Health workforce survey data Licensed practical nurse (LPN) report

October 15, 2025



Table of contents

Table of contents	2
Executive summary	4
Key findings	4
Introduction	5
Background	5
Utah LPN workforce in context	6
Methods	7
DOPL survey	7
DOPL data preparation and analysis	8
Other data sources	8
Results	10
Licensed and active workforce	10
Full-time equivalence (FTE) and direct patient care	12
Specialty	13
Practice characteristics	15
Setting	15
Long-term care	17
Urban versus rural comparisons	20
Telehealth services	23
Demographics	24
Age	24
Sex and gender	25
Race and ethnicity	26
Education	28
Qualifying education	28
Highest education	29



Education debt	30
Employment characteristics	31
Precepting	31
Role and employment type	33
Income	34
Patient characteristics	38
Future employment	38
Two-year employment intentions	39
Programs	43
Graduates	44
Workforce indicators	46
Help wanted online job postings	46
Unemployment insurance data workforce activity	50
Discussion	52
Limitations	53
Appendix A - DOPL supply survey	54
Objectives	54
Target population	54
Response rates	55
References	58
Contact information	60



Executive summary

The 2024 survey yielded approximately 75% more responses than the 2022 survey.

Vulnerable populations are the least likely to be treated by respondents. Most respondents plan to continue working the same hours as they currently work. Long-term care is the most common setting for LPNs but such workplaces pay considerably less than others. Female LPNs also earn considerably less than their male counterparts.

Several indicators suggest a tightening of the LPN workforce, including a decrease in the number of employers, a reduction in the number of LPNs earning wages, and a decline in the number of LPN graduates.

Key findings

- The LPN survey responses show that incarcerated individuals, newborns, children ages 2–10, and individuals experiencing homelessness are the least likely to be served by respondents.
- Over the next two years, 64% of respondents plan to continue working the same hours as they currently work, while 18% plan to increase the number of hours they work.
- LTC (long-term care) is the most common setting for LPNs, but those working in LTC during 2023 earned about 19% less than LPNs working in other settings
- During 2023, the average female LPN wage was 78% of the average male LPN wage.
- The number of LPN employers in 2023 dropped from the previous two years.
- While over 1,400 positions were added during 2021-2022, only 12 were added during 2023.
- The number of LPN graduates in 2022 dropped approximately 9% from 2021.
- Although not all individuals with an LPN type license actively use or are in a position that requires the license, the number of individuals with an LPN type license with wages in unemployment insurance data has increased approximately 62% from 2020.



Introduction

The Utah Health Workforce Information Center (HWIC, https://hwic.utah.gov/), established in 2022 through HB176 (https://le.utah.gov/~2022/bills/static/HB0176.html), is a key entity in efforts to collect and analyze healthcare workforce data in Utah. This legislation also created the Governor's Health Workforce Advisory Council (HWAC), which provides strategic guidance and oversight on policies and initiatives aimed at strengthening the state's healthcare workforce across all sectors.

The Department of Professional Licensing (DOPL), responsible for the licensure of healthcare professionals in Utah, is now required to integrate workforce survey questions into the licensing process. These surveys, previously developed and administered by the UMEC, help inform decisions regarding workforce trends and needs. By incorporating these surveys and capturing this data, the HWAC will now have data to inform health workforce initiatives and recommendations for Utah.

The HWAC provides information and recommendations to support the growth and strengthening of Utah's health workforce. Chaired by Tracy Gruber, Executive Director of the Department of Health and Human Services, the Council includes fourteen additional members representing both state and private organizations.

Background

A licensed practical nurse (LPN) is a nurse responsible for performing essential medical tasks such as checking vital signs, patient status, maintaining medical records, and often is the primary contact for patients (American Nursing Association, 2023; Cleveland Clinic, 2022). LPNs commonly work under the direction of registered nurses (RN) and doctors in a variety of environments, including nursing homes, extended care facilities, hospitals, physician offices, and in-home health care settings (Cleveland Clinic, 2022). Duties may include reporting patient status, record keeping, patient monitoring, and providing basic medical and comfort care (Cleveland Clinic, 2022). While the general tasks or duties may seem similar to those of RNs, RNs typically supervise or oversee LPNs, and LPNs do not have the same full scope of practice, training, or education as RNs (Cleveland Clinic, 2022). RNs typically have an associate or bachelor's degree, whereas LPN programs typically require a high school diploma or GED (American Nursing Association, 2023).



Utah LPN workforce in context

Table 1 compares key characteristics of Utah's LPN workforce to national averages. It highlights differences in wages, employment density, education levels, age, and gender distribution. Understanding these comparisons helps identify areas in which Utah's LPN workforce aligns with or differs from broader trends.

Table 1. Comparison of Utah LPN Workforce to National Averages

Measure	National average	Utah average	
Average LPN wage	\$62,340	\$48,792	
LPNs per 1,000 jobs	2	2	
Associate's degree holders	33%	24%	
Bachelor's degree holder	31%	2%	
Master's degree holders	15%	<1%	
Average LPN age	46	50	
Gender distribution (female)	88%	86%	

Bureau of Labor Statistics, 2024; Zippia, 2025; Data USA, 2023; Department of Workforce Services, 2025

Comparing the average Utah LPN wage to the national average results in a difference of about \$13,548 per year, meaning Utah LPNs on average earn about 22% less.

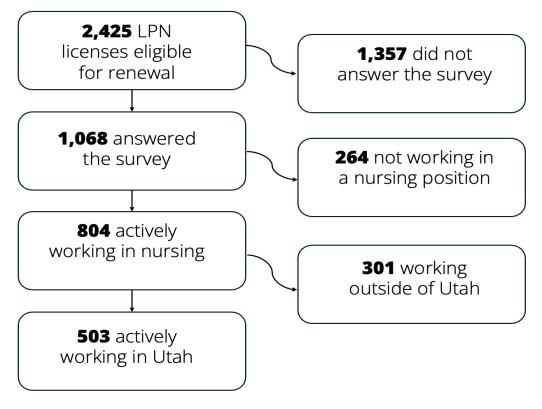
While education, age, and gender are derived from survey results which are not generalizable to the entire Utah LPN population, LPN workforce survey respondents are slightly older and do not have the same educational background as the national average.



Methods

DOPL survey

Figure 1. DOPL survey population and respondents



DOPL, Utah, 2024

All practitioners who were eligible for online renewal were offered the survey during their license renewal process, and participation in the survey was voluntary. These types of sampling designs are often referred to as convenience samples or non-probability samples. Providers who chose to respond to the survey may not be representative of the entire workforce. Therefore, the statistical analysis included in this report only represents individuals who participated in the survey and does not attempt to make inferences about the entire population. Comprehensive unit and item non-response rates are also provided to guide interpretation of the results (see Appendix A). Additional limitations that provide important context for subsequent report information will be included on an as-needed basis.



DOPL data preparation and analysis

Once the renewal period closes, DOPL sends a secure CSV file with all the responses to HWIC. Quality checks are performed including how to evaluate duplicate respondent records, questions with multiple responses, and null-type values. Only participants from respondents who replied to a question and provided a valid license number are included in the analysis. It was observed that invalid license numbers can introduce bias, as the missing data might represent a distinct group that could potentially skew results.

LPNs whose license had expired in the previous two years were eligible for online renewal and were invited to participate in the survey. DOPL reported there were 2,425 LPNs eligible for renewal, and 1,068 of them provided a valid DOPL license number and responded to at least one survey question.

Other data sources

While the focus of this analysis is on the LPN DOPL survey, supplemental data is also used to help contextualize the survey results and provide deeper insights into the LPN workforce in Utah. Other data sources that are included in this report include: Unemployment Insurance (UI), National Plan and Provider Enumeration System (NPPES), and education data.

UI data includes those with reported wages and shows that there were 3,150 providers in 2023. UI analysis is based on data captured through the Utah Department of Workforce Services' Unemployment Insurance program. Employers pay unemployment taxes based on the wages earned by their employees. A data sharing agreement is in place that allows the HWIC to request data for individuals found in healthcare workforce professional licenses.

UI data includes those with reported wages and shows that there were 3,150 LPN providers in 2023. This is a better estimate than the 4,083 active LPN licenses or the 2,425 LPNs DOPL identified as eligible for renewal. The 4,083 active DOPL licenses overestimates the active Utah LPN population because it includes those who are not actively providing services in Utah while the 2,425 eligible LPN renewal count likely underestimates. The estimated 3,150 LPNs from matching active licenses from DOPL to UI data, while more far more accurate probably overestimates by likely including those who have an active license but is employed in a position other than an active LPN.

UI data has other limitations. Notably, the data contains an industry code and employer name but does not specify geographic area, job title, or scope of work performed by the individual. The data indicates a provider was employed in a healthcare-related industry based on the North American Industry Classification System (NAICS) code, which all start



with 62. In addition, self-employed healthcare workers, like those in private practice, do not report their wages since they do not pay into the Utah unemployment insurance program.

The NPPES serves as the national system designed to assign unique identifiers to healthcare providers and health plans who apply for the National Provider Identifier (NPI). NPIs are being used across the health care industry and government health care programs.

Graduation counts and the number of programs come from the Integrated Postsecondary Education Data System (IPEDS) Graduates data, Urban Institute Education Data Portal (UIEDP) API directory:

https://educationdata.urban.org/documentation/colleges.html#ipeds-awards-by6-digit-cipcode.

Additional API information is available at: https://urbaninstitute.github.io/education-datapackage-r/

DWS Help Wanted Online Job Postings data is obtained from a data request. DWS provides monthly counts of jobs from Standard Occupational Classification (SOC) codes associated with LPNs.

Note that all 2020 data should be interpreted with caution, as the COVID-19 pandemic caused significant disruptions in healthcare staffing, hiring patterns, and workforce demand that may not reflect typical trends.



Results

Licensed and active workforce

LPN providers who renewed their license during 2023 and those whose license expired in the previous two years were eligible for online renewal and were supposed to be invited to participate in the survey. Based on the population files supplied by DOPL, approximately 44% responded to at least one survey question and provided a valid license number that matched LPN licenses from DOPL's database.

However, there seems to be a fairly large discrepancy in DOPL's reported LPN population and the estimated number of LPNs who were active during 2023. DOPL supplied population files with 2,425 distinct LPN-related licenses; however, there seems to have been approximately 4,083 active licenses, suggesting the survey population may have missed 1,658 licenses or about 68% of the reported population.

The 2024 DOPL survey results look to be an improvement compared to past surveys in terms of the number of responses. This survey showed the most responses of the two LPN surveys reported on by HWIC.

Figure 2. LPN survey respondents Increase in the number of respondents

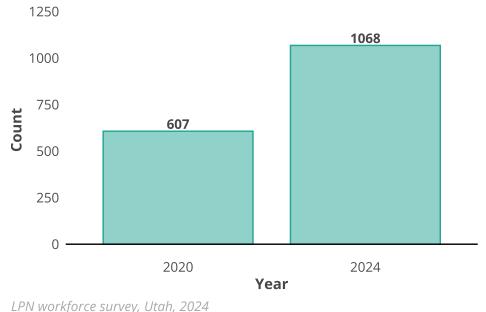
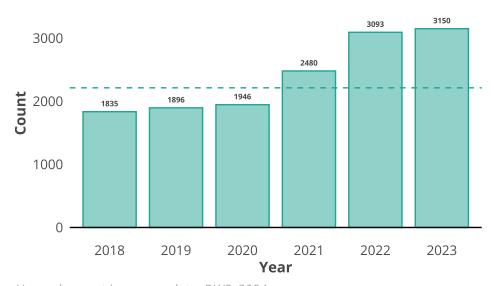




Figure 2 shows the count of respondents for the LPN workforce surveys. The 2024 survey results look to be a dramatic improvement over the previous survey. The 2024 survey increased the number of responses by 75% from the 2022 survey. However, item response rates seem much lower than expected, compared to other profession surveys such as the APRN, PA, and physician surveys. Item response rates based on the number of respondents are generally over 60% although some items had a response rate under 32%. All item response rates are detailed in the response rates portion of the methodology section.

Figure 3. LPNs with wages
Increase in employed LPNs over time



Unemployment insurance data, DWS, 2024

Figure 3 shows the count of LPNs in UI data, which includes those with reported wages. UI data shows that there were 3,575 distinct providers between 2018 and 2023. The number of LPNs has increased every year since 2018, with a count of 3,150 in 2023.



Figure 4. Employment status

Most are active in a postion that requires licensure

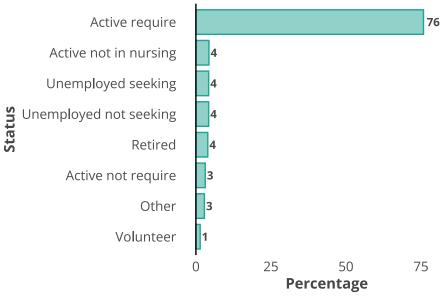


Figure 4 shows the proportion of respondents' reported employment status. Response options were modified for the presentation of the chart. What is displayed as Active require appeared on the survey as actively working in a position that requires this license. Active not require appeared on the survey as actively working in a position in the field of nursing that does not require this license. Unemployed seeking appeared on the survey as unemployed and seeking work that requires this license. Volunteer appeared on the survey as volunteer work only. Unemployed not seeking appeared on the survey as unemployed and not seeking work that requires this license. Active not in medicine appeared on the survey as actively working in a position in a field other than medicine.

About 77% of those who responded to the question report actively working in a position that requires their license. While approximately 88% of respondents indicated they were working, about 12% of respondents indicated they were not.

Full-time equivalence (FTE) and direct patient care

Full-time equivalence is calculated based on the respondent working 37+ hours a week. This was indicated on the survey as one of two options: 37-40 hours a week or 41+ hours a week. Direct patient care (DPC) is captured in the same way and means that providers are directly treating or seeing patients. The major difference between working full-time compared to working in direct patient care is that the direct patient care excludes administrative or more traditional office work and is exclusively time spent treating



patients. This data illustrates how many LPNs are working full-time versus how many are working full-time in DTC.

Figure 5. FTE statusMost work full time equivalence



LPN workforce survey, Utah, 2024

Figure 5 shows the percentage of respondents' FTE status. Approximately 58% of respondents indicate they are working 37 hours or more per week at their primary practice, while about 37% provide direct patient care. Only 7% of respondents specified working at a secondary location.

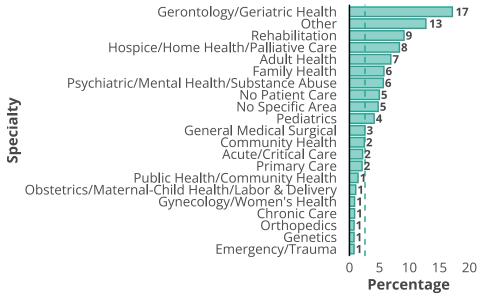
Specialty

Specialties of providers are analyzed below. While there are many different types of specialties, for this report due to space limitations, only the most common specialties are included in the charts below.



Figure 6. Top specialties

Most common specialty is gerontology/geriatric health



LPN workforce survey, Utah, 2024

Figure 6 shows respondents' most common primary specialty. The most common specialty indicated by respondents was Gerontology/Geriatric Health, which comprised about 17% of respondents. The second most selected specialty was Other, with close to 13% and the third was Rehabilitation with 9%.



Figure 7. Top FTE specialties



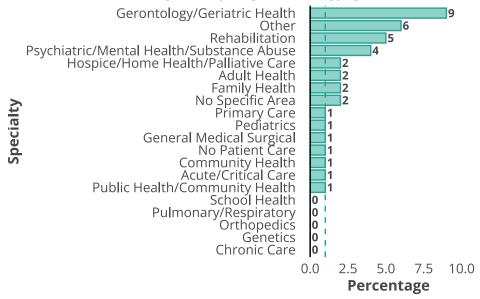


Figure 7 looks at FTE by primary specialty. Gerontology/geriatric health, rehabilitation, and other had the greatest proportion of respondents, followed by psychiatric/mental health/substance abuse, hospice/home health/palliative care, family health, and adult health.

Primary care, acute/critical care, school health, pulmonary/respiratory, orthopedics, occupational health, infectious/communicable disease, genetics, emergency/trauma, and chronic care all had respondents, but the proportion of respondents rounds to 0% which is illustrated in the chart.

Practice characteristics

This section includes practitioner survey response information on practices where they provide services, such as the setting type

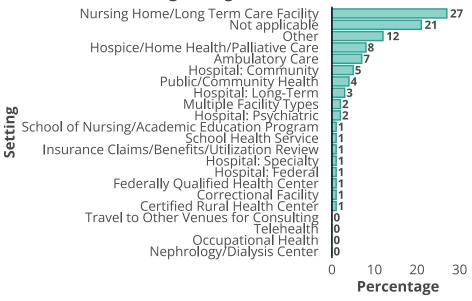
Setting

This section includes practitioner survey response information on practices where they provide services, such as setting type and geographic distribution. While there are many different types of settings, for this report due to space limitations, only the most common specialties are included in the charts.



Figure 8. Top primary practice settings

Most common setting is long-term care



LPN workforce survey, Utah, 2024

Figure 9. Top secondary practice settings Most do not have a secondary setting

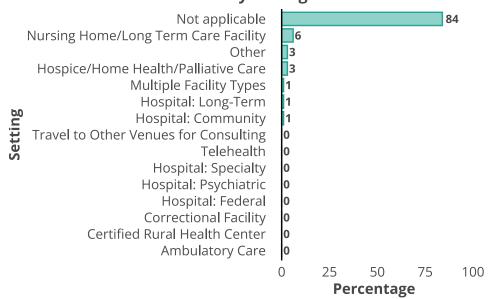




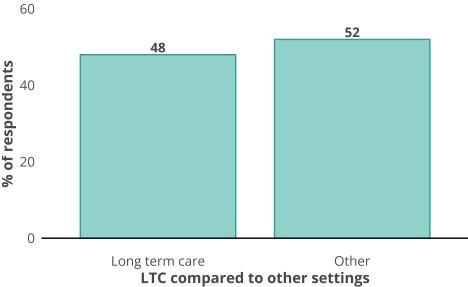
Figure 8 displays the percentage of respondents' primary setting while Figure 9 shows their secondary setting. While approximately 42% of participants responded to the question regarding their primary practice setting, only about 23% responded to the question regarding their secondary practice setting. Of those who responded to the secondary setting question, only 11% specified having a workplace setting.

Long-term care

Long-term care (LTC) should be an area of concern considering demographic aging. This section reviews issues around long-term care such as the proportion of respondents employed and typical wages in long-term care type settings.

Below is the proportion of respondents indicating they practice in Utah.





LPN workforfce survey, Utah, 2024

Figure 10 shows the proportion of respondents working in LTC settings compared to non-LTC settings. LTC settings include one of the following: nursing home, long-term care facilities, hospice, home health, palliative care, and hospital long-term care. As shown in Figure 10, LTC has almost as many respondents as all other LPN work settings. Long-term care settings had 48% of respondents, almost triple the number of respondents as the second most common workplace.



While long-term care is an essential component of the healthcare ecosystem, the compensation in terms of wages compared to the general LPN workforce seems more volatile.

Table 2. Comparing long-term care to non-long-term care

Year	Non-LTC LPN employers	Non- LTC LPNs	Non-LTC LPN average wage	LTC LPN employers	LTC LPNs	LTC LPN average wage
2018	888	2,830	\$33,702	104	1,220	\$29,657
2019	894	2,508	\$32,033	98	1,157	\$30,940
2020	949	2,913	\$35,824	98	1,230	\$31,997
2021	936	2,601	\$35,488	95	1,141	\$31,517
2022	1,003	3,109	\$41,938	95	1,140	\$34,553
2023	917	2,766	\$41,805	104	1,108	\$37,035
2024	962	3,313	\$45,243	95	1,279	\$36,647

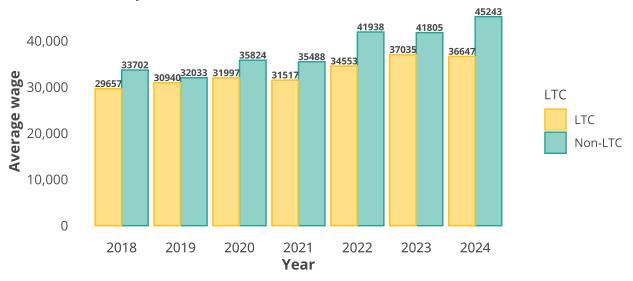
Unemployment insurance data, DWS, 2024

Table 2 compares LTC to non-LTC in terms of the number of employers, number of LPNs, and average wages by year. While the number of LTC employers of LPNs and the number of LPNs in LTC have remained fairly consistent, the number of non-LTC employers and non-LTC LPNs has increased. While LPN average wages for LTC and non-LTC have increased, the average wage for non-LTC has increased at a larger rate.



Figure 11. Average LPN wage for LTC compared to non-LTC

LTC drop while non-LTC rise

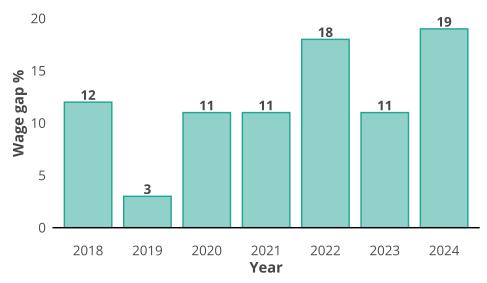


Unemployment insurance data, DWS, 2024

Figure 11 displays the average LPN wage by year for those employed in LTC compared to those who are employed in other settings.



Figure 12. % between LTC and non-LTC wages
Gap between LTC and non-LTC has increased



Unemployment insurance data, 2024

Figure 12 illustrates the percentage gap between the average LTC wage compared to the average non-LTC wage for LPNs by year. Note that the gap narrowed substantially in 2019 but has grown considerably in 2024.

Urban versus rural comparisons

Rural care is always a focus to ensure residents in non-urban counties are receiving adequate care as well. Two measures are used below to compare respondents practicing in urban counties versus those practicing in rural counties, the first being FTE and the second being two-year employment plans.



Figure 13. LPN respondents by FTE, Urban vs. Rural

Urban counties have about 8% more FTE LPN respondents

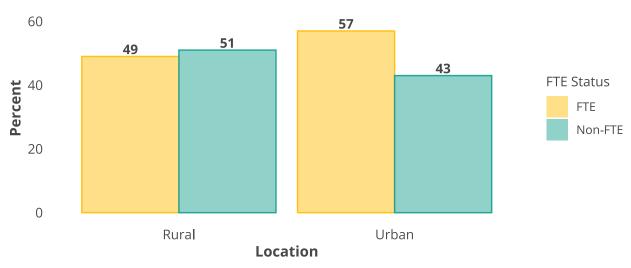
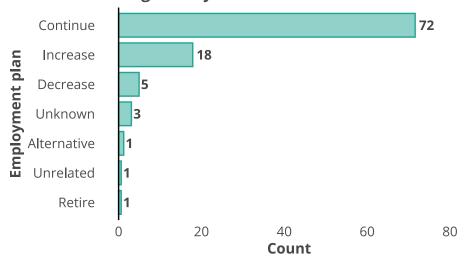


Figure 13 compares urban and rural FTE LPNs. Urban areas have approximately 8% more FTE LPNs than rural areas.



Figure 14. LPN respondents by employment plan, rural counties

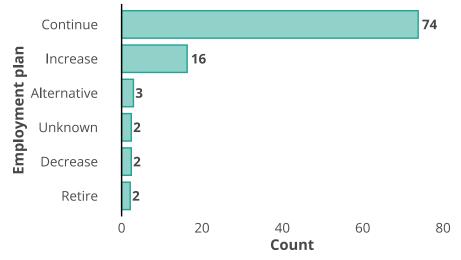
The majority of LPN respondents in rural counties plan to continue working as they are



LPN workforce survey, Utah, 2024

Figure 15. LPN respondents by employment plan, urban counties

The majority of LPN respondents in urban counties plan to continue working as they are





Two-year employment plans appear to be similar as well, with 72% of rural practicing respondents indicating plans to continue as they are versus 74% of urban practicing respondents indicating the same.

Telehealth services

The prevalence of telehealth used by LPN providers is depicted below, along with a breakdown of hours used.

Figure 16. Telehealth Hours

Most do not provide telehealth services

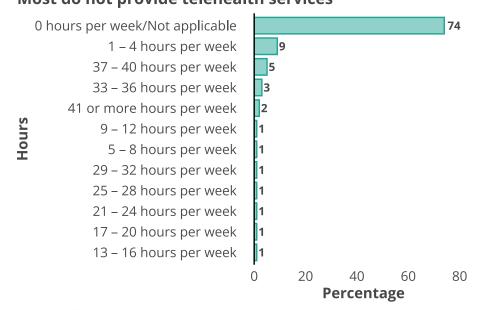




Figure 17. % providers providing telehealth services

Most do not provide telehealth services

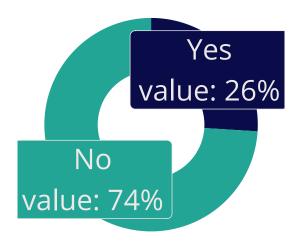


Figure 16 shows respondents' use of telehealth. The ratio of hours worked by LPN survey respondents to hours spent providing telehealth services was **25:5**. This means that LPN respondents work an average of around 32 hours a week and provide an average of 6 hours of telehealth a week. Note that these are averages due to the responses being in range format (such as 21-24 hours worked a week).

Demographics

The following section includes practitioner survey response information on demographic information such as age, race/ethnicity, and sex/gender.

Age

The age of the provider workforce is important to consider in anticipating supply levels.



Figure 18. Age of respondents
Most between 45 and 64

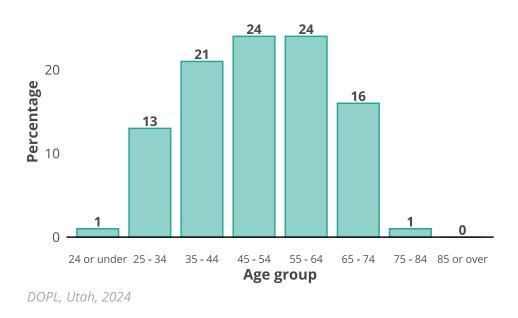


Figure 18 shows the proportion of respondents within various age groups. Age data comes from a DOPL database and not from the survey. Age is calculated by subtracting the day of the birth date from the date the survey was made available.

Approximately 48% of LPN respondents are between 45 and 64 years old. Approximately 9% of LPN respondents also report planning on pursuing alternative work, decreasing current work hours, or retiring which could create gaps in staffing if not enough new LPNs enter the workforce. The LPN workforce is experienced but aging which may point to a need for proactive planning to sustain LPN capacity.

Sex and gender

Sex is an important characteristic to consider due to patient-provider relations, as it can impact patient experiences. Sex and gender interact in a variety of ways that can affect patient health outcomes (WHO, 2021).



Figure 19. Sex of respondents

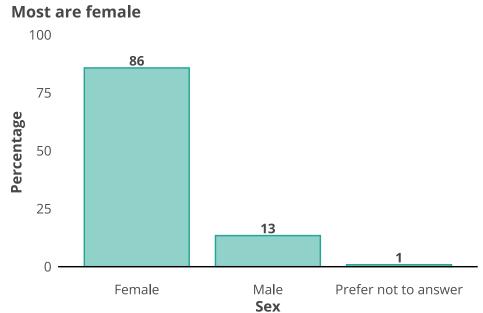


Figure 19 shows the percentage of respondents' sex. The Utah LPN workforce is predominantly female with approximately 86% of respondents identifying as female and only 13% identifying as male, highlighting a lack of diversity.

Race and ethnicity

Similar to issues of sex and gender, race and ethnicity are important to consider when analyzing provider workforce demographics (Togioka, et al., 2024).



Figure 20. Race of respondents Most are white

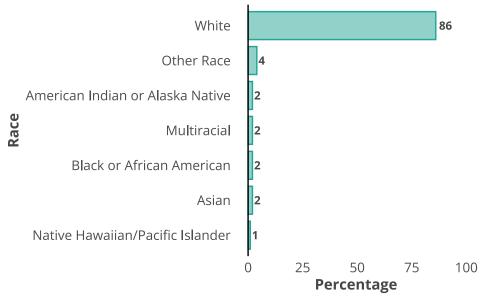


Figure 21. Ethnicity of repondents
Most are not Hispanic

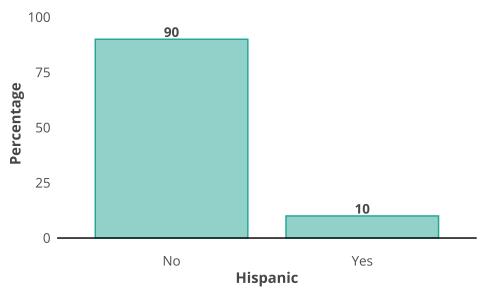




Figure 20 shows the ethnicity of respondents. Multiracial did not appear as a response option, but was created for this report by counting respondents who selected multiple racial options.

About 86% of LPN survey respondents identified as white compared with roughly 75% of Utah's overall population in 2025. Additionally, approximately 10% of respondents identified as Hispanic, while Hispanic residents make up about 17% of the state's population in 2025. Increasing diversity in the workforce could broaden perspectives and improve patient care.

Education

This section includes practitioner survey response information on education, including qualifying education and highest education.

Qualifying education

Aspects of providers' qualifying education, such as degree and degree location are reviewed below.

Figure 22. Qualifying degree

Most common are technical/volcational certification

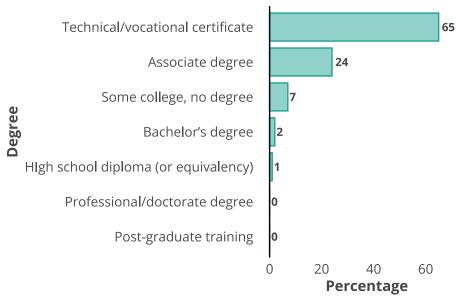
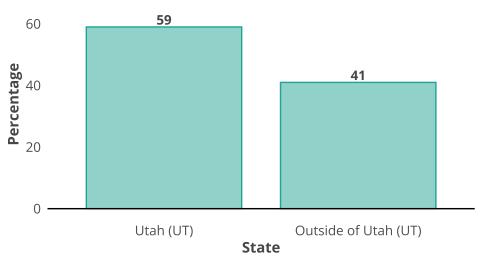




Figure 23. Qualifying degree inside/outside of Utah

Most earned their degree in Utah



LPN workforce survey, Utah, 2024

Figure 22 illustrates the percentage of respondents with various types of qualifying education. Figure 23 shows the proportion of respondents who earned their qualifying degree in Utah compared to outside of Utah.

Highest education

Providers' highest education is reviewed below.



Figure 24. Highest degree

Most common are technical/volcational certification

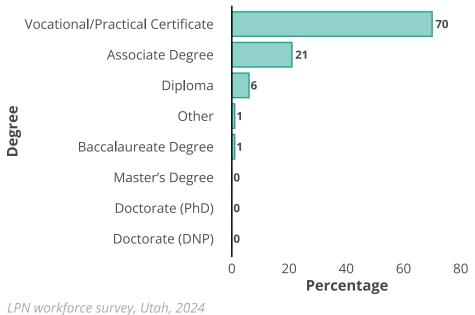


Figure 24 shows the proportion of respondents' highest education.

Education debt

This section includes practitioner survey response information on educational debt.

Responding providers' educational debt is depicted below. It is important to note that responses were regarding total educational debt at the time of graduation as opposed to their current educational debt.



Figure 25. Educational debt
Most do not have educational debt

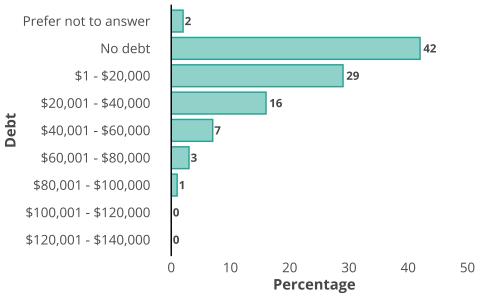


Figure 25 shows respondents' educational debt. Most LPNs being debt-free gives them greater flexibility in career choices, including pursuing advanced roles or working in underserved areas, and may support higher retention and continued professional growth. In short, a largely debt-free workforce can be more stable, adaptable, and capable of pursuing professional growth.

Employment characteristics

This section includes practitioner survey response information on their employment, such as specialty, role, telehealth hours, precepting status, and patient types.

Precepting

The proportion of responding providers who precept is depicted below.



Figure 26. Precepting
Approximately 28% of respondents precept

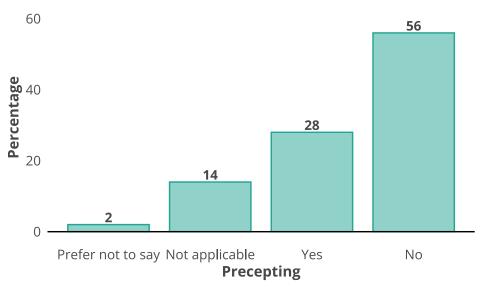


Figure 27. Precepting
Most respondents do not precept

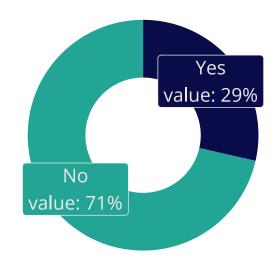




Figure 26 shows the proportion of respondents who precept. Precepting refers to LPNs who provide mentoring, teaching, or guiding a student or new staff member.

Figure 27 shows the percentage of responding LPN providers who precept excluding those who responded with prefer not to say, and grouping those who selected not applicable with those who selected no. Approximately 71% do not precept, whereas 28% do. Precepting is essential for building and sustaining the nursing workforce, but it also requires resources and support to avoid overburdening experienced staff.

Role and employment type

Responding providers' role and employment type are depicted below.

Figure 28. Primary role types
Most work as direct staff

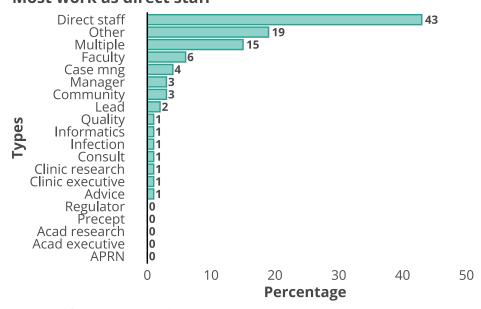
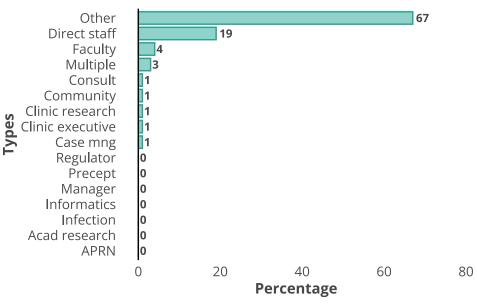




Figure 29. Secondary role types

Most work as other



LPN workforce survey, Utah, 2024

Figure 28 shows respondents' primary role type whereas Figure 29 depicts respondents' secondary role type. Multiple did not appear as a response option on the survey but was constructed for this report by counting respondents who selected multiple response options. Approximately 28% of respondents report having a secondary role.

Income

Income data including employment and wages, comes from matching LPN providers from DOPL data to unemployment insurance (UI) data from DWS.

Table 3. Average wage and employer count

Year	LPN count	Employer count	Total wages	Average wage
2018	1,835	1,045	\$ 61,274,973	\$ 33,392
2019	1,896	992	\$ 65,594,559	\$ 34,596
2020	1,946	908	\$ 68,892,397	\$ 35,402
2021	2,480	1,007	\$ 79,932,333	\$ 32,231
2022	3,093	1,047	\$ 111,717,638	\$ 36,120



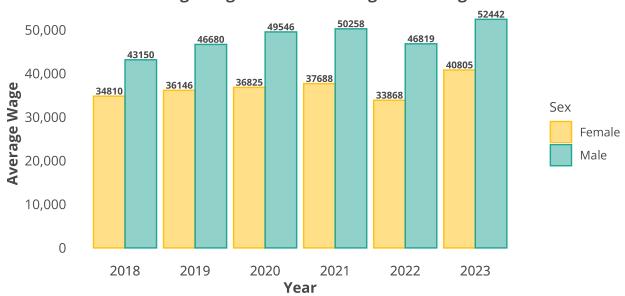
Year	LPN count	Employer count	Total wages	Average wage
2023	3,150	977	\$ 153,693,975	\$ 48,792

Unemployment insurance data, DWS, 2024

Table 3 shows LPN employer counts and LPN average wages by year. The LPN count is of distinct LPN providers while the employer count is the count of distinct employers of LPNs. Total wages are the sum of LPN provider wages, while the average wage is the mean LPN provider wage. The average LPN wage from UI data increased approximately 46% from 2018 to 2023.

There is a long history of a national sex/gender pay gap (Majumder et al., 2025; Fry et al., 2025; Coillberg, 2025; Criado-Perez, 2019), and that gap is wider in Utah (Kervin, 2022; Alberty, 2023; Majumder et al., 2025). While the causes for lower female pay can be multifaceted, females commonly "provide essential care to family members, including children and adults who need help" and consequently "often face significant financial consequences when they reduce their employment to provide unpaid family care" (Johnson et al., 2023, para. 1 & 5). It is estimated that the costs related to females "providing unpaid care averages \$295,000 over a lifetime, based on the 2021 U.S. dollar value, adjusted for inflation" (Johnson et al., 2023, para. 6).

Figure 30. Average wage by sex
Female average wage is 78% of average male wage



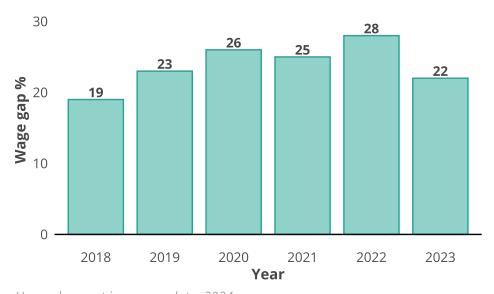
Unemployment insurance data, DWS, 2024



Possible family care in tandem with injuries may explain a fraction of the wage penalties females encounter in the workplace but there are many others. While DWS reports that in 2022, female healthcare workers generally made 51% of male wages (Department of Workforce Services, 2022), the gap is narrower for LPNs. From unemployment insurance data, the sex wage gap for LPNs has risen and fallen from 2018 through 2023. The LPN sex wage gap appears to be the smallest in 2018, then grew through 2022 but appeared to drop in 2023. The female-to-male wage gap in 2018 was 81%, meaning the average female wage was 81% of the average male wage. In 2023, the gap had grown 3% to where the average female wage was 78% of the average male wage, \$40,805 for females compared to \$52,442 for males, a difference of about \$11,637.

Figure 31. % between female and male wages

Gap between female and male wages has declined from 2022



Unemployment insurance data, 2024

From 2018 through 2023, both female and male average LPN wages have ebbed and flowed, but have both increased from 2018 estimates. Although average LPN wages in 2023 are higher than they were in 2018, the gap between female and male average LPN wages is higher than it was in 2018. The average female wage increased approximately 17% whereas the average male wage increased approximately 22%. While higher wages are welcomed, the different rates of growth in addition to a preexisting 19% difference in 2018, help explain how the female and male wage gap continues and, in some cases, has expanded for LPNs.

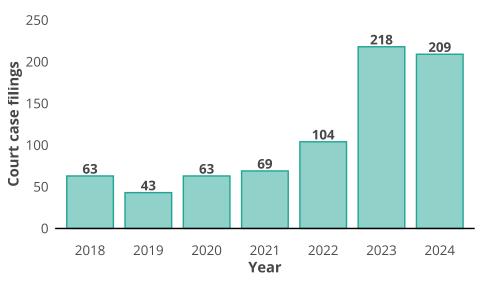
In addition to the issues of lower wages compared to their male counterparts and unpaid labor, female healthcare workers face a considerably more dangerous work environment.



Female nurses are "subjected to more acts of violence than police officers or prison guards" and "required time off work due to violence four times more often than other types of injury" (Criado-Perez, 2019, para. 33). While the higher rates of violence are alarming, perhaps even more concerning is that such instances are routinely and dramatically underreported as only 12% of workers report violence because of how common and frequently it occurs (Criado-Perez, 2019, para. 38). While there are many different reasons for violence against females, research suggests "wait times as a trigger for violent behavior directed towards staff" (Criado-Perez, 2019, para. 40).

Figure 32. Violence against healthcare workers

Cases filed has increased



Utah state courts, 2025

Utah court case filings involving a charge of violence against a healthcare worker have dramatically increased. From 2018 to 2021 there were only between 43 and 69 cases filed per year. In 2022 the count of case filings jumped to 104, and in 2023 it more than doubled with 218. While the rise might not be completely due to more instances of violence but more willingness to file, the workplace for many healthcare staff is dangerous. Using unemployment insurance data to estimate the healthcare worker count for Utah in 2023 (88,383) and Utah court case filings involving charges of violence against healthcare staff, the rate of violence per 100,000 was 247 for healthcare workers in Utah. The Commission on Criminal and Juvenile Justice (CCJJ) estimates the rate of violence per 100,000 Utah residents for 2023 was 232 (CCJJ, 2024). This means healthcare workers are about 6.5% more likely to be subjected to violence. Future research and analysis should look at the proportion of violence directed at female and male healthcare workers. It is also important



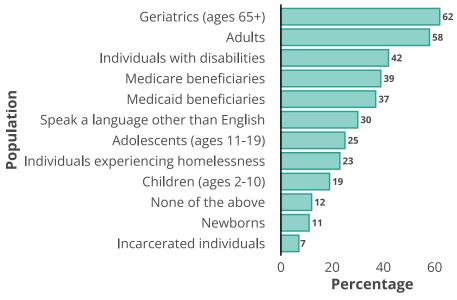
that the rate of violence against healthcare workers is based on court case filings which likely substantially underestimates the rate as most violence goes unreported.

Patient characteristics

The patient population chart above was derived from a multiple selection (i.e., select all that apply) option question.

Figure 33. Patient populations

Most common are geriatrics and adults



LPN workforce survey, Utah, 2024

Individuals experiencing homelessness, children between the ages of 2 and 10, newborns, and those incarcerated are the least likely to be seen by a responding LPN provider. It is important to note that approximately 11% of respondents to the question indicated they do not provide services to any patient populations.

Future employment

This section includes practitioner survey response information on employment intentions, including employment plans for the next two years, anticipated changes in hours worked (change in FTE status), and projections.

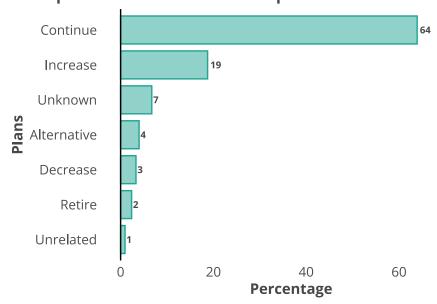


Two-year employment intentions

Figure 35 shows respondents' future employment plans over the next two years regarding changing work hours per week.

Figure 34. Two-year employment plans

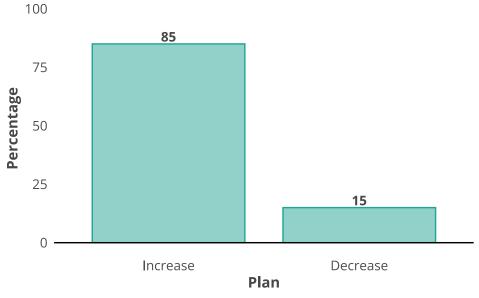
Most plan to continue while 19% plan to increase their hours



LPN workforce survey, Utah, 2024



Figure 35. Increase vs decrease hours
Of those who plan to change, most plan to increase hours

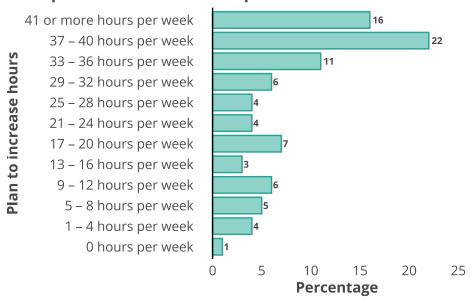


LPN workforce survey, Utah, 2024

Figures 36 and 37 look at just those respondents who plan to increase or decrease their work hours per week and how many hours they plan to work per week following their change.

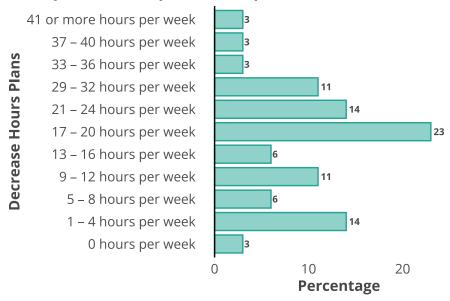


Figure 36. Hours for increase plans Most plan to work full-time equivalence



LPN workforce survey, Utah, 2024

Figure 37. Hours for decrease plans Most plan to work part-time equivalence



LPN workforce survey, Utah, 2024



It should be noted that the small response rate related to the question regarding a change in hours is a consequence of the relatively low number of respondents indicating they plan to increase or decrease hours. In the response rates section of this report, in the item response rates table, number 12 has a response rate under 25%.

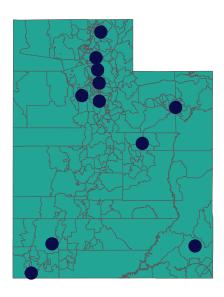
Approximately 64% of respondents indicate they plan to continue working the same hours as they do currently, about 18% indicate they plan to increase their hours, and only about 3% indicate they plan to decrease their hours.



Programs

LPN-related educational programs located in the state of Utah are mapped below along with counts.

Figure 38. LPN programs geography 11 counties have LPN programs



Urban institute education data portal, 2024

Table 4. LPN program counts

County	School count	Program count
Cache	1	1
Carbon	1	1
Davis	1	1
Duchesne	1	1
Iron	1	1
Salt Lake	1	1
San Juan	1	1



County	School count	Program count
Tooele	1	1
Utah	1	1
Washington	1	1
Weber	1	1

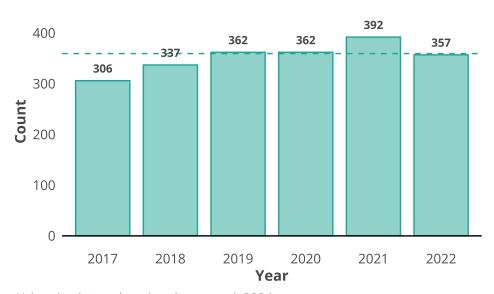
Urban institute education data portal, 2024

Table 4 includes LPN-specific programs such as practical nursing and nursing LPN, while all other nursing, medical, and healthcare related programs were excluded.

Graduates

Counts of Utah's LPN-related program graduates are provided below by academic year.

Figure 39. LPN graduatesNumber of graduates has dropped



Urban institute education data portal, 2024

Figure 39 displays licensed practical nursing graduates derived from medicine Classification of Instructional Programs or CIP code (51.1201) completions by year for programs located in Utah. Data comes from Integrated Postsecondary Education Data System (IPEDS), via



Education Data Portal v. 0.22.0, Urban Institute, under ODC Attribution License. 2023 provisional data files from the IPEDS Data Center were accessed in November 2024.

Graduation trends show that the number of LPN-related graduates increased steadily from 2017 through 2019. 2020 had the same number of graduates as 2019. While 2021 had a large increase from 2020, the number of graduates in 2022 dropped substantially. The recent drop in graduates may suggest a kind of cooling in the LPN workforce pipeline.

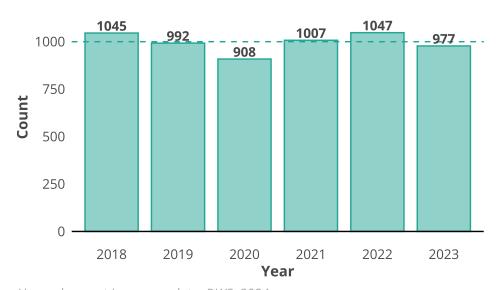


Workforce indicators

This section includes workforce indicators and Help Wanted Online data.

Employer counts of LPN providers derived from unemployment insurance data are depicted below.

Figure 40. LPN employers LPN employers has deceased 1250



Unemployment insurance data, DWS, 2024

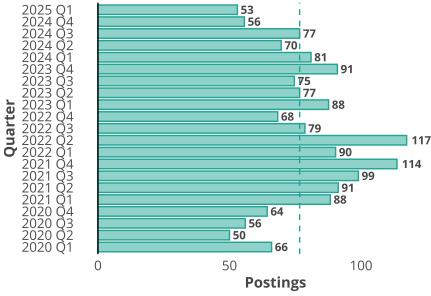
Licensed practical nurse employer counts from unemployment insurance data suggest a 2023 decrease of approximately 7% from 2022 and from 2018.

Help wanted online job postings

The quarterly average number of LPN help-wanted online job postings along with the advertised salary, is depicted below.



Figure 41. Average monthly job postings
The number of job postings has dropped from 2022



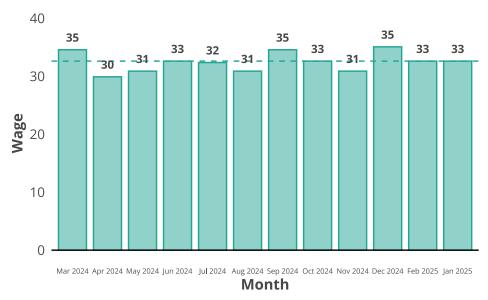
Help wanted online, DWS, 2024

Data comes from DWS Help Wanted Online Job Postings. Job postings are received as monthly counts of unique listings. For this report, those counts are used to calculate quarterly averages. Advertised wages are averages of wages specified in monthly job postings and are used for the following forecasting.

Averages or means are based on monthly distinct counts of job postings. Displaying values of means rather than the sum of counts was decided because there was a perceived higher risk of inflating counts through summing due to the possibility of including duplicates which is avoided by taking the mean. While the same job may be listed in different months, the mean would avoid compounding its representation while the sum would not.



Figure 42. Advertised salary of job postings Advertised wages has remained consistant



Help wanted online, DWS, 2024

Figure 42 displays the monthly average hourly wage for help-wanted online job postings. Not all job postings advertise the salary. Comparing the count of unique job postings to the count of job postings with an advertised salary during 2024, about 41% do advertise a salary. It cannot be determined from the data if the advertised salary is an accurate representation of pay or wages. It might be accurate for some professions or jobs, but might not be for others.

Table 5. Forecasting job postings

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
17	46	30	31	24	17	30	28	23	23	32	26

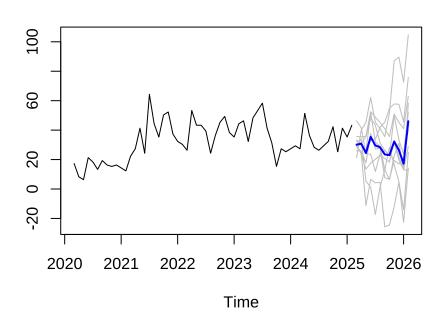
Help wanted online, DWS, 2024

Table 5 displays the projected outlook on LPN job listings.



Figure 43. Forecasting LPN job postings. Projects a sharp decline in LPN job postings

Forecasts from MLP



Help wanted online, DWS, 2024

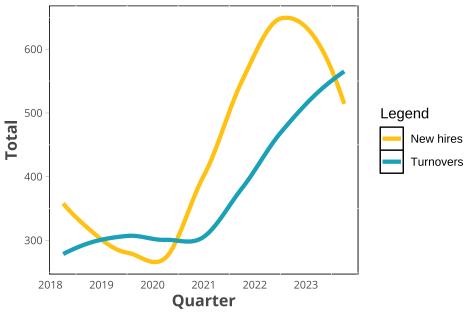
Figure 43 is a projection done using a Multi-Layer Perceptron (MLP), which is a low-level neural network. This architecture is the baseline for many common AI applications today. Grey lines show the various simulations run by the neural network, while the blue line is the averaged prediction over the next year, giving us the most likely scenario. Simulated predictions like these are healthy estimates of future projections, but they should not be taken as the concrete truth as unpredictable factors are in play (COVID being a great example).

The MLP projection forecasts a substantial drop in LPN job listings during 2025. While month-to-month changes fluctuate modestly, overall job postings show a dramatic drop followed by months of readjustment. This indicates that demand for new hires may remain limited, with only small seasonal increases unlikely to offset the general decline.



Figure 44. LPN turnovers and new hires

Recent drop in new hires after period of growth



Data may not capture self-employed physician job change counts.

Unemployment insurance data, DWS, 2024

Figure 44 shows staffing levels appear to be stable, with turnovers and new hires closely tracking each other and alternating months where either new hires or turnovers are greater than the other. Additionally, many of the LPNs hired during the pandemic seem to have remained in the workforce, as monthly turnovers have not reached the peaks of new hires seen during the COVID hiring years.

Unemployment insurance data workforce activity

Unemployment insurance data is used to determine the general yearly trend of job growth or loss. The added column is the count of new hires, while the loss column are counts of providers leaving employment. The net column is simply the sum of the added and loss aggregates.

Table 6. LPN providers added/loss

Year	Added	Loss	Net
2018	1,014	930	84
2019	1,296	1,179	117



Year	Added	Loss	Net
2020	1,083	1,218	-135
2021	2,102	1,336	766
2022	2,509	1,785	724
2023	2,239	2,227	12

Unemployment insurance data, DWS, 2024

A major limitation of unemployment insurance data is that not all practitioners are captured in the data, such as those working in a self-employed practice. Regardless of the limitations, Table 6 shows a large spike in the number of LPNs in 2021 and 2022. The number of LPNs added has since slowed down significantly. This suggests that while the LPN workforce generally expanded in recent years—especially following the pandemic surge in hires—growth may be stabilizing or beginning to decline.

Table 7. LPN NAICS groupings

NAICS group	2018	2019	2020	2021	2022	2023
Ambulatory Health Care Services	489	524	516	681	805	859
Hospitals	290	316	328	569	1,025	1,248
Nursing and Residential Care Facilities	764	805	834	1,092	1,264	1,215
Social Assistance	74	81	83	90	83	73

Unemployment insurance data, DWS, 2024

Table 7 displays counts of providers by NAICS groupings which is the North American Industry Classification System used by federal agencies to analyze business data. Data from 2023 shows an increase from 2019-2021 but a drop from 2022. Ambulatory Health Care Services and Hospitals are the largest source of jobs, comprising more than 70% of the sector's 2023 employment.

It is important to note that while the analysis counts distinct LPN providers by year and NAICS group, there is some double-counting when an LPN provider changes employment with different NAICS codes. For example, a worker may have started a year employed in a hospital setting but later in the year moved to an ambulatory care setting. That worker in the above table would be counted once in each setting during the year in question.



Discussion

Together, these trends indicate that while the current LPN workforce remains largely stable, maintaining adequate capacity will depend on supporting new graduates, supporting full-time work among early-career nurses, and managing gradual reductions in hours among mid-career professionals.

The LPN workforce in Utah has increased since 2018 but the net growth in job postings and paid employment has slowed and even decreased in recent years. The number of new LPN graduates has also declined, and both employer counts and job postings have shown a declining trend. While overall workforce numbers have risen, these patterns suggest that growth is slowing, and future LPN supply may be constrained if these trends continue.



Limitations

While these findings offer valuable insights, they should be interpreted in light of several limitations. The data are drawn from a voluntary survey administered during license renewal, with an average response rate of about 50%, which may not fully represent the entire LPN workforce. Because the survey is neither a complete census nor a statistically valid random sample, results generalized to all LPNs in Utah must be interpreted with caution.

Additionally, license counts from the DOPL include all individuals holding an active license, but do not confirm whether the licensee is currently practicing, practicing in Utah, or working in an LPN role. All employment and demographic information is self-reported, which introduces the potential for misclassification, recall bias, and error. Finally, the data represent a single point in time and do not reflect changes in the workforce that may occur after data collection. Despite these limitations, the report offers a meaningful starting point for understanding Utah's LPN workforce.

As mentioned earlier in the section on other data sources, DOPL showed there were approximately 4,083 active LPN licenses around the time of the survey but only counted 2,425 as eligible for renewal. The 4,083 active DOPL licenses overestimates the active Utah LPN population because it includes those who are not actively providing services in Utah while the 2,425 eligible LPN renewal count likely underestimates the population considering there were approximately 3,150 in UI data. The estimated 3,150 LPNs from matching active licenses from DOPL to UI data, while more far more accurate than counts from DOPL probably overestimates by likely including those who have an active license but is employed in a position other than an active LPN.



Appendix A - DOPL supply survey

Questions were asked about practitioners' Utah status, practice characteristics, demographics, employment plans, and patient population types.

The survey can be found at:

https://ruralhealth.utah.gov/wp-content/uploads/Nursing_-profession-specific-survey-HWAC-adopted-.pdf

Objectives

The HWAC has developed and adopted, with support from the Data Subcommittee, the Utah cross-profession minimum data set (UCPMDS). The UCPMDS is the underlying set of questions covering the highest priority data elements needed for health workforce planning throughout Utah.

Seven national healthcare regulatory organizations worked with Veritas Health Solutions, a consultant in health workforce data, policy, and planning, to create the UCPMDS. The UCPMDS intends to standardize certain information captured from various health professions to support within-profession and between-profession analyses to better inform health policies and strategies. The UCPMDS serves as a fundamental data system, upon which individual profession-specific tools are being developed and implemented into the re-licensure process.

Profession-specific surveys are being created for all licensed health professions. They are optional and are being implemented into the application process through the Division of Professional Licensing.

Target population

All DOPL licensed practical nurse-related licenses were included in the license renewal process. Licensed practical nurse-related license types include:

- Licensed Practical Nurse
- Request Authorization to Test LPN
- Temporary Graduate Nurse LPN
- Temporary Licensed Practical Nurse
- Time Limited Licensed Practical Nurse
- Volunteer LPN



However, there seems to be a fairly large discrepancy in DOPL's reported LPN population and the estimated number of LPNs who were active during 2023. DOPL supplied population files with 2,425 distinct LPN-related licenses; however, there seems to have been approximately 4,083 active licenses, suggesting the survey population may have missed 1,658 licenses or about 68% of the reported population.

Response rates

Observing the count of eligible practitioners provided by DOPL, the survey response rate was approximately 44%.

The following item response rates are based on those who provided a valid license number and responded to at least one question, rather than those who were eligible to receive the survey. Accompanying the item response rate is the question text. The question text displayed is as it appeared on the survey instrument

Table 8. Item response rates

Number	Text	%
1	What is your sex?	99.81
2	What is your race? Mark one or more boxes.	99.63
3	Are you of Hispanic, Latina/o, or Spanish origin?	99.34
4	What type of degree/credential first qualified you for this license?	99.53
5	What year did you complete the education program/degree that first qualified you for this license?	99.34
6	Where did you complete the education program/degree that first qualified you for this license? (Note: for online programs, please select the location where this program was housed).	99.53
7	In which city & country did you complete your qualifying education program/degree?	0.66
8	Please indicate what degree was conferred with your highest-level nursing degree:	99.81
9	What year did you complete your highest level of nursing degree?	99.25
10	What is your employment status?	99.25



Number	Text	%
11	What best describes your employment plans for the next 2 years?	98.88
12	If you previously indicated you plan to increase or decrease hours in a field related to this license in the next 2 years, please estimate the total number of hours per week you expect to work after the change. If this does not apply, please select not applicable.	24.81
13	Which of the following best describes the specialty/field/area of practice in which you spend most of your professional time?	97.75
14	Of the hours per week spent in direct patient care, estimate the average number of hours per week delivering patient care via telehealth. Telehealth may be defined as the use of electronic information and telecommunications technologies to extend care to patients, and may include videoconferencing, audio only, stored-forward imaging, streaming media, and terrestrial and wireless communications.	95.69
15	Please indicate the population groups to which you provide clinical services. Please check all that apply.	97.85
16	What is your primary practice location? If this does not apply, please select "N/A".	87.73
17	Which of the following best describes your current employment arrangement at your principal practice location?	96.82
18	Please identify the role/title(s) that most closely corresponds to your primary employment/practice type.	92.88
19	Which of the following best describes the practice setting at your primary practice location? If this does not apply, please select "not applicable".	94.85
20	Estimate the average number of hours per week spent at your primary practice location. If this does not apply, please select not applicable. Does not include time on call.	96.35
21	Estimate the average number of hours per week spent IN DIRECT PATIENT CARE at your primary practice location. If this does not apply, please select not applicable.	96.25



Number	Text	%
22	What is your secondary practice location? If this does not apply, please select "N/A".	74.72
23	Which of the following best describes your current employment arrangement at your secondary practice location?	65.45
24	Please identify the role/title(s) that most closely corresponds to your secondary employment/practice type.	26.31
25	Which of the following best describes the practice setting at your secondary practice location? If this does not apply, please select "not applicable".	52.53
26	Estimate the average number of hours per week spent at your secondary practice location. If this does not apply, please select not applicable. Does not include time on call.	51.87
27	Estimate the average number of hours per week spent IN DIRECT PATIENT CARE at your secondary practice location. If this does not apply, please select not applicable.	52.15
28	Please indicate the amount of total educational debt incurred for your nursing education (at time of graduation, excluding non-education debt).	92.13
29	Have you mentored/precepted students within the last two years?	95.32
30	If you plan to leave the nursing field permanently in the next 2 years, what is your primary reason for leaving?	83.80
31	How did you finance your initial nursing education? (Please mark all that apply).	93.35

LPN workforce survey, Utah, 2024



References

American Nursing Association (2023). *How to Become a Licensed Practical Nurse*, (https://www.nursingworld.org/content-hub/resources/becoming-a-nurse/how-to-become-a-licensed-practical-nurse/)

Bailey, M., et al. (2024). Probability and Nonprobability Sample in Surveys: Opportunities and Challenges. *Administration for Children & Families*.

(https://acf.gov/sites/default/files/documents/opre/opre_nonprobability_samples_brief_september2024.pdf)

Boyd, Robin J. et al (2023). We need to talk about nonprobability samples. *Trends in Ecology & Evolution*, 38(6), 521-531. (https://www.cell.com/trends/ecology-evolution/fulltext/S0169-5347(23)00005-8)

Bureau of Labor Statistics (2023). *Occupational Employment and Wage Statistics*. (https://www.bls.gov/oes/current/oes291171.htm)

Cleveland Clinic (2022). *Licensed Practical Nurse*, (https://my.clevelandclinic.org/health/articles/24503-licensed-practical-nurse-lpn)

Feeney, Ann (2024). The U.S. Nursing Shortage: A State-by-State Breakdown. *Nurse Journal* (https://nursejournal.org/articles/the-us-nursing-shortage-state-by-state-breakdown/)

HRSA Health workforce (2024). *State of the U.S. Health Care Workforce, 2024* (https://bhw.hrsa.gov/sites/default/files/bureau-health-workforce/state-of-the-health-workforce-report-2024.pdf)

HRSA Health Workforce (2022). *Scoring Shortage Designations*. (https://bhw.hrsa.gov/workforce-shortage-areas/shortage-designation/scoring)

Lucas, Samuel R. (2014). Beyond the existence proof: ontological conditions, epistemological implications, and in-depth interview research. *Quality & Quantity*, 48, 387-408. (https://link.springer.com/article/10.1007/s11135-012-9775-3#Bib1)

Markowski, Justin H. et al. (2023). After 50 Years, Health Professional Shortage Areas Had No Significant Impact on Mortality or Physician Density. Health Affairs, 42(11), 1507-1516. (https://www.healthaffairs.org/doi/10.1377/hlthaff.2023.00478#:~:text=41-,Conclusion,and%20mortality%20across%20four%20decades)

Milbank Memorial Fund (2025). 2025 Primary Care Scorecard Data Dashboard (https://www.milbank.org/primary-care-scorecard/)



Snowden, Lonnie R. et al. (2022). Racial Bias Correlates with States Having Fewer Health Professional Shortage Areas and Fewer Federally Qualified Community Health Center Sites. Journal of Racial and Ethnic Health Disparities, 10:325–333.

(https://pmc.ncbi.nlm.nih.gov/articles/PMC8744578/pdf/40615_2021_Article_1223.pdf)

Stamper, Andi (2024). *Unlocking Opportunities: The Strategic Advantages of Holding Licenses in Multiple States* (https://healthshieldcredentialing.com/licenses-in-multiple-

states/#:~:text=Geographic%20Flexibility:%20Holding%20licenses%20in%20multiple%20states,healthcare%20settings%2C%20patient%20populations%2C%20and%20working%20environments.&text=Having%20licenses%20in%20multiple%20locations%20enables%20professionals,demand%2C%20increasing%20their%20employability%20and%20job%20security.)

Togioka, Brandon M. et al. (2024). Diversity and Discrimination in Health Care. StatPearls, 2025 Jan. (https://www.ncbi.nlm.nih.gov/books/NBK568721/)

Word Health Organization (2021). Gender and health. (https://www.who.int/news-room/questions-and-answers/item/gender-and-health)



Contact information

Holly Uphold: huphold@utah.gov Matt Cottrell: mattc@utah.gov

Jordan Miller: jordanmiller@utah.gov

Jiehong Jiang: jjiang@utah.gov

Department of Health and Human Services Multi-Agency State Office Building 195 North 1950 West Salt Lake City, Utah 84116

https://hwic.utah.gov/ Phone: 801-538-9375