8%). The mean age at attainment of the first nursing degree varied by degree type; RNs who entered nursing through diploma (24.1 years) and BSN programs (25.2 years) were younger compared to those entering through associate (30.3 years) or master's level (30.8 years). The time to terminal degree completion was shortest for RNs who entered through direct entry master's programs (DNP in 11.2 years, PhD in 8.3 years), followed by BS (18.4 years to PhD and 13.1 years to DNP) and associate degree (19.2 years to PhD and 15.0 years to DNP). Given the substantial length of time it takes to complete advanced degrees, entry into these programs through BSN and direct entry master's programs and at younger ages could contribute to longer careers in advanced practice, research, or teaching.

**Table 10. Mean Age at First Degree in Nursing and at Subsequent Degrees in Nursing (*n* = 79,750)**

|  | n | % | Vocational Nursing Certificate | Diploma | ADN | BSN | MSN | DNP | PhD |
|---|---|---|---|---|---|---|---|---|---|
| Practical or vocational nursing diploma | 9,041 | 11.3 | 27.7 | 30.9 | 32.6 | 36.4 | 41.5 | 42.5 | 47.2 |
| Diploma in nursing | 7,506 | 9.4 | - | 24.1 | 31.0 | 34.0 | 40.6 | 51.9 | 48.4 |
| ADN | 28,623 | 35.9 | - | - | 30.3 | 36.4 | 41.1 | 45.3 | 49.5 |
| BSN | 33,747 | 42.3 | - | - | - | 25.2 | 34.5 | 38.3 | 43.6 |
| MSN | 624 | 0.8 | - | - | - | - | 30.8 | 39.1 | 42.0 |

*Note:* Table 10 includes responses to survey question 4.

**Racial and Ethnic Diversity of RNs in Wisconsin**

Table 11 provides an overview of the diversity of the RN workforce in Wisconsin by demographic, educational, and employment characteristics. Less than 10% of RNs in Wisconsin identified as racially or ethnically diverse (7.1%). Of those who identify as racially or ethnically diverse, 28.1% are Hispanic or Latino, 27.7% identify as Black or African American, and 25.1% identify as Asian. A substantially higher proportion of RNs classified as diverse speak at least one language in addition to English (41.5% compared to 7.7% for non-diverse). The mean age of RNs who identified as diverse was 4.1 years less than the non-diverse (White) group.

A few notable differences in types of employment and positions were seen for RNs identifying as diverse compared to those identifying as non-diverse. Higher proportions of RNs classified as diverse reported employment in nursing homes or extended care, community or public health, and home health, and reported working as case managers and staff nurses. Higher proportions of RNs classified as non-diverse worked in ambulatory care settings and held positions as APRNs, nurse executives, and nurse managers. In addition, diverse RNs worked 1.9 hours, on average, more each week (37.8) compared to non-diverse RNs (35.9).

Some differences in educational attainment between diverse and non-diverse groups were identified. Slightly higher proportions of RNs classified as diverse had attained BSN and doctoral degrees, while a higher proportion of non-diverse RNs had achieved a master's degree.

**Table 11. Demographics, Principal Place of Work, Position, Education, and Employment Sector Characteristics by Diversity Category (*n* = 79,750)**

| | Racially or Ethnically Diverse | | Non-Racially or Ethnically Diverse | |
|---|---|---|---|---|
| | *n* | *%* | *n* | *%* |
| All respondents | 5,642 | 7.1 | 74,108 | 92.9 |
| **Hispanic or Latino Ethnicity** | | | | |
| Yes | 1,587 | 28.1 | | |
| **Race** | | | | |
| White | 1,010 | 17.9 | 74,108 | 100.0 |
| Black or African American | 1,562 | 27.7 | | |
| Asian | 1,417 | 25.1 | | |
| Native Hawaiian or Pacific Islander | 85 | 1.5 | | |
| American Indian or Alaska Native | 303 | 5.4 | | |
| Two or more races | 1,265 | 22.4 | | |
| **Age** | | | | |
| Mean (*SD*) | 42.6 (11.7) | | 46.7 (13.4) | |
| **Gender** | | | | |
| Female | 5,045 | 89.4 | 68,760 | 92.8 |
| Male | 597 | 10.6 | 5,348 | 7.2 |
| **Proficient in Another Language** | | | | |
| English only | 3,298 | 58.5 | 68,426 | 92.3 |
| 1 other language | 2,100 | 37.2 | 5,153 | 7.0 |
| 2 or more other languages | 244 | 4.3 | 529 | 0.7 |
| **Principal Place of Work** | | | | |
| Valid responses | 4,610 | | 61,218 | |
| Ambulatory care | 641 | 13.9 | 12,096 | 19.8 |
| Nursing home or extended care | 516 | 11.2 | 5,300 | 8.7 |
| Education | 120 | 2.6 | 1,725 | 2.8 |
| Public or community health | 243 | 5.3 | 2,206 | 3.6 |
| Home health | 332 | 7.2 | 3,238 | 5.3 |
| Hospital | 2,432 | 52.8 | 31,767 | 51.9 |
| Other | 326 | 7.1 | 4,886 | 8.0 |
| **Position or Function at Principal Place of Work** | | | | |
| Valid responses | 4,610 | | 61,218 | |
| Administrator | 50 | 1.1 | 845 | 1.4 |
| Advanced practice nurse | 282 | 6.1 | 4,658 | 7.6 |
| Case manager | 461 | 10.0 | 5,394 | 8.8 |

| | Racially or Ethnically Diverse | | Non-Racially or Ethnically Diverse | |
|---|---|---|---|---|
| | *n* | *%* | *n* | *%* |
| Consultant or contract | 40 | 0.9 | 676 | 1.1 |
| Manager, other non-medical | * | * | 105 | 0.2 |
| Nurse executive | 33 | 0.7 | 702 | 1.1 |
| Nurse faculty | 87 | 1.9 | 1,072 | 1.8 |
| Nurse manager | 252 | 5.5 | 4,200 | 6.9 |
| Nurse researcher | 17 | 0.4 | 238 | 0.4 |
| Staff nurse | 3,061 | 66.4 | 37,675 | 61.5 |
| Staff, other non-medical | 12 | 0.3 | 167 | 0.3 |
| Other | 312 | 6.8 | 5,486 | 9.0 |
| **Total Mean Hours/Week Primary/Secondary Position** | | | | |
| Valid responses | 4,610 | | 61,218 | |
| Mean (*SD*) | 37.8 (12.3) | | 35.9 (11.8) | |
| **Highest Nursing Degree** | | | | |
| Valid responses | 5,619 | | 73,932 | |
| Practical or vocational nursing diploma | * | * | 104 | 0.1 |
| Diploma in nursing | 129 | 2.3 | 3,992 | 5.4 |
| ADN | 1,989 | 35.4 | 25,628 | 34.7 |
| BSN | 2,810 | 50.0 | 35,074 | 47.4 |
| MSN | 575 | 10.2 | 8,236 | 11.1 |
| DNP | 77 | 1.4 | 643 | 0.9 |
| DNS or ND | * | * | 31 | 0.0 |
| PhD in nursing | 35 | 0.6 | 224 | 0.3 |
| **Highest Degree Earned (% within diverse)** | | | | |
| Valid responses | 5,642 | | 74,108 | |
| Practical or vocational nursing diploma | * | * | 94 | 0.1 |
| Diploma | 124 | 2.2 | 3,664 | 4.9 |
| AD | 1,925 | 34.1 | 24,578 | 33.2 |
| BS | 2,821 | 50.0 | 35,102 | 47.4 |
| MS | 645 | 11.4 | 9,615 | 13.0 |
| Doctorate, any field | 124 | 2.2 | 1,055 | 1.4 |

*Note.* Table 11 includes responses to survey questions 4, 29, 30, 36, 37, 45, 46, 64 – 67.
*Too few to report

**Comparing 2016 and 2018**

- The Wisconsin RN workforce grew by approximately 3,000 RNs between 2016 and 2018.
- Men comprised 7.5% of the RN workforce in 2018, up from 7.1 % in 2016.
- Racial/ethnic diversity increased slightly from 6.2% of the RN workforce in 2016 to 7.1% in 2018.
- The proportion employed as an RN increased from 82.7% in 2016 to 85.4% in 2018.
- The proportion of RNs in Wisconsin with any bachelor's or higher degree remained nearly the same at 60.1% in 2016 and 60.4% in 2018.
- The number of RNs working as faculty decreased from 1,212 (1.9%) in 2016 to 1,159 (-1.8%) in 2018.
- Between 2018 and 2016, the number of RNs with a DNP increased from 422 to 720, a change of 70.6%.
- The number of RNs reporting having obtained a PhD in nursing went up by 8 (251 in 2016 to 259 in 2018).

Table 12 compares the change in educational attainment for diverse and non-diverse RNs in Wisconsin from 2016 to 2018. The numbers of RNs attaining a diploma as the highest degree declined for both groups, likely reflecting aging of the workforce. Attainment of the BSN rose for both groups, while attainment of the ADN rose for diverse RNs and declined for the non-diverse group. Attainment of graduate degrees also increased for both groups, with the exception of the PhD, which declined slightly among the non-diverse group. The direction of change is mostly promising and reflects increasing access to nursing education for and diversity among Wisconsin RNs.

**Table 12. 2016 – 2018 Comparison of Educational Attainment by Racial or Ethnic Diversity**

| | Diverse | | | | Non-Diverse | | | |
|---|---|---|---|---|---|---|---|---|
| | **2016** | **2018** | **Difference 2016-2018** | **Change 2016-2018** | **2016** | **2018** | **Difference 2016-2018** | **Change 2016-2018** |
| | *n* | *n* | *n* | *%* | *n* | *n* | *n* | *%* |
| **Highest Nursing Degree** | | | | | | | | |
| Diploma | 133 | 129 | - 4 | - 3.0 | 4,948 | 3,992 | - 956 | - 23.9 |
| ADN | 1,761 | 1,989 | 228 | 12.9 | 25,646 | 25,628 | - 18 | - 0.1 |
| BSN | 2,341 | 2,810 | 469 | 20.0 | 33,093 | 35,074 | 1,981 | 5.6 |
| MSN | 484 | 575 | 91 | 18.8 | 7,389 | 8,236 | 847 | 10.3 |
| DNP | 28 | 77 | 49 | 175.0 | 394 | 643 | 249 | 63.2 |
| PhD in nursing | 24 | 35 | 11 | 45.8 | 227 | 224 | - 3 | - 1.3 |

*Note.* Table 12 includes responses to survey questions 4, 65, 66.

**Discussion and Recommendations**

The size and diversity of the Wisconsin RN workforce is increasing, and the average age of RNs is decreasing. These findings are encouraging and may reflect ongoing efforts in the state to increase the number and diversity of graduates from nursing programs. Despite these gains, the diversity of Wisconsin's RN workforce still lags well behind the U.S. nursing workforce and national benchmarks (Buerhaus, Skinner, Auerbach & Staiger, 2017; NACNEP, 2013; Smiley et al., 2018). Based on the 2017 national nursing workforce survey, men comprise 9.1% of the U.S. nursing workforce (Smiley et al., 2018), and in this study, Wisconsin men comprise 7.2% of the Wisconsin RN workforce. Racial and ethnic diversity was reported nationally by 19.3% of nurses, while in Wisconsin racial and ethnic diversity was reported by only 7.1% of nurses (Smiley et al., 2018). Only 2.0% of nurses in Wisconsin reported Hispanic or Latino ethnicity, which is less than the 5.3% reported for Hispanics or Latino ethnicity nationally (Smiley et al., 2018).

Over half of RNs reported they intend to continue in their current type of employment for less than 10 years. In addition, the data suggest that RNs leave nursing positions or transition to other types of work before they reach retirement age. Given the physically demanding nature of direct care nursing and the contribution that experienced nurses bring to clinical care, it is important to consider how these factors may affect the RN workforce in the future. The proportion of Wisconsin RNs who maintain their RN license but are not working due to retirement (4.5%) is

lower than for RNs in the United States (10.3%). This may indicate that nurses in Wisconsin are working for more years beyond retirement age than in other states or that more nurses in other states choose to maintain their RN license after retirement.

Employment patterns of RNs in Wisconsin are similar to those across the United States. Most RNs are employed as a nurse (Wisconsin 85.4%, U.S. 84.5%) and in a hospital setting (Wisconsin 52.0%, U.S. 55.7%) where they work as a staff nurse (Wisconsin 69.1%, U.S. 58.1%). Wisconsin has experienced declines in numbers of RNs in nursing home or extended care, home health, and public or community health. These changes are concerning given shorter lengths of hospital stays, increases in the aging population, and a growing interest in aging in place.

All states are making progress toward the 80% benchmark for RNs with a bachelor or higher degree, as the national average has reached 64.2% (Smiley et al., 2018). Even though the percentage of nurses with a bachelor or higher degree in nursing is increasing (60.1% in 2016 to 60.4% in 2018), Wisconsin still lags the national average and goal. Although the numbers of RNs who reported having a DNP have increased substantially, only eight more RNs reported having a PhD and five more reported enrollment in a PhD program in 2018 compared to 2016. In contrast, 298 additional RNs reported having a DNP in 2018 compared to 2016, and 171 reported they were enrolled in a DNP program. Wisconsin seems to be reflecting the nation, where attainment of a DNP is rising and the numbers of RNs earning a PhD in nursing is decreasing (Smiley et al., 2018).

State and federal funding is needed to invest in nursing program expansion to increase the number of bachelor-prepared nurses. Innovative recruitment strategies could help increase the racial, ethnic, and gender diversity of the workforce. Financial incentives, like loan forgiveness or funding support, are needed to increase the number of RNs with doctoral preparation in nursing.

## Section III. Geographic Distribution of Wisconsin RNs

In this section, the characteristics of the Wisconsin RN workforce data are presented by DHS region and by rural-urban status (see Appendix H for map and listing of DHS regions). Tables in this section include only subsets of survey respondents who reported county of residence or county of employment, as this information was necessary for analyses of the data by geographic distribution. These findings may be useful in tailoring initiatives to meet regional workforce needs.

**Wisconsin RN Workforce by DHS Region**

Table 13 displays demographic information by state and DHS region in which the RN resides. Characteristics across regions were generally similar to the state. The mean age of nurses in the state was 46.4 years; however, in the Northern region, the mean age of RNs was slightly higher at 47.5 years. The gender diversity in nursing varied from a low of 6.6% men in the Northeastern region to a high of 8.5% in the Northern region. RNs from the Southern and Southeast regions have greater racial, ethnic, and linguistic diversity than the other regions of the state, which may reflect differences in regional population demographics.

**Table 13. Demographic Information for RNs by DHS Region of Residence**

| | State n = 77,111 | | Southern n = 15,662 | | Southeastern n = 29,471 | | Northeastern n = 15,563 | | Western n = 9,678 | | Northern n = 6,777 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* |
| Mean age (years) | 46.4 | | 46.2 | | 46.5 | | 46.0 | | 46.6 | | 47.5 | |
| **Gender** | | | | | | | | | | | | |
| Female | 71,439 | 92.6 | 14,410 | 92.2 | 27,382 | 92.9 | 14,536 | 93.4 | 8,910 | 92.1 | 6,201 | 91.5 |
| Male | 5,672 | 7.4 | 1,212 | 7.8 | 2,089 | 7.1 | 1,027 | 6.6 | 768 | 7.9 | 576 | 8.5 |
| **Diversity** | | | | | | | | | | | | |
| White | 70,594 | 94.9 | 14,397 | 96.0 | 26,078 | 91.7 | 14,536 | 97.1 | 9,107 | 97.8 | 6,476 | 97.5 |
| Black/ African American | 1,504 | 2.0 | 180 | 1.2 | 1,237 | 4.2 | 48 | 0.3 | 24 | 0.2 | 15 | 0.2 |
| American Indian/ Alaska Native | 293 | 0.4 | 29 | 0.2 | 87 | 0.3 | 96 | 0.6 | 35 | 0.4 | 46 | 0.7 |
| Asian | 1,369 | 1.8 | 331 | 2.1 | 672 | 2.3 | 201 | 1.3 | 84 | 0.9 | 81 | 1.2 |
| Native Hawaiian/ Other Pacific Islander | 82 | 0.1 | 15 | 0.1 | 37 | 0.1 | 13 | 0.1 | 9 | 0.1 | 8 | 0.1 |
| Multiracial | 1,210 | 1.6 | 216 | 1.4 | 639 | 2.2 | 171 | 1.1 | 116 | 1.2 | 68 | 1.0 |
| Hispanic Origin | 1,528 | 2.0 | 234 | 1.5 | 976 | 3.3 | 171 | 1.1 | 76 | 0.8 | 71 | 1.0 |
| **Language Proficiency** | | | | | | | | | | | | |
| English language only | 69,370 | 90.0 | 13,937 | 89.2 | 25,806 | 87.6 | 14,337 | 92.1 | 8,996 | 93.0 | 6,294 | 92.9 |
| One other language | 7,004 | 9.1 | 1,486 | 9.5 | 3,344 | 11.3 | 1,128 | 7.2 | 617 | 6.4 | 429 | 6.3 |
| Two or more other languages | 737 | 1.0 | 199 | 1.3 | 321 | 1.1 | 98 | 0.6 | 65 | 0.7 | 54 | 0.8 |

*Note*. Table 13 includes survey questions 11, 27, 63 – 69.

**Employment Status of RNs Residing in Wisconsin DHS Regions**

Table 14 describes the employment characteristics of RNs in each of the five DHS regions. The percentage of nurses per region working as a nurse ranged from 83.7% in the Northern region to 86.6% in the Western region. The Southern and Southeastern regions have the most RNs per 1,000 residents (11.8) and the Northeastern region has the fewest (10.5 RNs per 1,000 residents, U.S. Census Bureau, 2017). See Appendix I for more information on the number of working RNs per 1,000 population by county.

The percentage of RNs providing direct care ranged from 77.3% in the Northern region to 79.8% in the Southern region. Most RNs were employed in a hospital (range 44.5% Northern to 56.4% Southeastern), worked as a staff nurse (range 60.0% Northern to 64.7% Southern), and were paid hourly (range 66.4% Southeastern to 71.1% Southern). The percentage of nurses paid per diem was similar across regions, with a range of 3.2% to 3.6%. The proportion of nurses reporting volunteering work hours was similar across regions and ranged from 1.0% to 1.4%. Total mean hours worked per week in primary and secondary positions ranged from 35.4 to 36.9 hours.

Regional variations in principal place of work were noted. Respondents who indicated extended care as their principal place of work ranged from 6.7% in the Southern region to 11.6% in the Western region. Hospitals as the primary place of work was indicated by a low of 44.5% in the Northern region and a high 56.4% Southeastern region.

**Table 14. Employment Characteristics of RNs by DHS Region of Employment**

| | State n = 77,111 | | Southern n = 15,662 | | Southeastern n = 29,471 | | Northeastern n = 15,563 | | Western n = 9,678 | | Northern n = 6,777 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *n* | % | *n* | % | *n* | % | *n* | % | *n* | % | *n* | % |
| Employed nurses per 1,000 population in primary employment | 11.3 | | 11.8 | | 11.8 | | 10.5 | | 10.8 | | 11.4 | |
| Employed as a nurse | 65,557 | 85.0 | 13,438 | 86.0 | 24,923 | 84.6 | 13,147 | 84.5 | 8,379 | 86.6 | 5,670 | 83.7 |
| Currently employed as a nurse providing direct patient care | 49,535 | 78.4 | 10,349 | 79.8 | 18,670 | 78.1 | 10,018 | 78.5 | 6,270 | 77.4 | 4,228 | 77.3 |
| Mean years (*SD*) providing direct patient care as a nurse | 15.1 (11.9) | | 15.2 (12.0) | | 15.1 (12.0) | | 15.0 (11.7) | | 15.2 (12.0) | | 15.4 (11.8) | |
| **Principal Place of Work** | | | | | | | | | | | | |
| Ambulatory care | 12,238 | 19.4 | 2,569 | 19.8 | 4,204 | 17.6 | 2,729 | 21.4 | 1,475 | 18.2 | 1,261 | 23.0 |
| Nursing home or extended care | 5,584 | 8.8 | 1,119 | 8.6 | 1,595 | 6.7 | 1,361 | 10.7 | 941 | 11.6 | 568 | 10.4 |
| Academia | 1,746 | 2.8 | 348 | 2.7 | 666 | 2.8 | 356 | 2.8 | 237 | 2.9 | 139 | 2.5 |
| Public health or community health | 2,383 | 3.8 | 467 | 3.6 | 915 | 3.8 | 452 | 3.5 | 324 | 4.0 | 225 | 4.1 |
| Home health | 3,377 | 5.3 | 673 | 5.2 | 1,250 | 5.2 | 758 | 5.9 | 396 | 4.9 | 300 | 5.5 |
| Hospital | 32,868 | 52.0 | 6,899 | 53.2 | 13,477 | 56.4 | 5,998 | 47.0 | 4,060 | 50.1 | 2,434 | 44.5 |
| Other | 4,993 | 7.9 | 887 | 6.8 | 1,785 | 7.5 | 1,107 | 8.7 | 669 | 8.3 | 545 | 10.0 |
| **Position or Function at Principal Place of Work (*n* = 63,189)** | | | | | | | | | | | | |
| | State n = 63,189 | | Southern n = 12,962 | | Southeastern n = 23,892 | | Northeastern n = 12,761 | | Western n = 8,102 | | Northern n = 5,472 | |
| Administrator | 847 | 1.3 | 164 | 1.3 | 326 | 1.4 | 178 | 1.4 | 95 | 1.2 | 59 | 1.1 |
| Advanced practice nurse | 4,638 | 7.3 | 873 | 6.7 | 1,771 | 7.4 | 1,008 | 7.9 | 587 | 7.2 | 399 | 7.3 |
| Case manager | 5,622 | 8.9 | 1,076 | 8.3 | 2,159 | 9.0 | 1,103 | 8.6 | 737 | 9.1 | 547 | 10.0 |
| Consultant or contractor | 677 | 1.1 | 141 | 1.1 | 255 | 1.1 | 126 | 1.0 | 96 | 1.2 | 59 | 1.1 |

| | n | % | n | % | n | % | n | % | n | % | n | % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Nurse executive | 695 | 1.1 | 130 | 1.0 | 243 | 1.0 | 137 | 1.1 | 108 | 1.3 | 71 | 1.3 |
| Nurse faculty | 1,103 | 1.7 | 190 | 1.5 | 428 | 1.8 | 247 | 1.9 | 151 | 1.9 | 87 | 1.6 |
| Nurse manager | 4,289 | 6.8 | 868 | 6.7 | 1,433 | 6.0 | 951 | 7.5 | 682 | 8.4 | 355 | 6.5 |
| Nurse researcher | 247 | 0.4 | 62 | 0.5 | 128 | 0.5 | 32 | 0.3 | 15 | 0.2 | 10 | 0.2 |
| Staff nurse | 39,208 | 62.0 | 8,391 | 64.7 | 14,884 | 62.3 | 7,753 | 60.8 | 4,896 | 60.4 | 3,284 | 60.0 |
| Staff, other non-medical industry | 177 | 0.3 | 28 | 0.2 | 59 | 0.2 | 47 | 0.4 | 23 | 0.3 | 20 | 0.4 |
| Manager, other non-medical | 104 | 0.2 | 20 | 0.2 | 34 | 0.1 | 25 | 0.2 | 13 | 0.2 | 12 | 0.2 |
| Other | 5,582 | 8.8 | 1,019 | 7.9 | 2,172 | 9.1 | 1,154 | 9.0 | 706 | 8.7 | 531 | 9.7 |
| **Payment Basis of Position at Principal Place of Work** | | | | | | | | | | | | |
| Hourly | 43,283 | 68.5 | 9,213 | 71.1 | 15,867 | 66.4 | 8,898 | 69.7 | 5,597 | 69.1 | 3,708 | 67.8 |
| Salary | 17,043 | 26.9 | 3,187 | 24.6 | 6,947 | 29.1 | 3,292 | 25.8 | 2,103 | 25.9 | 1,514 | 27.7 |
| Per diem | 2,108 | 3.3 | 412 | 3.2 | 785 | 3.3 | 425 | 3.3 | 292 | 3.6 | 194 | 3.5 |
| Volunteer | 755 | 1.2 | 150 | 1.2 | 293 | 1.2 | 146 | 1.1 | 110 | 1.4 | 56 | 1.0 |
| Total mean hours worked per week, primary and secondary jobs | 36.0 | | 36.0 | | 36.2 | | 35.5 | | 35.4 | | 36.9 | |
| Primary employment through temporary employment agency or travel agency | 971 | 1.5 | 157 | 1.2 | 395 | 1.6 | 209 | 1.6 | 99 | 1.2 | 111 | 1.2 |

*Note.* Table 14 includes responses to survey questions 11, 20, 25, 28 – 30, 36, 37, 45, 46.

**Patterns of Employment in Nursing**

Table 15 describes the employment status of nurses in each DHS region. The proportion of respondents reporting employment as a nurse was similar across regions, with a range of 83.7% in the Northern region to 86.0% in the Southern region. Employment in health care but not as a nurse ranged from 2.3% to 3.2%. There is little variability across regions in the total number of RNs who reported they were not working at the time of licensure renewal. The Southeastern region had the greatest percentage of unemployed RNs who were seeking work either in health care (1.5%) or another field (0.7%). The percentage of nurses reporting being retired ranged from 6.5% in the Western region to 7.9% in the Northern region.

**Table 15. Employment Status in Nursing by DHS Region of Residence**

| | State *n* = 77,111 | | Southern *n* = 15,622 | | Southeastern *n* = 29,471 | | Northeastern *n* = 15,563 | | Western *n* = 9,678 | | Northern *n* = 6,777 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* |
| **Employed** | | | | | | | | | | | | |
| Employed as a nurse | 65,557 | 85.0 | 13,438 | 86.0 | 24,923 | 84.6 | 13,147 | 84.5 | 8,379 | 86.6 | 5,670 | 83.7 |
| Employed in health care, not as a nurse | 2,072 | 2.7 | 359 | 2.3 | 849 | 2.9 | 442 | 2.8 | 207 | 2.1 | 215 | 3.2 |
| Employed in another field | 1,100 | 1.4 | 187 | 1.2 | 424 | 1.4 | 251 | 1.6 | 120 | 1.2 | 118 | 1.7 |
| **Unemployed** | | | | | | | | | | | | |
| Retired | 5,422 | 7.0 | 1,138 | 7.3 | 2,040 | 6.9 | 1,080 | 6.9 | 627 | 6.5 | 537 | 7.9 |
| Unemployed, seeking work in nursing | 988 | 1.3 | 184 | 1.2 | 438 | 1.5 | 185 | 1.2 | 106 | 1.1 | 75 | 1.1 |
| Unemployed, seeking work in another field | 130 | 0.2 | 17 | 0.1 | 60 | 0.2 | 30 | 0.2 | 11 | 0.1 | 12 | 0.2 |
| Unemployed, not seeking employment | 1,842 | 2.4 | 299 | 1.9 | 737 | 2.5 | 428 | 2.8 | 228 | 2.4 | 150 | 2.2 |

*Note.* Table 15 includes responses to survey questions 11, 69.
*Note.* Percentages are based on the valid responses in the category and may vary between categories.

Table 16 displays the responses by region to a survey question that asked respondents to choose a category that best described their jobs at their primary place of work. The majority of respondents in all regions categorized their jobs as "nursing."

**Table 16. Description of Position at Principal Place of Work by DHS Region of Residence**

| | State n = 63,189 | | Southern n = 12,962 | | Southeastern n = 23,892 | | Northeastern n = 12,761 | | Western n = 8,102 | | Northern n = 5,472 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* |
| Nursing | 55,243 | 87.4 | 11,507 | 88.8 | 20,833 | 87.2 | 11,077 | 86.6 | 7,127 | 88.0 | 4,699 | 85.9 |
| Nurse educator | 2,542 | 4.0 | 475 | 3.7 | 1,000 | 4.2 | 535 | 4.2 | 313 | 3.9 | 219 | 4.0 |
| Retail sales and services | 57 | 0.1 | * | * | 29 | 0.1 | 8 | 0.1 | 8 | 0.1 | 7 | 0.1 |
| Health-related services outside of nursing | 1,535 | 2.4 | 278 | 2.1 | 581 | 2.4 | 338 | 2.6 | 185 | 2.3 | 153 | 2.8 |
| Financial, accounting, and insurance processing | 419 | 0.7 | 79 | 0.6 | 151 | 0.6 | 91 | 0.7 | 37 | 0.5 | 61 | 1.1 |
| Consulting | 578 | 0.9 | 114 | 0.9 | 239 | 1.0 | 101 | 0.8 | 74 | 0.9 | 50 | 0.9 |
| Other | 2,815 | 4.5 | 504 | 3.91 | 1,059 | 4.4 | 611 | 4.8 | 358 | 4.4 | 283 | 5.2 |

*Note.* Table 16 includes responses to survey questions 23, 26.
*Too few to report.

## Specialized Clinical Knowledge

Table 17 provides an overview of areas for which RNs in each DHS region reported either specialized clinical knowledge or significant experience (defined as two or more years). Variation in reported clinical expertise across regions may reflect concentrations of health care facilities and the range of health services available in each region.

**Table 17. Areas of Specialized Clinical Knowledge and Experience by DHS Region of Residence**

| | State n = 77,111 | | Southern n = 15,622 | | Southeastern n = 29,471 | | Northeastern n = 15,563 | | Western n = 9,678 | | Northern n = 6,777 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* |
| Acute/ critical/ intensive care | 19,098 | 24.8 | 3,836 | 24.6 | 7,923 | 26.9 | 3,343 | 21.5 | 2,188 | 22.6 | 1,808 | 26.7 |
| Addiction/ AODA/ substance abuse | 3,223 | 4.2 | 575 | 3.7 | 1,314 | 4.5 | 589 | 3.8 | 436 | 4.5 | 309 | 4.6 |
| Adult health | 15,170 | 19.7 | 3,201 | 20.5 | 5,799 | 19.7 | 3,038 | 19.5 | 1,815 | 18.8 | 1,317 | 19.4 |
| Anesthesia | 1,821 | 2.4 | 377 | 2.4 | 583 | 2.0 | 369 | 2.4 | 276 | 2.9 | 216 | 3.2 |
| Cardiac | 12,849 | 16.7 | 2,342 | 15.0 | 5,335 | 18.1 | 2,539 | 16.3 | 1,482 | 15.3 | 1,151 | 17.0 |
| Community health | 5,781 | 7.5 | 1,100 | 7.0 | 2,255 | 7.7 | 1,105 | 7.1 | 788 | 8.1 | 533 | 7.9 |
| Correctional health | 1,671 | 2.2 | 426 | 2.7 | 485 | 1.6 | 466 | 3.0 | 180 | 1.9 | 114 | 1.7 |
| Dialysis | 3,103 | 4.0 | 556 | 3.6 | 1,293 | 4.4 | 614 | 3.9 | 354 | 3.7 | 286 | 4.2 |
| Emergency care | 10,682 | 13.9 | 2,222 | 14.2 | 3,657 | 12.4 | 2,058 | 13.2 | 1,680 | 17.4 | 1,065 | 15.7 |
| Family health | 6,531 | 8.5 | 1,392 | 8.9 | 2,098 | 7.1 | 1,458 | 9.4 | 917 | 9.5 | 666 | 9.8 |
| Geriatrics or gerontology | 15,061 | 19.5 | 3,079 | 19.7 | 4,886 | 16.6 | 3,314 | 21.3 | 2,210 | 22.8 | 1,572 | 23.2 |
| Home health | 8,783 | 11.4 | 1,658 | 10.6 | 3,346 | 11.4 | 1,844 | 11.8 | 1,159 | 12.0 | 776 | 11.5 |
| Hospice or palliative care | 9,271 | 12.0 | 1,897 | 12.1 | 3,310 | 11.2 | 1,996 | 12.8 | 1,255 | 13.0 | 813 | 12.0 |
| Labor and delivery | 5,346 | 6.9 | 1,058 | 6.8 | 1,634 | 5.5 | 1,268 | 8.1 | 873 | 9.0 | 513 | 7.6 |
| Maternal-child health | 5,161 | 6.7 | 1,063 | 6.8 | 1,805 | 6.1 | 1,173 | 7.5 | 687 | 7.2 | 423 | 6.2 |
| Medical-surgical | 23,476 | 30.4 | 4,752 | 30.4 | 8,642 | 29.3 | 4,747 | 30.5 | 3,169 | 32.7 | 2,166 | 32.0 |
| Neonatal | 4,331 | 5.6 | 803 | 5.1 | 1,774 | 6.0 | 898 | 5.8 | 504 | 5.2 | 352 | 5.2 |
| Obstetrics-gynecology | 5,525 | 7.2 | 1,167 | 7.5 | 1,861 | 6.3 | 1,248 | 8.0 | 767 | 7.9 | 482 | 7.1 |

| | State n = 77,111 | | Southern n = 15,622 | | Southeastern n = 29,471 | | Northeastern n = 15,563 | | Western n = 9,678 | | Northern n = 6,777 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | n | % | n | % | n | % | n | % | n | % | n | % |
| Occupational or employee health | 2,071 | 2.7 | 354 | 2.3 | 666 | 2.3 | 566 | 3.6 | 234 | 2.4 | 251 | 3.7 |
| Oncology | 5,993 | 7.8 | 1,142 | 7.3 | 2,542 | 8.6 | 1,235 | 7.9 | 601 | 6.2 | 473 | 7.0 |
| Pediatrics | 8,315 | 10.8 | 1,789 | 11.5 | 3,443 | 11.7 | 1,444 | 9.3 | 883 | 9.1 | 756 | 11.2 |
| Parish or faith community | 829 | 1.1 | 150 | 1.0 | 342 | 1.1 | 193 | 1.2 | 86 | 0.9 | 76 | 1.1 |
| Psychiatric or mental health | 6,311 | 8.2 | 1,243 | 8.0 | 2,374 | 8.1 | 1,333 | 8.6 | 893 | 9.2 | 468 | 6.9 |
| Public health | 3,106 | 4.0 | 624 | 4.0 | 1,069 | 3.6 | 606 | 3.9 | 501 | 5.2 | 306 | 4.5 |
| Rehabilitation | 5,399 | 7.0 | 884 | 5.7 | 2,144 | 7.3 | 1,223 | 7.9 | 678 | 7.0 | 470 | 6.9 |
| Respiratory care | 2,564 | 3.3 | 575 | 3.7 | 1,019 | 3.5 | 424 | 2.7 | 322 | 3.3 | 224 | 3.3 |
| School health | 2,040 | 2.6 | 451 | 2.9 | 762 | 2.6 | 388 | 2.5 | 260 | 2.7 | 179 | 2.6 |
| Surgery/pre-op/post-op/ PACU | 11,274 | 14.6 | 2,284 | 14.6 | 4,069 | 13.8 | 2,394 | 15.4 | 1,427 | 14.7 | 1,100 | 16.2 |
| Women's health | 4,761 | 6.2 | 894 | 5.7 | 1,878 | 6.4 | 1,070 | 6.9 | 593 | 6.1 | 326 | 4.8 |
| Other | 11,720 | 15.2 | 2,339 | 15.0 | 4,588 | 15.6 | 2,319 | 14.9 | 1,424 | 14.7 | 1,050 | 15.5 |

*Note.* Table 17 includes responses to survey questions 14, 69.
*Note.* Respondents could select more than one category.

**Employment Status Change**

Table 18 describes changes in employment status reported by respondents in the past year by DHS region. The most common type of employment status change across all regions was taking a new position with a new employer. The proportion of respondents reporting this change ranged from a low of 9.2% in the Southern region to a high of 11.2% in the Northern region. Across regions, the proportion of nurses who reported no longer working as a nurse was similar to the state (2.5%).

**Table 18. Employment Status Change of RNs by DHS Region of Residence**

| | State $n = 77,111$ | | Southern $n = 15,622$ | | Southeastern $n = 29,471$ | | Northeastern $n = 15,563$ | | Western $n = 9,678$ | | Northern $n = 6,777$ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *n* | % | *n* | % | *n* | % | *n* | % | *n* | % | *n* | % |
| No change | 53,691 | 69.9 | 10,928 | 70.0 | 20,535 | 69.7 | 10,921 | 70.2 | 6,718 | 69.4 | 4,589 | 67.7 |
| Changed number of hours worked | 5,502 | 7.1 | 1,132 | 7.2 | 2,094 | 7.1 | 1,102 | 7.1 | 731 | 7.6 | 443 | 6.5 |
| New position with same employer | 5,471 | 7.1 | 1,103 | 7.1 | 2,117 | 7.2 | 1,067 | 6.9 | 668 | 6.9 | 516 | 7.6 |
| New position with different employer | 7,447 | 9.7 | 1,444 | 9.2 | 2,783 | 9.4 | 1,503 | 9.7 | 961 | 9.9 | 756 | 11.2 |
| Working as nurse, previous employment not as nurse | 1,523 | 2.0 | 338 | 2.2 | 584 | 2.0 | 287 | 1.8 | 186 | 1.9 | 128 | 1.9 |
| No longer employed as nurse | 1,918 | 2.5 | 384 | 2.5 | 716 | 2.4 | 386 | 2.5 | 243 | 2.5 | 189 | 2.8 |
| Other | 1,559 | 2.0 | 293 | 1.9 | 642 | 2.2 | 297 | 1.9 | 171 | 1.8 | 156 | 2.3 |

*Note.* Table 18 includes responses to survey questions 12, 69.

Table 19 describes the factors RNs cited that were most important in their change in employment by DHS region. The three most common reasons for an employment change across regions in the past year include promotion or career advancement, followed by dissatisfaction with previous position and seeking more convenient hours. Some regional differences were noted. RNs in the Southeastern reported dissatisfaction with prior employment (15.2%) more than RNs from other regions. In addition, more RNs in the Southern (8.1%) and Southeastern (8.0%) regions cited childcare responsibilities. In the Northeastern region, promotion or career advancement (16.4%) and retirement (11.4%) were reported more frequently than in other regions.

**Table 19. Important Factors in Employment Change in the Past Year by DHS Region of Residence**

| | State n = 25,755 | | Southern n = 5,082 | | Southeastern n = 9,912 | | Northeastern n = 5,133 | | Western n = 3,207 | | Northern n = 2,421 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* |
| Retirement | 2,566 | 10.0 | 517 | 10.2 | 959 | 9.7 | 499 | 9.7 | 316 | 9.9 | 275 | 11.4 |
| Childcare responsibilities | 1,935 | 7.5 | 411 | 8.1 | 794 | 8.0 | 374 | 7.3 | 194 | 6.0 | 162 | 6.7 |
| Other family responsibilities | 1,315 | 5.1 | 253 | 5.0 | 507 | 5.1 | 266 | 5.2 | 180 | 5.6 | 109 | 4.5 |
| Salary, medical, or retirement benefits | 2,099 | 8.1 | 391 | 7.7 | 811 | 8.2 | 401 | 7.8 | 300 | 9.4 | 196 | 8.1 |
| Laid off | 380 | 1.5 | 55 | 1.1 | 173 | 1.7 | 80 | 1.6 | 45 | 1.4 | 27 | 1.1 |
| Change in spouse or partner work situation | 508 | 2.0 | 102 | 2.0 | 209 | 2.1 | 98 | 1.9 | 76 | 2.4 | 23 | 1.0 |
| Change in financial situation | 597 | 2.3 | 100 | 2.0 | 241 | 2.4 | 120 | 2.3 | 85 | 2.7 | 51 | 2.1 |
| Relocation or moved to another area | 1,531 | 5.9 | 377 | 7.4 | 467 | 4.7 | 307 | 6.0 | 211 | 6.6 | 169 | 7.0 |
| Promotion or career advancement | 3,962 | 15.4 | 737 | 14.5 | 1,550 | 15.6 | 844 | 16.4 | 463 | 14.4 | 368 | 15.2 |
| Change in health status of RN | 976 | 3.8 | 185 | 3.6 | 378 | 3.8 | 201 | 3.9 | 125 | 3.9 | 87 | 3.6 |
| Seeking more convenient hours | 3,130 | 12.2 | 633 | 12.5 | 1,146 | 11.6 | 643 | 12.5 | 398 | 12.4 | 310 | 12.8 |
| Dissatisfaction with previous position | 3,648 | 14.2 | 701 | 13.8 | 1,506 | 15.2 | 680 | 13.2 | 422 | 13.2 | 339 | 14.0 |
| Other | 3,108 | 12.1 | 620 | 12.2 | 1,171 | 11.8 | 620 | 12.1 | 392 | 12.2 | 305 | 12.6 |

*Note.* Table 19 includes responses to survey questions 13, 69.

**Secondary Employment**

The survey asked RNs to identify whether or not they have a secondary place of work, and if yes, the survey asked for more information about the secondary place of work. Table 20 shows patterns of employment in secondary positions by DHS region. Across all regions, the majority of nurses who worked a secondary position require an RN license for that position. The greatest percentage of those who work a secondary position worked in nursing education or a health-related field outside of nursing. Regional differences may reflect variations in local economies. For example, more RNs in the Southeastern region reported work as a nurse educator (10.3%), an area with greater density of nursing schools than other areas of the state, and RNs in the Northern region reported greater secondary employment in health-related services outside of nursing (8.1%), an area with few and more geographically distant tertiary care centers. The mean number of hours worked in the secondary position was similar to the state and ranged from 8.2 hours to 8.7 hours.

**Table 20. Description of Position at Secondary Place of Work by DHS Region of Residence**

| | State n = 9,414 | | Southern n = 1,888 | | Southeastern n = 3,567 | | Northeastern n = 1,840 | | Western n = 1,292 | | Northern n = 827 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* |
| Secondary job requires RN licensure | 7,695 | 81.7 | 1,527 | 80.9 | 2,987 | 83.7 | 1,472 | 80.0 | 1,046 | 81.0 | 663 | 80.2 |
| Nursing | 6,761 | 71.8 | 1,360 | 72.0 | 2,540 | 71.2 | 1,304 | 70.9 | 965 | 74.7 | 592 | 71.6 |
| Nurse educator | 818 | 8.7 | 155 | 8.2 | 367 | 10.3 | 151 | 8.2 | 91 | 7.0 | 54 | 6.5 |
| Retail sales and services | 103 | 1.1 | 29 | 1.5 | 31 | 0.9 | 24 | 1.3 | 13 | 1.0 | 6 | 0.7 |
| Health-related services outside of nursing | 596 | 6.3 | 114 | 6.0 | 209 | 5.9 | 120 | 6.5 | 86 | 6.7 | 67 | 8.1 |
| Financial, accounting, and insurance processing staff | 29 | 0.3 | 6 | 0.3 | 9 | 0.3 | 9 | 0.5 | * | * | * | * |
| Consulting | 184 | 9.8 | 35 | 1.9 | 80 | 2.2 | 34 | 1.8 | 23 | 1.8 | 12 | 1.5 |
| Other | 923 | 9.8 | 189 | 10.0 | 331 | 9.3 | 198 | 10.8 | 112 | 8.7 | 93 | 11.2 |
| Mean number of hours worked per week (*SD*) | 8.0 (8.5) | | 8.0 (8.2) | | 8.4 (8.7) | | 7.8 (8.6) | | 7.6 (8.6) | | 8.0 (8.6) | |

*Note.* Table 20 includes responses from survey questions 40 – 42, 44 – 46, 69.
*Too few to report.

## Employment Intentions

Table 21 shows the employment intentions of RNs who reported they were not working at the time of license renewal overall and by DHS region. Half of unemployed RNs in all regions were uncertain whether they would return to nursing. Across regions, the highest proportion of unemployed RNs seeking employment in nursing was in the Southeastern region (16.3%). Higher proportions of RNs in this same region also reported they were not retired and would not return to nursing (5.4%). Greater proportions of nurses from the Northern (23.0%) and Northeastern (23.1%) regions reported being either retired or unable to return to nursing compared to other regions. Variations in responses may reflect differences in regional or local economies, opportunities for employment, or demographic differences in RNs by region.

**Table 21. Employment Intentions of Unemployed RNs by DHS Region of Residence**

| | State n = 13,922 | | Southern n = 2,660 | | Southeastern n = 5,579 | | Northeastern n = 2,802 | | Western n = 1,576 | | Northern n = 1,305 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* |
| Currently seeking employment in nursing | 2,074 | 14.9 | 376 | 14.1 | 912 | 16.3 | 365 | 13.0 | 248 | 15.7 | 173 | 13.3 |
| Plan to return to nursing in the future | 1,286 | 9.2 | 212 | 8.0 | 539 | 9.7 | 267 | 9.5 | 143 | 9.1 | 125 | 9.6 |
| Retired or unable to return to nursing | 3,006 | 21.6 | 602 | 22.6 | 1,147 | 20.6 | 647 | 23.1 | 310 | 19.7 | 300 | 23.0 |
| Definitely will not return to nursing, but not retired | 698 | 5.0 | 131 | 4.9 | 300 | 5.4 | 148 | 5.3 | 64 | 4.1 | 55 | 4.2 |
| Undecided at this time | 6,858 | 49.3 | 1,339 | 50.3 | 2,681 | 48.1 | 1,375 | 49.1 | 811 | 51.5 | 652 | 50.0 |

*Note.* Table 21 includes responses to survey questions 61, 69.

Table 22 shows the factors by DHS region that RNs reported would influence their return to nursing. Similarities across regions emerged, such as the need for affordable childcare at or near work, improved health benefits, and worksite location. The Western region reported the lowest proportion of RNs who would not consider a return to nursing (15.6%). Higher proportions of RNs in the Northern region cited modified physical job requirements (11.3%), improved health status (7.5%), and retirement benefits (9.4%) compared to other regions. A higher proportion of RNs in the Southeastern region cited the work environment (23.2%) as a factor that would influence a return to nursing. The greatest variability in factors cited across regions was seen in more or flexible hours (ranging from 23.1% in the Southern region to 26.0% in the Southeastern region), and improved pay (ranging from 17.4% in the Western region to 22.5% in the Southern region). Of note, nearly 30% of RNs across all regions selected *other* as a factor that would influence a return to nursing. Additional information would be useful to better understand those other factors that prompt RNs to return to the nursing workforce.

**Table 22. Factors Influencing a Return to Nursing by DHS Region of Residence**

| | State *n* = 13,922 | | Southern *n* = 2,660 | | Southeastern *n* = 4,589 | | Northeastern *n* = 2,268 | | Western *n* = 1,330 | | Northern *n* = 1,305 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *n* | % | *n* | % | *n* | % | *n* | % | *n* | % | *n* | % |
| Would not consider returning to nursing | 2,520 | 18.1 | 511 | 19.2 | 990 | 17.7 | 534 | 19.1 | 246 | 15.6 | 239 | 18.3 |
| Modified physical job requirements | 1,444 | 10.4 | 243 | 9.1 | 601 | 10.8 | 290 | 10.3 | 162 | 10.3 | 148 | 11.3 |
| Affordable childcare at or near work | 495 | 3.6 | 98 | 3.7 | 198 | 3.5 | 99 | 3.5 | 54 | 3.4 | 46 | 3.5 |
| Improvement in health status | 996 | 7.2 | 190 | 7.1 | 400 | 7.2 | 190 | 6.8 | 118 | 7.5 | 98 | 7.5 |
| Improved health benefits | 1,174 | 8.4 | 223 | 8.4 | 492 | 8.8 | 229 | 8.2 | 114 | 7.2 | 116 | 8.9 |
| Retirement benefits | 1,144 | 8.2 | 220 | 8.3 | 472 | 8.5 | 200 | 7.1 | 129 | 8.2 | 123 | 9.4 |
| More or flexible hours | 3,435 | 24.7 | 615 | 23.1 | 1,451 | 26.0 | 714 | 25.5 | 345 | 21.9 | 310 | 23.8 |
| Opportunity for career advancement | 1,076 | 7.7 | 197 | 7.4 | 478 | 8.6 | 186 | 6.6 | 111 | 7.0 | 104 | 8.0 |
| Improved pay | 2,815 | 20.2 | 488 | 18.3 | 1,253 | 22.5 | 543 | 19.4 | 274 | 17.4 | 257 | 19.7 |
| Shift | 2,074 | 14.9 | 371 | 13.9 | 866 | 15.5 | 438 | 15.6 | 234 | 14.8 | 165 | 12.6 |
| Work environment | 3,120 | 22.4 | 586 | 22.0 | 1,293 | 23.2 | 619 | 22.1 | 324 | 20.6 | 298 | 22.8 |
| Worksite location | 2,093 | 15.0 | 377 | 14.2 | 876 | 15.7 | 414 | 14.8 | 233 | 14.8 | 193 | 14.8 |
| Other | 4,156 | 29.9 | 782 | 29.4 | 1,608 | 28.8 | 852 | 30.4 | 506 | 32.1 | 408 | 31.3 |

*Note.* Table 22 includes responses from survey questions 62, 69.
*Note.* Respondents could choose two selections.

**Future Employment Plans**

Table 23 displays the intent of respondents to continue providing direct patient care in each DHS region. Slightly over 20% of the nursing workforce in every region intends to continue providing direct patient care for less than five years, and more than 40% for less than 10 years. Variation between regions may reflect differences in age distribution of RNs.

**Table 23. Intent to Continue Providing Direct Patient Care by DHS Region of Residence**

| Years | State $n = 56,874$ | | Southern $n = 11,755$ | | Southeastern $n = 21,544$ | | Northeastern $n = 11,395$ | | Western $n = 7,272$ | | Northern $n = 4,908$ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* |
| < 2 | 4,350 | 7.6 | 888 | 7.6 | 1,712 | 7.9 | 773 | 6.8 | 576 | 7.9 | 401 | 8.2 |
| 2 – 4 | 8,471 | 14.9 | 1,719 | 14.6 | 3,456 | 16.0 | 1,570 | 13.8 | 1,028 | 14.1 | 698 | 14.2 |
| 5 – 9 | 11,894 | 20.9 | 2,448 | 20.8 | 4,715 | 21.9 | 2,284 | 20.0 | 1,435 | 19.7 | 1,012 | 20.6 |
| 10 – 19 | 14,709 | 25.9 | 3,067 | 26.1 | 5,579 | 25.9 | 2,905 | 25.5 | 1,859 | 25.6 | 1,299 | 26.5 |
| 20 – 29 | 9,554 | 16.8 | 2,064 | 17.6 | 3,323 | 15.4 | 2,029 | 17.8 | 1,294 | 17.8 | 844 | 17.2 |
| ≥ 30 | 7,896 | 13.9 | 1,569 | 13.3 | 2,759 | 12.8 | 1,834 | 16.1 | 1,080 | 14.9 | 654 | 13.3 |

*Note.* Table 23 includes responses to survey questions 21, 26, 27.

## Educational Preparation of RNs in Wisconsin by Region

Table 24 provides an overview of the educational preparation for nursing practice by DHS region where the respondent resides. Higher proportions of RNs in the Western (43.4%) and Northern (47.3%) regions have associate degrees compared to other regions. The Southeastern region has the highest proportion of RNs with bachelors' degrees (52.5%), followed by the Southern region (49.7%). The Southeastern region also had the highest proportion of nurses with a nursing bachelor degree or higher (65.4%). All regions remain well below the national targeted goal of 80% bachelor or higher nursing prepared RNs by 2020 (IOM, 2010).

### Table 24. Highest Nursing Degree by DHS Region of Residence

| | State n = 76,920 | | Southern n = 15,586 | | Southeastern n = 29,383 | | Northeastern n = 15,524 | | Western n = 9,659 | | Northern n = 6,768 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* |
| Practical or vocational nursing diploma | 104 | 0.1 | 27 | 0.2 | 22 | 0.1 | 21 | 0.1 | 27 | 0.3 | 7 | 0.1 |
| Diploma in nursing | 4,001 | 5.2 | 778 | 5.0 | 1,588 | 5.4 | 808 | 5.2 | 426 | 4.4 | 401 | 5.9 |
| ADN | 26,679 | 34.7 | 5,050 | 32.4 | 8,556 | 29.1 | 5,677 | 36.6 | 4,195 | 43.4 | 3,201 | 47.3 |
| BSN | 36,787 | 47.8 | 7,754 | 49.7 | 15,427 | 52.5 | 7,210 | 46.4 | 3,943 | 40.8 | 2,453 | 36.2 |
| MSN | 8,399 | 10.9 | 1,743 | 11.2 | 3,415 | 11.6 | 1,650 | 10.6 | 941 | 9.7 | 650 | 9.5 |
| DNP | 675 | 0.9 | 166 | 1.1 | 247 | 0.8 | 117 | 0.8 | 97 | 1.0 | 48 | 0.7 |
| PhD in nursing | 247 | 0.3 | 57 | 0.4 | 120 | 0.4 | 39 | 0.3 | 27 | 0.3 | * | * |
| Total BSN or higher degree in nursing | 46,108 | 57.7 | 9,720 | 62.4 | 19,209 | 65.4 | 9,016 | 58.1 | 5,008 | 51.8 | 3,155 | 46.6 |

*Note.* Table 24 includes responses from survey questions 4, 26 27.
*Too few to report.

**Future Educational Plans**

Table 25 describes respondents' future educational plans in each DHS region. The majority of RNs in every region reported having no plans for further education, ranging from 67.4% in the Western region to 70.3% in the Northern region. Less than 22% of RNs in the state reported an intent to pursue further education in the next two years. The Northern region has the largest proportion of nurses enrolled in a bachelor's in nursing program (6.2%), and the Southeastern region has the largest proportion enrolled in a master's in nursing program (3.7%). Small numbers of nurses are enrolled in doctoral programs, with the lowest enrollment in the Northern region.

**Table 25. Plans for Further Education in Nursing by DHS Region of Residence**

| | State<br>*n* = 77,111 | | Southern<br>*n* = 15,622 | | Southeastern<br>*n* = 29,471 | | Northeastern<br>*n* = 15,563 | | Western<br>*n* = 9,678 | | Northern<br>*n* = 6,777 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ***n*** | ***%*** | ***n*** | ***%*** | ***n*** | ***%*** | ***n*** | ***%*** | ***n*** | ***%*** | ***n*** | ***%*** |
| No plans | 52,903 | 68.6 | 10,819 | 69.2 | 19,950 | 67.7 | 10,853 | 69.7 | 6,519 | 67.4 | 4,762 | 70.3 |
| Enrolled in BSN program | 3,723 | 4.8 | 668 | 4.3 | 1,210 | 4.1 | 961 | 6.2 | 595 | 6.1 | 289 | 4.3 |
| Enrolled in MSN program | 2,201 | 2.9 | 340 | 2.2 | 1,095 | 3.7 | 417 | 2.7 | 212 | 2.2 | 137 | 2.0 |
| Enrolled in MS degree program in a related field | 356 | 0.5 | 63 | 0.4 | 147 | 0.5 | 60 | 0.4 | 58 | 0.6 | 28 | 0.4 |
| Enrolled in DNP program | 825 | 1.1 | 224 | 1.4 | 294 | 1.0 | 123 | 0.8 | 131 | 1.4 | 53 | 0.8 |
| Enrolled in a nursing PhD program | 110 | 0.1 | 31 | 0.2 | 50 | 0.2 | 17 | 0.1 | 6 | 0.1 | 6 | 0.1 |
| Enrolled in a PhD program in a related field | 54 | 0.1 | 10 | 0.1 | 25 | 0.1 | 11 | 0.1 | * | * | * | * |
| Enrolled in a non-degree specialty certification program | 672 | 0.9 | 148 | 0.9 | 277 | 0.9 | 124 | 0.8 | 62 | 0.6 | 61 | 0.9 |
| Plan to pursue further nursing education in the next 2 years | 16,267 | 21.1 | 3,319 | 21.2 | 6,423 | 21.8 | 2,997 | 19.3 | 2,090 | 21.6 | 1,438 | 21.2 |

*Note.* Table 25 includes responses to survey questions 6, 26, 27.
*Too few to report.

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## Challenges to Further Education

Table 26 provides an overview of the barriers RNs in each region identified to pursuing further education. At least a quarter of respondents in all regions reported no barriers to pursuing further education. Some regional variation in responses was noted. Commuting distance, cost of tuition/fees/materials, and access to online learning appeared to be less frequent barriers for RNs in the Southeastern region compared to other regions. Conversely, these same barriers were identified by a larger proportion of RNs in the Northern region. Across all regions, cost of lost work and benefits and family or personal reasons were the most commonly reported barriers to further education. With the exception of the Southeastern region, the largest proportions of RNs (nearly half) in all other regions reported that cost of tuition, fees, and materials was a challenge to pursuing higher nursing education.

**Table 26. Challenges to Pursuing Additional Education by DHS Region of Residence**

|  | State<br>*n* = 77,111 | | Southern<br>*n* = 15,622 | | Southeastern<br>*n* = 29,471 | | Northeastern<br>*n* = 15,563 | | Western<br>*n* = 9,678 | | Northern<br>*n* = 6,777 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* |
| None | 20,098 | 26.1 | 4,057 | 26.0 | 7,453 | 25.3 | 4,154 | 26.7 | 2,534 | 26.2 | 1,900 | 28.0 |
| Commuting distance | 1,731 | 2.2 | 371 | 2.4 | 336 | 1.1 | 378 | 2.4 | 294 | 3.0 | 352 | 5.2 |
| Cost of lost work and benefits | 18,730 | 24.3 | 3,968 | 25.4 | 7,101 | 24.1 | 3,622 | 23.3 | 2,311 | 23.9 | 1,728 | 25.5 |
| Cost of tuition, fees, materials | 38,170 | 49.5 | 7,592 | 48.6 | 15,121 | 51.3 | 7,478 | 48.0 | 4,776 | 49.3 | 3,203 | 47.3 |
| Family or personal reasons | 25,560 | 33.1 | 5,103 | 32.7 | 9,844 | 33.2 | 5,379 | 34.6 | 3,211 | 33.2 | 2,023 | 29.9 |
| Lack of flexibility in work schedule | 7,720 | 10.0 | 1,554 | 9.9 | 3,105 | 10.5 | 1,560 | 10.0 | 879 | 9.1 | 622 | 9.2 |
| Limited access to online learning or other resources | 695 | 0.9 | 154 | 1.0 | 187 | 0.6 | 142 | 0.9 | 111 | 1.1 | 101 | 1.5 |
| Schedule of education programs offered | 1,945 | 2.5 | 398 | 2.5 | 795 | 2.7 | 374 | 2.4 | 239 | 2.5 | 139 | 2.1 |
| Other | 5,802 | 7.5 | 1,274 | 8.2 | 2,218 | 7.5 | 1,130 | 7.3 | 715 | 7.4 | 465 | 6.9 |

*Note.* Table 26 includes responses to survey questions 7, 68, 69.

**Emergency Response Training**

Table 27 displays RNs who have received formal emergency preparedness education in each DHS region. Approximately 70% of Wisconsin RNs have received formal training, with most of the training provided by employers (range 62.9% to 69.2%). Regional differences in the proportion of RNs who received emergency preparedness and response training were noted. For example, 68.3% of RNs in the more densely populated Southeastern region reported emergency preparedness and response training compared to 75.3% in the more sparsely populated Western region.

**Table 27. Formal Training in Emergency Preparedness and Response by DHS Region of Residence**

| | State<br>n = 77,111 | | Southern<br>n = 15,622 | | Southeastern<br>n = 29,471 | | Northeastern<br>n = 15,563 | | Western<br>n = 9,678 | | Northern<br>n = 6,777 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* |
| Have not received training | 22,806 | 29.6 | 4,686 | 30.0 | 9,346 | 31.7 | 4,478 | 28.8 | 2,351 | 24.7 | 1,905 | 28.1 |
| Received training | 54,305 | 70.4 | 10,936 | 70.0 | 20,125 | 68.3 | 11,085 | 71.2 | 7,287 | 75.3 | 4,872 | 71.9 |
| **Organization that provided emergency preparedness and response training*** | | | | | | | | | | | | |
| Employer | 49,912 | 64.7 | 10,026 | 64.2 | 18,533 | 62.9 | 10,251 | 65.9 | 6,694 | 69.2 | 4,408 | 65.0 |
| Voluntary organization | 1,882 | 2.4 | 434 | 2.8 | 662 | 2.2 | 360 | 2.3 | 245 | 2.5 | 181 | 2.7 |
| Other source | 3,497 | 4.5 | 725 | 4.6 | 1,243 | 4.2 | 664 | 4.3 | 483 | 5.0 | 382 | 5.6 |

*Note.* Table 27 includes responses to survey questions 8, 26, 27.
*Respondents could select more than one response.

Table 28 displays information about RNs who have applied emergency preparedness and response training by region of residence. The numbers of RNs who participated in a simulated or actual emergency or disaster ranges from a low of 2.7% (actual) and 30.9% (simulated) in the Southeastern region to a high of 4.1% (actual) and 38.7% (simulated) in the Northern and Western regions, respectively. It is concerning that less than half of RNs in all regions who have trained in emergency preparedness and response have used this training within the last two years. Small numbers of RNs report being in the Wisconsin Emergency Assistance Volunteer Registry of the Medical Reserve Corps (WEAVR). Because the nursing profession represents a large segment of health care professionals, "The effectiveness of the health care system's response to a public health emergency or disaster is largely dependent on the surge capacity of the nurse workforce" (NACNEP, 2009, p. 2). To protect the health and safety of our local communities, it is imperative that nurses have opportunities to practice emergency response skills, so they are prepared to respond to any local disaster or public health emergency (American Nurses Association [ANA], 2017; Veenema et al., 2016).

**Table 28. Applied Training in Emergency Preparedness and Response by DHS Region of Residence**

| | State n = 77,111 | | Southern n = 15,622 | | Southeastern n = 29,471 | | Northeastern n = 15,563 | | Western n = 9,678 | | Northern n = 6,777 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** |
| Have not applied training | 49,910 | 64.7 | 9,963 | 63.8 | 19,886 | 67.5 | 10,049 | 64.6 | 5,745 | 59.4 | 4,267 | 63.0 |
| Have applied training | 27,201 | 35.3 | 5,659 | 36.2 | 9,585 | 32.5 | 5,514 | 35.4 | 3,933 | 40.6 | 2,510 | 37.0 |
| **Applied emergency preparedness and response training*** | | | | | | | | | | | | |
| Participated in an emergency preparedness exercise in the past 2 years | 25,817 | 33.5 | 5,355 | 34.3 | 9,120 | 30.9 | 5,236 | 33.6 | 3,749 | 38.7 | 2,357 | 34.8 |
| Responded to an actual emergency, incident or disaster in the past 2 years | 2,443 | 3.2 | 546 | 3.5 | 795 | 2.7 | 481 | 3.1 | 344 | 3.6 | 277 | 4.1 |
| Member of WEAVR | 1,453 | 1.9 | 257 | 1.6 | 561 | 1.9 | 248 | 1.6 | 247 | 2.6 | 140 | 2.1 |
| Member of Medical Reserve Corps | 157 | 0.2 | 22 | 0.1 | 53 | 0.2 | 18 | 0.1 | 50 | 0.5 | 14 | 0.2 |

*Note.* Table 28 includes responses to survey questions 9, 10, 26, 27.
*Respondents could select more than one response.

**Wisconsin RN Workforce by Rural-Urban Designation**

Table 29 displays information about demographic characteristics of RNs by rural or urban location using zip codes of primary employer. Rural and urban areas were determined using AHEC Wisconsin Health Service Areas designations (Sugden, 2015). RNs who work in rural communities are, on average, 2.4 years older than RNs working in urban areas. Rural areas compared to urban areas had greater proportions of older RNs (40 years and older) and lower proportions of younger RNs (less than 40 years). Only 34.2% of rural RNs are less than 40 years of age, whereas 43.0% are less than 40 years of age in urban communities. Racial, ethnic and gender diversity in the RN workforce is also greater in urban communities compared to rural communities.

**Table 29. Demographics by Rural-Urban Location of Employer**

| | Rural *n* = 14,217 | | Urban *n* = 46,138 | |
|---|---|---|---|---|
| | *n* | *%* | *n* | *%* |
| **Mean Age (SD)** | 46.3 (12.1) | | 43.9 (12.4) | |
| **Gender** | | | | |
| Female | 13,277 | 93.4 | 42,729 | 92.6 |
| Male | 940 | 6.6 | 3,409 | 7.4 |
| **Age Distribution (years)** | | | | |
| < 25 | 158 | 1.1 | 973 | 2.1 |
| 25 – 34 | 2,830 | 19.9 | 12,348 | 26.7 |
| 35 – 44 | 3,583 | 25.2 | 11,799 | 25.6 |
| 45 – 54 | 3,329 | 23.4 | 9,383 | 20.3 |
| 55 – 64 | 3,536 | 24.8 | 9,719 | 21.1 |
| 65 – 74 | 738 | 5.3 | 1,833 | 4.0 |
| ≥ 75 | 43 | 0.3 | 83 | 0.2 |
| **Primary Racial Identity** | | | | |
| White | 13,828 | 97.3 | 43,107 | 93.4 |
| Black or African American | 43 | 0.3 | 1,162 | 2.5 |
| American Indian or Alaska Native | 81 | 0.6 | 133 | 0.3 |
| Asian | 83 | 0.6 | 913 | 2.0 |
| Native Hawaiian or Other Pacific Islander | 9 | 0.1 | 52 | 0.1 |
| Two or more races | 173 | 1.2 | 771 | 1.7 |
| **Hispanic or Latino Ethnicity** | | | | |
| Hispanic | 172 | 1.2 | 1,062 | 2.3 |
| Non-Hispanic | 14,045 | 98.8 | 45,076 | 97.7 |
| **Language Proficiency** | | | | |
| Number of languages spoken | 1.1 | 0.3 | 1.1 | 0.4 |

*Note*. Table 29 includes responses to survey questions 26, 63, 67, and 68.

Table 30 displays information pertaining to the employment of Wisconsin RNs by location of primary employer. RNs employed in rural communities work on average 30 minutes more each week and have approximately one additional year of direct patient care experience than RNs working in urban areas. There is no difference in the number of positions that rural and urban RNs work.

**Table 30. Employment by Rural-Urban Status of Employer**

| | Rural $n = 14,217$ | | Urban $n = 46,138$ | |
|---|---|---|---|---|
| | **Mean** | *SD* | **Mean** | *SD* |
| Years providing direct patient care | 15.1 | 11.4 | 14.0 | 11.3 |
| Hours worked per week in primary job | 35.3 | 11.0 | 35.0 | 10.5 |
| Number of nursing jobs | 1.2 | 0.6 | 1.2 | 0.5 |
| Total hours worked in primary and secondary jobs | 36.7 | 11.7 | 36.1 | 11.1 |

*Note*. Table 30 includes responses to survey questions 20, 22, 29, 30, 45, 46, 67 – 68.

Table 31 displays information about nurses' intent to continue providing direct patient care based on rural or urban location of their primary employer. Intent to continue to provide direct patient care was similar between rural and urban employer groups.

**Table 31. Intent to Continue Providing Direct Patient Care by Rural-Urban Location of Employer**

| | Rural $n = 12,339$ | | Urban $n = 39,034$ | |
|---|---|---|---|---|
| **Years** | *n* | *%* | *n* | *%* |
| < 2 | 922 | 7.5 | 2,845 | 7.3 |
| 2 – 4 | 1,755 | 14.2 | 5,787 | 14.8 |
| 5 – 9 | 2,544 | 20.6 | 8,222 | 21.0 |
| 10 – 19 | 3,218 | 26.1 | 10,186 | 26.1 |
| 20 – 29 | 2,233 | 18.1 | 6,569 | 16.8 |
| ≥ 30 | 1,667 | 13.5 | 5,485 | 14.0 |

*Note*. Table 31 includes responses to survey questions 21, 67 – 68.

Table 32 displays information about nurses' intent to continue in their current type of employment by employer location. The patterns of intent do not mirror the age distribution of RNs based on rural or urban employment. Rural RNs indicated they intended to stay in their current type of employment for more years than urban nurses. This may be related to a lower number of employment options available to rural nurses.

**Table 32. Intent to Continue in Current Employment by Rural-Urban Status of Employer**

|  | Rural (n = 14,125) | | Urban (n = 45,824) | |
| --- | --- | --- | --- | --- |
| **Years** | ***n*** | **%** | ***n*** | **%** |
| < 2 | 1,635 | 11.6 | 5,976 | 13.0 |
| 2 – 4 | 2,778 | 19.7 | 10,191 | 22.2 |
| 5 – 9 | 2,958 | 20.9 | 9,660 | 21.1 |
| 10 – 19 | 3,264 | 23.1 | 9,695 | 21.1 |
| 20 – 29 | 2,056 | 14.6 | 6,023 | 13.1 |
| ≥ 30 | 1,434 | 10.2 | 4,279 | 9.3 |

*Note*. Table 32 includes responses to survey questions 17, 67 – 68.

Table 33 displays information about education preparation of RNs by rural or urban employment. There are noteworthy differences in degree attainment between rural and urban nurses. A greater proportion of urban nurses obtained either a bachelor's (51.8%) or master's (13.0%) as their highest degree compared to rural nurses (bachelor's 46.7%, master's 11.5%). Similar differences were noted with the highest nursing degree attained. Higher proportions of rural RNs compared to urban nurses reported having associate's degree (48.4% rural, 31.7% urban), while urban nurses were more likely to have a bachelor's degree (51.7% urban, 36.1% rural). Smaller differences were noted in attainment of a master's (rural 10.0%, urban 11.5%) and PhD (rural 0.1%, urban 0.4%). There were no differences in the proportion of RNs who obtained a DNP by rural or urban location of employer.

**Table 33. Educational Preparation by Rural-Urban Status of Employer**

| Highest Degree Earned | Rural *n* = 14,217 | | Urban *n* = 46,138 | |
|---|---|---|---|---|
| | *n* | *%* | *n* | *%* |
| Diploma | 536 | 3.8 | 1,523 | 3.3 |
| Practical or Vocational Degree | 28 | 0.2 | 38 | 0.1 |
| AD | 6,641 | 46.7 | 14,008 | 30.4 |
| BS | 5,199 | 36.6 | 23,877 | 51.8 |
| MS | 1,639 | 11.5 | 5,995 | 13.0 |
| Doctorate | 174 | 1.2 | 697 | 1.5 |
| **Highest Nursing Degree Earned** | Rural *n* = 14,191 | | Urban *n* = 46,025 | |
| Diploma | 585 | 4.1 | 1,631 | 3.5 |
| Practical or Vocational Nursing | 29 | 0.2 | 43 | 0.1 |
| ADN | 6,871 | 48.4 | 14,588 | 31.7 |
| BSN | 5,126 | 36.1 | 23,780 | 51.7 |
| MSN | 1,420 | 10.0 | 5,352 | 11.5 |
| DNP | 144 | 1.0 | 441 | 1.0 |
| DNS or Nursing Doctorate | * | * | 22 | 0.0 |
| PhD in nursing | 12 | 0.1 | 168 | 0.4 |

*Note*. Table 33 includes responses to survey questions 4, 67 – 68.

Table 34 describes the DHS region where RNs work or live and the rural-urban status of their employer. The Western and Northern regions have the greatest proportion of nurses who both work for employers and live in rural communities. Conversely, the Southeastern region has the greatest proportion of nurses who both work for employers and live in urban communities. In the Southern region, approximately 4% more nurses work and live in rural communities, and the proportions are similar in the Northeastern region. These results suggest that RNs tend to live and work in the same type of community, whether rural or urban.

**Table 34. Residence and Primary Position by DHS Region and Rural-Urban Status of Employer**

| | Rural *n* = 14,217 | | Urban *n* = 45,138 | |
|---|---|---|---|---|
| **Region of Primary Position** | ***n*** | **%** | ***n*** | **%** |
| Southern | 3,386 | 23.8 | 9,076 | 19.7 |
| Southeastern | 1,571 | 11.1 | 21,407 | 46.4 |
| Northeastern | 2,715 | 19.1 | 9,015 | 19.5 |
| Western | 2,948 | 20.7 | 4,873 | 10.6 |
| Northern | 3,597 | 25.3 | 1,767 | 3.8 |
| **Region of Residence** | Rural *n* = 13,629 | | Urban *n* = 44,705 | |
| Southern | 3,128 | 23.0 | 8,905 | 19.9 |
| Southeastern | 1,557 | 11.4 | 20,677 | 46.3 |
| Northeastern | 2,739 | 20.1 | 9,241 | 20.7 |
| Western | 2,863 | 21.0 | 4,160 | 9.3 |
| Northern | 3,342 | 24.5 | 1,722 | 3.9 |

*Note*. Table 34 includes responses to survey questions 26, 27, 67-68.

## Comparing 2016 and 2018

- The regional distribution of RNs by race and ethnicity was similar to that in 2016, as was the level of language proficiency other than English.
- The percentage of RNs employed as a nurse increased over two percentage points in every region since 2016. The greatest change was in the Northern region, which saw an increase of 3.7 percentage points. The proportion of RNs not working as a nurse but employed in health care or another field decreased in all regions, as did the percentage of RNs who reported being retired.
- The numbers of RNs enrolled in BSN programs decreased in all but the Northeastern region, where the number increased from 614 in 2016 to 961 in 2018, a growth of 56.5%.
- Enrollment in DNP and PhD programs varied across regions, with the Western and Southern regions reporting the most significant growth in RNs pursuing a DNP and PhD, respectively. Only the Northern region reported growth in the numbers of RNs enrolled in all types of programs (BSN, DNP, and PhD). The Northern region also experienced a reduction in the number of RNs enrolled in an MSN program, though the numbers enrolled in a related master's program increased.
- In most regions, both the number and proportion of nurses in each region who indicated they are currently or are planning to pursue further education in nursing is declining.

- The number of nurses reporting participation as a member of the WEAVR increased from 967 in 2016 to 1,453 in 2018, an increase of 50.3%.

**Discussion and Recommendations**

Geographic variation is expected given the distribution of major health care centers, educational institutions, resources, and overall population across the state. More nurses with bachelor's degrees or higher are needed in all regions to meet national benchmarks and demands for health care access. This is particularly the case in rural communities, where the proportions of bachelor's degree prepared nurses is lower. The numbers of nurses reporting no plans to further their education is concerning, and the cost of higher education tuition and fees remains a significant challenge. Overall, the findings suggest declining interest or ability to enroll in BSN completion programs or pursue graduate training in most areas of the state.

Regional differences in training and practice for emergency preparedness indicate that RNs in less densely populated regions may play a more active role in emergency or disaster response. If this is the case, it is important to consider how greater involvement in these types of situations may affect the overall RN workforce in rural areas.

Building the RN workforce to meet the forecasted increase in demand for health services is required in all regions. The aging population in rural communities continues to grow, and innovative strategies are needed to recruit and retain RNs and APRNs to these areas. In addition, improved access to educational programs and financial support or loan repayment are needed to support nurses working in areas that are less resource dense.

The following recommendations could help address regional RN workforce challenges:

- Health care leaders, schools of nursing, and policymakers should continue to strive to increase the overall RN workforce size and address specialty gaps through expanded programming and innovation to increase access in every DHS region.
- All major health care organizations within each DHS region should implement a plan to increase the number of nurses with a bachelor's degree to 80% by 2020.
- Efforts to increase the number of RNs advancing their education should address major challenges through scholarship and loan forgiveness programs that assist with tuition and fees.
- Greater emphasis should be placed on strategies to recruit bachelors-prepared nurses and support continuing education for nurses in rural communities.
- Given the low numbers and percentage of nurses who have applied and actually used emergency preparedness training in the last two years, efforts to coordinate interdisciplinary emergency training through simulation should be considered to enhance the preparedness of the RN workforce.

## Section IV. Advanced Practice Registered Nurses

Section IV provides information on the APRN workforce in Wisconsin. Findings from the state level are presented (Tables 35 – 38), then broken down by DHS regions (see Appendix H for map and listing of DHS regions) of the primary position of APRN (Tables 40 – 42). Tables in this section include results for only those respondents who are licensed as an APRN. For those tables that report data by geographic distribution, only those APRNs who included county of residence or county of employment are included, as this information was necessary for analysis.

APRNs are nurses who have advanced education and professional training at the master's, post-master's certificate, or DNP degree with one of four APRN certification roles. They include nurse practitioner (NP), clinical nurse specialist (CNS), certified nurse midwife (CNM), and certified registered nurse anesthetist (CRNA). If the APRN meets the criteria for an advanced practice nurse prescriber (APNP), they may prescribe medications, selected orders, and devices based on their specialty focus and national, state, and organizational requirements.

### Demographics of APRN Workforce in Wisconsin

There are 5,623 APRNs, with 4,999 working as an APRN and 4,896 working in Wisconsin as an APRN. This represents 6.3% of the RN workforce. Almost all (98%) of the APRNs work in Wisconsin.

Table 35 describes demographic characteristics of the APRN workforce in Wisconsin. Males comprised 10.8% of APRNs. The age range of APRNs is 26 years to 80 years, with a mean age of 45.9 (*SD* = 11.0). The proportion of APRNs who reported racial/ethnic diversity is 6.1%. A master's or higher nursing degree is held by 92.8% of APRN.

**Table 35. APRN Demographics (*n* = 4,999)**

|  | *n* | *%* |
|---|---|---|
| Works in Wisconsin as APRN | 4,896 | 98.0 |
| Works out of Wisconsin as APRN | 101 | 2.0 |
| Did not report state where working as APRN | * | * |
| Male | 541 | 10.8 |
| Female | 4,458 | 89.2 |
| Mean age (*SD*) | 45.9 (11.0) | |
| Range (years) | 26 – 80 | |
| Diverse | 306 | 6.1 |
| Not diverse | 4,693 | 93.9 |
| **Highest Nursing Degree** | | |
| Diploma | 31 | 0.6 |
| ADN | 37 | 0.7 |
| BSN | 292 | 5.9 |
| MSN | 4,073 | 81.7 |
| DNP | 490 | 9.8 |
| DNS or nursing doctorate | 17 | 0.3 |
| PhD in nursing | 48 | 1.0 |
| **Highest Degree Earned** | | |
| Diploma | 21 | 0.4 |
| AD | 15 | 0.3 |
| BS | 85 | 1.7 |
| MS | 4,304 | 86.1 |
| Doctorate, any field | 574 | 11.5 |

*Note*. Table 35 includes responses to survey questions 4, 26, 27, 48, 63 – 67.

**Certification, Employment Status, and Age of APRNs**

Table 36 describes APRNs who work in Wisconsin by their certification type and age. There are four national certification types: NP, CNS, CNM, and CRNA. There are 3,557 APRNs who are APNPs. The mean age of APRNs varies by type of certification. The mean age for NP was 45.3 years, and for CNS the mean age 51.1 years. The majority (71.2%) of APRNs report certification as an APNP. Only 155 nurses reported being in a CNM role.

**Table 36. APRN Age by Certification Type (*n* = 4,999)**

| Current National Certification as an APRN | *n* | % | Mean Age |
|---|---|---|---|
| NP | 2,934 | 58.7 | 45.3 |
| CNS | 243 | 4.9 | 51.1 |
| CNM | 155 | 3.1 | 46.7 |
| CRNA | 577 | 11.5 | 47.1 |
| APNP | 3,557 | 71.2 | 45.6 |

*Note*. Table 36 includes responses to survey question 48, 63.
*Note*. Respondents could choose more than one response

Table 37 describes the APRN workforce by employment status, including primary place of employment and position or function at the primary place of employment. Most NPs work in ambulatory care (1,529, 52.1%), followed by hospitals (878, 29.9%). Other primary work settings for NPs include extended care (4.5%), public health (3.2%), education (2.7%), and home health (2.2%). Roles of NPs most frequently reported are APRN (2,734, 93.2%). Other reported positions of NPs include nurse faculty (69, 2.4%), staff nurse (23, 0.8%), administrator (15, 0.5%), and nurse manager (12, 0.4%). Providing direct care was reported by 86.9% of the NPs.

Most CNSs reported working in a hospital (154, 63.4%), followed by 45 (18.5%) working in ambulatory care, 16 (6.6%) working in education and 16 working in a mix of other locations. Most reported working as an APRN (202, 83.1%), followed by nurse faculty (10, 4.1%).

CNMs reported working in ambulatory care (74, 47.7%), followed by hospital (53, 34.2%) and public health (15, 9.7%). The number working in education was too low to report. Most identified their position as APRN (137, 88.4%), with eight working in other positions. Nearly all CNMs reported working in direct care (92.3%).

Most CRNAs reported working in the hospital setting (501, 86.8%), with 61(10.6%) working in ambulatory care. Most have an APRN position (519, 89.9%). Twenty-five (4.3%) reported working as a staff nurse, with 21 (3.6%) working in other positions. Direct care was reported by 98.8% of the CRNAs.

Most APNPs reported working in ambulatory care (1,830, 51.4%), followed by hospitals (1,140, 32.0%), extended care (136, 3.8%), public health (119, 3.3%), education (79, 2.0%), and home health (71, 2.0%). Nearly all APNPs reported their position or function at their principal place of work was NP (3,377, 94.9%), with the remainder indicating nurse faculty (68, 1.9%), staff nurse (20, 0.6%), other roles (45, 1.3%), and nurse manager (11, 0.3%) positions.

**Table 37. Principal Place of Employment and Position by APRN Certification Type**

| | NP n = 2,934 | | CNM n = 155 | | CRNA n = 577 | | CNS n = 243 | | APNP n = 3,557 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** |
| **Principal Place of Employment** | | | | | | | | | | |
| Ambulatory care | 1,529 | 52.1 | 74 | 47.7 | 61 | 10.6 | 45 | 18.5 | 1,830 | 51.4 |
| Nursing home or extended care | 133 | 4.5 | * | * | * | * | * | * | 136 | 3.8 |
| Academia | 78 | 2.7 | * | * | * | * | 16 | 6.6 | 79 | 2.0 |
| Public or community health | 95 | 3.2 | 15 | 9.7 | * | * | * | * | 119 | 3.3 |
| Home health | 66 | 2.2 | * | * | * | * | * | * | 71 | 2.0 |
| Hospital | 878 | 29.9 | 53 | 34.2 | 501 | 86.8 | 154 | 63.4 | 1,140 | 32.0 |
| Other | 155 | 5.3 | * | * | * | * | 16 | 6.6 | 182 | 5.1 |
| **Position or Function at Principal Place of Employment** | | | | | | | | | | |
| Administrator | 15 | 0.5 | * | * | * | * | * | * | 18 | 0.5 |
| Advanced practice nurse | 2,734 | 93.2 | 137 | 88.4 | 519 | 89.9 | 202 | 83.1 | 3,377 | 94.9 |
| Case manager | * | * | * | * | * | * | * | * | * | * |
| Consultant or contract | * | * | * | * | * | * | * | * | * | * |
| Nurse executive | * | * | * | * | * | * | * | * | * | * |
| Nurse faculty | 69 | 2.4 | * | * | * | * | 10 | 4.1 | 68 | 1.9 |
| Nurse manager | 12 | 0.4 | * | * | * | * | * | * | 11 | 0.3 |
| Nurse researcher | * | * | * | * | * | * | * | * | * | * |
| Staff nurse | 23 | 0.8 | * | * | 25 | 4.3 | * | * | 20 | 0.6 |
| Staff, other non-medical industry | * | * | * | * | * | * | * | * | * | * |
| Manager, other non-medical industry | * | * | * | * | * | * | * | * | * | * |
| Other | 61 | 2.1 | 8 | 5.2 | 21 | 3.6 | 10 | 4.1 | 45 | 1.3 |

*Note*. Table 37 includes responses to survey questions 36, 37, 48.
*Too few to report.

Table 38 describes the specialty certifications available to NPs and CNSs. For NP, the largest reported certification specialty area was family nursing (52.6%), followed by adult (22.1%). Only 247 (8.4%) hold a gerontology certification. Acute care certification was reported by 220 (7.5%). There were 67 who reported specialty certification as neonatal NP.

The number of CNSs with national certifications decreased from 363 in 2016 to 243 in 2018. Only 99 CNSs are certified in adult health, followed by 34 in adult psychiatric and mental health, 31 in gerontology, and only 24 in adult critical care. There are a number of certifications in which the numbers are too low to report, including medical-surgical and diabetes management.

In 2018, 2,563 (51.3%) APRNs held one specialty certification, while 2,405 (48.1%) held two national certifications and 31 (0.6%) held three national certifications.

**Table 38. Specialty Certification Nurse Practitioner and Clinical Nurse Specialist**

| Certification as NP (current) (*n* = 2,394) | *n* | % |
|---|---|---|
| Acute care | 220 | 7.5 |
| Adult | 649 | 22.1 |
| Adult psychiatric and mental health | 28 | 1.0 |
| Clinical nurse leader | * | * |
| College health | * | * |
| Diabetes management | 16 | 0.5 |
| Emergency nursing | 23 | 0.8 |
| Family | 1,544 | 52.6 |
| Family planning | 10 | 0.3 |
| Family psychiatric and mental health | 48 | 1.6 |
| Gerontology | 247 | 8.4 |
| Neonatal | 67 | 2.3 |
| OB-Gyn/women's health | 128 | 4.4 |
| Pediatric | 228 | 7.8 |
| School | * | * |
| No specialty designation | * | * |
| Other | 165 | 5.6 |
| **Certification as CNS (current) (*n* = 243)** | | |
| Acute/critical care – Adult | 24 | 9.9 |
| Acute/critical care – Pediatric | * | * |
| Acute/critical care – Neonatal | * | * |
| Adult health | 99 | 40.7 |
| Adult psychiatric and mental health | 34 | 14.0 |
| Child/adolescent psychiatric and mental health | * | * |
| Diabetes management – Advanced | * | * |
| Home health | * | * |
| Gerontology | 31 | 12.8 |
| Medical-Surgical | * | * |
| OB-Gyn/women's health | * | * |
| Palliative care – Advanced | * | * |
| Pediatric | 13 | 5.3 |
| Community/public health | * | * |
| No specialty designation | * | * |
| Other | 34 | 14.0 |

*Note*. Table 38 includes responses to survey questions 48 – 50.
*Too few to report.

## APRNs with Prescriptive Authority

Table 39 provides a summary of the number and percentage of APRNs who reported prescriptive authority and are identified as APNP. Most NPs (97.8%) and CRNAs (98.7%) reported holding prescriptive authority, while lower proportions of CNMs (75.9%) and CNSs (20.6%) are prescribers. Overall, NPs make up 60.9% of all APNPs.

**Table 39. APNPs with Prescriptive Authority by Specialty Certification**

| | NP<br>n = 2,214 | | CNS<br>n = 339 | | CNM<br>n = 83 | | CRNA<br>n = 153 | |
|---|---|---|---|---|---|---|---|---|
| | *n* | % | *n* | % | *n* | % | *n* | % |
| APRNs within specialty with prescriptive authority | 2,166 | 97.8 | 70 | 20.6 | 63 | 75.9 | 151 | 98.7 |
| APRNs across specialties with prescriptive authority (*n* = 3,557) | | 60.9 | | 2.0 | | 1.8 | | 4.2 |

*Note.* Table 39 includes responses to survey question 48.

## APRNs by Setting and Population

Table 40 displays data on primary care or outpatient mental health services provided by APRNs. In 2018, 2,329 APRNs provided primary care or outpatient mental health services. This represents 46.6% of all certified APRNs working in Wisconsin. Those providing outpatient primary care reported working an average across all settings of 37.9 hours per week (*SD* = 14.3) for their primary position. A small number of APRNs (59) reported providing direct care at a secondary position for an average of 7.6 hours per week (*SD* = 8.2) (data not shown).

**Table 40. Certified APRNs Providing Primary Care or Outpatient Mental Health Services (*n* = 2,329)**

| | *n* | % |
|---|---|---|
| Family | 1,043 | 44.8 |
| Women's health | 640 | 27.5 |
| Certified nurse midwife | 109 | 4.7 |
| Pediatric | 529 | 22.7 |
| Adult | 1,088 | 46.7 |
| Geriatric | 745 | 32.0 |
| Mental health | 494 | 21.2 |
| Other | 184 | 7.9 |

*Note.* Table 40 includes responses to survey questions 48, 53, 54.
*Note.* Respondents could select multiple options.

Table 41 provides a summary of the reported population focus areas for APRNs. Family health (44.4%) and adult-gerontology (36.7%) were the most frequently reported population focus areas. Only 202 (4.0%) reported a focus on psychiatric-mental health nursing, with only 94 (1.9%) reporting a focus in neonatal care.

**Table 41. APRN Population Focus Areas (*n* = 4,999)**

|  | *n* | *%* |
|---|---|---|
| Family/individual across the lifespan | 2,222 | 44.4 |
| Adult-gerontology | 1,835 | 36.7 |
| Neonatal | 94 | 1.9 |
| Pediatric | 317 | 6.3 |
| Women's health/gender-related | 329 | 6.6 |
| Psychiatric-mental health | 202 | 4.0 |

*Note*. Table 41 includes responses to survey questions 51, 52.

## APRNs by Wisconsin DHS Regions

The DHS region of the primary position could be identified for 5,448 APRNs, as reported in Table 42. The Southeastern region has the highest proportion of APRNs (2,113, 38.8%); the Northern region has the lowest proportion of APRNs (463, 8.5%). APRNs from the Southeastern region reported the highest proportion in the racial/ethnic diverse category (9.6%). The number of working APRNs per 1,000 population ranges from 0.67 in the Southern region to a high of 1.55 in the Western region. Across all regions, 527, 9.7% of APRNs, have a doctoral degree (DNP or PhD) as their highest degree. Most hold a master's in nursing degree.

**Table 42. Demographics of APRN Workforce in DHS Region**

|  | State *n* = 5,448 | | Southern *n* = 1,015 | | Southeastern *n* = 2,113 | | Northeastern *n* = 1,112 | | Western *n* = 745 | | Northern *n* = 463 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* |
| Employed APRNs/ 1,000 population | 0.94 | | 0.67 | | 1.00 | | 0.09 | | 1.55 | | 1.06 | |
| **Demographics** | | | | | | | | | | | | |
| Employed in region as APRN | 4,847 | 89.0 | 868 | 8.5 | 1,884 | 89.2 | 1,023 | 92.0 | 659 | 88.5 | 412 | 89.2 |
| Not employed as APRN | 601 | 11.0 | 147 | 14.5 | 229 | 10.8 | 89 | 8.0 | 86 | 11.5 | 50 | 10.8 |
| Male | 528 | 10.9 | 95 | 10.9 | 129 | 6.8 | 130 | 12.7 | 100 | 15.2 | 74 | 17.9 |
| Female | 4,319 | 89.1 | 773 | 89.1 | 1,755 | 93.2 | 893 | 87.3 | 559 | 84.8 | 339 | 82.1 |
| Diverse | 296 | 6.1 | 42 | 4.8 | 180 | 9.6 | 36 | 3.5 | 18 | 2.7 | 20 | 4.8 |
| Not diverse | 4,551 | 93.9 | 826 | 95.2 | 1,704 | 90.4 | 987 | 96.5 | 641 | 97.3 | 393 | 95.2 |

| | State $n = 5,448$ | | Southern $n = 1,015$ | | Southeastern $n = 2,113$ | | Northeastern $n = 1,112$ | | Western $n = 745$ | | Northern $n = 463$ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** |
| Mean age (*SD*) | 45.9 (11.0) | | 46.1 (11.2) | | 44.7 (11.1) | | 45.6 (10.8) | | 47.7 (10.9) | | 48.2 (10.2) | |
| **Highest nursing degree** | | | | | | | | | | | | |
| Diploma in nursing | 30 | 0.6 | * | * | 9 | 0.5 | * | * | * | * | * | * |
| ADN | 36 | 0.7 | 7 | 0.8 | 6 | 0.3 | * | * | 10 | 1.5 | 8 | 1.9 |
| BSN | 279 | 5.8 | 69 | 8.0 | 58 | 3.1 | 52 | 5.1 | 67 | 10.2 | 33 | 8.0 |
| MSN | 3,964 | 82.0 | 661 | 76.3 | 1,598 | 85.0 | 866 | 84.9 | 505 | 76.9 | 334 | 80.9 |
| DNP | 464 | 9.6 | 107 | 12.4 | 176 | 9.4 | 88 | 8.6 | 62 | 9.4 | 31 | 7.5 |
| DNS or ND | 17 | 0.4 | * | * | 8 | 0.4 | * | * | * | * | * | * |
| PhD in nursing | 46 | 1.0 | 12 | 1.4 | 25 | 1.3 | * | * | 6 | 0.9 | * | * |
| **Highest degree earned** | | | | | | | | | | | | |
| Diploma | 20 | 0.4 | * | * | * | * | * | * | * | * | * | * |
| AD | 15 | 0.3 | * | * | * | * | * | * | 7 | 1.1 | * | * |
| BS | 82 | 1.7 | 20 | 2.3 | 22 | 1.2 | 10 | 1.0 | 19 | 2.9 | 11 | 2.7 |
| MS | 4,185 | 86.3 | 718 | 82.7 | 1,638 | 86.9 | 909 | 88.9 | 556 | 84.4 | 364 | 88.1 |
| Doctorate, any field | 545 | 11.2 | 126 | 14.5 | 217 | 11.5 | 96 | 9.4 | 72 | 10.9 | 34 | 8.2 |

*Note*. Table 42 includes responses to survey questions 4, 27, 51, 63-67.
*Too few to report.

## Certification of APRN Workforce by Region

Table 43 shows the distribution of working APRNs across the DHS regions by their primary position. The Southeastern and the Northeastern regions have the largest distribution of APRNs.

**Table 43. APRN Certification Type by DHS Region**

| Certification | State $n = 4,847$ | | Southern $n = 868$ | | Southeastern $n = 1,884$ | | Northeastern $n = 1,023$ | | Western $n = 659$ | | Northern $n = 413$ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** |
| NP | 2,847 | 58.7 | 515 | 59.3 | 1,159 | 61.5 | 569 | 55.6 | 378 | 57.4 | 226 | 54.7 |
| CNS | 232 | 4.8 | 41 | 4.7 | 145 | 7.7 | 19 | 1.9 | 16 | 2.4 | 11 | 2.7 |
| CNM | 148 | 3.1 | 24 | 2.8 | 50 | 2.7 | 27 | 2.6 | 46 | 7.0 | * | * |
| CRNA | 552 | 11.4 | 121 | 13.9 | 103 | 5.5 | 117 | 11.4 | 127 | 19.3 | 84 | 20.3 |
| APNP | 3,474 | 71.7 | 611 | 70.4 | 1,378 | 73.1 | 789 | 77.1 | 405 | 61.5 | 291 | 70.5 |

*Note*. Table 43 includes responses to survey questions 27, 48.
*Note*. Could select more than one.
*Too few to report.

Table 44 shows the distribution of APRNs with prescriptive authority across the DHS regions. The Southeastern region has 1,457 (39.6%) APNPs, with only 307 (8.3%) in the Northern region.

**Table 44. Prescriptive Authority of APRNs by DHS Region (*n* = 3,682)**

| | State | Southern | | Southeastern | | Northeastern | | Western | | Northern | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | *n* | % | *n* | % | *n* | % | *n* | % | *n* | % |
| Prescriptive authority (APNP) | 3,682 | 658 | 17.9 | 1,457 | 39.6 | 821 | 22.3 | 439 | 11.9 | 307 | 8.3 |

*Note*. Table 44 includes response to survey questions 27, 48.

Table 45 displays the distribution of NPs in the most frequently reported specialty certification. The Southeastern region has a higher concentration of NP specialty certification. Family health is the most frequently reported specialty focus across all regions.

**Table 45. Nurse Practitioner Specialty Certification by DHS Region**

| | State<br>n = 2843 | | Southern<br>n = 515 | | Southeastern<br>n = 1,156 | | Northeastern<br>n = 569 | | Western<br>n = 377 | | Northern<br>n = 226 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* |
| Certified | 2,833 | 99.6 | 515 | 99.6 | 1,155 | 99.9 | 564 | 99.1 | 375 | 99.5 | 226 | 100.0 |
| **Specialty certification** | | | | | | | | | | | | |
| Acute care | 217 | 7.6 | 46 | 8.9 | 118 | 10.2 | 21 | 3.7 | 22 | 5.8 | 10 | 4.4 |
| Adult | 631 | 22.2 | 164 | 31.8 | 254 | 22.0 | 83 | 14.6 | 85 | 22.5 | 45 | 19.9 |
| Clinical nurse leader | * | * | * | * | * | * | * | * | * | * | * | * |
| College health | * | * | * | * | * | * | * | * | * | * | * | |
| Diabetes management | 16 | 0.6 | 6 | 1.2 | * | * | * | * | * | * | * | * |
| Emergency nursing | 21 | 0.7 | * | * | 7 | 0.6 | * | * | 7 | 1.9 | * | * |
| Family | 1,500 | 52.8 | 183 | 35.5 | 579 | 50.1 | 377 | 66.3 | 23 | 56.5 | 148 | 65.5 |
| Family planning | 9 | 0.3 | * | * | * | * | * | * | * | * | * | * |
| Adult psychiatric and mental health | 26 | 0.9 | 9 | 1.7 | 8 | 0.7 | * | * | * | * | * | * |
| Family psychiatric and mental health | 44 | 1.5 | 13 | 2.5 | 13 | 1.1 | 7 | 1.2 | 9 | 2.4 | * | * |
| Gerontology | 239 | 8.4 | 59 | 11.5 | 91 | 7.9 | 35 | 6.2 | 37 | 9.8 | 17 | 7.5 |
| Neonatal | 61 | 2.1 | 9 | 1.7 | 34 | 2.9 | 12 | 2.1 | * | * | * | * |
| OB-Gyn/ women's health | 123 | 4.3 | 26 | 5.0 | 43 | 3.7 | 26 | 4.6 | 19 | 5.0 | 9 | 4.0 |
| School | * | * | * | * | * | * | * | * | * | * | * | * |
| Pediatric | 223 | 7.8 | 58 | 11.3 | 126 | 10.9 | 15 | 2.6 | 18 | 4.8 | 6 | 2.7 |
| Other | 161 | 5.7 | 29 | 5.6 | 43 | 3.7 | 49 | 8.6 | 24 | 6.4 | 16 | 7.1 |

*Note.* Table 45 includes responses to survey questions 27, 49.
*Too few to report.

## Future Work Intentions

Understanding the future work intentions of APRNs is critical to planning for the necessary advanced practice resources for Wisconsin. APRNs have an essential role in access, direct care, population health, and system redesign initiatives. Table 46 summarizes the age, percentage of APRNs reporting direct care in their role, and future work intentions related to providing direct patient care by certification level. Across the state, 86.7% of APRNs report providing direct care. Across the certification roles, 12.3% of APRNs report an intent to continue providing direct care in less than five years and 28.0% in less than 10 years. Variation across roles was noted, with 34.2% of CNSs who provide direct care reporting an intent to provide direct care 10 years or less.

**Table 46. APRN Intent to Continue Providing Direct Patient Care**

|  | State $n = 4,999$ | | NP $n = 2,934$ | | CNS $n = 243$ | | CNM $n = 155$ | | CRNA $n = 577$ | | APNP $n = 3,557$ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mean age (range) | 45.9 (26 – 80) | | 45.3 (26 – 75) | | 51.2 (29 – 76) | | 46.7 (27 – 69) | | 47.1 (28 – 74) | | 45.6 (26 – 80) | |
| % in direct care | 86.7 | | 86.9 | | 39.5 | | 92.3 | | 98.8 | | 87.8 | |
| **Years** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** |
| Not applicable | 618 | 12.4 | 366 | 12.5 | 96 | 39.5 | 9 | 5.8 | 8 | 1.4 | 420 | 11.8 |
| < 2 | 202 | 4.0 | 108 | 3.7 | 14 | 5.8 | 10 | 6.5 | 26 | 4.5 | 134 | 3.8 |
| 2 – 4 | 413 | 8.3 | 244 | 8.3 | 27 | 11.1 | 14 | 9.0 | 47 | 8.1 | 288 | 8.1 |
| 5 – 9 | 785 | 15.7 | 457 | 15.6 | 42 | 17.3 | 28 | 18.1 | 100 | 17.3 | 556 | 15.6 |
| 10 – 19 | 1,315 | 26.3 | 743 | 25.3 | 41 | 16.9 | 47 | 30.3 | 174 | 30.2 | 934 | 26.3 |
| 20 – 29 | 1,093 | 21.9 | 644 | 21.9 | 18 | 7.4 | 31 | 20.0 | 101 | 31.4 | 777 | 21.8 |
| ≥ 30 or more | 573 | 11.5 | 372 | 12.7 | * | * | 16 | 10.3 | 41 | 7.1 | 448 | 12.6 |

*Note.* Table 46 includes responses to survey questions 21, 48, 63.
*Note.* Could check more than one category.

Table 47 displays the responses to a question about how much longer the APRN plans to work in their current type of employment. Among CNSs, 31.3% reported their intent to stay in their current type of employment for less than five years and 58% for less than 10 years, and among CNMs, 21.3% reported plans to stay less than five years and 41.3% for less than 10 years.

**Table 47. APRN Plans to Stay in Current Type of Employment**

|  | State $n = 4,972$ | | NP $n = 2,919$ | | CNS $n = 241$ | | CNM $n = 155$ | | CRNA $n = 574$ | | APNP $n = 3,541$ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Years** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** |
| Not Applicable | 27 | 0.5 | 15 | 0.5 | * | * | * | * | * | * | 16 | 0.4 |
| < 2 | 368 | 7.4 | 219 | 7.5 | 31 | 12.8 | 15 | 9.7 | 28 | 4.9 | 256 | 7.2 |
| 2 – 4 | 674 | 13.5 | 402 | 13.7 | 45 | 18.5 | 18 | 11.6 | 58 | 10.1 | 480 | 13.5 |
| 5 – 9 | 989 | 19.8 | 580 | 19.8 | 65 | 26.7 | 31 | 20.0 | 104 | 18.0 | 699 | 19.7 |
| 10 – 19 | 1,305 | 26.1 | 738 | 25.2 | 57 | 23.5 | 44 | 28.4 | 174 | 30.2 | 909 | 25.6 |
| 20 – 29 | 1,076 | 21.5 | 625 | 21.3 | 28 | 11.5 | 31 | 20.0 | 170 | 29.5 | 769 | 21.6 |
| ≥ 30 or more | 560 | 11.2 | 355 | 12.1 | 15 | 6.2 | 16 | 10.3 | 40 | 6.9 | 428 | 12.0 |

*Note.* Table 47 includes responses to survey questions 17, 48.
*Note.* Respondents could check more than one category. *Too few to report.

**Comparing 2016 and 2018**

- The size of the APRN workforce working in Wisconsin increased from 4,395 in 2016 to 4,896 in 2018, an 11.4% increase in two years. The largest increase was in the NP role.
- Overall, the number of APRNs in each DHS region increased from 2016, as did the ratio per 1,000 population.
- The number of APRNs who hold a master's degree in nursing increased from 3,705 in 2016 to 4,073 in 2018, and the number who hold a doctoral degree in nursing increased from 354 in 2016 to 555 in 2018.
- The percentage of APRNs with DNP preparation has been rising in all DHS regions. In 2016, the percentage of DNP prepared APRNs ranged from 5.5% to 7.5%, and in 2018, this increased to 7.5% to 12.4% across DHS regions.
- CRNAs decreased 20.4%, from 725 in 2016 to 577 in 2018. CNMs decreased 15.8%, from 184 in 2016 to 155 in 2018. CNSs had the largest decrease of 33.2%, from 364 in 2016 to 243 in 2018.

**Discussion and Recommendations**

The majority of APRNs are nurse practitioners. There are similarities in the type and distribution of APRNs across the DHS regions. The Southeastern region has the highest overall proportion of APRNs, with low numbers in the Western and Northern regions. Fewer than 50% of APRNs provide primary care or outpatient mental health care. In addition, there are declines in the number of CNSs, CNMs and CRNAs. Most concerning was the number and intent of APRNs intending to leave direct care within the next four to nine years.

The shifts in health care as a result of health care reform are expected to require more APRNs, particularly NPs in primary care and mental health (IOM, 2011), to meet the health care needs of the citizens of Wisconsin. There continues to be a need to increase the number of APRNs in the state, especially in the rural areas. The APRN percentage in the nurse workforce in Wisconsin is 6.3%, which is well below the national average of 8.8% NP, 2.1% CNS, 1.6% CRNA, and 0.5% CNM (Smiley et al., 2018). Due to the need for improved access for care and the key role that advanced practice nurses provide, Wisconsin established the goal of at least 10% of the RN workforce being APRNs by 2020 (WCN, 2013). Significant effort is needed to address the shortage in the APRN workforce.

Health care organizations, in partnership with schools of nursing and communities, should establish targeted goals to increase the number and specialty focus of APRNs to meet the needs across employment settings and primary positions. Emphasis should be on recruitment, retention, and succession planning of APRNs across the four roles (NP, CNS, CNM, CRNA). Given the small number (24) of APRNs with adult psychiatric and mental health specialty certification and the significant community needs in this area due to the opioid crisis, efforts should be made to accelerate APRN training in psychiatric and mental health and substance abuse treatment. Innovative models of care that utilize APRNs to their full scope of practice should be explored to promote effective and efficient team care, with a focus on improving access and decreasing health care disparities. Wisconsin should enact legislation to assure that APRNs can practice to their full scope based on national recommendations for scope of practice (APRN Consensus Group, 2008). Finally, additional research is needed to identify barriers to APRN practice.

**Section V. Nurses in Leadership Roles**

In 2011, the IOM strongly endorsed the expansion of leadership roles for nurses. In alignment with this recommendation, nursing leadership characteristics in Wisconsin have been included on the RN workforce survey since 2014. This section presents the results from the 2018 survey related to nurses in leadership roles. Tables in this section include results for only those respondents who reported county of residence or county of employment, as this information was necessary for analyses of the data by geographic distribution.

**Characteristics of Nurses in Leadership Roles**

Table 48 provides information about RNs working in Wisconsin who engage in leadership roles by DHS region and type. Of the 61,427 respondents to the 2018 survey working as RNs in Wisconsin, 29,023 (47.2%) reported they held one or more leadership role(s). Among those who reported being in a leadership role, 26,158 (90.1%) reported that the role was within their primary work area (e.g., charge nurse, team leader, or unit manager) and 2,986 (10.3%) reported serving in leadership roles such as director, chief nursing officer (CNO), or dean at the organizational level. The number of nurses who reported serving on a governance board in 2018 was 546 (1.9%), while the number who reported serving as public officials was 162 (0.6%). There were 1,837 (6.3%) nurses who reported serving as a chair of a committee.

Small regional differences in leadership engagement were noted. The proportion of RNs engaged in leadership was highest in the Western region (49.4%) and lowest in the Northeastern region (45.5%). Leadership through chairing committees was reported by the highest proportion of RNs in the Southern region (7.3%) and lowest in the Northern region (4.2%). The Southeastern region had the largest number of nurses participating in leadership roles. The proportion of nurses with leadership roles in their work area was similar across all regions. The proportion of RNs engaged in organizational leadership was highest in the Western region (11.8%) and lowest in the Southeastern region (9.7%). Nurses in the Southeastern region reported participating on governance boards in greater numbers (259) and at a higher proportion (2.3%) than in other regions. This may reflect greater opportunity in an urban area with more hospitals with Magnet status, greater numbers of organizations, and higher overall population.

**Table 48. Employed Nurses in Leadership Positions by DHS Region and Role Type**

| | State | | Southern | | Southeastern | | Northeastern | | Western | | Northern | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* |
| Engaged in leadership role | 29,023 | 47.2 | 5,793 | 45.7 | 11,191 | 48.0 | 5,390 | 45.5 | 4,044 | 49.4 | 2,605 | 48.0 |
| Not engaged in leadership role | 32,404 | 528 | 6,877 | 54.3 | 12,111 | 52.0 | 6,458 | 54.5 | 4,136 | 50.6 | 2,822 | 52.0 |
| Total | 61,427 | | 12,670 | | 23,302 | | 11,848 | | 8,180 | | 5,427 | |
| **Type of Role Reported by Nurses Engaged in Leadership Roles (*n* = 29,023)** | | | | | | | | | | | | |
| Work area[a] | 26,158 | 90.1 | 5,181 | 89.4 | 10,105 | 90.3 | 4,853 | 90.0 | 3,659 | 90.5 | 2,360 | 90.6 |
| Organization level[b] | 2,986 | 10.3 | 571 | 9.9 | 1,083 | 9.7 | 583 | 10.8 | 477 | 11.8 | 272 | 10.4 |
| Governance board[c] | 546 | 1.9 | 97 | 1.7 | 259 | 2.3 | 114 | 2.1 | 44 | 1.1 | 32 | 1.2 |
| Public official[d] | 162 | 0.6 | 41 | 0.7 | 33 | 0.3 | 34 | 0.6 | 25 | 0.6 | 29 | 1.1 |
| Chair of major committee in organization | 1,837 | 6.3 | 423 | 7.3 | 763 | 6.8 | 345 | 6.4 | 196 | 4.8 | 110 | 4.2 |

*Note*. Table 48 includes responses to survey questions 18, 26.
*Note*. Respondents could select more than one leadership role.
[a]Examples include charge nurse, team leader, unit manager. [b]Examples include dean, CNO, director. [c]Examples include board of trustees. [d]Examples include county board of supervisors, state legislator.

**Demographics of Nursing Leadership in Wisconsin**

Table 49 displays the age, gender, diversity, and education characteristics of nurses reporting engagement in leadership roles. The mean age of nursing leadership roles was 44.7 years, while the mean age of organizational leaders and public officials was 47.2 years and 47 years, respectively. The percentage of males (7.7%) and females (92.7%) in leadership roles mirrored the overall percentages of male (7.5%) and female (92.5%) RNs in the state, except among nurses who report being public officials, which included a higher proportion of males (13%) nurses.

The percentage of nurse leaders across the state who identified as racially and ethnically diverse was 7.3%. The greatest diversity was among RNs with leadership roles in their work areas (7.5%) and governance boards (7.3%), while the least racial and ethnic diversity was among RNs who serve as committee chairs within their organization (5.6%).

Although diploma, associate, or bachelor's degree programs prepare nurses for the same level of licensure, the proportion of bachelor-prepared RNs engaged in leadership roles was much higher than for RNs with a diploma or associate degree. For example, among leaders in work areas, 3.4% earned a diploma, 38.0% earned an associate degree, and 48.8% earned a bachelor's degree as their highest nursing degree. Of note, RNs with a bachelor's as their highest nursing degree reported the greatest engagement in leadership across all roles.

The greatest proportion of nurses with a diploma as their highest nursing degree (3.4%) or an associate degree (38.0%) reported a leadership role in their work area. This leadership role was also highest for nurses with a DNP as their highest nursing degree, with 8.5% holding a leadership role in their work area. Among RNs with a bachelor's as their highest nursing degree who engaged in leadership, most (53.1%) reported a role as a chair of a major committee within their organization. This was also the case for RNs with a master's (24.8%) and a PhD or DNS (4.1%) as their highest nursing degree. The distribution in leadership roles by degree was similar among RNs when comparing highest nursing degree and highest degree (any field).

**Table 49. Age, Diversity, Gender, and Education Reported by Currently Employed Nurses with Leadership Role(s)**

| | State *n* = 29,023 | | Work Area *n* = 26,158 | | Organization Level *n* = 2,986 | | Governance Board *n* = 546 | | Public Official *n* = 162 | | Chair of Major Committee in Organization *n* = 1,837 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Range | Mean | Range | Mean | Range | Mean | Range | Mean | Range | Mean | Range | Mean |
| Age | 23-84 | 44.7 | 23-84 | 44.3 | 23-84 | 47.2 | 24-74 | 44.2 | 24-77 | 47.0 | 23-79 | 45.0 |
| | *n* | % | *n* | % | *n* | % | *n* | % | *n* | % | *n* | % |
| Racially or ethnically diverse | 2,129 | 7.3 | 1,961 | 7.5 | 178 | 6.0 | 40 | 7.3 | 10 | 6.2 | 103 | 5.6 |
| **Gender** | | | | | | | | | | | | |
| Female | 26,794 | 92.7 | 24,121 | 92.5 | 2,765 | 92.6 | 503 | 92.1 | 141 | 87.0 | 1,713 | 93.2 |
| Male | 2,229 | 7.7 | 2,037 | 7.5 | 221 | 7.4 | 43 | 7.9 | 21 | 13.0 | 124 | 6.8 |
| **Highest Nursing Degree** | | | | | | | | | | | | |
| Practical or vocational nursing diploma | 37 | 0.1 | 33 | 0.1 | * | * | * | * | * | * | * | * |
| Diploma in nursing | 958 | 3.3 | 884 | 3.4 | 66 | 2.2 | * | * | * | * | 44 | 2.4 |
| ADN | 10,549 | 36.4 | 9,952 | 38.0 | 790 | 26.5 | 108 | 19.8 | 46 | 28.4 | 332 | 2.4 |
| BSN | 14,005 | 48.4 | 12,776 | 48.8 | 1,251 | 42.0 | 225 | 46.8 | 77 | 47.5 | 973 | 53.1 |
| MSN | 2,971 | 10.3 | 2,207 | 8.4 | 701 | 23.5 | 135 | 24.8 | 25 | 15.4 | 387 | 21.1 |
| DNP | 296 | 1.0 | 189 | 8.5 | 96 | 3.2 | 19 | 3.5 | * | * | 54 | 2.9 |
| PhD in nursing or DNS | 136 | 0.5 | 55 | 0.2 | 70 | 3.4 | 22 | 4.1 | * | * | 42 | 2.1 |
| **Highest Degree** | | | | | | | | | | | | |
| Practical or vocational diploma | 34 | 0.1 | 31 | 0.1 | * | * | * | * | * | * | * | * |
| Diploma | 885 | 3.0 | 823 | 3.1 | 56 | 1.9 | * | * | * | * | 39 | 2.1 |
| AD | 10,164 | 3.0 | 9,614 | 36.8 | 742 | 1.9 | 101 | 18.5 | 43 | 26.5 | 313 | 17.0 |
| BS | 13,974 | 48.1 | 12,869 | 49.2 | 1,123 | 37.6 | 225 | 41.2 | 75 | 46.3 | 931 | 50.7 |
| MS | 3,476 | 12.0 | 2,556 | 9.8 | 863 | 28.9 | 163 | 29.9 | 29 | 17.9 | 445 | 24.2 |
| Doctorate, any field | 490 | 1.7 | 265 | 1.0 | 199 | 6.7 | 51 | 9.3 | 11 | 6.8 | 108 | 5.9 |

*Note*. Table 49 includes responses to survey questions 4, 18, 63 – 66.
*Note*. Respondents could select more than one role.
*Too few to report.

**Leadership Roles by Position and Principal Place of Work**

Respondents reported leadership roles in all categories of positions and principal work settings. Overall, the largest number of nurses reporting leadership roles were staff nurses (17,138). Table 50 displays data from respondents who reported engagement in leadership compared to those who did not by position at the principal place of work. Nurses reporting working in direct care reported lower engagement in leadership roles than nurses in management types of positions. Among staff nurses, 43.6% indicated they held some type of leadership role at work (e.g., charge nurse, team leader, unit manager). Less than one-third of APRNs reported having a leadership role (30.5%). Role categories generally associated with leadership responsibilities (nurse manager, administrator, nurse executive, and manager – non-medical industry) all demonstrated high proportions of respondents reporting leadership roles (87.0% to 98.3%). The findings for nurse faculty and nurse researchers were similar to the direct care roles, with 47.6% of nurse faculty and 40.8% of nurse researchers reporting serving in leadership roles.

**Table 50. Leadership Roles of Employed Nurses by Position at Principal Place of Work**

| Principal Work Role | State Total<br>n = 61,427 | Report Leadership Role<br>n = 29,023 | | Did Not Report Leadership Role<br>n = 32,404 | |
|---|---|---|---|---|---|
| | n | n | % | n | % |
| Staff nurse | 39,281 | 17,138 | 43.6 | 22,143 | 56.4 |
| Nurse manager | 4,232 | 4,137 | 97.8 | 95 | 2.2 |
| Case manager | 5,559 | 2,167 | 39.0 | 3,392 | 61.0 |
| Advanced practice nurse | 4,572 | 1,394 | 30.5 | 3,178 | 69.5 |
| Administrator | 669 | 643 | 96.1 | 26 | 3.9 |
| Nurse executive | 637 | 262 | 98.3 | 11 | 1.7 |
| Nurse faculty | 1,057 | 503 | 47.6 | 554 | 52.4 |
| Consultant or contractor | 523 | 210 | 40.2 | 313 | 59.8 |
| Nurse researcher | 213 | 87 | 40.8 | 126 | 59.2 |
| Staff, other non-medical industry | 144 | 55 | 38.2 | 89 | 61.8 |
| Manager, other non-medical industry | 54 | 47 | 87.0 | 7 | 13.0 |
| Other | 4,486 | 2,016 | 44.9 | 2,470 | 55.1 |

*Note*. Table 50 includes responses to survey questions 18, 36.

Table 51 displays the work settings reported by nurses in leadership and non-leadership roles. The highest proportion of nurses who reported serving in a leadership role worked in hospital settings (55.5%), with much lower proportions who reported working in education (2.9%) and public health (3.1%).

**Table 51. Principal Work Setting of Employed Nurses with Leadership Roles (*n* = 29,589)**

| | Report Leadership Role *n* = 29,023 | | Did Not Report Leadership Role *n* = 32,404 | |
|---|---|---|---|---|
| | *n* | *%* | *n* | *%* |
| Hospital | 16,111 | 55.5 | 16,552 | 51.1 |
| Long term or extended care | 4,013 | 13.8 | 1,465 | 4.5 |
| Ambulatory care | 4,319 | 14.9 | 7,742 | 23.9 |
| Other[a] | 1,444 | 5.0 | 2,710 | 8.4 |
| Home health[b] | 1,383 | 4.8 | 1,951 | 6.0 |
| Community or public health[c] | 899 | 3.1 | 1,190 | 3.7 |
| Education | 854 | 2.9 | 794 | 2.5 |

*Note*. Table 51 includes responses to survey questions 18, 37.
[a]Includes telehealth, call center, insurance. [b]Includes hospice. [c]Includes community, occupational, and school health.

## Employment Status – Nurse Leaders

Table 52 displays leadership role reported by employment status of the respondent. Although most RNs who reported any leadership role are currently employed as nurses, there were RNs employed in other settings and fields who reported being in all types of leadership roles. Organizational leaders had the highest percentage (11.7%) of nurses who indicated they are working in health care but not in nursing. Nearly 400 retired nurses reported engagement in leader roles, with 7.1% (54) serving as governance level leaders and 6.6% (15) as public officials. Further research related to engagement of retired nurses in the workforce would be important to fully understand these findings.

**Table 52. Employment Status among Nurses with Leadership Roles**

| | Work Area Leaders n = 30,599 | | Organizational Level Leaders n = 4,046 | | Governance Level Leaders n = 761 | | Public Officials n = 226 | | Committee Chairs n = 2,206 | |
|---|---|---|---|---|---|---|---|---|---|---|
| | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* | *n* | *%* |
| **Employed** | | | | | | | | | | |
| Employed as a nurse | 29,151 | 95.3 | 3,326 | 82.2 | 602 | 79.1 | 181 | 85.4 | 1,998 | 90.6 |
| Employed in health care, not nursing | 479 | 1.6 | 475 | 11.7 | 58 | 7.6 | 12 | 5.3 | 85 | 3.9 |
| Employed in another field | 165 | 0.5 | 89 | 2.2 | 29 | 3.8 | 7 | 3.1 | 41 | 1.9 |
| **Not employed** | | | | | | | | | | |
| Retired | 398 | 1.3 | 83 | 2.1 | 54 | 7.1 | 15 | 6.6 | 40 | 1.8 |
| Unemployed, seeking employment in nursing | 233 | 0.8 | 37 | 0.9 | 8 | 1.1 | * | * | 19 | 0.9 |
| Unemployed, seeking employment in another field | 16 | 0.1 | 7 | 0.2 | * | * | * | * | * | * |
| Unemployed, not seeking employment | 157 | 0.5 | 29 | 0.7 | 9 | 1.2 | 6 | 0.3 | 20 | 0.9 |

*Note*. Table 52 includes response to survey questions 11, 18.
*Too few to report.

**Barriers to Leadership Roles**

Table 53 provides an overview of barriers to leadership identified by employed RNs. Respondents not in leadership roles were asked to indicate their two most important barriers to engaging in leadership roles. The most frequently reported barrier overall and in every region was a lack of interest in leadership (57.0%), followed by having other personal priorities (24.9%) and lack of opportunity (16.6%).

**Table 53. Barriers to Leadership Roles for Employed RNs by DHS Region**

| | State $n = 61,427$ | | Southern $n = 12,670$ | | Southeastern $n = 23,302$ | | Northeastern $n = 11,848$ | | Western $n = 8,180$ | | Northern $n = 5,427$ | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *n* | % | *n* | % | *n* | % | *n* | % | *n* | % | *n* | % |
| Not engaged in leadership role | 32,404 | 52.8 | 6,877 | 21.1 | 12,111 | 37.4 | 6,458 | 19.9 | 4,136 | 12.8 | 2,822 | 8.7 |
| **Barriers to Engagement in Leadership Roles** | | | | | | | | | | | | |
| | $n = 32,404$ | | $n = 6,877$ | | $n = 12,111$ | | $n = 6,456$ | | $n = 4,136$ | | $n = 2,822$ | |
| Lack of leadership development or preparation | 1,993 | 6.2 | 471 | 6.8 | 788 | 6.5 | 343 | 5.3 | 229 | 5.5 | 162 | 5.7 |
| Lack of opportunity | 5,366 | 16.6 | 1,218 | 17.7 | 1,922 | 15.9 | 1,091 | 16.9 | 665 | 16.1 | 470 | 16.7 |
| Other personal priorities | 8,069 | 24.9 | 1,774 | 25.8 | 3,156 | 26.1 | 1,511 | 23.4 | 983 | 23.8 | 645 | 22.9 |
| Not interested | 18,476 | 57.0 | 3,882 | 56.4 | 6,802 | 56.2 | 3,742 | 57.9 | 2,454 | 59.3 | 1,596 | 56.6 |

*Note*. Table 53 includes responses to survey questions 18, 19, 26.
*Note*. Could select two options.

## Future Work Intentions

Table 54 displays leaders' intentions to remain in their current positions. Nearly a third (32.6%, 9,459) of current nurse leaders across leadership roles intend to work in their current positions for less than five years, and over half (54%) for less than 10 years. In less than five years, 30.1% of organizational level nurse leaders are expected to leave their positions. The number of RNs across all leadership roles who plan to continue in their current positions for under 10 years adds to over 15,000 nurse leaders.

**Table 54. Currently Employed Nurse Leaders' Intent to Stay in Current Position**

| Years | Total Nurse Leaders n = 28,856 | | Work Leaders n = 26,002 | | Organizational Level Leaders n = 2,975 | | Governance Level Leaders n = 542 | | Public Officials n = 162 | | Committee Chairs n = 1,830 | | Did Not Report Leadership Role n = 32,157 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** | **n** | **%** |
| Not Applicable | 167 | 0.6 | 156 | 0.6 | 11 | 0.4 | * | * | * | * | 7 | 0.4 | 247 | 0.8 |
| < 2 | 3,456 | 11.9 | 3,144 | 12.0 | 360 | 12.1 | 83 | 15.2 | 27 | 16.7 | 196 | 10.7 | 4,278 | 13.2 |
| 2 – 4 | 6,003 | 20.7 | 5,455 | 20.9 | 537 | 18.0 | 102 | 18.7 | 28 | 17.3 | 395 | 21.5 | 7,206 | 22.2 |
| 5 – 9 | 6,166 | 21.2 | 5,426 | 20.7 | 702 | 23.5 | 126 | 23.1 | 33 | 20.4 | 423 | 23.0 | 6,668 | 20.6 |
| 10 – 19 | 6,654 | 22.9 | 5,916 | 22.6 | 744 | 24.9 | 107 | 19.6 | 39 | 24.1 | 440 | 24.0 | 6,578 | 20.3 |
| 20 – 29 | 4,046 | 13.9 | 3,681 | 14.1 | 411 | 13.8 | 70 | 12.8 | 22 | 13.6 | 253 | 13.8 | 4,170 | 12.9 |
| ≥ 30 | 2,531 | 8.7 | 2,380 | 9.1 | 221 | 7.4 | 54 | 9.9 | 13 | 8.0 | 123 | 6.7 | 3,247 | 10.1 |

*Note.* Table 54 includes responses to survey questions 17, 18.
*Note.* Not all nurse leaders responded to this question.

## Comparing 2016 and 2018

- The number of nurses reporting leadership roles was 29,589 (49.6%) in 2016 and decreased by 566 in 2018 to 29,023 (47.2%).
- Although the number of RNs in leadership roles overall decreased, there was a 10.1% increase in the number of nurses reporting leadership positions at the organizational level (e.g., dean, CNO, or director), from 2,711 (9.2%) in 2016 to 2,986 (10.3%) in 2018.
- The proportion of organizational level leaders intending to remain in their current type of employment less than five years increased by 3.4% since 2016.
- A noticeable change is the number of nurses who reported serving on a governance board decreased 35.3% from 2016. Similarly, there was a 17.3% decrease in the number of nurses serving as public officials from 2016 (196, 0.7%) to 2018 (162, 0.6%).
- The number of nurses with a doctoral degree in work area leadership roles increased from 68 in 2016 to 244 in 2018, a 259% increase. There was a similar increase in nurses with doctoral degrees who reported organizational leadership roles, from 132 to 166, a 25.8% increase from 2016 to 2018.

## Discussion and Recommendations

The results of the survey identified variation between leadership roles by position at the primary place of work. As expected, nurses in direct care roles reported lower engagement in leadership roles than nurses in management positions did. Many staff nurses currently have some type of leadership role at work (e.g., charge nurse, team leader, unit manager), as do RNs in faculty and

research roles. Key barriers to engaging in leadership roles continue to be the lack of interest and other personal priorities, followed by lack of leadership opportunities.

Turnover among leaders can be a serious problem for all types of organizations. With almost one-third of current nurse organizational leaders planning to leave their positions in less than five years, and over half of nurses in Wisconsin indicating no interest in becoming a leader, there is an urgent need for succession planning and leadership development for nurses in many settings. Given that the most frequently reported barriers to leadership were lack of interest and other personal priorities, efforts to build a pipeline of nurse leaders will have to address opportunities to make leadership more attractive and allow for nurses in these roles to balance both work and life. Further analysis of leadership roles within job types is needed to increase understanding of nurses as leaders. Health care organizations, in partnership with schools of nursing and professional organizations, should develop robust leadership pipelines, succession planning programs, and mentoring opportunities. Organizations should proactively assess and implement leadership development opportunities to prepare for the emerging leadership shortage. In addition, health care organizations should evaluate innovative leadership structures and coverage models to make leadership opportunities more attractive to millennial and other generations of nurses.

Another area of concern is the decrease in the number of nurses on boards. Given the national initiative to place 10,000 nurses on boards by 2020, further exploration of Wisconsin nurses' barriers to serving on boards and as public officials would provide additional information on how to ensure a pipeline for the future.

The increasing prevalence of DNP programs that include opportunities to build skills in leadership is likely to contribute to improving qualifications of nurses for leadership positions. Further work to increase opportunities for associate degree staff nurses to complete a bachelor's degree, which includes leadership skill development, will also help support nurses in leadership roles.

## Section VI. Nurse Faculty

Nurse educators are essential to the basic education and ongoing development of the RN workforce. Among the survey respondents, 1,648 (2.7%) nurses reported working in education as their principal work setting. There were 1,057 nurses who identified nurse faculty as their primary position or function at their principal work setting. Working as nurse faculty in education at universities, technical colleges, and hospitals and health systems in Wisconsin was reported by 900 nurses. In addition, 818 nurses reported working a secondary position as nurse educator. Tables 55 – 57, 60 – 61, and 63 – 64 include results for respondents who reported working as nurse faculty across all settings ($n = 1,057$). Tables 58 – 59 and 62 include results from nurse faculty with a primary position working in education (university, technical colleges, and hospitals and health systems). The *Nurse Faculty at a Glance* summary is found in Appendix C.

### Demographic Patterns among Nurse Faculty

Table 55 describes the demographics of the 1,057 nurse faculty in Wisconsin. Nurse faculty are predominantly female (95%) and reported their primary racial identity as White (992, 93.9%). The racial and ethnic diversity of nurse faculty is 7.2%.  Small proportions report racial/ethnic identities in these categories: African American (35, 3.3%), Hispanic (21, 2.0%), Asian (10, 0.9%), and American Indian or Alaska Native (4, 0.4%). The mean age of all nurse faculty was 50.6 years, with a range from 23 years to 81 years.

The survey asked respondents to report their highest degree in nursing, as well as their highest degree in any field. Most nurse faculty reported their highest nursing degree was at the master's level (634, 60%), with 85 (8%) reporting the DNP and 80 (7.6%) reporting the PhD in nursing. A total of 206 (19.5%) nurse faculty respondents have attained a doctoral level degree in any field.

**Table 55. Nurse Faculty Demographics (*n* = 1,057)**

|  | *n* | *%* |
|---|---|---|
| Male | 53 | 5.0 |
| Female | 1,004 | 95.0 |
| Mean age (*SD*) | 50.6 (11.9) | |
| Diverse | 76 | 7.2 |
| Not diverse | 981 | 92.8 |
| **Highest Nursing Degree** | | |
| Diploma in nursing | 7 | 0.7 |
| ADN | 94 | 8.9 |
| BSN | 150 | 14.2 |
| MSN | 634 | 60.0 |
| DNP | 85 | 8.0 |
| DNS or ND | 6 | 0.6 |
| PhD in nursing | 80 | 7.6 |
| **Highest Degree Earned** | | |
| Diploma | * | * |
| AD | 90 | 8.5 |
| BS | 146 | 13.8 |
| MS | 611 | 57.8 |
| Doctorate, any field | 206 | 19.5 |

*Note*. Table 55 includes responses to survey questions 4, 26, 36, 63 – 66.

Table 56 displays nurse faculty respondents by all degree types and mean age. Nurse faculty prepared at a doctoral level report a mean age of 54.6 years.

**Table 56. Nurse Faculty Age by Degree (*n* = 1,057)**

| **Highest Degree Earned** | *n* | **Mean** | *SD* | **Range** |
|---|---|---|---|---|
| Diploma | * | 61.5 | 11.5 | 48 – 76 |
| AD | 90 | 43.0 | 13.3 | 23 – 71 |
| BS | 146 | 45.3 | 12.4 | 23 – 73 |
| MS | 611 | 51.6 | 10.7 | 25 – 80 |
| Doctorate, any field | 206 | 54.6 | 11.9 | 30 – 81 |

*Note*. Table 56 includes responses to survey questions 4, 36, 63.

**Employment Patterns for Nurse Faculty by Setting and Region**

Table 57 describes the primary work settings reported by nurse faculty respondents. Of the 1,057 nurse faculty, the majority (900, 85.1%) reported working in education as their primary work setting. There were 71 nurse faculty who reported working in hospitals.

**Table 57. Nurse Faculty Principal Place of Work (*n* = 1,057)**

| Principal Place of Work | *n* | % |
|---|---|---|
| Hospital | 71 | 6.7 |
| Ambulatory care | 23 | 2.2 |
| Nursing home or extended care | 31 | 2.9 |
| Home health | 6 | 0.6 |
| Public health or community health | 8 | 0.8 |
| Education | 900 | 85.1 |
| Other | 18 | 1.7 |

*Note*. Table 57 includes responses to survey questions 36, 37.

Table 58 describes faculty working in education by type of education setting. The majority of nurse faculty working in education report working in a university, followed by technical college.

**Table 58. Education Work Setting of Nursing Faculty (*n* = 900)**

| Education Setting | *n* | % |
|---|---|---|
| University | 467 | 51.9 |
| Technical College | 388 | 43.1 |
| Hospitals and Health System | 45 | 5.0 |

*Note.* Table 58 includes responses to survey questions 36, 37.

Table 59 displays the number of nurse faculty working in education by DHS region. The Southeastern region has the highest number of nurse faculty (376), while only 67 nurse faculty reported working in the Northern region. This finding may reflect the differences of geographic distribution of nursing schools in each region, with fewer schools in the Northern region.

**Table 59. Nurse Faculty in Education by DHS Region (*n* = 900)**

| DHS Region | Total Nursing *n* = 900 | | University *n* = 467 | | Technical College *n* = 388 | | Hospital/Health System *n* = 45 | |
|---|---|---|---|---|---|---|---|---|
| | *n* | % | *n* | % | *n* | % | *n* | % |
| Southern | 135 | 15.0 | 59 | 12.6 | 63 | 16.2 | 13 | 28.9 |
| Southeastern | 376 | 41.8 | 236 | 50.5 | 127 | 32.7 | 13 | 28.9 |
| Northeastern | 192 | 21.3 | 103 | 22.1 | 82 | 21.1 | 7 | 15.9 |
| Western | 130 | 14.4 | 61 | 13.1 | 59 | 15.2 | 10 | 22.2 |
| Northern | 67 | 7.4 | 8 | 1.7 | 57 | 14.7 | * | * |

*Note*. Table 59 includes responses to survey questions 26, 36.

**Faculty Intentions Regarding Future Work and Education**

Table 60 displays nurse faculty plans to stay in current type of employment. A concerning finding of this survey is that 32.7% of nurse faculty reported an intent to stay in their current employment for less than five years, and 56% reported an intent to stay in their current employment for less than 10 years.

**Table 60. Nurse Faculty Intent to Stay in Current Type of Employment – All Degrees (*n* = 1,057)**

| Years | *n* | % |
|---|---|---|
| Not applicable | 6 | 0.6 |
| < 2 | 124 | 11.7 |
| 2 – 4 | 222 | 21.0 |
| 5 – 9 | 246 | 23.3 |
| 10 – 19 | 270 | 25.5 |
| 20 – 29 | 124 | 11.7 |
| ≥ 30 | 65 | 6.1 |

*Note*. Table 60 includes responses to survey questions 17, 36.

The intent to continue in current employment is more concerning when considering only nurse faculty with the PhD. Table 61 displays the intent to work in current type of employment for nurse faculty who reported a PhD in nursing and other fields. Of nurse faculty with a PhD, 37.8% report an intent to work in current type of employment for less than five years, while 65.9% reported this intent for less than 10 years.

**Table 61. Nurse Faculty with PhD in Nursing or Other Fields Intent to Stay in Current Type of Employment (*n* = 135)**

| Years | *n* | % |
|---|---|---|
| Not applicable | * | * |
| < 2 | 21 | 15.6 |
| 2 – 4 | 30 | 22.2 |
| 5 – 9 | 38 | 28.1 |
| 10 – 19 | 29 | 21.5 |
| 20 – 29 | 11 | 8.1 |
| ≥ 30 | * | * |

*Note*. Table 61 includes response to survey questions 4, 17, 36.
*Too few to report.

Table 62 displays the intention of nurse faculty in education settings (universities, technical colleges, and hospitals) to continue working in their current type of employment. There were 106 nurse faculty in education who reported intentions to work in their positions for less than two years, with another 185 less than five years. This represents one-third of the nurse faculty intending to work in their positions for five years or less and 57% for less than 10 years

**Table 62. Nurse Faculty in Education to Stay in Current Type of Employment (*n* = 900)**

| Years | Total | | University | | Technical College | | Hospital/Health System | |
|---|---|---|---|---|---|---|---|---|
| | *n* | % | *n* | % | *n* | % | *n* | % |
| < 2 | 106 | 11.8 | 53 | 11.4 | 48 | 12.4 | * | * |
| 2 – 4 | 185 | 20.6 | 94 | 20.2 | 79 | 20.4 | 12 | 27.3 |
| 5 – 9 | 221 | 24.6 | 112 | 24.0 | 100 | 25.8 | 9 | 20.5 |
| 10 – 19 | 237 | 25.7 | 119 | 25.5 | 108 | 27.9 | 10 | 22.7 |
| 20 – 29 | 101 | 11.2 | 57 | 12.2 | 39 | 10.1 | * | * |
| ≥ 30 | 47 | 5.2 | 31 | 6.7 | 13 | 3.4 | * | * |

*Note*. Table 62 includes responses to survey questions 17, 36, 37.
*Too few to report.

Table 63 displays the intent of nurse faculty to pursue further education. Of the 1,057 faculty, 37 are enrolled in PhD in nursing programs and 46 are enrolled in DNP programs. In addition, 206 nurse faculty have an intent to pursue further education in the next two years. The cost of tuition and fees was reported as the most frequent barrier to pursuing further education.

**Table 63. Nurse Faculty Plans for Further Education and Barriers to Pursue Education**

| Plans for Further Education (*n* = 1,057) | *n* | % |
|---|---|---|
| No plans | 686 | 64.9 |
| Enrolled in BSN | 16 | 1.5 |
| Enrolled in MSN | 32 | 3.0 |
| Enrolled in MS in related field | * | * |
| Enrolled in DNP | 46 | 4.4 |
| Enrolled in PhD in nursing | 37 | 3.5 |
| Enrolled in PhD in related field | 11 | 1.0 |
| Enrolled in specialty certificate | 18 | 1.7 |
| Plan to pursue further education within next 2 years | 206 | 19.5 |
| **Barriers to Pursuing Additional Education[a] (*n* = 1,057)** | | |
| Commuting distance to education program | 29 | 1.8 |
| Cost of loss of work time and benefits | 195 | 12.1 |
| Cost of tuition and fees | 533 | 33.1 |
| Family or personal reasons | 311 | 19.3 |
| Lack of flexibility in work schedule | 106 | 6.6 |
| Limited access to online learning or other resources | 7 | 0.4 |
| Schedule of educational programs offered | 39 | 2.4 |
| None identified | 308 | 29.1 |
| Other | 82 | 5.1 |

*Note*. Table 63 includes responses to survey questions 6, 7, 36.
[a]Respondents could check two challenges.
*Too few to report.

**Nurse Faculty Clinical Specialty Knowledge**

Certification as a nurse educator was reported by 174 (0.2%) of all respondents. Among nurse faculty (900), 337 (37.4%) reported holding at least one current national board certification. The proportion of nurse faculty holding national certification was higher for nurse faculty in university settings (217, 46.5%) than in technical college settings (104, 26.8%) (See Appendix C). Table 64 displays the clinical specialty knowledge of nurse faculty with more than two years of professional experience. Medical-surgical nursing, adult health, and critical care were the most frequently reported specialties.

**Table 64. Areas of Clinical Specialty Knowledge and Experience (*n* = 1,057)**

| Current Practice in Primary Position | *n* | % |
|---|---|---|
| Acute care/critical care/intensive care | 335 | 31.7 |
| Adult health | 364 | 34.4 |
| Addiction/AODA/substance abuse | 69 | 6.5 |
| Anesthesia | 21 | 2.0 |
| Cardiac care | 230 | 21.8 |
| Community health | 192 | 18.2 |
| Correctional health | 23 | 2.2 |
| Dialysis | 35 | 3.3 |
| Emergency care | 134 | 12.7 |
| Family health | 128 | 12.1 |
| Geriatrics/gerontology | 273 | 25.8 |
| Home health | 131 | 12.4 |
| Hospice or palliative care | 136 | 12.9 |
| Labor and delivery | 111 | 10.5 |
| Maternal-child health | 136 | 12.9 |
| Medical-surgical | 470 | 44.5 |
| Neonatal care | 62 | 5.9 |
| Obstetrics-gynecology | 81 | 7.7 |
| Occupational or employee health | 43 | 4.1 |
| Oncology | 80 | 7.6 |
| Pediatrics | 130 | 12.3 |
| Parish or faith community | 36 | 3.4 |
| Psychiatric or mental health | 119 | 11.3 |
| Public health | 116 | 11.0 |
| Rehabilitation | 72 | 6.8 |
| Respiratory care | 34 | 3.2 |
| School health | 80 | 7.6 |
| Surgery/pre-op/post-op/PACU | 110 | 10.4 |
| Women's health | 101 | 9.6 |

| Current Practice in Primary Position | *n* | % |
|---|---|---|
| Other | 194 | 18.4 |
| None of the above | 26 | 2.5 |

*Note.* Table 64 includes responses to survey questions 14, 36.

## Comparing 2016 and 2018

- The number of male faculty increased from 37 (3.6%) in 2016 to 53 (5.0%) in 2018.
- The racial diversity of faculty increased from 5.9% diverse in 2016 to 7.2% diverse in 2018.
- The mean age of faculty was stable from 2016 (50.8 years) to 2018 (50.6 years).
- The DNP as the highest nursing degree reported by nurse faculty respondents increased from 5.6% (57) in 2016 to 8.0% (85) in 2018. The PhD as the highest nursing degree was stable between the two surveys (7.9%, 81 in 2016 and 7.6%, 80 in 2018).
- The number of MSN faculty increased from 590 (57.6%) in 2016 to 634 (60%) in 2018.
- The proportion of nurse faculty who reported the intent to continue with their present type of employment for less than five years dropped slightly from 2016 (33.8%) to 2018 (32.7%).
- The number of RNs in Wisconsin working as nurse faculty in education increased from 825 in 2016 to 900 in 2018.

## Discussion and Recommendations

The proportion of nurse faculty who reported male gender continues to be lower than the overall proportion of the state nursing workforce reported to be male (7.5%), as well as the proportion of the national nursing workforce reported to be male (9.1%) (Smiley et al., 2018). Small gains in racial diversity among faculty were noted over the last survey. Additional efforts to recruit men into faculty positions and to increase the racial and ethnic diversity of faculty are essential.

The overall increase in faculty prepared at the master's and doctoral level is a positive finding. However, there are only 206 nurse faculty members prepared at a doctoral level in the state. The low number prepared with the PhD is particularly concerning given the importance of nursing research and the preparation of future nurse faculty and nurse researchers. The finding that over half (56.6%) of all nurse faculty and 65.9% of nurse faculty prepared at the PhD level reported an intent to stay in their positions less than 10 years is a concern. While this reflects the high mean age of nurse faculty (50.6 years), it also points to the urgent need to continue to invest in preparation of the next generation of nurse faculty. Current master's prepared faculty could be an important future source of faculty with doctoral preparation. However, the number of faculty reporting plans to continue their education to obtain doctoral degrees is low. Cost of tuition and fees are the most frequently reported barriers for pursuing additional education.

The American Association of Colleges of Nursing (AACN, 2017) reported that faculty shortages and budget constraints are key factors limiting nursing school capacity. A special survey on vacant faculty positions reported a national faculty vacancy rate of 8.0% in public schools, with a Midwest regional vacancy rate of 6.8% (Li, Turinetti, & Fang, 2019). An earned doctorate in nursing or allied field is required in 56.1% of the full-time vacant positions (Li et al., 2019). The AACN suggests faculty retirements are increasing nationally.

Given that two-thirds of faculty reported plans to stay in nursing education for less than 10 years, the faculty vacancy rate in Wisconsin is likely to worsen. Faculty shortage is a major contributor

to overall nurse shortage. Given the length of time to educate and prepare nurse faculty, immediate efforts to mitigate the shortage are needed. Schools of nursing, based on mission and programming, should carefully determine the appropriate size and educational mix of faculty and develop targeted recruitment and retention plans. Wisconsin nursing schools, in partnership with health care organizations and policy makers, should develop robust plans to recruit and retain nurse faculty. Continued efforts to increase the faculty pipeline should focus on innovative programming to decrease time to degree, increase educational scholarships and loan forgiveness programs, and support competitive salaries. A shortage of faculty at a time when increasing numbers of nurses are needed due to changing population demographics could result in significant bottlenecks to educating the future nurse workforce and meeting the care demands for Wisconsin.

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**STATE OF WISCONSIN**
**DWD**
Department of Workforce Development

## 2018 Registered Nurse Workforce Survey
*Information to Grow Wisconsin's Workforce*!

The Registered Nurse Workforce Survey was created to collect critical information on the nursing profession in Wisconsin. Your careful survey responses will be used to help plan future nursing care for the people of Wisconsin.

The Survey is designed to be as **simple and quick** as possible while gathering **critical information** about the RN Workforce.  Your responses are important for an accurate representation of nursing in Wisconsin.

**Thank you for taking the time to participate in this important survey**

The survey may take between 10 to 20 minutes.  **You will not be asked every question in the survey.**  The information you provide will determine the questions asked.

**No personal information or information from your license is attached to your survey responses.**

Please have the following information available before you begin:

1. The year you received your **first RN license**. To find this date, go to https://app.wi.gov/LicenseSearch/
2. The year(s) you received your **diploma(s)**
3. Country or county <u>and</u> zip code of your current place(s) of work.

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**Complete, and return the survey and signed affidavit to DSPS:**
Fax:    608-251-3036
Email:  DSPSRenewal@wisconsin.gov
Mail:   DSPS – Renewal Unit
        PO Box 8935
        Madison, WI 53708-8935

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If you have questions concerning your license renewal, payment or you are experiencing technical difficulties while taking the survey, please contact the Department of Safety and Professional Services (DSPS) at DSPSRenewal@wisconsin.gov or by calling 608-266-2112.  Please allow 2-3 business days for assistance. **Please note that making multiple requests for assistance slows down agency response time.**

Use the email address NursingSurvey@dwd.wisconsin.gov if you need help answering the survey questions, or have additional comments or suggestions.
**This email address is active only during the open renewal period.**
**LICENSING, EDUCATION, AND TRAINING INFORMATION**

**Licensing**

1. In what **country** were you initially licensed as a nurse?

     ___ U.S.
     ___ Another Country

2. In what year did you obtain your **initial** U.S. licensure as an RN?

     _____ Enter a 4-digit year between 1930 and 2018

3. In what year did you obtain your first **Wisconsin** license as an RN?

     _____ Enter a 4-digit year between 1930 and 2018
     (To look up first year of licensure go to https://app.wi.gov/LicenseSearch/)

**Education**

4. For each of the following **nursing diplomas or degrees** you have received, please enter the year you received the diploma or degree.

   Enter a 4-digit year between 1930 and 2018 for all that apply:

     _____ Practical Nursing or Vocational Nursing Diploma
     _____ Diploma in Nursing
     _____ Associate Degree in Nursing
     _____ Bachelor Degree in Nursing
     _____ Bachelor Degree in a related field
     _____ Master's Degree in Nursing or related health field
     _____ Master's Degree in a related health field
     _____ Doctor of Nursing Practice
     _____ Doctor of Nursing Science or Nursing Doctorate (DNSc, DSN, ND or DN)
     _____ PhD in Nursing
     _____ PhD in a related field

5. For your most recent degree, did you receive the degree from a Wisconsin based college or university?

     ___ Yes
     ___ No

6. Please indicate your plans for further education:
   (Select only one response)

      \_\_\_ I have no plans for additional nursing studies
      \_\_\_ Currently enrolled in a BSN program
      \_\_\_ Currently enrolled in a Master's degree program in nursing
      \_\_\_ Currently enrolled in a Master's degree program in a related health field
      \_\_\_ Currently enrolled in a Doctor of Nursing Practice program
      \_\_\_ Currently enrolled in a Nursing PhD program
      \_\_\_ Currently enrolled in a PhD program in a related field
      \_\_\_ Currently enrolled in a non-degree specialty certification program
      \_\_\_ Plan to pursue further education in nursing in the next two years

7. What are the **two greatest challenges** you face or anticipate in pursuing higher nursing education?
   (Select at most only two responses)

      \_\_\_ None
      \_\_\_ Commuting distance to educational program
      \_\_\_ Cost of lost work time and benefits
      \_\_\_ Cost of tuition, materials, books etc.
      \_\_\_ Family/personal reasons
      \_\_\_ Lack of flexibility in work schedule
      \_\_\_ Limited access to online learning or other online resources
      \_\_\_ Scheduling of educational programs offered
      \_\_\_ Other, not listed

## Training

8. Have you received training in emergency preparedness and response (such as Incident Command System (ICS) 100, 200, 700; Hazardous Materials, etc.)?
   (Check all that apply)

      \_\_\_ No
      \_\_\_ Yes  I have received this training from my employer.
      \_\_\_ Yes  I have received this training from a voluntary organization (e.g. Red Cross)
      \_\_\_ Yes other.

9. Have you applied training in emergency preparedness and response?  (Check all that apply)

      \_\_\_ No
      \_\_\_ Yes, I have participated in an emergency preparedness and response exercise in the last two years
      \_\_\_ Yes, I have responded to an actual emergency, incident, or major disaster within the last two years

10. Are you a member of the following:  (Check all that apply)

      \_\_\_ Wisconsin Emergency Assistance Volunteer registry (WEAVR)
      \_\_\_ Medical Reserve Corps (MRC) unit
      \_\_\_ No, I am not a member

**CURRENT EMPLOYMENT INFORMATION**

Please take into account **only your current employment status** while answering the following questions.  **Do not include unpaid volunteer work.**

11.  Please indicate your employment status:
     (Select only one response)

       \_\_\_ Actively working as a nurse (receiving compensation for work requiring licensure or educational preparation as a nurse)
       \_\_\_ Actively working in health care, not nursing
       \_\_\_ Actively working in another field
       \_\_\_ Unemployed, seeking work in nursing
       \_\_\_ Unemployed, seeking work in another field
       \_\_\_ Unemployed, not seeking work
       \_\_\_ Retired

12.  Has your employment status changed during the past year?
     (If you have experienced more than one change, please **select the most significant change**.)

       \_\_\_ No change in employment status
       \_\_\_ Yes I changed the number of hours worked
       \_\_\_ New position with the same employer
       \_\_\_ New position with a different employer
       \_\_\_ I was not working as a registered nurse, but am now in a registered nursing job
       \_\_\_ I was working as a registered nurse but I am no longer working as a registered nurse
       \_\_\_ Other

13.  Which of the following factors was the most important in your change in employment during the past year?  (Select only one response)

       \_\_\_ Not applicable
       \_\_\_ I retired
       \_\_\_ Childcare responsibilities
       \_\_\_ Other family responsibilities
       \_\_\_ Salary/medical or retirement benefits
       \_\_\_ Laid off
       \_\_\_ Change in spouse/partner work situation
       \_\_\_ Change in financial status
       \_\_\_ Relocation/moved to a different area
       \_\_\_ Promotion/career advancement
       \_\_\_ Change in my health status
       \_\_\_ Seeking more convenient hours
       \_\_\_ Dissatisfaction with previous position
       \_\_\_ Other

**NURSING CAREER INFORMATION**

Please take into account **all your nursing work experiences, including unpaid volunteer nursing work,** when answering the questions in this section.

14. Please indicate any of the clinical areas listed below in which you have specialized knowledge and/or experience of two or more years:
(Check all that apply)

     ___ None
     ___ Acute Care /Critical Care/Intensive Care
     ___ Addiction/ AODA/Substance Abuse
     ___ Adult Health
     ___ Anesthesia
     ___ Cardiac Care
     ___ Community Health
     ___ Corrections
     ___ Dialysis/Renal
     ___ Emergency/Trauma
     ___ Family Health
     ___ Geriatrics/Gerontology
     ___ Home Health
     ___ Hospice Care/ Palliative Care
     ___ Labor and Delivery
     ___ Maternal-Child Health
     ___ Medical-Surgical
     ___ Neonatal Care
     ___ Obstetrics/Gynecology
     ___ Occupational Health/Employee Health
     ___ Oncology
     ___ Pediatrics
     ___ Parish/Faith Community
     ___ Public Health
     ___ Psychiatric/Mental Health
     ___ Rehabilitation
     ___ Respiratory Care
     ___ School Health (K-12 or post-secondary)
     ___ Surgery/Pre-op/Post-op/ PACU
     ___ Women's Health
     ___ Other, not listed

15. Please indicate the specialties in which you hold **current** national board certification:
(Check all that apply)

     ___ I am not certified
     ___ Acute Care/Critical Care
     ___ Addiction/AODA
     ___ Adult Health
     ___ Ambulatory Care Nursing
     ___ Anesthesia (CRNA)
     ___ Cardiac Rehabilitation Nursing
     ___ Cardiac-Vascular Nursing
     ___ Case Management Nursing
     ___ College Health Nursing

___ Community Health

___ Diabetes Management - Advanced

___ Domestic Violence/Abuse Response

___ Emergency Nursing (CEN®, CFRN®)

___ Family Health

___ Family Planning

___ Gastroenterology (CGRN)

___ General Nursing Practice

___ Gerontological Nursing

___ High-Risk Perinatal Nursing

___ Home Health Nursing

___ Hospice and Palliative Nursing (CHPN®, ACHPN®)

___ Informatics Nursing

___ Infusion Nursing (CRNI)

___ Legal Nurse Consultant (LNCC®)

___ Medical-Surgical Nursing

___ Medical-Surgical Nursing (CMSRN®)

___ Neonatal

___ Nephrology (CNN, CDN)

___ Neurology (CNRN)

___ Nurse Educator (CNE)

___ Nurse Executive (CENP)

___ Nurse Executive - Advanced

___ Nurse Manager and Leader (CNML)

___ Nursing Case Management

___ Nursing Professional Development

___ OB/GYN/Women's Health Care

___ Occupational Health (COHN)

___ Orthopedic Nursing (ONC®)

___ Oncology Nursing (OCN®, CPON®, CBCN, AOCNP®, AOCNS®)

___ Parish Nurse

___ Perianesthesia (CPAN®, CAPA®)

___ Peri-Operative (CNOR®)

___ Pain Management

___ Pediatric Nursing

___ Perinatal Nursing

___ Public/Community Health

___ Public Health Nursing-Advanced (APHN)

___ Psychiatric & Mental Health Nursing

___ Psychiatric & Mental Health Nursing-Advanced (APMHN)

___ Radiology/Invasive Procedures Lab

___ Rehabilitation (CRRN®)

___ Respiratory/Pulmonary Care

___ School Nursing

___ School Nursing (NCSN®)

___ Transplant

___ Wound/Ostomy Nursing (CWOCN, CWCN, COCN, CCCN, CWON)

___ Other, not listed

16. Which of the following factors best captures the **single most important factor** in your career decisions today?

    ___ I am retired/not working
    ___ Level of personal satisfaction/ collegial relationships
    ___ Family/personal issues
    ___ Pay
    ___ Medical Benefits
    ___ Retirement benefits
    ___ Hours/shift availability
    ___ Potential for advancement
    ___ Employer supported education options
    ___ Worksite location
    ___ Physical work requirements
    ___ Physical disability
    ___ Other

17. How much longer do you plan to work in your present type of employment?
(Select only one response)

    ___ Not applicable
    ___ Less than 2 years
    ___ 2-4 years
    ___ 5-9 years
    ___ 10-19 years
    ___ 20-29 years
    ___ 30 or more years

18. In which setting(s) do you have a designated/appointed/ or elected formal leadership role? (Check all that apply)

    ___ Work Area (e.g. Charge Nurse, Team Leader, Unit Manager)
    ___ Organizational Level (e.g. Dean, CNO, Director)
    ___ Governance Board (e.g. Board of Trustees)
    ___ Public Official (e.g. County Board of Supervisors, state legislator)
    ___ Chair of major committee in the organization of your primary position
    ___ None

19. If you are **not engaged** in a leadership role, what are the **two most** significant barriers?
(Select at most two responses)

    ___ Does not apply (If you check this please continue to the next question)
    ___ Lack of leadership development/preparation
    ___ Lack of opportunity
    ___ Other personal priorities
    ___ Presently, I am not interested in a leadership role

20. In your career, how many years have you worked as a Registered Nurse providing **direct patient care**?

**Direct patient care (DPC)** is defined as, *"To administer nursing care one-on-one to patients, the ill, the disabled, or clients, in the hospital, clinic or other patient care setting."* Examples include providing treatments, counseling, patient education or administration of medication.

_____ Number of years

21. If you presently provide direct patient care, how much longer do you plan to work providing direct patient care?

___ Does not apply
___ Less than 2 years
___ 2-4 years
___ 5-9 years
___ 10-19 years
___ 20-29 years
___ 30 or more years

22. How many separate nursing jobs do you currently have?
(Including unpaid volunteer nursing work)

_____ Number of jobs
If you answered 0 jobs to this question, please skip to the UNEMPLOYED SECTION, Question 61.


**PRINCIPAL PLACE OF WORK**

Please respond to the following questions by referring to your principal place of work (the place where you work the most hours), **even if this work is unpaid or voluntary.**

23. Which of the following categories best describes your job at your principal place of work?
(Select only one response)

___ Nursing
___ Health related services outside of nursing
___ Retail sales and services
___ Nursing education
___ Financial, accounting, and insurance processing staff
___ Consulting
___ Other
___ I am not working at the present time.
If not working, please skip to the UNEMPLOYED SECTION, Question 61.

24. Does this job require licensure as a Registered Nurse?

___ Yes
___ No

25. Which of the following categories best describes your employment at this job?
(Select only one response)

___ A regular employee

___ Self-employed
___ Employed through a temporary employment service agency
___ Travel nurse or employed through a traveling nurse agency
___ Volunteer

26. What is the zip code of your **principal place of work**?
(If you travel to more than one location during a normal day or week of work, please provide the zip code of your headquarters.)

    Zip code (if in the U.S.) _____(5 digits only)
    ___ Outside of U.S.

27. If you work in Wisconsin, in what county is your principal place of work located?

    ___ Does not apply
    Specify name of Wisconsin county: _____

28. What is your current employment basis for this principal position?
(Select only one response)

    ___ Full time, salaried
    ___ Full time, hourly wage
    ___ Part time, salaried
    ___ Part time, hourly wage
    ___ Per diem (called as needed)
    ___ Volunteer

29. In this job, how many hours do you work in a **typical day**?
(Do not include time spent on-call.)

    _____ Number of hours

30. In this job, on average how many days do you work in a **two week time period**?
(Do not include time spent on-call.)

    _____ Number of days

31. For what reason would you work more than your scheduled hours for the two week time period?
(Select only one response)

    ___ I am salaried
    ___ I have agreed to this as part of my employment
    ___ I am required to work the additional hours (not on-call)
    ___ I am required to work the additional hours (on-call)
    ___ I may voluntarily agree to work the additional hours

32. How many weeks did you work (including paid vacations) in calendar year 2015?

    _____ Number of weeks

33. Does your compensation from your principal working position include:
(Check all that apply)

___ Retirement plan
___ Dental insurance
___ Personal health insurance
___ Family health insurance
___ None

34. How long have you worked in your principal job?

_____ Number of years (please round up to the nearest year)

35. In your current role, is your **primary** function to provide **direct patient care**?

**Direct patient care (DPC)** is defined as, *"To administer nursing care one-on-one to patients, the ill, the disabled, or clients, in the hospital, clinic or other patient care setting."* Examples include providing treatments, counseling, patient education or administration of medication.

(Select only one response)

___ Yes
___ No

36. Which one of the following **best** describes your position or function at your principal place of work? (Select only one response)

___ Staff Nurse
___ Case manager/Care Coordinator
___ Staff Other Non-Medical Industry
___ Nurse Manager
___ Manager Other Non-medical industry
___ Advanced Practice Nurse
___ Consultant/Contractor
___ Administrator
___ Nurse Executive
___ Nurse Faculty
___ Nurse Researcher
___ Other

37. Please select **only one** in the categories below as best describing your **principal place of work**. (The headings are intended as guides only)

Hospital (Medical/Surgical, AODA/Psychiatric, Long-Term Acute Care)
__Hospital, emergency/urgent care
__Hospital, 24 hour inpatient unit (other than intensive care or obstetrics)
__Hospital, outpatient/ambulatory care
__Hospital, obstetrics
__Hospital, intensive care
__Hospital, inpatient mental health/substance abuse
__Hospital, long-term acute care
__Hospital, perioperative services ( OR, PACU, and others)
__Hospital, other departments

__Hospital, I work in several/all hospital units

**Extended Care (Nursing, Hospice, CBRF, RCAC, and AFH Facilities)**
__Nursing Facility
__Skilled Nursing Facility (nursing care to residents that require some medical attention and continuous skilled nursing observation)
__Hospice facility
__Intermediate Care Facility of the Intellectually Disabled (ICF-ID)
__Assisted Living Facility (CBRF, Community Based Residential Facility)
__Assisted Living Facility (RCAC, Residential Care Apartment Complexes)
__Adult Family Homes (AFH/Group Home)

**Ambulatory Care (Employee Health, Outpatient Care, Clinics, Surgery Center)**
__Medical practice, clinic, physician office,
__Surgery center, dialysis center
__Urgent care, not hospital-based
__Outpatient mental health/substance abuse
__Correctional facility, prison or jail (federal, state or local)
__Occupational health or employee health service

**Home Health (Private Home)**
__Home health agency
__Home health service
__Hospice

**Public/Community Health**
__Public health (governmental: federal, state, or local)
__Community health centers, agencies and departments
__Parish nurse services
__School health services (K-12, college and universities)

**Nurse/Educator**
__Education- Universities
__Education Technical Colleges
__Education Hospital/Health System

**Other (Insurance, call center etc.)**
__Call center/tele-nursing center
__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

38. Is this a federally owned facility?

___ Yes
___ No

39. Is this a tribal facility?

     ___ Yes
     ___ No

## SECONDARY PLACE OF WORK

40. Do you have a secondary place of work?

     ___ Yes
     ___ No

If No, please skip this section and go to the ADVANCED PRACTICE NURSING section, and start with Question 48.

Please respond to the following questions by referring to your secondary **place** of work **even if this is unpaid voluntary work.**

41. Which of the following categories best describes your job at your secondary place of work?

     ___ Nursing
     ___ Health related services outside of nursing
     ___ Retail sales and services
     ___ Nurse Education
     ___ Financial, accounting, and insurance processing staff
     ___ Consulting
     ___ Other

42. Does this job require licensure as a Registered Nurse?

     ___ Yes
     ___ No

43. What is the zip code of your **secondary place of work**? (If you travel to more than one location during a normal day or week of work, please provide the zip code of your headquarters.)

     Zip code (if in the U.S.) _____(5 digits only)
     ___ Outside of U.S.

44. If your secondary place of work is in Wisconsin, what county is your secondary place of work located?

     ___ Does not apply
     Specify name of Wisconsin county: _____

45. In your **secondary** job, how many hours do you work in a **typical day**?
(Do not include time spent on-call.)

     _____ Number of hours

46. In your **secondary** job, on average how many days do you work in a **two week time period**?

(Do not include time spent on-call.)

_____ Number of days

47. In this job, how many weeks did you work (including paid vacations) in calendar year 2013?

_____ Number of weeks

## ADVANCED PRACTICE NURSING

In Wisconsin, Advanced Practice Nurses (APNs) are legally defined.

(1) "Advanced practice nurse" means a registered nurse who possesses the following qualifications:
(a) The registered nurse has a current license to practice professional nursing in this state, or has a current license to practice professional nursing in another state which has adopted the nurse licensure compact;

(b) The registered nurse is currently certified by a national certifying body approved by the board as a **nurse practitioner**, **certified nurse−midwife**, **certified registered nurse anesthetist** or **clinical nurse specialist**; and,

(c) For applicants who receive national certification as a nurse practitioner, certified nurse−midwife, certified registered nurse anesthetist or clinical nurse specialist after July 1, 1998, the registered nurse holds a master's degree in nursing or a related health field granted by a college or university accredited by a regional accrediting agency approved by the board of education in the state in which the college or university is located. [1]

[1]**Doctor of Nursing Practice is acceptable alternative to the master's degree (DSPS position statement)**

(2) **"Advanced practice nurse prescriber"** means an advanced practice nurse who has been granted a certificate to issue prescription orders under s. 441.16 (2), Stats.

For more information refer to the Wisconsin Legislative Documents for Nursing N 8.02 Definitions:
https://docs.legis.wisconsin.gov/code/admin_code/n/8/02/1

48. Indicate if you **currently have national certification** as an APN by the definition given in this survey. (Check all that apply)

___ Nurse Practitioner (NP)
___ Certified Nurse Midwife (CNM)
___ Certified Registered Nurse Anesthetist (CRNA)
___ Clinical Nurse Specialist (CNS)
___ Advanced Practice Nurse Prescriber (APNP)
___ None of the above

If None of the above, please go to the DEMOGRAPHIC INFORMATION section, and start with Question 63.

49. If you are a **currently certified Nurse Practitioner (NP)**, please indicate your specialty(s): (Check all that apply)

___ Does not Apply
___ No specialty designation

___ Not currently certified

___ Acute Care NP

___ Adult NP

___ Adult Psychiatric & Mental Health NP

___ College Health NP

___ Diabetes Management NP – Advanced

___ Emergency Nursing NP

___ Family NP

___ Family Planning NP

___ Family Psych & Mental Health NP

___ Gerontological NP

___ Neonatal NP

___ OB-Gyn / Women's Health Care NP

___ Pediatric NP

___ School NP

___ Clinical Nurse Leader (CNL)

___ Other Specialty NP

50. If you are a **currently certified Clinical Nurse Specialist (CNS)**, please indicate your specialty(s): (Check all that apply)

___ Does not Apply

___ No specialty designation

___ Not currently certified

___ Acute and Critical Care CNS-Adult

___ Acute and Critical Care CNS-Pediatric

___ Acute and Critical Care CNS-Neonatal

___ Adult Health CNS

___ Adult Psychiatric & Mental Health CNS

___ Child & Adolescent Psych & Mental Health CNS

___ Diabetes Management CNS – Advanced

___ Home Health CNS

___ Gerontological CNS

___ Medical-Surgical CNS

___ OB-Gyn / Women's Health Care

___ Palliative Care - Advanced

___ Pediatric CNS

___ Community /Public Health CNS

___ Other Specialty CNS

51. Are you currently **working** as an Advanced Practice Nurse (APN)?

___ Yes

___ No

If No, please go to the DEMOGRAPHIC INFORMATION section, and start with Question 63.

52. Please indicate your population focus as an Advanced Practice Nurse: (Select only one response)

___ Family/Individual Across Lifespan

___ Adult-Gerontology

___ Neonatal

___ Pediatric

___ Women's Health/Gender-related

___ Psychiatric-Mental Health

53. Do you provide **outpatient primary care\* or outpatient mental health services** at your **principal place of work**?  (Where you spend the most time providing primary care or outpatient mental health services)

*\*Primary Care is defined as providing first contact and continuing care, including basic or initial diagnosis and treatment, health supervision, management of chronic conditions, preventive health services, and appropriate referral(s)*

___ Yes

___ No

If No, please go to Question 57

54. What type of care do you provide at this location?
(Check all that apply)

___ Family

___ Women's health

___ Certified Nurse Midwife services

___ Pediatric

___ Adult

___ Geriatric

___ Mental health services

___ Other

55. If you provide **primary care on an outpatient basis**, what is the *average number of hours per week* you provide **direct patient care** at this practice location? (Do not include on-call time, administrative, teaching or research time):

_____ Number of hours

56. If you provide **mental health services on an outpatient basis**, what is the *average number of hours per week* you provide **direct patient care** at this practice location? (Do not include on-call time, administrative, teaching or research time):

_____ Number of hours

57. Do you provide **primary care or outpatient mental health services** at your **secondary place of work**?

___ Yes

___ No

If No, please go to the DEMOGRAPHIC INFORMATION section, and start with Question 63.

58. What type of care do you provide at this second location?
(Check all that apply)

___ Family

___ Women's health

   ___ Certified Nurse Midwife services
   ___ Pediatric
   ___ Adult
   ___ Geriatric
   ___ Mental health services
   ___ Other

59.  If you provide **primary care on an outpatient basis**, what is the *average number of hours per week* you provide **direct patient care** at this second practice location?  (Do not include on-call time, administrative, teaching or research time)

      _____ Number of hours

60.  If you provide **mental health services on an outpatient basis**, what is the *average number of hours per week* you provide **direct patient care** at this second practice location? (Do not include on-call time, administrative, teaching or research time):

      _____ Number of hours

     Please go to the DEMOGRAPHIC INFORMATION section, and start with Question 63.

## UNEMPLOYED SECTION

61.  Which of the following best describes your current intentions regarding work in nursing? (Select only one response)

     ___ Currently seeking employment in nursing
     ___ Plan to return to nursing in the future
     ___ I am retired/unable to return to nursing
     ___ Definitely will not return to nursing, but not retired
     ___ Undecided at this time

62.  What factors would influence you to return to nursing? (Check all that apply)

     ___ I would not consider returning
     ___ Modified physical requirements of job
     ___ Affordable childcare at or near work
     ___ Improvement in my health status
     ___ Improved health care benefits
     ___ Retirement benefits
     ___ More or flexible hours
     ___ Opportunity for career advancement
     ___ Improved pay
     ___ Shift
     ___ Work environment
     ___ Worksite location
     ___ Other

     Please continue to the DEMOGRAPHIC INFORMATION section, and start with Question 63.

## DEMOGRAPHIC INFORMATION

63.  What is your year of birth?

_____ Enter a 4-digit year between 1915 and 1995.

64. What is your gender?

___ Female
___ Male

65. Are you of Hispanic, Latino, or Spanish ethnicity?

___ Yes
___ No

66. Which of the following would you use to describe your **primary** racial identity?
(Select the most appropriate)

___ White
___ Black or African American
___ American Indian or Alaska Native
___ Asian
___ Native Hawaiian or Other Pacific Islander
___ Two or more races

67. Please indicate languages, other than English, in which you can communicate with patients and pose
questions about their condition:

___ No other languages
___ Spanish
___ Filipino, Tagalog
___ German
___ French
___ Russian
___ Hmong
___ Hindi
___ Polish
___ American Sign Language
___ Other

68. Please enter the zip code of your **primary residence:**

Zip code (if in the U.S.) _____(5 digits only)

___ Outside of U.S.

69. If you reside in Wisconsin, please indicate the county of your **primary residence**:

___ Does not apply

Specify name of Wisconsin county: _____

*You have successfully completed the survey.*
*Thank you!*

**Wisconsin Department of Safety and Professional Services**

REGISTERED NURSE WORKFORCE SURVEY
ATTESTATION FORM
(Must Return with Paper Copy of Survey)

Name: _____ Credential #: _____

      Last            First           MI

I attest that I have completed the enclosed workforce survey to the best of my ability as required by law. I understand that failure to provide the requested information may result in the delay of my renewal and could lead to enforcement action against my license.

Signature: _____ Date: __ __ / __ __ / __ __

**Note**: This form will be retained by the Department of Safety and Professional Services as documentation that the completed survey was submitted for renewal requirement purposes. If this attestation is not completed and returned with the survey, the renewal requirement cannot be met and renewal of the license will be delayed until the attestation and complete survey are returned together.

# Appendix B: 2018 Wisconsin RN Survey At a Glance Summary

## 2018 Wisconsin registered nurses by age (n=79,750)
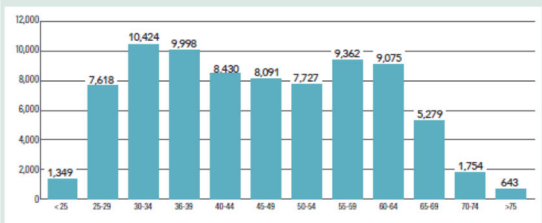
| Age | Count |
|---|---|
| <25 | 1,349 |
| 25-29 | 7,618 |
| 30-34 | 10,424 |
| 36-39 | 9,998 |
| 40-44 | 8,430 |
| 45-49 | 8,091 |
| 50-54 | 7,727 |
| 55-59 | 9,362 |
| 60-64 | 9,075 |
| 65-69 | 5,279 |
| 70-74 | 1,754 |
| >75 | 643 |

**WCN** — Wisconsin Center for Nursing

Data Source: Labor Market Information, Wisconsin Department of Workforce Development, 2018.

**WISCONSIN DWD**

Wisconsin 2018 RN Workforce Survey
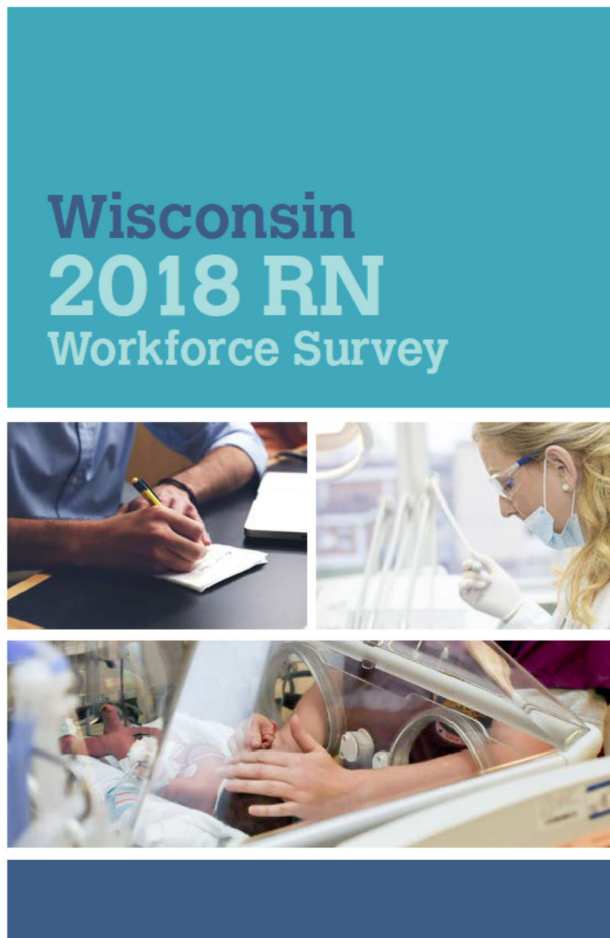
# At a Glance Information

| | Total valid online survey respondents | % of applicable respondents |
|---|---|---|
| Total survey response n = 90,143* | 79,750 | 100 |

| Gender | (n=79,750) | |
|---|---|---|
| Female | 73,805 | 92.5 |
| Male | 5,945 | 7.5 |

| Age distribution | (n=79,750) | |
|---|---|---|
| Less than 25 | 1,349 | 1.7 |
| 25-34 | 18,042 | 22.6 |
| 35-44 | 18,428 | 23.1 |
| 45-54 | 15,818 | 19.8 |
| 55-64 | 18,437 | 23.1 |
| 65 and older | 7,676 | 9.6 |

| Race/Ethnicity | (n=79,750) | |
|---|---|---|
| White | 75,118 | 94.2 |
| Black/African American | 1,562 | 2.0 |
| Hispanic | 1,587 | 2.0 |
| Asian | 1,417 | 1.8 |
| Other | 1,653 | 2.1 |

| Highest degree held in nursing | (n=79,750) | |
|---|---|---|
| Diploma in Nursing | 4,121 | 5.2 |
| Associate degree in Nursing | 27,617 | 34.6 |
| Bachelor Degree in Nursing | 37,884 | 47.5 |
| Master degree in Nursing | 8,811 | 11.0 |
| Doctorate of Nursing Practice | 720 | 0.9 |
| Doctorate of Nursing Science/Nursing Doctorate | 31 | 0.0 |
| PhD in Nursing | 259 | 0.3 |

| Holds at least one current national board certification | Earned most recent nursing degree in Wisconsin |
|---|---|
| **19,386 / 24.3%** (n=79,750) | **59,179 / 74.2%** (n=79,750) |

| Employment status | (n=79,750) | |
|---|---|---|
| Actively working as a nurse | 68,132 | 85.4 |
| Actively working in health care, not nursing | 2,115 | 2.7 |
| Actively working in another field | 1,105 | 1.4 |
| Unemployed, seeking work in nursing | 993 | 1.2 |
| Unemployed, seeking work in another field | 130 | 0.2 |
| Unemployed, not seeking work | 1,844 | 2.3 |
| Retired | 5,431 | 6.8 |

| Age 55 & over by work setting | (27.9%) | 55 & over (%) | Average Age |
|---|---|---|---|
| Academic education | 806 | 43.7 | 51 |
| Ambulatory care | 3,748 | 29.4 | 46 |
| Home health | 1,234 | 34.6 | 48 |
| Hospital | 7,281 | 21.3 | 42 |
| Nursing home/extended care | 2,120 | 36.5 | 48 |
| Public/community health | 955 | 39.0 | 49 |
| Other | 2,198 | 42.2 | 50 |

# Wisconsin Labor Market

| | Total valid online survey respondents | % of applicable respondents |
|---|---|---|

| Registered nurse workforce | (n=79,750) | |
|---|---|---|
| Working in healthcare | 70,247 | 88.1 |
| Working in healthcare in Wisconsin | 62,642 | 78.5 |

| Primary place of work in current Wisconsin labor market | (n=63,680) | |
|---|---|---|
| Academic education | 1,761 | 2.8 |
| Ambulatory care | 12,403 | 19.5 |
| Home health | 3,451 | 5.4 |
| Hospital | 33,165 | 52.1 |
| Nursing home/extended care | 5,638 | 8.9 |
| Public/community health | 2,382 | 3.7 |
| Other | 4,880 | 7.7 |

| Serves in a Leadership Position | Nursing positions at primary place of work in Wisconsin | (n=63,680) | |
|---|---|---|---|
| Governance Boards | Staff Nurse | 39,572 | 62.1 |
| **761 / 1.0%** | Case Manager | 5,664 | 8.9 |
| | Nurse Manager | 4,313 | 6.8 |
| Public Officials | Advanced Practice Nurse | 4,797 | 7.5 |
| **226 / 0.3%** | Administrator | 863 | 1.4 |
| | Nurse Executive | 682 | 1.1 |
| (n=79,750) | Nursing Faculty | 1,111 | 1.7 |
| | Other | 6,678 | 10.5 |

| Plans to leave Direct Patient Care (DPC) in Wisconsin | (n=50,062) | |
|---|---|---|
| Less than 2 years | 3,260 | 6.5 |
| 2-4 years | 7,060 | 14.1 |
| 5-9 years | 10,102 | 20.2 |
| 10 or more years | 28,255 | 56.4 |

| Current DPC providers in Wisconsin | Certified as APN prescriber in Wisconsin | Working in role requiring an APN in Wisconsin |
|---|---|---|
| **50,062 / 78.6%** (n=63,680) | **3,682 / 67.6%** (n=5,448) | **4,850 / 7.6%** (n=63,680) |

| Advanced Practice Nurse (APN) Workforce | (n=79,750) | |
|---|---|---|
| Certified to practice as APN | 5,623 | 7.1 |
| Certified to practice as APN and working in Wisconsin | 4,847 | 6.1 |

| Advanced Practice Nurses in Wisconsin with master's or higher | (n=4,491) | |
|---|---|---|
| Nurse Practitioner | 2,771 | 61.7 |
| Clinical Nurse Specialist | 226 | 5.0 |
| Certified Nurse Midwife | 140 | 3.1 |
| Certified Registered Nurse Anesthetist | 307 | 6.8 |
| Advanced Practice Nurse Prescriber | 3,324 | 74.5 |

*Online responses = 88,932  Paper responses = 1,211
Online responses from RN's who do not live or work in Wisconsin = 8,293
Data Source: Labor Market Information, Wisconsin Department of Workforce Development, 2018

# Appendix C: Wisconsin RN Survey Faculty At a Glance Summary

# Wisconsin 2018 Faculty Workforce Survey

| Highest degree earned | n | Mean age (SD) | Age range |
|---|---|---|---|
| Diploma | ** | 61.5 (11.5) | 48 – 76 |
| Associate degree | 90 | 43.0 (13.3) | 23 – 71 |
| Bachelor's degree | 146 | 45.3 (12.4) | 23 – 73 |
| Master's degree | 611 | 51.6 (10.7) | 25 – 80 |
| Doctorate, any field | 206 | 54.6 (11.9) | 30 - 81 |

**WCN**
Wisconsin Center for Nursing

Data Source: Labor Market Information, Wisconsin Department of Workforce Development, 2018.

**WISCONSIN DWD**

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# At a Glance Information

| Total survey response (n=90,143)* | Total valid online survey respondents | % of applicable respondents |
|---|---|---|
| Total survey response (n=90,143)* | 79,750 | 100 |

| Works as a nurse in Wisconsin (n=79,750) | 61,427 | 77.0% |
|---|---|---|
| Works in education as a principal work setting | 1,648 | 2.7% |
| Certification as a nurse educator | 174 | 0.2% |

| Nurse faculty | (n=61,427) | |
|---|---|---|
| Primary position is nurse faculty | 1,057 | 1.7% |
| Primary position is nurse faculty and works in education | 900 | 1.5% |

| Nurse with a secondary position | (n=9,414) | |
|---|---|---|
| Nurse with a secondary position as a nurse educator | 818 | 8.7% |

| Principal place of work of nurse faculty | (n=1,057) | |
|---|---|---|
| Education | 900 | 85.1% |
| Ambulatory care | 23 | 2.2% |
| Home health | 6 | 0.6% |
| Hospital | 71 | 6.7% |
| Nursing home/extended care | 31 | 2.9% |
| Public/community health | 8 | 0.8% |
| Other | 18 | 1.7% |

**1,057** respondents reported their position at their principal place of work was nurse faculty. **900** of nurse faculty reported working in education settings (universities, technical colleges, or hospitals/health systems).

| Primary position of nurses working in education | (n=1,648) | |
|---|---|---|
| Staff nurse | 62 | 3.8% |
| Case manager | 20 | 1.2% |
| Nurse manager | 29 | 1.8% |
| Advanced practice nurse | 19 | 1.2% |
| Administrator | 44 | 2.7% |
| Nurse executive | 15 | 0.9% |
| Nursing faculty | 900 | 54.6% |
| Nurse researcher | 20 | 1.2% |
| Other | 539 | 32.7% |

| Education work setting of nurse faculty | (n=900) | |
|---|---|---|
| University | 467 | 51.9% |
| Technical College | 388 | 43.1% |
| Hospital/Health setting | 45 | 5.0% |

Of the 1,057 faculty: **95%** were female, **7.2%** were categorized as racial/ethnically diverse.

The mean age was **50.6** years with a range from 23 to 81 years.

| Gender of nurse faculty working in education | (n=900) | |
|---|---|---|
| Female | 857 | 95.2% |
| Male | 43 | 4.8% |

| Age distribution of nurse faculty working in education | (n=900) | |
|---|---|---|
| 25-34 | 65 | 7.2% |
| 35-44 | 178 | 19.8% |
| 45-54 | 234 | 26.0% |
| 55-64 | 317 | 35.2% |
| 65 and older | 106 | 11.8% |

| Race/Ethnicity | (n=900) | |
|---|---|---|
| White | 849 | 94.3% |
| Black/African American | 29 | 3.2% |
| Hispanic | 16 | 1.8% |
| Asian | 10 | 1.1% |
| Other | 12 | 1.3% |

| Highest degree held | (n=900) | |
|---|---|---|
| Diploma in nursing | ** | ** |
| Associate degree in nursing | 26 | 2.9% |
| Bachelor degree | 98 | 10.9% |
| Master degree | 571 | 63.4% |
| Doctorate | 203 | 22.6% |

**The number of faculty with doctoral degrees increased** from 2016 (171) to 2018 (206), with the increase attributable to faculty with the DNP (57 in 2016 and 85 in 2018) compared to the PhD (81 in 2016 and 80 in 2018).

| Highest degree held in nursing | (n=900) | |
|---|---|---|
| Diploma in nursing | ** | ** |
| Associate degree in nursing | 30 | 3.3% |
| Bachelor degree in nursing | 101 | 11.2% |
| Master degree in nursing | 595 | 66.1% |
| Doctorate of nursing practice | 84 | 9.3% |
| Doctorate of nursing science/ nursing doctorate | 6 | 0.7% |
| PhD in nursing | 78 | 8.7% |

| DHS region of employment | (n=900) | |
|---|---|---|
| Southern | 135 | 15.0% |
| Southeastern | 376 | 41.8% |
| Northeastern | 192 | 21.3% |
| Western | 130 | 14.4% |
| Northern | 67 | 7.4% |

**32.4%** of faculty working in education intend to stay in their current type of employment for less than five years and **57%** reported the intent to stay for less than ten years. (n=900)

| How long do you plan to work in your present type of employment? | (n=900) | |
|---|---|---|
| Less than 2 years | 106 | 11.8% |
| 2-4 years | 185 | 20.6% |
| 5-9 years | 221 | 24.6% |
| 10 or more years | 385 | 42.8% |

*Online responses = 88,932  Paper responses = 1,211
Online responses from RNs who do not live or work in Wisconsin = 8,293
**Less than five responses

# Appendix D: State of Employment of RNs Licensed in Wisconsin in 2018

Appendix D provides an overview of the states in which RNs who are licensed in the State of Wisconsin are practicing. These numbers include all licensed RNs, regardless of their state of residence ($n$ = 72,531).

| State | $n$ | % | State | $n$ | % |
|-------|-----|-----|-------|-----|-----|
| Alabama | 22 | 0.0% | Nebraska | 29 | 0.0% |
| Alaska | 36 | 0.0% | Nevada | 64 | 0.1% |
| Arizona | 97 | 0.1% | New Hampshire | 11 | 0.0% |
| Arkansas | * | * | New Jersey | 31 | 0.0% |
| California | 357 | 0.5% | New Mexico | 10 | 0.0% |
| Colorado | 51 | 0.1% | New York | 313 | 0.4% |
| Connecticut | 20 | 0.0% | North Carolina | 47 | 0.1% |
| Delaware | * | * | North Dakota | 11 | 0.0% |
| District of Columbia | 12 | 0.0% | Ohio | 246 | 0.3% |
| Florida | 331 | 0.5% | Oklahoma | 21 | 0.0% |
| Georgia | 286 | 0.4% | Oregon | 47 | 0.1% |
| Hawaii | 30 | 0.0% | Pennsylvania | 91 | 0.1% |
| Idaho | 11 | 0.0% | Rhode Island | * | * |
| Illinois | 1,834 | 2.5% | South Carolina | 15 | 0.0% |
| Indiana | 140 | 0.2% | South Dakota | 14 | 0.0% |
| Iowa | 245 | 0.3% | Tennessee | 45 | 0.1% |
| Kansas | 49 | 0.1% | Texas | 100 | 0.1% |
| Kentucky | 28 | 0.0% | Utah | 15 | 0.0% |
| Louisiana | 27 | 0.0% | Vermont | 9 | 0.0% |
| Maine | 6 | 0.0% | Washington | 124 | 0.2% |
| Maryland | 31 | 0.0% | West Virginia | 32 | 0.0% |
| Massachusetts | 42 | 0.1% | Wisconsin | 63,797 | 88.0% |
| Michigan | 428 | 0.6% | Wyoming | 11 | 0.0% |
| Minnesota | 3,172 | 4.4% | Military Base | 9 | 0.0% |
| Mississippi | * | * | Puerto Rico | 6 | 0.0% |
| Missouri | 87 | 0.1% | Guam | * | * |
| Montana | 19 | 0.0% | | | |

*Too few to report

## Appendix E: Place of Work and Role by State of Employment in 2018

Appendix E describes whether RNs who hold a license in Wisconsin are working in Wisconsin or another state, by their place of work and their functional role.

| | Works Outside of Wisconsin (n = 2,047) | | Works in Wisconsin (n = 62,867) | |
|---|---|---|---|---|
| **Primary Place of Work** | *n* | *%* | *n* | *%* |
| Nursing | 1,685 | 82.3 | 55,345 | 88.0 |
| Health related services outside of nursing | 63 | 3.1 | 1,407 | 2.2 |
| Retail sales and services | 8 | 0.4 | 42 | 0.1 |
| Nurse educator | 101 | 4.9 | 2,511 | 4.0 |
| Financial, accounting and insurance processing | 14 | 0.7 | 412 | 0.7 |
| Consulting | 63 | 3.1 | 487 | 0.8 |
| Other | 113 | 5.5 | 2,663 | 4.2 |
| **Position or Functional Role** | *n* | *%* | *n* | *%* |
| Staff nurse | 1,131 | 55.3 | 39,319 | 62.5 |
| Case manager/Care coordinator | 188 | 9.2 | 5,629 | 9.0 |
| Staff – Other non-medical industry | * | * | 169 | 0.3 |
| Nurse manager | 136 | 6.6 | 4,299 | 6.8 |
| Manager – Other non-medical industry | * | * | 103 | 0.2 |
| Advanced Practice Nurse | 138 | 6.7 | 4,777 | 7.6 |
| Consultant/Contractor | 67 | 3.3 | 608 | 1.0 |
| Administrator | 32 | 1.6 | 855 | 1.4 |
| Nurse executive | 52 | 2.5 | 674 | 1.1 |
| Nurse faculty | 48 | 2.3 | 1,101 | 1.8 |
| Nurse researcher | 21 | 1.0 | 230 | 0.4 |
| Other | 225 | 11.0 | 5,103 | 8.1 |

*Too few to report

# Appendix F: RNs Working in Telehealth or Call Centers in 2018

Appendix F describes the state where RNs employed in telehealth or call centers work and reside.

| State of Employment | Works Outside of Wisconsin ($n = 1,228$) | | Works in Wisconsin ($n = 618$) | |
|---|---|---|---|---|
| | *n* | *%* | *n* | *%* |
| Resides in Wisconsin | 41 | 3.3 | 600 | 97.1 |
| Does not reside in Wisconsin | 1,187 | 96.7 | 18 | 2.9 |

# Appendix G: Certification Data for the Wisconsin Nursing Workforce in 2018

| Certification | *n* | % |
|---|---|---|
| I am not certified | 60,364 | 75.7 |
| Acute care/Critical Care | 1,723 | 2.2 |
| Addiction/AODA | 44 | 0.1 |
| Adult health | 732 | 0.9 |
| Ambulatory care nursing | 142 | 0.2 |
| Anesthesia (CRNA) | 834 | 1.0 |
| Cardiac rehabilitation nursing | 30 | 0.0 |
| Cardiac-vascular nursing | 382 | 0.5 |
| Case management nursing | 648 | 0.8 |
| College health nursing | 12 | 0.0 |
| Community health | 29 | 0.0 |
| Diabetes management - Advanced | 172 | 0.2 |
| Domestic violence/Abuse response | 19 | 0.0 |
| Emergency nursing (CEN®, CFRN®) | 859 | 1.1 |
| Family health | 1,416 | 1.8 |
| Family planning | 14 | 0.0 |
| Gastroenterology (CGRN) | 111 | 0.0 |
| General nursing practice | 369 | 0.5 |
| Gerontological nursing | 549 | 0.7 |
| High-risk perinatal nursing | 34 | 0.0 |
| Home health nursing | 161 | 0.2 |
| Hospice and palliative nursing (CHPN®, ACHPN®) | 458 | 0.6 |
| Informatics nursing | 65 | 0.1 |
| Infusion nursing (CRNI) | 44 | 0.1 |
| Legal nurse consultant (LNCC®) | 71 | 0.1 |
| Medical-surgical nursing | 708 | 0.9 |
| Medical-surgical nursing (CMSRN®) | 539 | 0.7 |
| Neonatal | 440 | 0.5 |
| Nephrology (CNN, CDN) | 108 | 0.1 |
| Neurology (CNRN) | 108 | 0.1 |
| Nurse educator (CNE) | 174 | 0.2 |
| Nurse executive (CENP) | 103 | 0.1 |
| Nurse executive - Advanced | 93 | 0.1 |
| Nurse manager and leader (CNML) | 72 | 0.1 |

| | | |
|---|---|---|
| Nursing case management | 133 | 0.2 |
| Nursing professional development | 75 | 0.1 |
| OB/GYN/Women's health care | 725 | 0.9 |
| Occupational health (COHN) | 155 | 0.2 |
| Orthopedic nursing (ONC®) | 171 | 0.2 |
| Oncology nursing (OCN®, CPON®, CBCN, AOCNP®, AOCNS®) | 1,108 | 1.4 |
| Parish nurse | 147 | 0.2 |
| Perianesthesia (CPAN®, CAPA®) | 247 | 0.3 |
| Peri-operative (CNOR®) | 657 | 0.8 |
| Pain management | 137 | 0.2 |
| Pediatric nursing | 791 | 1.0 |
| Perinatal nursing | 78 | 0.1 |
| Public/Community health | 145 | 0.2 |
| Public Health Nursing-Advanced (APHN) | 21 | 0.0 |
| Psychiatric & mental health nursing | 249 | 0.3 |
| Psychiatric & mental health nursing-Advanced (APMHN) | 176 | 0.2 |
| Radiology/Invasive procedures lab | 35 | 0.0 |
| Rehabilitation (CRRN®) | 205 | 0.3 |
| Respiratory/Pulmonary care | 209 | 0.3 |
| School nursing | 102 | 0.1 |
| School nursing (NCSN®) | 55 | 0.1 |
| Transplant | 123 | 0.2 |
| Wound/Ostomy nursing (CWOCN, CWCN, COCN, CCCN, CWON) | 875 | 1.1 |
| Other, not listed | 4,285 | 5.4 |

## Appendix H: DHS Regions of the State



| Southern | Southeastern | Northeastern | Western | Northern |
|---|---|---|---|---|
| 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 | Rusk | Wood |
| | | Waushara | St. Croix | |
| | | Winnebago | Trempealeau | |
| | | | Washburn | |

## Appendix I: Wisconsin RNs by County in 2018

| | Number of RNs working in county | Number of RNs per 1,000 population in county | Mean age of RNs working in each county |
|---|---|---|---|
| Adams | 61 | 3.0 | 50.9 |
| Ashland | 239 | 14.9 | 48.9 |
| Barron | 472 | 10.2 | 47.3 |
| Bayfield | 46 | 3.0 | 52.4 |
| Brown | 3,771 | 14.5 | 43.3 |
| Buffalo | 24 | 1.8 | 47.8 |
| Burnett | 90 | 5.8 | 47.3 |
| Calumet | 174 | 3.3 | 44.8 |
| Chippewa | 442 | 6.9 | 46.5 |
| Clark | 139 | 4.0 | 47.3 |
| Columbia | 386 | 6.8 | 44.7 |
| Crawford | 88 | 5.3 | 45.5 |
| Dane | 8,318 | 15.9 | 43.5 |
| Dodge | 651 | 7.2 | 46.3 |
| Door | 227 | 8.0 | 48.3 |
| Douglas | 294 | 6.6 | 49.7 |
| Dunn | 228 | 5.1 | 46.8 |
| Eau Claire | 2,108 | 20.6 | 43.5 |
| Florence | 16 | 3.6 | 53.4 |
| Fond du Lac | 1,021 | 9.8 | 44.9 |
| Forest | 53 | 5.7 | 48.3 |
| Grant | 355 | 6.7 | 45.9 |
| Green | 329 | 8.9 | 46.2 |
| Green Lake | 153 | 8.0 | 46.0 |
| Iowa | 193 | 8.1 | 47.2 |
| Iron | 34 | 5.7 | 43.4 |
| Jackson | 151 | 7.3 | 46.2 |
| Jefferson | 385 | 4.6 | 47.7 |
| Juneau | 172 | 6.4 | 48.5 |
| Kenosha | 1,368 | 8.1 | 45.1 |
| Kewaunee | 53 | 2.6 | 45.5 |
| La Crosse | 2,511 | 21.2 | 44.4 |

| | | | |
|---|---|---|---|
| Lafayette | 49 | 2.9 | 41.9 |
| Langlade | 165 | 8.2 | 47.1 |
| Lincoln | 180 | 6.2 | 48.3 |
| Manitowoc | 646 | 8.0 | 46.9 |
| Marathon | 1,936 | 14.3 | 44.2 |
| Marinette | 404 | 9.8 | 45.7 |
| Marquette | 21 | 1.4 | 50.0 |
| Menominee | 35 | 8.2 | 48.5 |
| Milwaukee | 14,322 | 15.1 | 44.0 |
| Monroe | 460 | 10.0 | 46.2 |
| Oconto | 146 | 3.8 | 47.5 |
| Oneida | 547 | 15.1 | 49.0 |
| Outagamie | 2,146 | 11.7 | 43.7 |
| Ozaukee | 1,052 | 11.9 | 44.3 |
| Pepin | 42 | 5.7 | 50.1 |
| Pierce | 106 | 2.6 | 49.5 |
| Polk | 373 | 8.4 | 46.2 |
| Portage | 475 | 6.7 | 45.1 |
| Price | 119 | 8.5 | 47.5 |
| Racine | 1,557 | 8.0 | 46.6 |
| Richland | 120 | 6.7 | 48.5 |
| Rock | 1,503 | 9.4 | 46.2 |
| Rusk | 93 | 6.3 | 49.4 |
| St. Croix | 633 | 7.2 | 46.1 |
| Sauk | 629 | 10.1 | 46.6 |
| Sawyer | 132 | 7.9 | 50.1 |
| Shawano | 229 | 5.5 | 47.9 |
| Sheboygan | 900 | 7.8 | 45.5 |
| Taylor | 147 | 7.1 | 45.8 |
| Trempealeau | 177 | 6.0 | 43.6 |
| Vernon | 228 | 7.6 | 46.2 |
| Vilas | 111 | 5.1 | 50.0 |
| Walworth | 610 | 5.9 | 47.5 |
| Washburn | 114 | 7.2 | 50.7 |
| Washington | 867 | 6.4 | 45.4 |
| Waukesha | 4,014 | 10.1 | 46.8 |

| | | | |
|---|---|---|---|
| Waupaca | 372 | 7.1 | 47.3 |
| Waushara | 89 | 3.7 | 49.3 |
| Winnebago | 1,920 | 11.4 | 44.1 |
| Wood | 1,459 | 19.6 | 45.2 |
| State of WI | 63,680 | 11.0 | 44.9 |

*Note.* Wisconsin county population information can be found at U.S. Census Bureau. (2017). *Annual estimates of the resident population: April 1, 2017 to July 1, 2017.*
https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF