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Summary of Findings

• As of January 2019, there were 21,393 actively licensed practical nurses in Minnesota, the majority of whom work outside the 7-county Twin Cities region (slide 19).

• Licensed practical nurses (LPNs) are mostly female (94 percent). Compared to RNs, LPNs are older with more than half the practitioners age 45 and older (slide 4) and a median age of 47 years. Most LPNs are planning to practice for at least another ten years (slide 12).

• A large majority of LPNs only speak English in their practice (92 percent) and are white (89 percent), which may impact the populations served (slide 5 and 6). A larger percentage of LPNs under the age of 45 identify themselves as being non-white compared to older LPNs (slide 5).

• The majority of LPNs work in a clinic/professional office/ambulatory care facility (42 percent) (slide 13).

• A majority of LPNs utilize electronic health records (EHRs) “all the time” (75 percent), while dedicated telemedicine equipment was used by less than 30 percent of LPNs (slide 14).

• There are differences in the geographic distribution of LPNs across the state (slide 19) compared to other health care practitioners. Most LPNs are working outside the 7-county Twin Cities metro region (60 percent), while only 40 percent are working in the 7-county Metro Area.
Demographics: Sex and Age

Age of Minnesota LPNs

- Minnesota’s LPN workforce is fairly evenly distributed in terms of age, with roughly equal shares of LPNs in age groups under the age of 65. An estimated nine percent of actively licensed LPNs are age 65 and over, and based on MDH survey data 70 percent of those LPNs are still actively working. The median age of Minnesota LPNs is 47, higher than the median age of RNs which is 45, and one year older than in 2015-2016 indicating that older LPNs are a growing segment of the nursing workforce.

- (Not shown above): Just over 93 percent of LPNs are female, making this one of the most female-dominated health care professions in Minnesota.

Source: Minnesota Board of Nursing, December 2018. Analysis done by MDH. Percentages are based on 21,393 actively licensed LPNs who provided valid birth dates to the licensing board.
The majority (89 percent) of LPNs indicated they were white, and the next largest share—eight percent—indicated that they identified as black, African American, or African. Although a predominately white profession, the LPN workforce is slightly more culturally and racially diverse than rest of the health care workforce.

(Data not shown): Thirty percent of LPNs 44 years and younger were more likely to identify as non-white versus 27 percent of LPNs who were 45 years and older.

Source: MDH Licensed Practical Nurse Workforce Questionnaire, 2017-2018. Respondents could select as many races as applicable. The chart is based on 12,561 valid survey responses.
The majority of LPNs—approximately 92 percent—spoke only English in their practices. The second most commonly spoken language was Spanish. Very small percentages of LPNs spoke other languages such as French, Vietnamese, Hmong or Somali with their patients.

Source: MDH Licensed Practical Nurse Workforce Questionnaire, 2017-2018. Respondents could select as many languages as applicable, but were instructed not to include languages spoken only through an interpreter. The chart is based on 10,346 valid survey responses.
The majority of LPNs initially qualified for their nursing license having earned an associate degree (43 percent).

Just 21 percent reported either having earned a hospital based diploma or certificate, and another 20 percent completed postsecondary non-degrees as preparation for an LPN career.

# Education: Minnesota Graduates by Institution

## All Degrees Awarded from Minnesota Practical Nursing Programs, by Institution and Year

<table>
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<tr>
<th>Region</th>
<th>Institution</th>
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<th>2017</th>
<th>2018</th>
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<td><strong>Total</strong></td>
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<td>1,260</td>
<td>1,180</td>
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Minnesota produced **1,101 new graduates** in 2019 across all the LPN programs, a slight decline from 1,146 in 2018, and a smaller percentage difference from 2015 to 2016 (10 percent).

Source: Data from the Minnesota Board of Nursing’s Annual Compliance Survey.
Graduates of LPN programs in Minnesota are more likely to have completed a non-degree certificate program than a two-year, associate program.

From 2015 through 2017, a declining number of Minnesota LPN graduates were entering the workforce as shown by the diminishing number of awards in both non-degree, certificate and associate degree programs in Minnesota.

The survey asked LPNs to identify all the medical specialties they practiced. As shown above, geriatric/gerontology and adult/family health were the most commonly reported specialties reported by LPNs, with 58 percent identifying one of those areas as a specialty.

Frequently reported “other” specialties include clinical nursing, dermatology, orthopedics, and urology.

Source: MDH LPN Workforce Questionnaire, 2017-2018. Respondents could select as many specialties as applicable; therefore, totals may not sum to 100 percent. Percentages are based on valid responses to the survey question.
The median work week for Minnesota LPNs was 36 hours, with the large majority (70 percent) working between 31 and 40 hours per week.

(Data not shown): An estimated 87 percent of Minnesota LPNs reported that they were “working in a paid or unpaid position related to [their] license.” Of those, just over half said they were seeking an LPN position, and another 30 percent said they were temporarily not working due to family, seasonal, or other reasons.

Source: MDH Licensed Practical Nurse Workforce Questionnaire, 2017-2018. Percentages are based on 11,466 valid responses.
Employment: Future Plans

“How long do you plan to continue practicing as an LPN in Minnesota?”

- Nearly one in five of all actively practicing LPNs indicated that they plan to leave the field within five years.
- (Data not shown): Among the 18 percent of LPNs planning to leave the profession, the majority – just under 70 percent – said they planned to retire. Another 19 percent said they planned to pursue training in order to advance in their career or a related profession. Since many Minnesota schools offer a direct path from LPN to RN degrees, it is likely that the 19 percent intend to advance to become RNs.

Source: MDH Licensed Practical Nurse Workforce Questionnaire, 2017-2018. Percentages are based on 11,519 valid responses.
The most commonly reported work setting among LPNs was an ambulatory care setting such as a clinic, professional office, or health center. A large share (nearly one in three) of LPNs also commonly work in long-term care facilities.

Eight percent of LPNs reported working in “other” settings. The most commonly reported primary work settings reported as “other” included hospice care, group home/residential care, and rehab/treatment centers.

Source: MDH Licensed Practical Nurse Workforce Questionnaire, 2017-2018. The survey includes questions on both the “primary” and “secondary” settings in which providers work. For the purposes of the analysis in this section, we present data only on the setting LPNs reported as their “primary” setting. The chart above is based on 10,744 valid responses.
• The MDH workforce survey includes questions on the use of technology in health care settings. Here, we show responses to questions about how often LPNs use electronic health records (EHRs) and/or equipment dedicated to telemedicine. The results show that three-fourths of LPNs use electronic health records “all the time.”

• Three out four also report that they never diagnose or consult with patients using dedicated telemedicine equipment. This may be a function of their scope of practice, the settings in which they practice, and the populations they serve.

Source: MDH Licensed Practical Nurse Workforce Questionnaire, 2017-2018. Percentages are based on 10,556 valid responses.
Health care providers increasingly work in multidisciplinary teams, prompting educators and health policymakers to ask how best to train providers to communicate and coordinate across professions. MDH included a question on its survey to shed light on these questions. As shown above, nearly 40 percent of LPNs reported that they were best prepared to work in multidisciplinary teams simply through informal learning on the job. Another 32 percent reported that formal on-the-job training provided the best preparation.

Source: MDH Licensed Practical Nurse Workforce Questionnaire, 2017-2018. Percentages are based on 10,556 valid responses.
Stakeholders are increasingly concerned about the extent to which providers deliver care that is culturally sensitive to all communities. The MDH survey includes a question to understand which experiences best prepare health care providers to provide culturally competent care. As shown above, 38 percent of LPNs reported they learned cultural competence best through informal, on-the-job learning.

“Which of the following work or educational experiences best prepared you to provide culturally competent care?”

- Informal learning on the job: 38%
- Formal on-the-job training: 31%
- Formal educational coursework or training: 11%
- Continuing education/professional development: 10%
- Does not apply to my job: 4%
- None: 4%

Source: MDH Licensed Practical Nurse Workforce Questionnaire, 2017-2018. Percentages are based on 12,586 valid responses.
The 2017-2018 survey included questions on career satisfaction in the past 12 months and overall. As shown above, the majority of LPNs indicated that they were either “satisfied” or “very satisfied,” both in the past 12 months and overall. LPNs were more likely to report being very satisfied with their career overall compared to the last 12 months—a trend typical among health care professionals for which work satisfaction data is available. This is consistent with national findings which suggest that the increase in administrative work—such as dealing with billing, insurance, and electronic medical records—has dampened work satisfaction among health care providers.

Source: MDH Licensed Practical Nurse Workforce Questionnaire, 2017-2018. Percentages are based on 10,762 valid responses.
A much smaller share of the LPN workforce is concentrated in the 7-County Metro area relative to the population residing in this region of the state. This pattern is uncommon from what is observed among other types of health care providers where their geographic distribution is primarily concentrated in the 7-county metro region.

The supply of LPNs in other regions of the state is more than adequate relative to the residential population living in these areas. The larger geographic concentration of LPNs in other regions of the state could indicate that there are more job opportunities for LPNs outside the 7-county metro area.

Source: Board of Nursing data from December 2019. MDH cleans and geocodes all addresses to identify location of practice. Analysis is based on 11,908 valid addresses. 13,203 addresses or outside Minnesota addresses are assumed to be randomly distributed around the state and should not affect regional percentages. 2017 population data is from the Minnesota State Demographic Center: [https://mn.gov/admin/demography/](https://mn.gov/admin/demography/)
Methodology

The data in this report comes from two sources:

• The **Minnesota Board of Nursing (MBN)** provides data on the *entire population* of LPNs who have active licenses in the state of Minnesota. The MBN maintains this database primarily for administrative and legal purposes. MBN provides the data to the Minnesota Department of Health, Office of Rural Health and Primary Care (MDH-ORHPC). This report uses data current as of January, 2019. At that time, there were a total of **21,393** LPNs with *active* Minnesota licenses, approximately 58 percent of whom indicated that their primary business address was in Minnesota. (Note that the analyses exclude LPNs whose licenses were inactive/restricted or active/conditional.) Analysts at the Minnesota Department of Health-Office of Rural Health and Primary Care clean organize, clean, and geocode addresses that come from the board, which is how we can identify practice locations (*shown in Slide 19*).

• The **2017-2018 Minnesota Department of Health-Office of Rural Health and Primary Care (MDH-ORHPC) LPN survey** collects additional demographic and workforce data from LPNs. MDH-ORHPC administered the survey to all LPNs who renewed their Minnesota license in the calendar years of 2017-2018. The response rate for this survey cycle was approximately 72 percent.

• See the ORHPC website for more details about the **methodology** of the survey (www.health.state.mn.us/data/workforce/method.html).
Visit our website at
https://www.health.state.mn.us/data/workforce/index.html

to learn more about the Minnesota health care workforce.

County-level data for this profession is available at
https://www.health.state.mn.us/data/workforce/database/index.html

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