Understanding Oregon's Nursing Workforce

SUPPLY, DEMAND, AND DISTRIBUTION (2022—2024)

Rick Allgeyer, PhD

ABSTRACT

Recent discourse frequently characterizes Oregon's nursing workforce challenges as a statewide shortage, often citing persistent hiring difficulties reported by healthcare employers. This paper examines whether recent workforce trends support this characterization. Analysis of the 2022—2024 data show sustained growth in both registered nurse (RN) and nurse practitioner (NP) workforces, with particularly rapid expansion among NPs. Age distribution analyses indicate a stable, multigenerational workforce with no evidence of imminent large-scale retirements.

> **Oregon's nursing workforce challenges are less about supply and more about where nurses work and the conditions they face.**

Policy strategies focused on retention, work environment, and place-based strategies may be more effective than expanding education capacity alone.

INTRODUCTION

Concerns about the adequacy of the nursing workforce have intensified in Oregon in recent years, mirroring national discussions often characterizing current conditions as a widespread nursing shortage, which exists when the demand for nursing professionals exceeds the available supply resulting in insufficient staff to meet patient care needs (Haddad et al., 2023). These concerns have been reinforced by persistent reports from healthcare employers, particularly in rural communities and non-hospital care settings, who describe ongoing difficulty recruiting and retaining nurses. At the same time, state licensing data show continued growth in the number of RNs and NPs practicing in Oregon. This contrast between reported hiring challenges and observed licensure growth raises important questions about how nursing supply, demand, and distribution are being measured and interpreted at the state level.

Workforce planning efforts frequently rely on aggregate indicators, such as projected occupational demand or total numbers of licensed professionals, to assess whether sufficient supply exists. While these measures are useful, they can obscure important distinctions between statewide capacity and localized workforce challenges. In Oregon, prior analyses have suggested that recruitment difficulties may be driven less by an absolute shortage of nurses and more by maldistribution across geographic regions and practice settings, as well as by job quality and community-level factors that influence nurses' employment decisions (Oregon Center for Nursing, 2017; 2019a).

OCN OREGON CENTER for NURSING

Acknowledgment: This report was made possible by the Oregon Nurse Advancement Fund.

Suggested Citation: Allgeyer, R. (2026). Oregon Healthcare Workforce Index: Understanding Nursing in the Broader Healthcare Labor Market. Portland, Oregon: Oregon Center for Nursing.

Understanding whether current trends reflect a true shortage, a distributional mismatch, or a combination of both is essential for informing effective workforce policy.

> **In addition to questions of supply and demand, the long-term sustainability of the nursing workforce depends on its demographic and educational composition.**

Persistent concerns about an aging nursing workforce and the potential for large-scale retirements have shaped workforce policy for more than a decade (Buerhaus, Staiger, & Auerbach, 2000; Muir et. al., 2024). At the same time, national initiatives have emphasized increasing educational attainment among nurses, particularly the proportion of RNs holding a Bachelor of Science in Nursing (BSN) or higher degree, based on evidence linking education level to patient outcomes and system performance (NAM, 2010; AACN, 2025). Examining age distributions and patterns of educational progression among Oregon nurses provides insight into whether these concerns and goals are reflected in current workforce trends.

The purpose of this paper is to examine recent trends in Oregon's RN and NP workforces using licensure data from 2022 through 2024, with a focus on three primary questions. First, how has the number of licensed and practicing RNs and NPs changed over time, and how does this growth compare to projected statewide need? Second, to what extent does Oregon's nursing supply align with employment demand when licensure data are adjusted to reflect staff nurse roles? Third, what do trends in age distribution and educational attainment reveal about the sustainability and evolution of the nursing workforce? By addressing these questions, this analysis aims to provide an empirically grounded assessment of Oregon's nursing workforce and to inform policy discussions that extend beyond simple shortage-based narratives.

METHODS

The analysis utilizes the public-use nursing workforce dataset from the Oregon Health Authority (OHA) for 2022, 2023, and 2024 to examine trends in the supply of RNs and NPs. Employment projections from the Oregon Employment Department (OED) for 2024 were used to estimate projected annual need for RNs in Oregon (OED, 2025.)

For this discussion, a distinction is made between licensed and practicing nurses. A licensed RN is defined as any individual holding an active Oregon nursing license. A practicing RN is defined as someone with an active Oregon nursing license and reports actively practicing nursing within the state. Because newly licensed nurses may not have completed the OHA workforce survey, which is typically administered at license renewal, the number of practicing nursing is estimated. The estimate is calculated by applying the proportion of licensed nurses who have completed the workforce survey and are practicing in Oregon to those who have not completed the workforce survey. This approach provides a standardized method for approximating the number of actively practicing nurses during each study year.

RESULTS

Number of Licensed and Practicing Nurses

Table 1 shows the number of licensed RNs and NPs, as well as the estimated practicing in Oregon between 2022 and 2024. Both professions experienced sustained growth over the three-year period. The number of RNs increased by 2,970 from 73,158 in 2022 to 76,127 in 2024, and average growth rate of approximately 3.3 percent. Meanwhile, the licensed NP workforce grew by 2,156 from 6,699 to 8,855, representing a 26.1 increase. The high growth in the number of licensed and practicing NPs is somewhat expected as there has been a recent push to increase the number of practicing NPs in Oregon and nationally, and due to the smaller baseline workforce (as compared to RNs), which can inflate growth rates.

TABLE 1: NUMBER OF LICENSED AND PRACTICING RNs AND NPs

	REGISTERED NURSES: LICENSED	REGISTERED NURSES: PRACTICING
2022	73,158	54,900
2023	75,188	56,200
2024	76,127	56,700

	NURSE PRACTITIONERS: LICENSED	NURSE PRACTITIONERS: PRACTICING
2022	6,699	5,250
2023	7,642	5,880
2024	8,855	6,620

Source: OHA, Public Nursing Workforce Data, 2022—2024

FIGURE 1: NUMBER OF LICENSED AND PRACTICING RNs

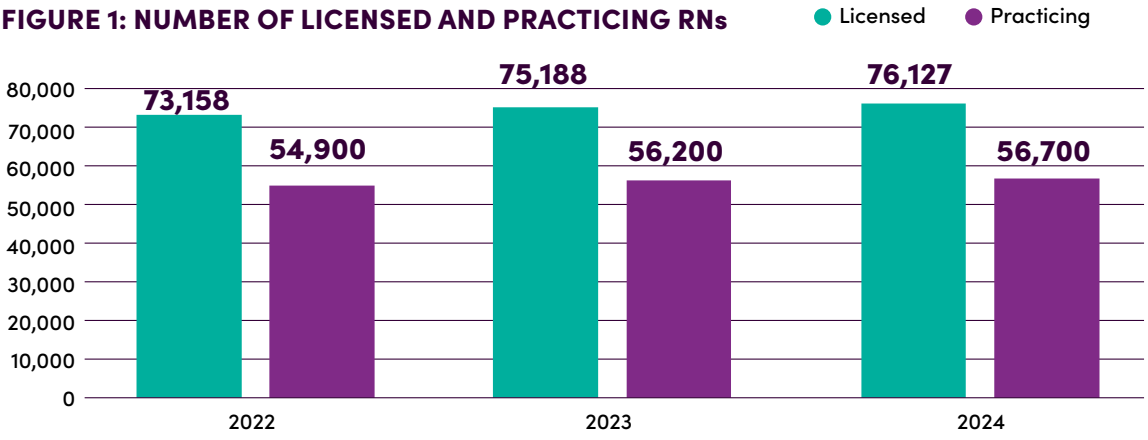
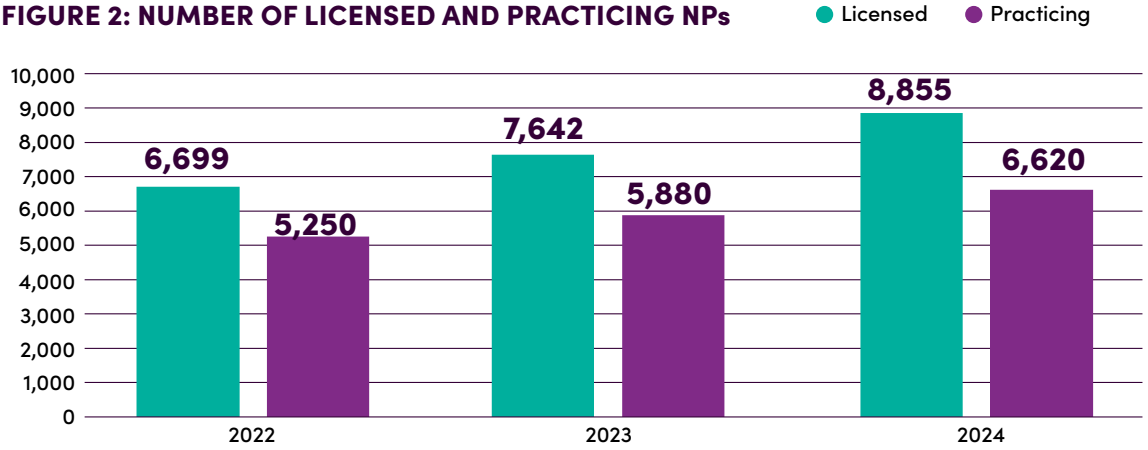


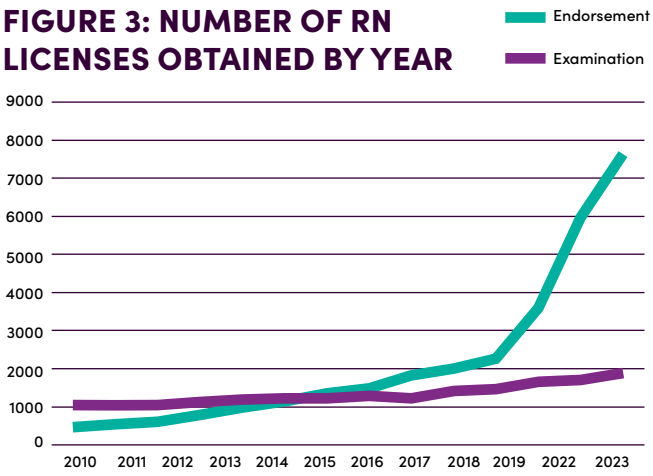
FIGURE 2: NUMBER OF LICENSED AND PRACTICING NPs



Source: OHA, Public Use Nursing Workforce Data File, 2022—2024

Consistent with prior analyses (OCN, 2019a), a substantial share of newly licensed RNs in Oregon continue to enter the state through endorsement rather than initial examination. That is, nurses who are educated, passed the NCLEX examination, and were initially licensed in another state who come to practice in Oregon receive their Oregon nursing license in a process called endorsement. Nurses who are educated, passed the NCLEX and obtain their initial license in Oregon are said to be licensed via examination. Over the past five years, about 73 percent of newly licensed nurses obtained their licenses via endorsement (see Figure 3). This pattern supports an ongoing concern about the ability of Oregon's nursing programs to graduate enough RNs to meet demand.

FIGURE 3: NUMBER OF RN LICENSES OBTAINED BY YEAR



Source: OSBN, RN Licensure Data System, Ad Hoc Request, 2023

Despite overall growth in licensure and practicing counts, employers in certain regions and practice settings, particularly rural communities and skilled nursing facilities, continue to report recruitment challenges. Comparisons between the licensing data from OHA and employment data show that, on average, Oregon licenses more RNs than are needed each year. For instance, in 2024 Oregon licensed 10,082 new RNs and estimate about 6,050 are practicing within the state. Between 2022 and 2024, the number of newly licensed RNs exceeded 10,000 annually.

According to OED, Oregon would need about 2,830 new RNs each year to meet projected statewide demand. Because OED's definition of an RN is more closely aligned with the "staff nurse" roles from the licensing data (U.S. Bureau of Labor Statistics, 2024), licensing data were adjusted to reflect licensed staff nurses alone. As shown in Table 2, the number of newly licensed staff nurses practicing in Oregon exceeded projected annual need in each study year.

TABLE 2: NUMBER OF STAFF NURSES AND PROJECTED NEED

	STAFF NURSES:			
	LICENSED	PRACTICING	OED PROJ.	+/-
2022	9,793	5,870	2,925	2,945
2023	8,907	5,340	2,880	2,460
2024	8,308	4,980	2,828	2,152

Sources: OHA, Public Use Nursing Workforce Data Files 2022—2024. OED, Occupational Employment Projections, 2022-2024

These comparisons indicate that the estimated number of new RNs practicing in Oregon exceeds the projected need for RNs across the state during the study period. However, this does not mean that certain communities or practice settings are able to recruit and retain enough nurses to meet their needs.

Prior research has documented geographic and practice-setting maldistribution within Oregon's nursing workforce (OCN 2019a). Rural communities have trouble recruiting and retaining nurses compared to urban areas, and hospitals are shown to be a preferred practice setting over other settings, such as long-term care. As a result, hiring difficulties can exist even when statewide supply of nurses appears sufficient relative to the projected need.

One promising strategy can be found in the OCN (2023) study of healthcare employment in rural southwestern Oregon. Employers identified both practice-level factors, such as workload, salary competitiveness, and leadership structure, and broader community concerns, including housing quality, employment opportunities for spouses, and access to essential services, as key factors in recruitment and retention. These findings suggest that while employers can identify barriers, broader community collaboration is needed to craft lasting solutions. The report emphasized the value of shared local leadership in reducing barriers to nurse recruitment and in scaling novel solutions that reflect both community and practice-level needs.

This type of approach seems likely to yield positive results as it directly identifies barriers for mitigation and identifies attractors that could be used to improve recruitment efforts rather than strategies focused solely on expanding educational capacity.

AGE DISTRIBUTIONS

The age composition of the nursing workforce provides insight into its long-term sustainability.

For more than two decades, researchers have been warning nurse leaders and policy makers about the aging of the nursing workforce and the ramifications of mass retirements within the workforce (Buerhaus, Staiger, and Auerbach, 2000; Gaffney, 2022; Muir, et al., 2024).

Data from licensure data between 2022 and 2024 indicate stable age distributions of both the RN and NP workforces (See Figures 4 and 5 below). The remarkable overlap across these three years suggests a stable, multigenerational workforce that allows older nurses to move out of direct patient care, while allowing for knowledge transfer from these nurses to younger generations of nurses.

The largest change is among the NP workforce, where growth is primarily in the 34—45 age group. This pattern is likely due to the rapid growth of the occupation rather than a shift in the age composition of NPs.

FIGURE 4: AGE DISTRIBUTION OF RNs FOR 2022—2024

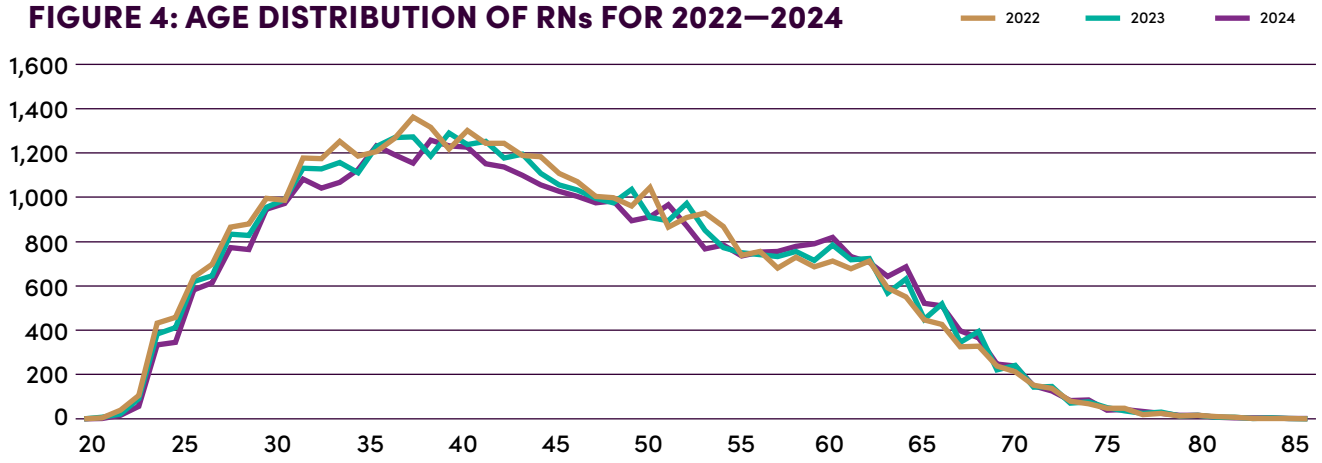
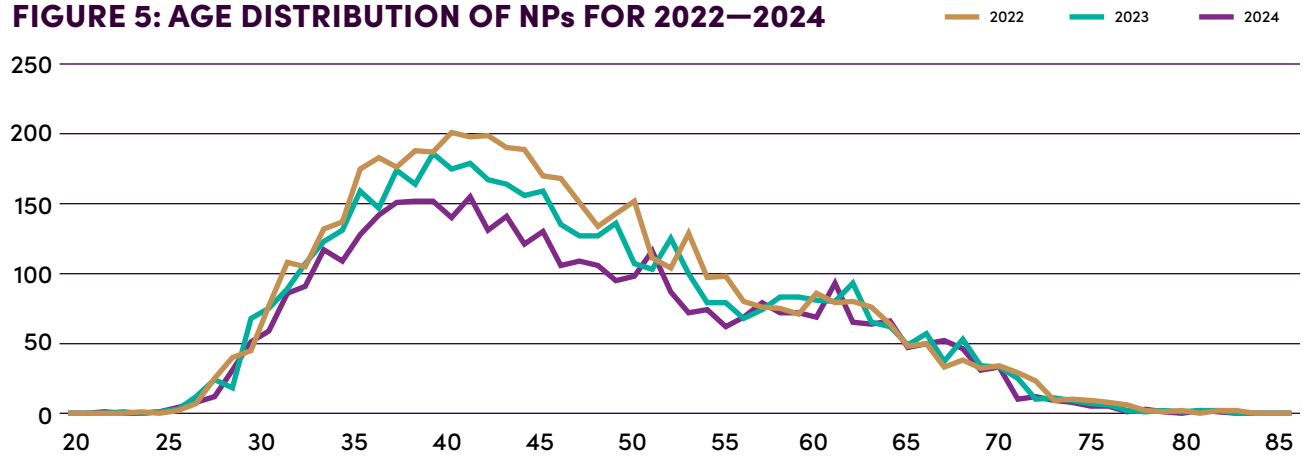
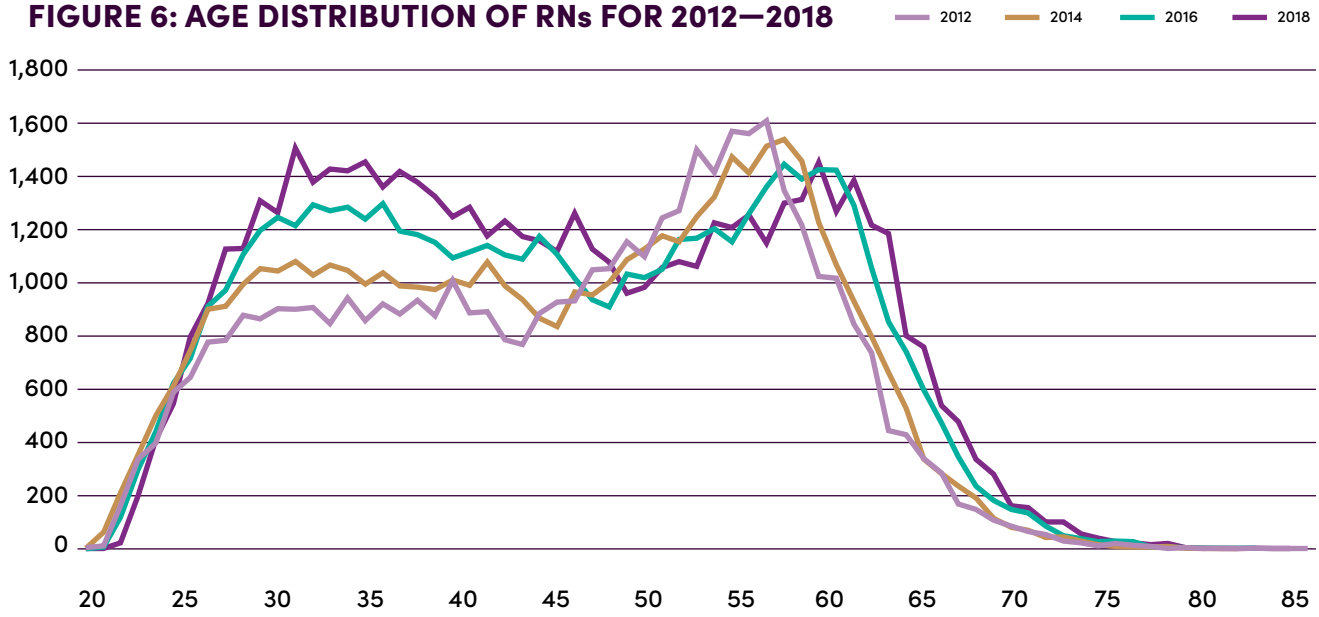


FIGURE 5: AGE DISTRIBUTION OF NPs FOR 2022—2024



Source: OHA, Public Use Nursing Workforce Data File, 2022—2024

FIGURE 6: AGE DISTRIBUTION OF RNs FOR 2012—2018



Source: OHA, Public Use Nursing Workforce Data File, 2022—2024

Comparisons of age distribution patterns from approximately a decade ago, as shown in Figure 6, further indicate that Oregon's nursing workforce has transitioned away from earlier concerns about concentrated aging toward a more evenly distributed age profile.

Overall, the data presented above suggests the nursing workforce in Oregon reflects age-distribution stability, and is characterized as a workforce with a balanced, multigenerational employee base that does not suffer from significant skill gaps, or knowledge loss due to rapid demographic changes. While local areas may experience age-related issues, (e.g., high turnover due to retirement, difficulty in recruiting newly licensed nurses), the aggregate data does not indicate an impending wave of large-scale retirements during the study period.

EDUCATIONAL ATTAINMENT

Research links practice settings with a higher percentage of nurses who hold a Bachelor of Science in Nursing (BSN) to lower mortality rates and fewer medication and procedural errors (AACN, 2025). A BSN provides deeper training in critical thinking, leadership, evidence-based practice, and public health, which are crucial for managing increasingly complex care environments (AACN, 2025). National workforce initiatives have therefore emphasized increasing the proportion of nurses holding a BSN.

Recent data indicate continued progress toward this goal in Oregon. Table 3 shows 63 percent of practicing RNs in Oregon held a BSN in 2024, and 71 percent hold a BSN or higher. Moreover, this represents steady growth across the study period. Additionally, the number of RNs whose highest degree obtained is an associate degree (ADN) declined from 28 percent in 2022 to 26 percent in 2024. Longer term trends show even more change; in 2016, 48 percent of RNs held a BSN with 54 percent holding a BSN or above (OCN, 2017).

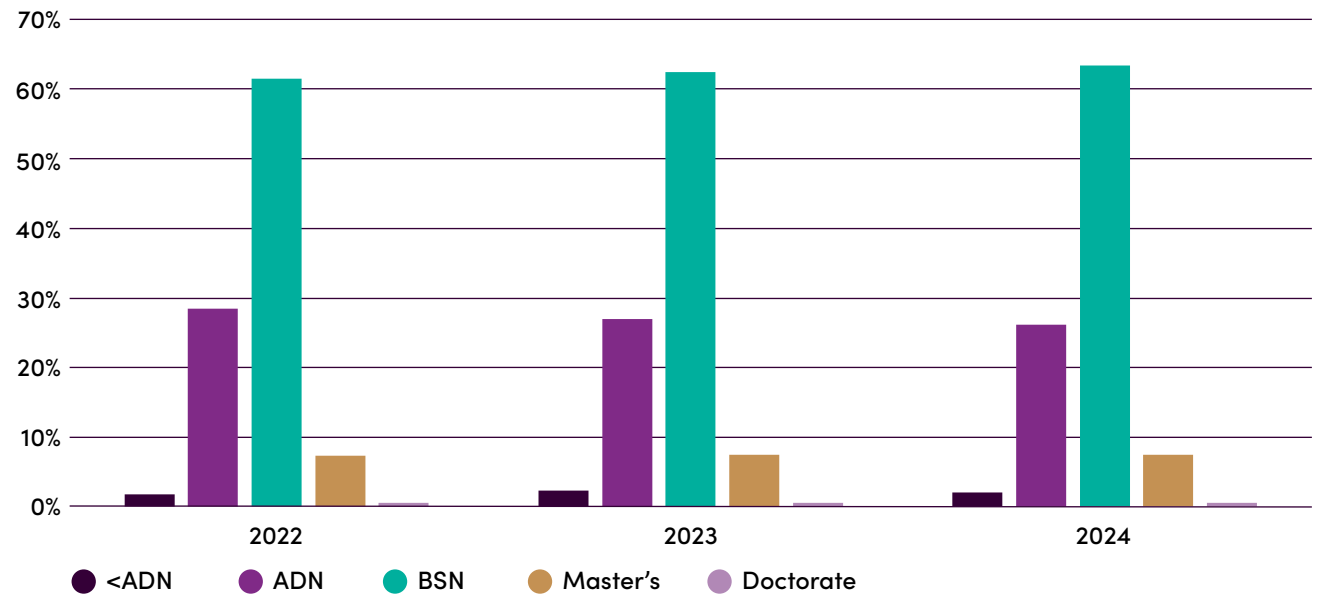
Data reflects sustained upward movement in educational attainment over time.

TABLE 3: HIGHEST LEVEL OF NURSING EDUCATION FOR RNs

	2022	2023	2024
Less Than ADN	1.7%	2.3%	2.0%
ADN	28.4%	26.9%	26.2%
BSN	61.6%	62.4%	63.4%
Master's	7.3%	7.4%	7.4%
Doctorate	0.5%	0.6%	0.5%

Source: OHA, Public Use Nursing Workforce Data File

FIGURE 7: HIGHEST EDUCATIONAL ATTAINMENT FOR RNs



Source: OHA, Public Use Nursing Workforce Data File, 2022—2024

Another way to examine the increase in the proportion of RNs holding a BSN is to look at education progression post licensure. Among RNs who held an ADN upon initial licensure, approximately one-third (33 to 35 percent) subsequently earned a BSN, and an additional six percent earned a master's degree. In contrast, most RNs who initially held a BSN (approximately 92 percent) did not pursue further graduate education within the study period, while about six to seven percent earned a master's degree. Doctoral-level education remained rare regardless of initial education.

Table 4 describes the educational progression of RNs over time.

TABLE 4: EDUCATIONAL PROGRESSION OF RNs: 2022—2024

2024	Highest Level of Nursing Education			
Entry Level Ed	ADN	BSN	Master's	Doctorate
ADN	58.2%	35.7%	5.8%	0.3%
BSN		92.9%	6.4%	0.6%
Master's			99.2%	0.8%

2023	Highest Level of Nursing Education			
Entry Level Ed	ADN	BSN	Master's	Doctorate
ADN	59.1%	34.9%	5.7%	0.4%
BSN		92.6%	6.7%	0.7%
Master's			99.3%	0.7%

2022	Highest Level of Nursing Education			
Entry Level Ed	ADN	BSN	Master's	Doctorate
ADN	60.8%	33.4%	5.5%	0.3%
BSN		92.5%	6.9%	0.6%
Master's			100.0%	0.0%

Source: OHA, Public Use Nursing Workforce Data File

These patterns indicate ongoing upward educational mobility within the RN workforce, particularly among ADN-prepared nurses, while graduate-level advancement beyond the Master's Degree remains limited.

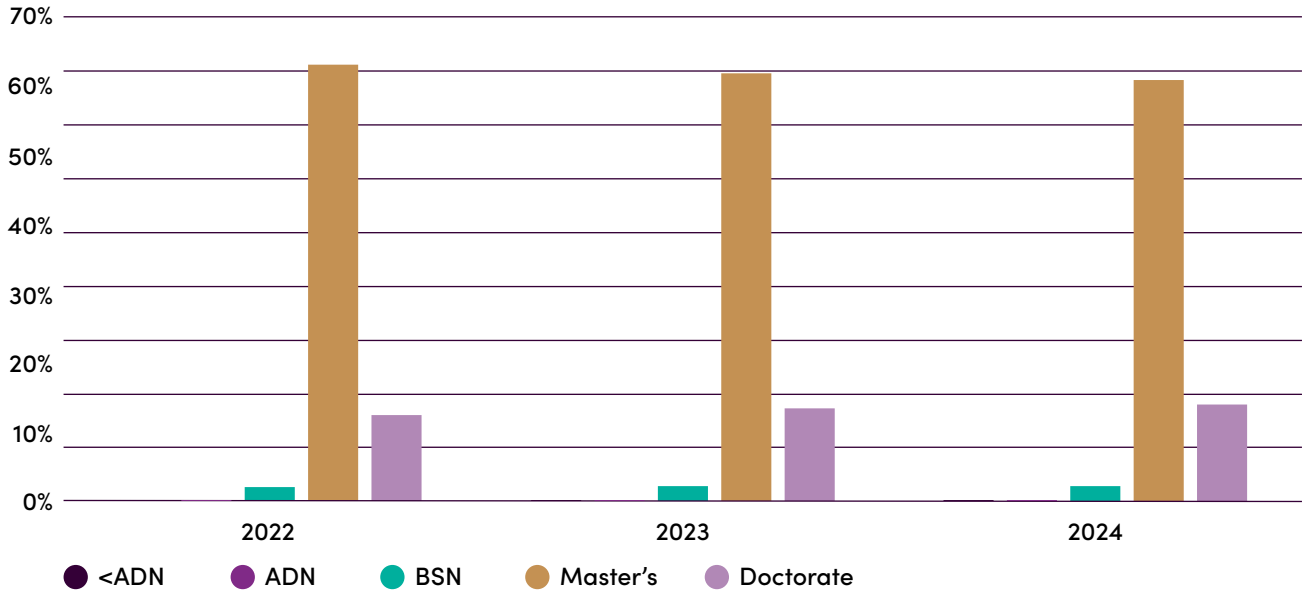
For NPs, graduate preparation is the norm. In 2024, about 78 percent held a Master of Science in Nursing (MSN) and another 18 percent held a doctoral degree. Of those with doctorates, approximately 95 percent hold a Doctor of Nursing Practice (DNP) degree. While the change in educational attainment is less dramatic than seen with RNs, a gradual shift from master's-level to doctoral-level preparation is evident. Compared to 2016, when 87 percent of NPs held a master's degree and eight percent held a doctorate, the number of NPs who have earned a doctorate has increased substantially.

TABLE 5: HIGHEST LEVEL OF NURSING EDUCATION FOR NPs

	2022	2023	2024
ADN or BSN	**2.7%**	**2.9%**	**2.8%**
Master's	**81.2%**	**79.7%**	**78.2%**
Doctorate	**15.9%**	**17.3%**	**17.9%**

Source: OHA, Public Use Nursing Workforce Data File

FIGURE 8: HIGHEST EDUCATIONAL ATTAINMENT FOR NPs



Source: OHA, Public Use Nursing Workforce Data File, 2022—2024

Overall, these findings suggest that Oregon's nursing workforce is becoming progressively more educated, aligning with national goals related to educational advancement and clinical complexity. Educational trends, however, operate independently of geographic distribution and employment setting preferences, and increases in educational attainment alone do not ensure improved workforce distribution across communities.

DISCUSSION

These findings have several implications for nursing workforce policy and planning in Oregon.

First, strategies focused exclusively on increasing the number of nursing program graduates may not directly address the workforce challenges currently reported across the state. During the study period, newly licensed RNs exceeded projected statewide demand. While educational pipelines remain important for long-term workforce sustainability, expanding educational capacity without addressing maldistribution risks exacerbating inefficiencies while failing to improve access in rural and non-hospital settings.

Second, workforce strategies should prioritize retention, job quality, and local practice setting-based solutions. The evidence presented here, along with prior OCN research (OCN, 2019a), suggest nurses' employment decisions are strongly influenced by practice environment, leadership quality, workload, compensation, and community-level factors such as housing availability and employment opportunities for family members. Addressing these factors requires collaboration among healthcare employers, local governments, workforce boards, and community organizations rather than reliance on educational pipelines alone.

Third, the age stability of Oregon's nursing workforce presents an opportunity. Age distributions during the study period reflect a balanced, multigenerational workforce rather than an imminent retirement surge. Policymakers and employers can leverage this demographic balance by investing in mentorship programs, flexible career pathways, and roles that allow experienced nurses to remain engaged while transitioning away from physically demanding positions. Such approaches may support retention while preserving institutional knowledge and clinical expertise.

Finally, continued monitoring of educational progression and role distribution will be critical as healthcare delivery evolves. Growth in the NP workforce and gradual increases in doctoral preparation warrant attention to scope-of-practice policies, care integration, and alignment between education and labor-market demand. Similarly, understanding why most BSN-prepared nurses do not pursue graduate education may inform future workforce planning related to leadership, education, and advanced clinical roles.

Overall, these findings suggest that Oregon's nursing workforce challenges are best understood not as a problem of insufficient number of nurses, but as a complex interaction of distribution, preferences, and structural conditions.

Policies grounded in this distinction, prioritizing retention, work environment, and community-based solutions, are more likely to produce durable, equitable solutions for both nurses and the communities they serve.

STUDY LIMITATIONS

This analysis relies on statewide licensure and employment projection data, which may obscure meaningful variation across local labor markets and practice settings. While this data suggests the number of Oregon's licensed nurses exceed projected statewide demand, aggregate figures do not ensure that individual communities or facilities can successfully recruit and retain nurses. Rural communities, long-term care facilities, and certain specialty settings may continue to experience hiring challenges due to geographic isolation, housing constraints, compensation differentials, or workplace factors that influence job choice. As discussed throughout this report, maldistribution remains a central structural issue. State-level adequacy can therefore coexist with persistent local shortages and does not automatically translate into local workforce stability.

In addition, this analysis focuses primarily on supply, projected demand, demographic composition, and educational attainment, but does not explicitly examine current turnover rates or role mobility among nurses. High turnover, particularly in hospital and post-acute care settings, can create operational instability even when overall licensure numbers appear robust. Elevated rates of voluntary separation, early-career attrition, or role transition may increase recruitment costs, strain remaining staff, and disrupt continuity of care. Although age distributions appear stable, workforce stability depends not only on demographic balance but also on retention within specific roles and practice settings.

Future analyses will examine turnover patterns and local labor market conditions in greater depth, including how local employment conditions interact with workforce mobility. Understanding these local labor market conditions may further clarify the distinction between statewide supply adequacy and localized workforce strain but also may shed light on the conditions within the local labor market affecting employers' ability to recruit, hire, and retain a sustainable nursing workforce.

REFERENCES

American Association of Colleges of Nursing (2025). Baccalaureate-prepared nurses are essential to quality health care. Washington D.C.

Buerhaus, P.I., Staiger, D.O., and Auerbach, D.I. (2000). Implications of an aging registered nurse workforce. Journal of the American Medical Association, 283, 2948-2954.

Gaffney, T. (2022). Retaining nurses to mitigate shortages. American Nurse Journal, 17, 14-25.

Haddad L.M., Annamaraju P., Toney-Butler T.J. (2023) Nursing Shortage. StatPearls. Treasure Island, Fla. Available from: https://www.ncbi.nlm.nih.gov/books/NBK493175/

Muir, K.J., Porat-Dahlerbruch, J., Nikpour, J., Leep-Lazar, K., and Lasater, K.B. (2024). Top factors in nurses ending health care employment between 2018 and 2021. JAMA Network Open, 7, 1-11.

National Academy of Medicine (2010). Future of nursing: Leading change, advancing health. Washington D.C.

Oregon Center for Nursing (2017). Characteristics of the nursing workforce in Oregon. Portland OR.

Oregon Center for Nursing (2019a). Shortage or maldistribution: Shifting the conversation about Oregon's nursing shortage. Portland OR.

Oregon Center for Nursing (2019b). Trends in Oregon Nursing Education 2012—18. Portland OR.

Oregon Center for Nursing (2023). Barriers to nursing workforce retention and attraction in rural areas. Portland OR.

Oregon Employment Department (2025). Oregon occupational employment projections, 2024—2034. Released on December 18, 2025. Salem OR.

Oregon Health Authority (2022—2024). Public use nursing workforce data files, 2022, 2023, & 2024.
U.S. Bureau of Labor Statistics (2024). Occupational wage and employment statistics, 29-1141 Registered Nurses. Washington D.C.