

Strengthening Orange County's Healthcare Workforce

Recommendations
for a Resilient Future



Report written by:



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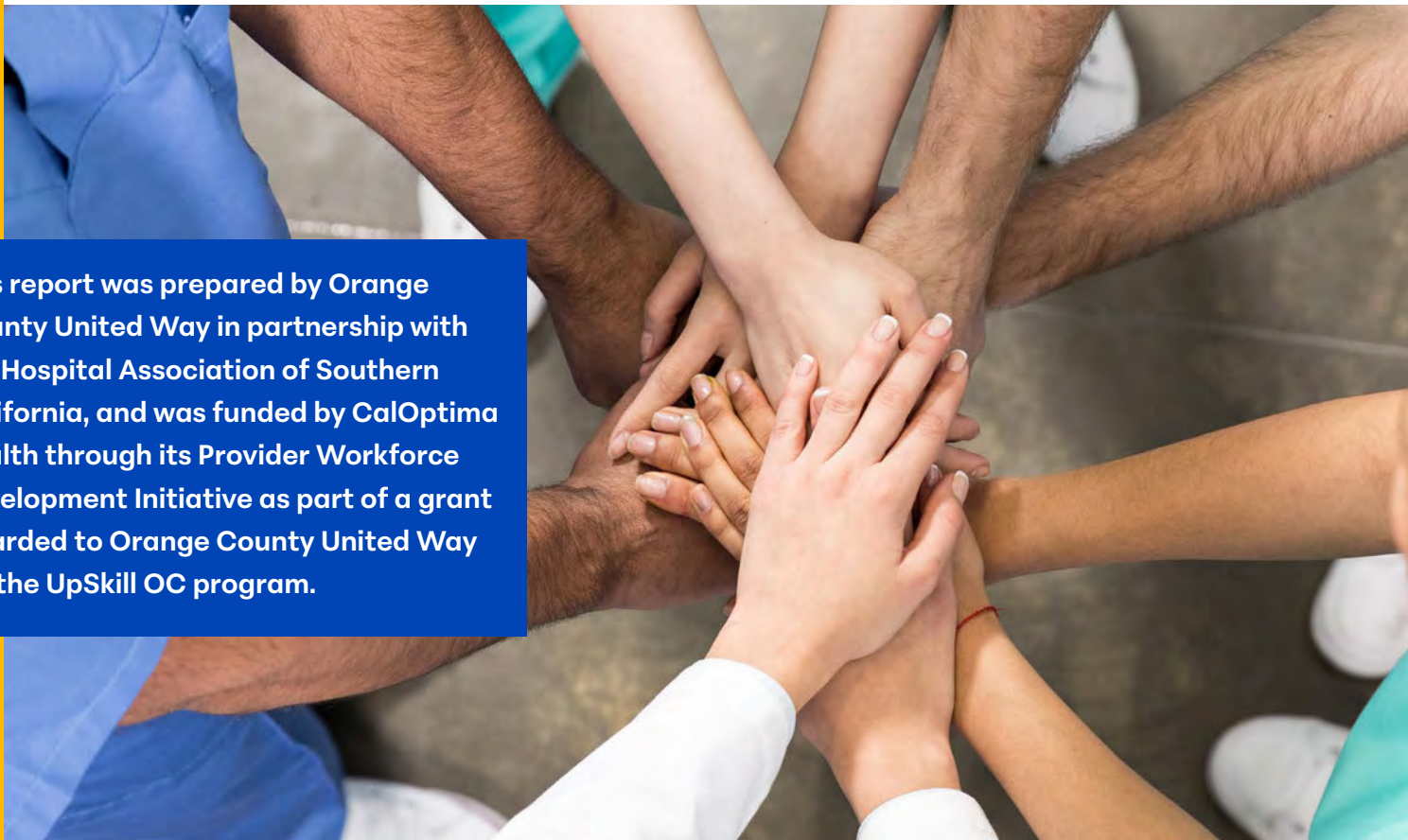
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SUMMARY

The Orange County healthcare sector is a cornerstone of the regional economy and a critical element in the delivery and sustainment of community well-being. The sector is one of the region's largest economic drivers—employing more than 248,000 workers and accounting for approximately 15% of all jobs.¹

However, like most areas throughout California and the nation, Orange County's healthcare sector is struggling to meet the increasing demand driven by aging residents, increasing patient acuity, and growing behavioral health needs. At the same time, the systems responsible for training, upskilling, recruiting, and retaining healthcare workers have not kept pace. The impact is more critical than a temporary labor shortage. Data reflects that this mismatch contributes to a set of structural workforce challenges that underlie constraints in accessing care, provider strain, and limited system capacity. These challenges are most acute at the entry- and middle-skill levels, where instability has cascading effects across the entire healthcare system—from patient access to clinician burnout to organizational costs and overall efficiency of the healthcare system. Given the importance of the healthcare sector in Orange County, the healthcare system must adapt to meet the sector's growing needs and deliver timely, high-quality care.

Five Critical Workforce Pressure Points

Employers in Orange County report persistent difficulties with recruiting, training, and retaining workers in critical roles. This report highlights five interconnected pressure points across the healthcare workforce pipeline. While each pressure point is distinct, they are driven by common underlying challenges: constrained training capacity, high turnover, limited clinical placements, misaligned career pathways, and an aging workforce.

- 1 **Behavioral Health Workforce Shortages**
- 2 **High Turnover in Support Roles**
- 3 **Nursing Shortages**
- 4 **Middle-Skill Workforce Bottleneck**
- 5 **Retirement Risk in Key Occupations**

Data reflects that this mismatch contributes to a set of structural workforce challenges that underlie constraints in accessing care, provider strain, and limited system capacity.

Purpose of This Report

This report will provide hospitals, education and training providers, workforce development boards, policymakers, and community stakeholders with data-driven insights to support the creation of coordinated strategies that strengthen the healthcare workforce pipeline. Findings can be leveraged to ensure that Orange County has a resilient, equitable, and sustainable healthcare workforce for the future. The report:

- Assesses the scale, composition, and economic role of Orange County's healthcare workforce.
- Analyzes current and projected labor demand, including high-demand and hard-to-fill occupations.
- Identifies structural barriers across the workforce pipeline.
- Identifies key pressure points as well as priorities to strengthen the healthcare workforce pipeline.
- Highlights demographic trends and opportunity gaps in workforce participation and career mobility.
- Recommends actionable, cross-sector strategies to expand workforce supply, improve retention, and strengthen career pathways.

From Fragmented Efforts to System-Level Solutions

Efforts to address these challenges have historically been fragmented—led by individual employers, education providers, or programs operating in isolation. However, the scale and persistence of these issues require a coordinated, cross-sector response. **Without coordinated intervention, workforce shortages will continue to grow—limiting access to care, increasing costs, and placing additional strain on healthcare providers and systems.**

This report outlines six priority recommendations that target the root causes of workforce instability and strengthen the healthcare workforce pipeline from training through retention. Each recommendation is designed to directly address one or more of the five workforce pressure points.

Priority Recommendations



Clarify and standardize career pathways and credential requirements to accelerate workforce entry and advancement.



Expand and coordinate clinical training capacity, particularly beyond hospital settings.



Strengthen cross-sector partnerships to align training, funding, and workforce demand.



Improve retention and expand pathways into middle-skill roles, particularly for frontline workers.



Retain experienced workers and strengthen knowledge transfer as the workforce ages.



Advance equity and access to ensure the workforce reflects and serves Orange County's diverse population.

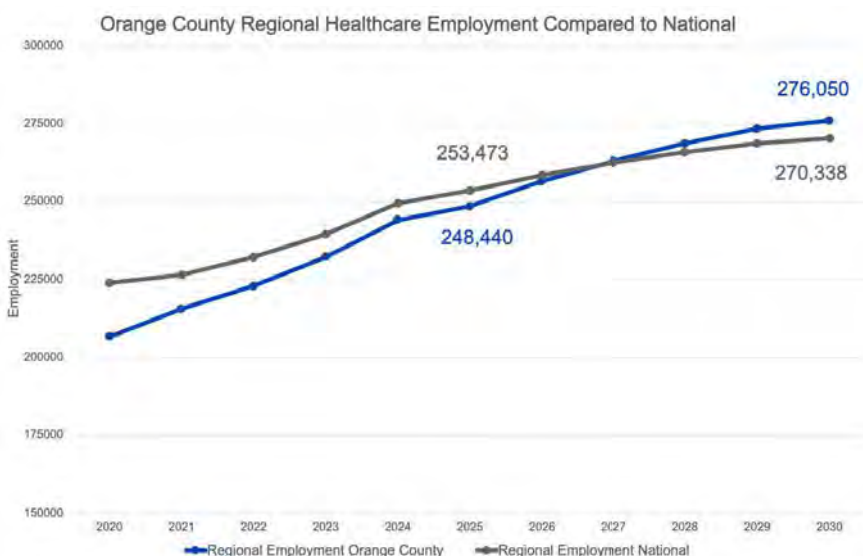
Why This Report Matters

Together, these strategies represent the **most critical levers for Orange County's healthcare system**. They are designed to: expand workforce supply by increasing training capacity and access, stabilize the workforce by improving retention and job quality, strengthen career mobility through clearer and more aligned pathways, and build long-term system resilience through coordinated regional action.

The challenges are significant, and Orange County is well positioned to respond. In recent years, more and more initiatives have brought people together across sectors to address the county's complex systemic needs. **The region has a strong network of healthcare employers, robust education and training institutions, active workforce and community partners, and growing alignment around the need for coordinated, system-level solutions.** By aligning these assets around shared strategies, Orange County can not only address current workforce shortages, but also build a more resilient, equitable, and future-ready healthcare workforce—and serve as a model for regions throughout California and the nation.

THE STATE OF ORANGE COUNTY'S HEALTHCARE WORKFORCE

Orange County's healthcare sector is one of the largest and economically significant industries in the county. In November 2025, 248,440 workers were employed in healthcare occupations in Orange County.² This represents a 2% year-over-year increase, up from 244,111 in November 2024.³ For comparison, total county employment grew by 0.3% during the same period, indicating that healthcare is expanding much faster than the broader local labor market. Further, Orange County's total payroll employment stood at 1,709,700 jobs in November 2025, meaning healthcare represented roughly 15% of all wage-and-salary jobs in the county.⁴

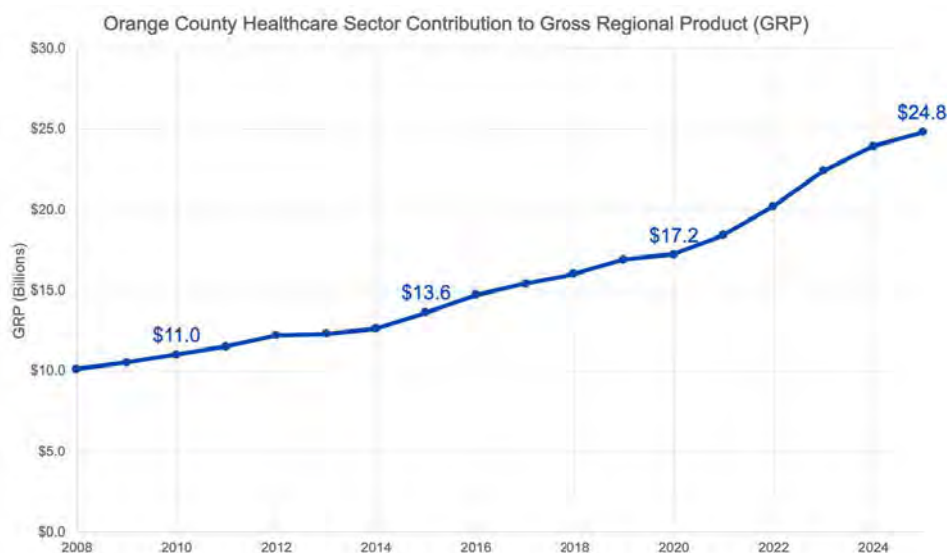


Source: Lightcast

Employment levels further illustrate the magnitude of the healthcare sector in Orange County. In 2025, employers posted over 26,000 new healthcare job openings throughout the year.⁵ Demand is expected to persist in the coming decade, as healthcare employment in the county is projected to grow by 11.1% between 2025 and 2030, increasing from 248,440 jobs to approximately 276,050 jobs. This closely mirrors the 11.5% projected national growth rate for healthcare occupations, indicating that Orange County's healthcare labor market is expanding as quickly as the national healthcare labor market overall.⁶

HEALTHCARE AS A DRIVER OF THE LOCAL ECONOMY

The healthcare sector contributed an estimated \$24.8 billion to Orange County's Gross Regional Product (GRP) in 2025, including \$19.9 billion in employee earnings. These sizable economic contributions underscore healthcare as a major employer and a driver of household income and regional economic stability.⁷ The chart to the right depicts the long-term economic impact of the healthcare industry on the local economy since 2008.



Source: Lightcast

Collectively, these data suggest that Orange County's healthcare sector will remain a cornerstone of the regional economy.

However, the healthcare sector is adding jobs faster than most other sectors in the region, and the workforce pipeline is not delivering enough employees to meet growing demand. The result is a structural labor shortage concentrated in support roles, nursing, behavioral health, and technicians—occupations that are essential to patient flow, care access, and hospital operations.

To fill roles, healthcare employers partially rely on a commuter workforce.⁹ In 2020, for example, more people commuted into Orange County for work than out of the county. Specifically, 280,789 workers traveled from Los Angeles County to Orange County for employment in all sectors of the economy.¹⁰ While commuting helps alleviate some workforce gaps, it also introduces risks for employers. For example, competition for workers across Southern California can make recruitment challenging, increase costs for employers as a result of high turnover, and put strain on employees due to insufficient staffing levels.

Growth in the healthcare workforce will require expanded training capacity, strengthened talent pipelines, and enhanced workforce retention. Thus, strategic investments in healthcare education programs, clinical training partnerships, and career advancement pathways will be critical to meeting the region's projected demand for healthcare workers and sustaining the sector's economic impact.

METHODOLOGY

A mixed-methods approach was used to assess the Orange County healthcare workforce, combining quantitative labor market data with qualitative insights from employers and workforce stakeholders. The research team analyzed labor market data (e.g., Lightcast, Employment Development Department, U.S. Department of Labor), Hospital Association of Southern California (HASC) member survey data from Orange County hospitals, and data from stakeholder interviews to examine workforce trends, identify hard-to-fill occupations, and understand key challenges related to recruitment, retention, and training capacity. Additionally, a targeted literature review was conducted to identify relevant national and statewide trends and best practices.

Data Limitations

Several limitations should be considered. Job posting data may not fully reflect actual demand, as postings can represent multiple openings or remain active after positions are filled. Additionally, survey and interview findings reflect input from a subset of healthcare stakeholders and may not capture all perspectives in the region. Finally, this analysis focuses on Orange County, and findings may not be directly generalizable to other regions with different labor market conditions.

Orange County Healthcare Workforce by the Numbers⁸



248,440 Jobs (2025)

14% Projected Job Increase
(243,639 jobs in 2024 vs. 276,924 jobs in 2030)

2,815 Employers

\$24.8 Contribution
Billion to GRP

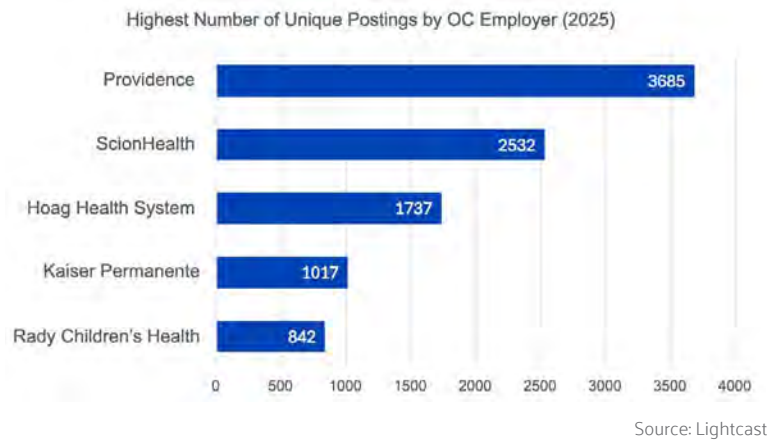
26,424 Annual Openings
(2025)

26% Projected Increase in Behavioral Health Jobs
(53,509 jobs in 2030 vs. 42,374 jobs in 2020)

3.17 Residents
Million who will need healthcare

HEALTHCARE WORKFORCE DEMAND

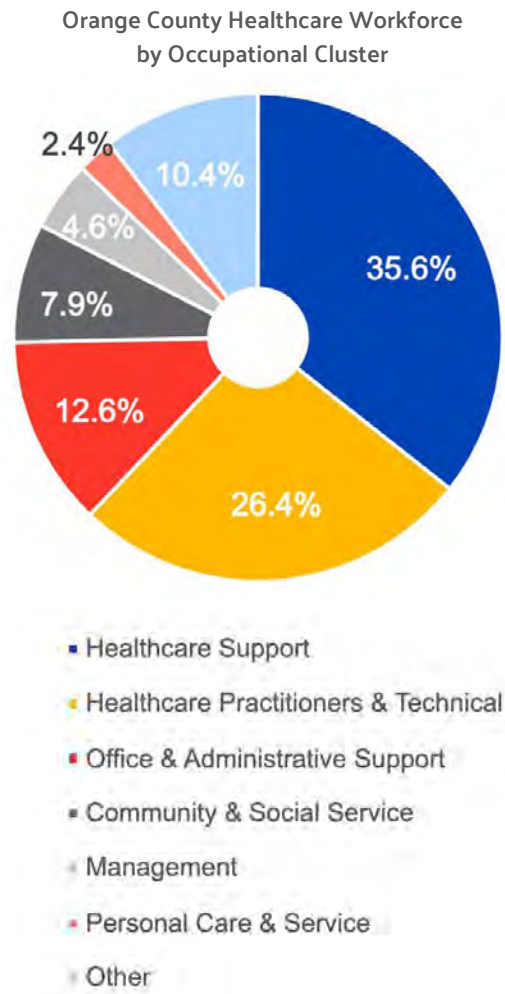
Demand for healthcare workers in Orange County is strong and will continue to grow. In 2025, there were 44,970 unique healthcare job postings listed in Orange County with 2,815 different employers, including hospitals, outpatient providers, and long-term care facilities, competing for employees.¹¹ Large hospital systems represent some of the prominent healthcare employers in the region and are significant contributors to healthcare workforce demand. The chart to the right shows the Orange County healthcare employers that posted the most jobs in 2025.



Orange County Healthcare Workforce by Occupational Cluster

To better understand workforce challenges in the healthcare sector, this report analyzed healthcare jobs by occupational clusters. Jobs were categorized using the federal Standard Occupational Classification (SOC) system, which groups occupations based on similar work activities, skills, and training requirements. Examining these groups together and separately illuminates workforce trends, hard-to-fill occupations, and training needs throughout the healthcare workforce.

The largest share of jobs falls within Healthcare Support Occupations (35.6%), which includes frontline roles that assist clinical staff and provide direct patient care, such as nursing assistants, home health aides, medical assistants, and phlebotomists. The second-largest group is Healthcare Practitioners and Technical Occupations (26.4%), which includes licensed professionals such as physicians, registered nurses (RNs), pharmacists, therapists, and diagnostic technologists. Additional workers are employed in Office and Administrative Support Occupations (12.6%), Community and Social Service Occupations (7.9%), and Management Occupations (4.6%), with smaller shares in Personal Care and other supporting occupations.¹²



Source: Lightcast

Occupational Cluster	% Healthcare Jobs	# 2025 Jobs	% Change (2021–2025 Job Growth)	2024 Annual Turnover Rate	Median Annual Earnings
Community and Social Service Occupations (SOC 21) support health and well-being through social, behavioral, and community-based services. These roles include social workers and counselors who help patients navigate care systems and address social determinants of health.	7.9%	32,744	26.1%	49.6%	\$61,089 (<i>\$39,798 COL adjusted</i>)
Healthcare Practitioners and Technical Occupations (SOC 29) include licensed clinical professionals and technical specialists who diagnose, treat, and provide direct medical care. These roles include physicians and nurses and typically require formal education, certification, or licensure.	26.4%	84,571	5.2%	48.1%	\$106,402 (<i>\$69,317 COL adjusted</i>)
Healthcare Support Occupations (SOC 31) include frontline and entry- to middle-skill workers who assist practitioners and provide direct patient care and operational support. These roles include medical assistants and home health aides, are critical to care delivery, and often represent key workforce-entry points into healthcare.	35.6%	97,864	20%	67.2%	\$34,430 (<i>\$22,430 COL adjusted</i>)

Note: Information on roles, including the highest level of education needed and annual earnings, are included in the Appendix.

Source: Lightcast

Community and Social Service Occupations grew by 26% between 2021 and 2025—the fastest-growing of the three healthcare occupational clusters¹³—reflecting increasing demand for behavioral health and care coordination services.¹⁴ These roles are increasingly important in healthcare delivery as hospitals expand behavioral health services and adopt integrated care models that address both medical and social needs. This growth indicates recognition of the need to address social determinants of health in order to improve patient outcomes and reduce hospital readmissions.

In Orange County, labor market data show that there are more job seekers with profiles than job postings in this occupational group. Despite this apparent supply, employers continue to report difficulties filling several behavioral health roles, and shortages persist. This suggests a mismatch between employer demand and the availability of workers with the specific credentials or specializations required for these positions.

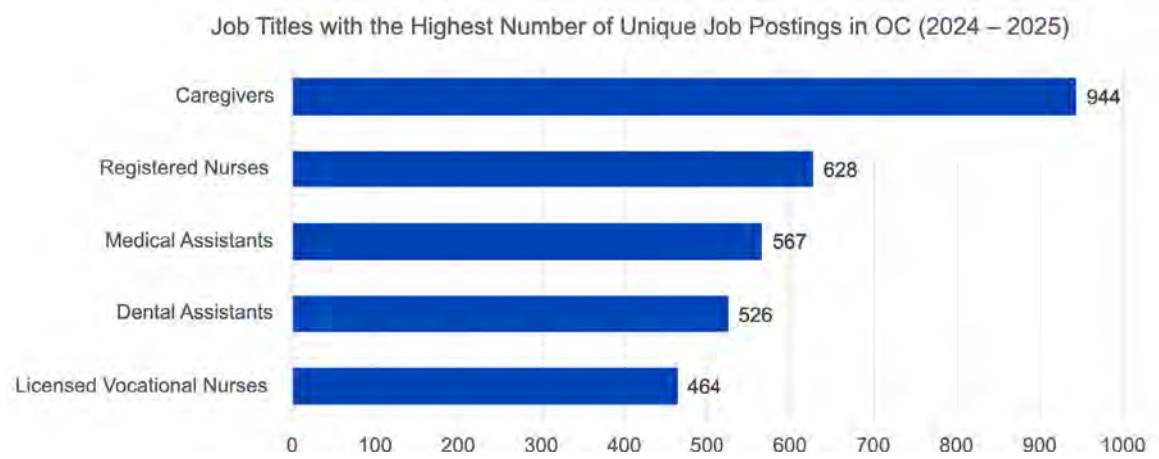
Healthcare Practitioners and Technical Occupations typically require formal education, professional certification, or state licensure, making them among the most highly trained and highly compensated roles in the healthcare workforce. Relative to other healthcare occupational clusters, employment growth in this group was less rapid between 2021 and 2025. However, labor market data show continued demand for these roles. Although the median annual earnings for this occupational cluster—approximately \$106,302, or \$69,252 when adjusted for cost of living—are significantly higher than wages in other clusters, employers report persistent difficulties with filling several key clinical and technical roles.

Healthcare Support Occupations, often referred to as allied health support roles, represent the largest segment of the healthcare workforce. Workers play a critical role in healthcare delivery by supporting clinical staff, preparing patients for care, and performing essential diagnostic and administrative tasks that enable healthcare systems to operate efficiently. These roles generally require less formal education than other healthcare occupations and often serve as entry points into the healthcare workforce. Many employees later pursue additional training to prepare them for advanced healthcare occupations and long-term careers within the healthcare workforce.

Healthcare Support Occupations are among the lowest-paid roles and experience the highest annual turnover rate across the healthcare workforce, likely reflecting the demanding nature of these roles and competition from other industries that offer comparable wages with less-demanding working conditions. The large share of healthcare support roles highlights the importance of these occupations in sustaining the healthcare system and underscores the need for strong training pipelines and career pathways into higher-skilled clinical roles.

OCCUPATIONS WITH THE HIGHEST WORKFORCE DEMAND

Occupations with the highest workforce demand in Orange County are concentrated in roles that are essential to day-to-day care delivery, patient care, and clinical operations. As shown in the chart below, the most frequently posted job titles in Orange County—caregivers, RNs, and medical assistants—reflect strong demand for workers who can support healthcare organizations with managing rising service needs in hospitals, outpatient settings, and home-based care. Many of these roles are middle-skill occupations that typically require more than a high school diploma but not always a four-year degree. These roles represent a key priority for the region’s workforce strategy, as they are critical to healthcare delivery and provide entry points to stable healthcare careers. High demand for these roles signals ongoing pressure in the workforce pipeline, particularly where training capacity, clinical placements, wages, and retention challenges limit employers’ abilities to fill positions quickly.



Source: Lightcast

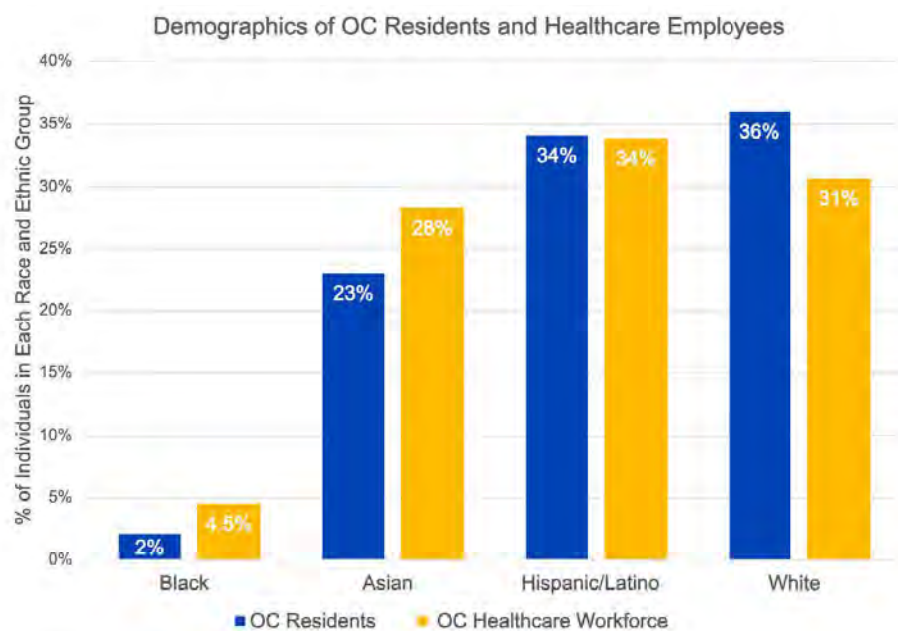


HEALTHCARE WORKFORCE DEMOGRAPHICS

Understanding the demographics of Orange County is essential for interpreting workforce trends and identifying strategies to increase healthcare workforce participation, equity, and access to opportunity. The characteristics of the region's population, including its racial and ethnic diversity, linguistic needs, educational attainment, and cost of living, shape both the demand for healthcare services and the composition of the healthcare workforce.

Race and Ethnicity of Orange County Residents

Orange County is home to a highly diverse and economically dynamic population of more than 3.17 million residents. The region's population is racially and ethnically diverse, with White (36%), Hispanic/Latino (34%), and Asian (23%) residents representing the largest groups.⁵¹ Black residents represent about 2% of the population, while American Indian and Alaska Native and Native Hawaiian and Other Pacific Islander populations represent a small but proportionate share of both the Orange County population and the healthcare workforce (0.5% each). Additionally, 46% of residents speak a language other than English at home.⁵² These demographics have important implications for healthcare delivery, as a diverse patient population often requires a workforce that reflects the community and can provide culturally and linguistically responsive care.



Educational Attainment of Orange County Residents

Nearly 45% of Orange County residents hold a bachelor's degree or higher, reflecting a relatively well-educated population that can support the development of highly skilled healthcare professions. At the same time, a substantial portion of the population enters the workforce through alternative education pathways. Among residents aged 25 and older, 24.2% have completed some college or earned an associate's degree, which represents a key pipeline for middle-skill healthcare occupations such as medical assistants, technicians, and LVNs.

Labor Force Participation in Orange County

Labor force participation in Orange County is relatively strong. Approximately 1.7 million individuals participate in the workforce, representing 65.5% of residents aged 16 and older. Further, Orange County maintains a relatively low unemployment rate of 3.9%. Together, these factors intensify cross-sector competition for workers, making recruitment more challenging for healthcare employers, especially in entry- and middle-skill roles.

Equity Gaps in Workforce Participation and Advancement

High Cost of Living

Orange County faces a significant cost-of-living challenge, which has important implications for workforce recruitment and retention. A recent study examined the true cost of living in California, highlighting gaps between the income needed to meet basic needs and wages of residents.⁵³ In 2023, the true cost of living for a household with two adults, one preschool-aged child, and one school-aged child was \$127,888, and 34% of households did not meet this threshold. Of note, cost of living varied by household; true cost amounted to \$73,274 for a two-adult household relative to \$107,729 in a two-adult household with one child.

The cost of living in Orange County is approximately 64% higher than the national average, driven largely by housing and transportation costs. While the median household income of \$115,229⁵⁴ is higher than the statewide median of \$100,149,⁵⁵ these higher earnings are not representative of wages for all residents, particularly those working in lower-wage healthcare occupations. For example, many Healthcare Support Occupations—such as nursing assistants, home health aides, and behavioral health support workers—earn wages that fall below the level required to meet basic living expenses in the region. As a result, employers may face challenges recruiting and retaining workers for critical roles, particularly when workers can pursue employment in other industries offering comparable wages with fewer overall demands.

Gender Distribution

Healthcare remains a female-dominated industry in Orange County, with **women representing approximately 71% of the workforce compared to 29% for men.** This gender distribution reflects national trends in healthcare professions, particularly in nursing and Healthcare Support Occupations where women comprise the vast majority of workers. Lightcast data shows that most medical and dental assistants (88%); RNs (86%); LVNs (85%); nurse practitioners (85%); and child, family, and school social workers (81%) are women. In contrast, men are more highly represented in higher-paying clinical roles such as physicians (74%) and dentists (81%) and some middle-skill roles such as EMTs (69%).

This gender distribution highlights a persistent occupational segmentation within the healthcare workforce where women are concentrated in lower-wage, high-turnover roles and men are more represented in higher-paying, advanced clinical positions. These patterns have implications for both equity and workforce stability, as they reinforce wage disparities and limit career mobility pathways. These gaps also present an opportunity to diversify the workforce by expanding recruitment of men into entry- and middle-skill healthcare roles while supporting advancement pathways for women into higher-paying clinical and leadership positions.



Disparities by Race and Ethnicity

Although the healthcare workforce reflects the diversity of Orange County, representation is uneven across occupations—particularly for wages, skill level, and career advancement. In the Orange County healthcare workforce, there is a lack of diversity in higher-paid occupations specifically. This is concerning given that racial concordance is associated with better outcomes in healthcare.⁵⁶

Hispanic/Latino workers, who make up roughly one-third of the county's population, are overrepresented in many entry-level and support roles, such as medical assistants (55%), dental assistants (48%), and social and human service assistants (44%). In contrast, they are underrepresented in higher-paying clinical occupations, such as RNs (21%) and pharmacists (12%), indicating a need for tailored initiatives to promote diversity in career advancement pathways.

The concentration gradient chart on the next page clearly shows this discrepancy. **Hispanic/Latino workers make up 40%–55% of the lowest-paid occupations (55% of medical assistants, 48% of dental assistants, 46% of pharmacy aides), well above their 34% share of the Orange County population.** However, in higher-paid positions, such as pharmacists and physical therapists, the share of Hispanic/Latino workers drops to 12%–16%. These patterns highlight structural concentration in roles with limited upward mobility.

White workers are generally more represented in higher-wage clinical roles, including physicians and specialized practitioners, demonstrating greater access to advanced education and professional pathways. Asian workers, who comprise 23% of the population, are well represented—and in some cases overrepresented—in technical and clinical occupations such as pharmacists and laboratory professionals.

Black workers are consistently overrepresented relative to population share (2.1% in Orange County) in nearly every occupation in the mid- to low-wage band, peaking at nursing assistants (10.5%), child and family social workers (9.6%), and LVNs (9.2%). Notably, these roles require significant training and licensure; however, salaries are not commensurate with credentials.

There is a clear advancement gap such that the occupations with the clearest pathways to higher wages—RNs, physical therapists, pharmacists—show dramatically lower Hispanic/Latino and Black representation. Although many of the entry-level roles (i.e., LVNs, medical assistants, pharmacy technicians) have high concentrations of both groups, workers in the pipeline are not advancing to higher level roles.



PRESSURES AFFECTING THE HEALTHCARE WORKFORCE

Orange County's healthcare workforce is growing rapidly, and employers are struggling to meet regional demand. Between 2024 and 2029, the number of healthcare jobs in the region is expected to increase by nearly 30%, more than double the projected national growth rate of 12.4%.¹⁵ Additionally, the Orange County population is projected to grow by nearly 1% to 3,187,664 residents by 2036, increasing the number of individuals who will need and receive care.¹⁶

These shortages are not driven by a lack of interest in healthcare careers but by systemic constraints that limit workforce entry and long-term retention.

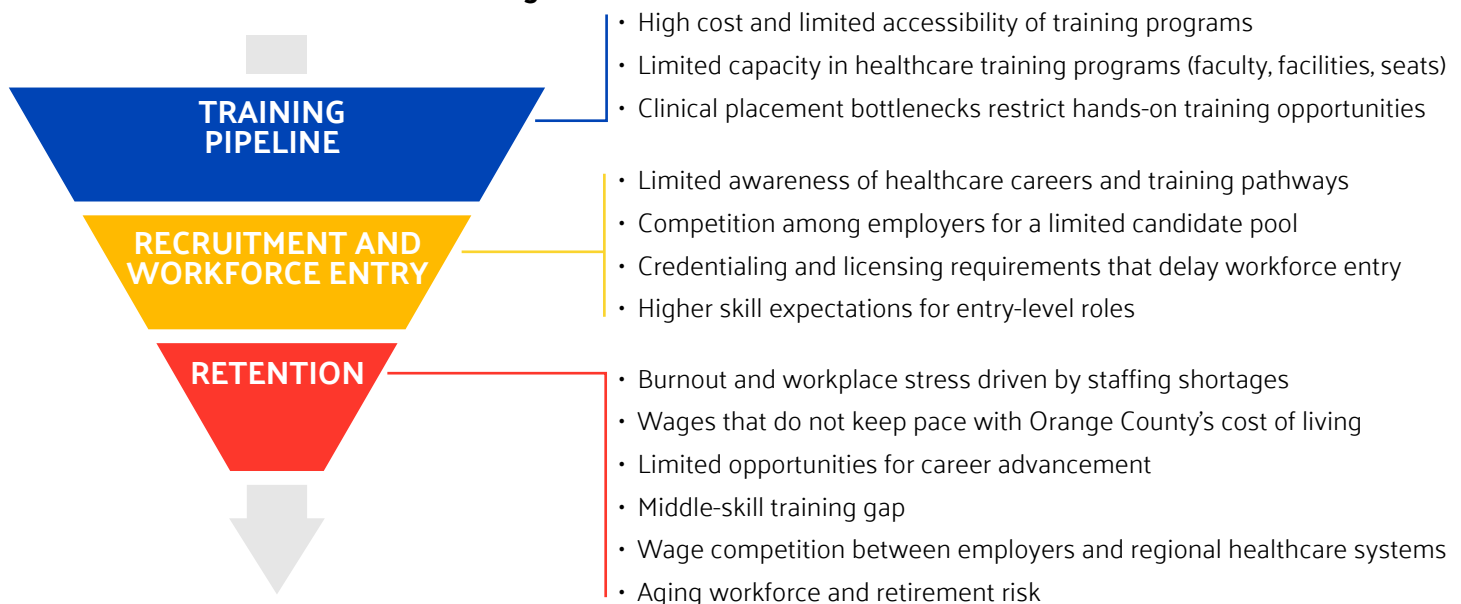
Orange County healthcare employers report ongoing difficulties with recruiting, training, and retaining workers in key roles—including nursing, behavioral health, and middle-skill occupations—that are essential to care delivery. These shortages are not driven by a lack of interest in healthcare careers but by systemic constraints that limit workforce entry and long-term retention. Additionally, there are inequities and disparities in workforce participation that reduce the strength of the healthcare system.

These challenges are reflected in California, which is projected to face a labor shortage of approximately 500,000 healthcare workers in 2026. Further, 800,000 workers are expected to leave the sector by 2030, representing a loss of 160,000 workers each year.¹⁷ Demand for behavioral health services also continues to rise significantly, with national projections indicating a need for 900,000 additional mental health professionals in 2026.¹⁸

HEALTHCARE WORKFORCE PIPELINE: KEY BARRIERS TO TRAINING, ENTRY, AND RETENTION

An understanding of the healthcare workforce pipeline is vital to identify where challenges are most prevalent and address workforce shortages. The workforce pipeline framework below illustrates the major stages that influence whether individuals successfully enter and remain in healthcare careers. Specific barriers at each stage of the pipeline—from training and recruitment to workforce entry and long-term retention—contribute to workforce shortages in Orange County, and multiple challenges exist across the pipeline.

Drivers of Healthcare Workforce Shortages



KEY FACTORS DRIVING ORANGE COUNTY WORKFORCE PRESSURES

Orange County's healthcare workforce is impacted by a variety of workforce pressures, many of which are systemic and structural and will take focused effort and collaboration to address.

The greatest workforce pressures in Orange County are concentrated on entry- and middle-skill level occupations. These roles, including support staff, technicians, and occupations that feed into nursing occupations, are essential to day-to-day care delivery and patient flow. Notably, previous reports and data attribute weaknesses in the healthcare system to challenges with hiring employees for these occupations. Instability in these roles creates system-wide impacts that limit provider capacity, increase burnout among clinical staff, and constrain access to care.

The following insights highlight the core structural pressures shaping the workforce today and provide a foundation for the deeper analysis that follows.

-  **Training pipeline constraints.** Education and training systems are not producing enough workers to meet demand, not due to lack of interest but due to limited training capacity. Constraints such as faculty shortages, limited program seats, and, most importantly, clinical placement bottlenecks delay workforce entry and restrict the number of qualified candidates entering the labor market.
-  **High turnover and workforce churn.** A large share of healthcare hiring demand is driven by turnover and replacement needs rather than net job growth. High churn, especially in healthcare support and nursing roles, creates continuous hiring pressure, destabilizes teams, and increases recruitment and training costs for employers.
-  **Misalignment between wages and high cost of living.** Many frontline, behavioral health, and middle-skill healthcare roles do not offer wages or advancement pathways that align with Orange County's high cost of living. This misalignment contributes to recruitment challenges, high turnover, and barriers to long-term career retention.
-  **Regional competition for talent.** Healthcare employers operate within a highly competitive regional labor market. Many workers commute over county lines, and competition among employers in Southern California increases wage pressure and contributes to workforce mobility and turnover.
-  **Aging workforce and rising demand for care.** As the population ages, demand for healthcare services is increasing, particularly for chronic disease management, long-term care, and behavioral health services. Additionally, a significant share of the healthcare workforce is nearing retirement age, which will further reduce workforce supply in the coming decade.

Many of these pressures reflect long-standing structural imbalances between workforce supply and demand. Without targeted, system-level interventions and sustained cross-sector collaboration, the healthcare workforce will not be equipped to meet growing demand amid a growing and aging population. The following section of the report highlights areas of the healthcare workforce where these pressures are most prominent.

HARD-TO-FILL OCCUPATIONS

A review of labor market data from Orange County's healthcare sector shows ongoing and structural shortages in several critical occupations. To identify which roles are most difficult for employers to fill, five key metrics were equally weighted and analyzed.

Together, these measures were analyzed to identify occupations where employer demand may be outpacing the available workforce, where retirement pressures may emerge, and where training pipelines may not be producing enough workers to meet hiring needs.

The hardest-to-fill occupations share a common pattern: Employer demand is high, the local candidate pool is small, and training pipelines are not producing enough workers to keep pace. For example, home health and personal care aides, the largest healthcare occupation in Orange County with 60,702 workers, recorded only 37 regional training completions relative to 11,589 annual openings, and nearly 37% of the current workforce is aged 55 or older. Other occupations had challenges with particular metrics. Emergency medical technicians (EMTs) had only 10 online profiles relative to 93 unique job postings—the lowest profile-to-posting ratio in the entire dataset—and phlebotomists recorded only 3 training completions in 2024 despite 196 projected annual openings. Data also showed high demand for dental assistants, with 1.86 times more job postings relative to the national average.

Beyond support roles, challenges with technical and behavioral health occupations underlie credential barriers and growing demand for service providers. Behavioral health counselors have grown by 80% since 2021—the fastest of any occupation analyzed—yet the profile-to-posting ratio of 0.24 signals that the candidate pipeline is not keeping pace with need. RNs, the county's largest individual occupation, face a retirement cliff (i.e., large percentage of older workers leaving the workforce) with 25% of the workforce aged 55 or older. Similarly, licensed vocational nurses (LVNs) have a 69% turnover rate and a below-average candidate concentration. For nearly every occupation flagged in the following table, challenges reflect a structural mismatch between Orange County's growing healthcare demand and the regional infrastructure built to supply it.

Metrics Used to Determine Hard-to-Fill Roles

- » **Posting Concentration.** This metric indicates how many job postings exist relative to the national average. Higher values indicate stronger local demand compared to other regions.
- » **Profile Concentration.** This metric indicates how many potential workers are available locally using the number of available workers with professional profiles online (e.g., Indeed) relative to the national average. Values above 1 indicate a higher concentration of potential workers in the region, whereas values below 1 indicate a lower concentration of available workers.
- » **Retirement Risk.** This metric indicates the percentage of workers aged 55 and older within an occupation, which may indicate potential workforce shortages as employees approach retirement.
- » **Profile-to-Posting Ratio.** This metric provides a ratio of the number of potential workers (i.e., job profiles) to the number of open jobs (i.e., job postings) for an occupation. Lower ratios suggest fewer available workers relative to employer demand.
- » **Education Completions-to-Openings Ratio.** This metric indicates the extent to which training programs produce enough graduates to meet demand. This ratio provides a comparison of the number of individuals completing relevant education or training programs to the number of projected job openings.



HARD-TO-FILL HEALTHCARE OCCUPATIONS – ORANGE COUNTY, CA

Top 15 Occupations by Composite Hard-to-Fill Score | Data: Lightcast (OC), BLS OOH 2024-2034 | 5 equal-weight metrics

#	Occupation	2025 Jobs	% Change 2021-2025	Projected Growth (10-yr)	Profile-to-Posting Ratio	Posting Conc.	Profile Conc.	Job Openings Rate	Hire Rate (2024)	Turnover Rate	Retirement Risk (% 55+)	Interpretation
1	Home Health & Personal Care Aides	60,702	32%	22%	0.105	1.11	0.67	17%	74%	64%	37%	Largest OC healthcare occupation with explosive 32% growth. Near-zero training pipeline (37 completions vs. 11,589 openings) and highest retirement risk at 37% aged 55+. Home-based care demand is structurally outpacing all supply signals.
2	Nursing Assistants	8,955	3%	4%	0.145	0.64	0.43	14%	87%	84%	22%	Persistently below-average profile concentration (0.43) in a high-volume frontline role. Only 154 completions against 1,427 annual openings. Churn and limited candidate visibility make continuous recruitment a major challenge.
3	Emergency Medical Technicians	2,199	32%	5%	0.006	1.25	0.59	11%	74%	65%	6%	Lowest profile-to-posting ratio in the entire dataset (0.006)—only 10 online profiles vs. 93 unique postings. 32% job growth since 2021 with near-zero candidate visibility signals a structurally thin and hard-to-replenish pipeline.
4	Phlebotomists	1,439	-13%	9%	0.132	1.04	0.73	12%	57%	61%	14%	Only 3 regional training completions against 196 annual openings — one of the most severe pipeline gaps in OC healthcare. High posting concentration (1.04x) with well-below-average profile concentration.
5	Counselors, All Other	1,197	-13%	6%	0.113	1.74	0.90	11%	84%	84%	26%	Highest posting concentration in the 21-group (1.74x national average) paired with a near-zero profile-to-posting ratio (0.11). Local employer demand far exceeds locally visible candidates despite a broader statewide training surplus.
6	Dental Assistants	6,239	5%	8%	0.103	1.86	0.87	13%	71%	72%	13%	Highest posting concentration among all support occupations (1.86x national average). Low profile-to-posting ratio (0.10) and only 265 completions against 946 annual openings create persistent hiring difficulty for dental practices across OC.
7	Registered Nurses	25,056	0%	6%	0.168	0.79	0.80	7%	47%	46%	25%	Largest single occupation in OC (25,000+ workers). Despite active nursing programs, a low profile-to-posting ratio (0.17), 25% retirement-age workforce, and ongoing travel-nurse competition create chronic structural pressure.
8	Medical Records Specialists	2,099	7%	8%	0.250	1.23	0.89	8%	37%	37%	29%	High posting concentration (1.23x) driven by digital health expansion. Highest 55+ share in this group (29%), making retirement-driven attrition an accelerating concern on top of already-limited completions.
9	Licensed Vocational Nurses	7,464	8%	2%	0.234	0.40	0.76	9%	71%	69%	26%	High retirement risk (26% aged 55+) in a volume clinical role. Below-average profile concentration (0.76) and hospital wage competition make LVN recruitment one of the most persistent challenges in OC.
10	Community & Social Service Specialists	1,251	34%	5%	0.248	0.95	0.76	11%	53%	46%	24%	Catch-all behavioral health group with 34% job growth and below-average profile concentration (0.76). Limited dedicated OC training pathways and credential fragmentation create persistent supply gaps.
11	Surgical Assistants	108	3%	6%	1.333	0.99	0.61	9%	—	29%	17%	No completions reported in OC for a specialized surgical support role requiring postsecondary credentials. Small occupation size combined with zero pipeline creates structurally chronic vacancy.
12	Mental Health & Substance Abuse Social Workers	2,092	38%	7%	0.191	1.08	1.09	10%	54%	47%	27%	High posting concentration (1.08x) for a niche clinical social work specialty requiring a master's degree. Credential barrier limits supply elasticity even as behavioral health demand grows.
13	Dental Hygienists	2,642	-6%	10%	0.302	1.11	0.86	8%	47%	44%	21%	Strong posting concentration (1.11x) with only 197 regional completions against 234 annual openings. Associate's degree requirement and licensure exam create a narrow pipeline for a growing role.
14	Behavioral Health Counselors	5,860	80%	17%	0.237	0.82	0.50	12%	66%	58%	20%	Fastest-growing occupation in this table at 80% change since 2021. Very low profile-to-posting ratio (0.24) and below-average profile concentration underscore a workforce pipeline failing to keep pace with behavioral health demand.
15	Pharmacy Technicians	4,070	12%	7%	0.257	0.75	0.71	9%	56%	54%	14%	Despite a large workforce (4,000+), only 135 regional completions against 407 annual openings. High turnover (54%) combined with a below-average profile pool creates a revolving-door recruitment challenge.
SCORING METHODOLOGY — each metric rank-normalized 0-1 (1 = hardest to fill), equal weight												

• **Posting Concentration:** Job postings for this occupation in OC relative to national average. Higher = stronger local demand.

• **Profile Concentration:** Online worker profiles in OC relative to national average. Lower = fewer available workers locally.

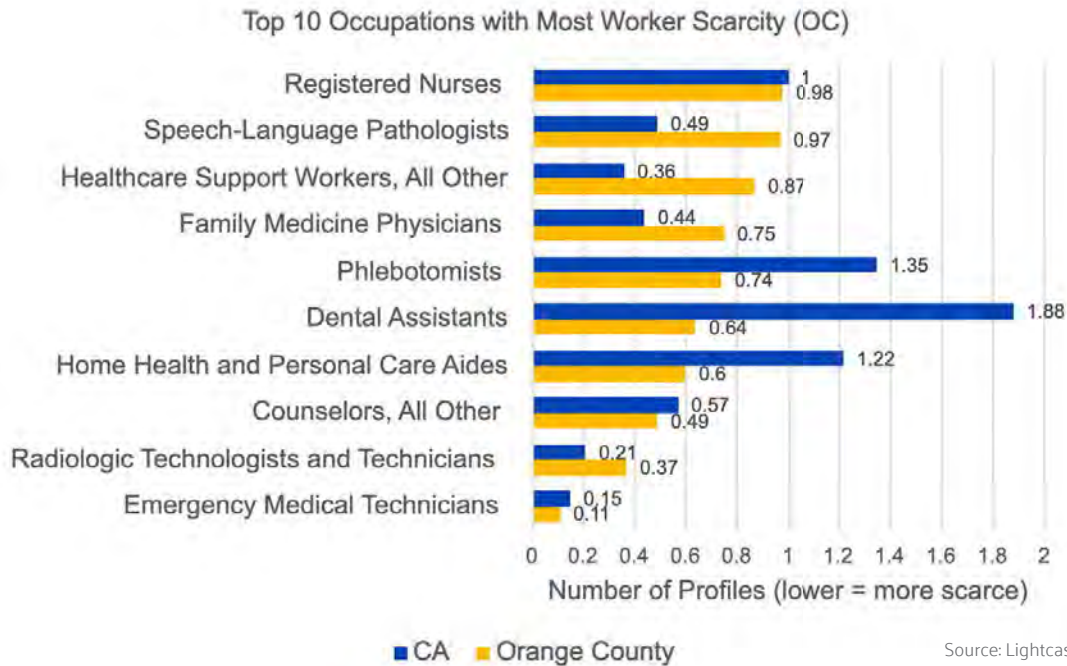
• **Retirement Risk (% 55+):** Share of workers aged 55+. Higher = greater near-term attrition risk from retirements.

• **Profile-to-Posting Ratio:** Worker profiles ÷ job postings. Lower = fewer candidates per open role — tighter labor market.

• **Complete-to-Openings Ratio:** Training completions ÷ projected openings. Lower = pipeline insufficient to meet employer demand.

WORKER SCARCITY

The bar chart below shows the top ten occupations with the fewest profiles in Orange County relative to California. Data shows that these occupations have few job seekers despite high regional demand. EMTs have the most scarcity, followed by radiologic technicians, which aligns with patterns throughout the state.



WORKFORCE CHURN

Workforce churn, a critical indicator of workforce stability, is the rate at which employees leave an organization and must be replaced. Workforce churn is very costly for employers with research showing that replacing hospital staff can exceed \$60,000 due to recruitment efforts, onboarding, administrative needs to manage turnover, and decreases in productivity.^{19,20}

Several labor market indicators were examined to identify structural challenges with filling occupations: profile-to-posting ratio (i.e., employee supply constraints), job openings rate (i.e., employer demand), hire rate (i.e., workforce churn), and turnover rate (i.e., retention pressure). When these indicators are simultaneously elevated, it signals a persistent imbalance between employer demand and available workers. As a result, these roles are consistently difficult for healthcare employers to recruit for and/or retain over time.

Occupation	2025 Jobs	% Change from 2021–2025	Projected Growth	Profile-to-Posting Ratio	Job Openings Rate	2024 Hire Rate	2024 Turnover Rate	Interpretation
Nursing Assistants	8,955	3%	4%	0.145	0.133	87%	84%	Severe workforce churn and extremely limited candidate supply for frontline care roles.
Medical Assistants	9,860	11%	14%	0.250	0.129	69%	65%	High-demand middle-skill occupation with persistent hiring pressure across hospitals and clinics.
Dental Assistants	6,239	5%	8%	0.103	0.142	71%	71%	Strong employer demand combined with a limited talent pool.
Home Health & Personal Care Aides	60,702	32%	22%	0.105	0.128	74%	64%	Extremely high demand in home-based care combined with supply shortages.
Physical Therapist Assistants	1,035	32%	14%	0.286	0.171	115 %	100%	Extremely high workforce churn indicates rapid hiring cycles and retention challenges.
Emergency Medical Technicians	2,199	32%	5%	0.006	0.126	74%	65%	Extremely small candidate pool relative to postings.
Phlebotomists	1,439	-13%	9%	0.132	0.103	57%	61%	Specialized diagnostic role with steady demand and turnover pressure.
Licensed Vocational Nurses	7,464	8%	2%	0.234	0.112	71%	69%	Persistent recruitment pressure driven by workforce churn and hospital competition.
Behavioral Health Counselors	5,860	80%	17%	0.237	0.125	66%	58%	Growing behavioral health demand outpacing credential pipeline.

Source: Lightcast

PRIORITIES TO STRENGTHEN THE HEALTHCARE WORKFORCE

This section identifies five interconnected pressure points across the healthcare workforce pipeline that should be prioritized to address workforce challenges in Orange County's healthcare system. While each pressure point is distinct, they are rooted in shared underlying challenges: constrained training capacity, limited clinical placements, misaligned career pathways, high turnover, and an aging workforce.

FIVE CRITICAL WORKFORCE PRESSURE POINTS

- 1 **Behavioral Health Workforce Shortages**
- 2 **High Turnover in Support Roles**
- 3 **Nursing Shortages**
- 4 **Middle-Skill Workforce Bottleneck**
- 5 **Retirement Risk in Key Occupations**



1. Behavioral Health Workforce Shortages

Behavioral health represents one of the most significant and rapidly widening workforce gaps in Orange County, with demand far outpacing the supply of qualified professionals.

In 2022, Orange County had an estimated supply of 8,070 behavioral health workers compared to an estimated demand for 11,470 workers, representing a workforce shortage of nearly 30%. This gap is projected to widen to 45% by 2033, aligning with broader behavioral health workforce shortages throughout California and the U.S.²¹ California was identified as one of the states with the highest hiring demand for mental health professionals, and workforce shortages have persisted for several years.²² California passed Proposition 1 in 2024 to increase and expand access to behavioral healthcare, further underscoring statewide needs.²³ Demand for behavioral health professionals is projected to grow by approximately 26%.²⁴ Furthermore, the demand for culturally responsive and bilingual behavioral health professionals to meet the needs of racially diverse individuals is increasing over the state.²⁵

The shortage of behavioral health workers has system-wide implications for healthcare delivery. These professionals play a critical role in coordinating patient care, supporting discharge planning, addressing social determinants of health, and connecting patients with community resources that improve overall health outcomes. Without sufficient behavioral health capacity, individuals in need experience

delays in receiving care, while hospitals experience longer patient stays and reduced overall system efficiency.²⁶

In many of these occupations, the challenge is not simply due to a lack of candidates—but rather a lack of training capacity; a mismatch between available workers and the specific credentials, licensure, and specialization required for these roles; and workplace burnout. Data show strong, sustained demand for behavioral health counselors in Orange County, for example, with employers posting a high volume of job openings relative to national trends. However, this demand is accompanied by a 13% decline in the number of counselors between 2021 and 2025, signaling a shrinking workforce. Additionally, there are relatively few candidates with active profiles, suggesting a limited and constrained talent pool. Compounding this issue, the occupation experiences an 84% annual turnover rate, indicating extreme workforce churn and ongoing instability. These challenges are further exacerbated by low compensation, with median wages of \$43,923 dropping to approximately \$28,614 when adjusted for cost of living. Together, these factors point to a structurally constrained workforce where high demand, declining supply, and poor retention dynamics make it difficult for employers to recruit and retain behavioral health professionals.

Similarly, demand for substance use disorder, behavioral disorder, and mental health counselors has grown rapidly, with employment increasing by 80% between 2021 and 2025. Employers report difficulty filling these roles, and the region has not found a way to meet this huge growth. Labor market indicators show a constrained talent pipeline such that the local supply of workers trained for these roles is relatively

limited, as evidenced by fewer job seekers than job postings. Further, there is high turnover (66%), signaling that the supply of workers with the required credentials and specialization is not sufficient to meet demand. This combination of rapid job growth, limited candidate supply, and high workforce churn underscores a structural shortage in the behavioral health workforce.

What's Driving Behavioral Health Workforce Shortages

- ❗ **Pre-licensure training demands.** Many behavioral health providers require advanced educational attainment, including hundreds of hours in supervised clinical training before graduation. These requirements reflect the standard of care necessary for roles providing clinical services. However, the financial strain of unpaid training may deter candidates from entering or completing these programs.
- ❗ **Rigid pathways to obtaining licensure and limited supervision opportunities.** After graduation, some occupations such as social work and marriage and family therapy require candidates to complete 3,000 supervised clinical hours before qualifying for independent licensure. Prior to licensure, individuals can practice and bill insurance under a licensed supervisor. However, supervision is not offered by all organizations due to limited staff capacity. Limited clinical placement impacts the workforce pipeline by slowing candidates' advancement from trainee to independent practice while delaying salary increases.
- ❗ **Burnout and high caseloads.** Behavioral health providers often face high caseloads, significant workplace stress, and burnout, which contribute to workforce attrition and difficulties with recruitment and retention.²⁹ These challenges reflect similar shortages in mental health providers throughout California and the U.S. Notably, demand for behavioral health services has increased substantially in recent years, particularly following the COVID-19 pandemic, intensifying pressure on the behavioral health workforce.
- ❗ **Low wages relative to high cost of living.** The median annual earnings for behavioral health occupations is \$61,160 and falls to \$39,798 when adjusted for Orange County's cost of living. This is significantly below the livable wage threshold of \$66,976 for adults without children in Orange County and may drive employees to seek additional employment to meet basic needs, reducing retention and long-term workforce participation.³⁰





2. High Turnover in Support Roles

High turnover, low wages, and misaligned training pipelines contribute to persistent staffing challenges with support occupations which comprise a large, critical portion of the healthcare workforce in Orange County.

In 2025, Orange County employed 97,864 workers in Healthcare Support Occupations, making it the largest occupational cluster in the healthcare workforce. Between 2021 and 2025, employment in this cluster grew by 20%, reflecting the increasing demand for patient care services in hospitals, outpatient clinics, and home-based care settings. Demand for entry-level healthcare workers is likely to increase as healthcare services expand into outpatient and home-based care settings. For example, there is an estimated 21.7% growth in home health care aides and a 14% increase in medical assistants by 2034. Because Healthcare Support Occupations make up more than one-third of the healthcare workforce, workforce instability in these roles can have system-wide impacts on hospital operations and patient care delivery.

Many of these occupations provide individuals with an entry point into the healthcare workforce, exposing them to valuable on-the-job training that prepares them for more advanced positions.³¹ When these positions remain unfilled, however, the entire healthcare talent pipeline is weakened. Despite representing a sizable segment of the healthcare workforce, support roles remain unstable, with turnover exceeding 67% annually.³² This rate indicates that employers are replacing their entire frontline workforce approximately every 18–24 months, creating continuous operational disruption. Turnover is even higher among nursing assistants (84%) and dental assistants (72%),³³ demonstrating extreme workforce churn. High turnover in support roles is not simply a retention issue—it is a structural weakness in the healthcare workforce system. Without improvements to wages, training alignment, and career pathways, workforce instability at the frontline level will continue to constrain system capacity and quality of care.

What's Driving Support Role Instability

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Turnover. Despite strong demand, turnover rather than growth is a major driver of much of the hiring. In some occupations, this imbalance is particularly stark. For example, nursing assistant roles grew by just 3% between 2021 and 2025, yet they experienced an 84% annual turnover rate—demonstrating workforce churn, not expansion, is driving hiring demand.
- 
Increasing skill expectations for entry-level roles. Employers increasingly expect candidates to enter support roles with multiple certifications and prior experience but training programs are not designed to produce such candidates. For example, medical assistant job descriptions indicate that requirements include relevant medical assistant coursework and a Basic Life Support certification. However, additional stackable certifications and qualifications, including phlebotomy certification, previous experience in direct patient care, and clinical administrative tasks, increase candidates' competitiveness during the hiring process. This misalignment between employer expectations and candidates' actual credentials contribute to delays in hiring.
- 
Wages fall below the regional cost of living. Healthcare Support Occupations are among the lowest-paid roles in the healthcare sector.³⁴ When adjusted for cost of living in Orange County, these wages fall significantly below the livable wage threshold. As a result, employees may leave to seek higher-paying jobs in other hospitals or industries.
- 
Gaps in the training pipeline. Training gaps contribute to limited availability of trained candidates to address workforce challenges. For example, home health and personal care aides have the lowest number of training completions in the dataset despite representing a large segment of this occupation group. In contrast, medical assistants have the highest number of training completions, reflecting the availability of training programs in community colleges and vocational schools. However, employers shared that they have a difficult time finding qualified candidates for both occupations, demonstrating how mismatches between workforce demand and training output may contribute to ongoing shortages.



3. Nursing Shortages

Nursing shortages in Orange County are driven not only by limited supply but by high turnover, workforce churn, and constrained career pathways, creating persistent instability throughout the care delivery system.

Registered Nurses (RNs) have consistently been identified as one of the most difficult roles to fill, both nationally and locally. By 2037, California is projected to face a shortage of approximately 65,000 full-time RNs, underscoring the long-term structural nature of this challenge.³⁵ Orange County labor market data show that RNs, nurse practitioners, and Licensed Vocational Nurses (LVNs) are difficult to recruit for and retain. Hospital stakeholders similarly identified certified nursing assistants (CNAs) as hard-to-fill positions within the broader nursing pipeline, further highlighting instability in nursing-related roles.

When nursing positions remain vacant, hospitals often rely on existing staff to absorb additional workloads, which can

contribute to longer shifts, higher patient-to-staff ratios, and increased burnout. These conditions not only impact quality of care but also contribute to a cycle of attrition that further exacerbates workforce shortages.

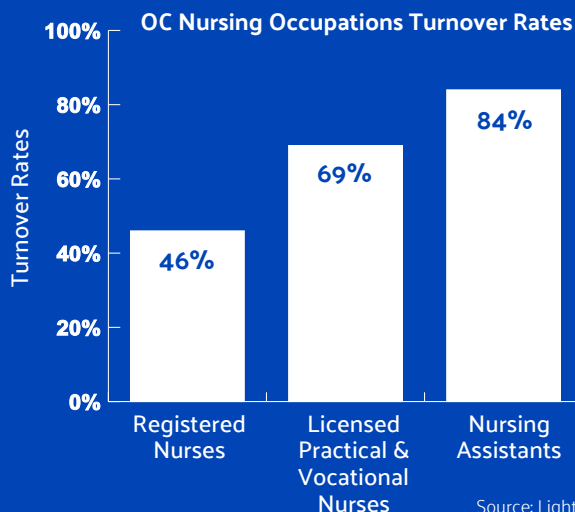
In Orange County, projections show low supply and high demand for several nursing occupations, including nurse anesthetist, RN, certified nurse specialist, public health nurse, and psychiatric mental health nurse occupations. In other occupations such as LVNs, supply and demand are nearly balanced.³⁶ This means that shifts in the workplace can lead to staffing shortages or increase workforce demands.



Nursing Shortage at a Glance: High Demand, High Turnover

Nursing demand is driven less by growth and more by turnover and retirement. Barriers with retention and mobility pathways create continuous replacement pressure on an already constrained workforce pipeline.

- 🛡️ **69%** turnover among Licensed Vocational Nurses
- 🛡️ **71%** annual hiring rate (replacement-driven demand)
- 🛡️ **6%** projected growth (RNs) and 1.5% (LVNs)
- 🛡️ **~25%** of workforce age 55+ (elevated retirement risk)



What's Driving Nursing Shortages

- Insufficient nursing supply.** Labor market data indicate that RNs and LVNs have fewer candidate profiles than job postings, meaning that the local supply of workers trained for these roles is relatively limited. Notably, hospital stakeholders consistently identified a limited candidate pool as a primary barrier in nursing occupations.
- Training capacity and clinical placement constraints.** Low supply of available nurses is partly driven by limited clinical placement opportunities. Despite completion of coursework, the availability of supervised clinical hours required for licensure creates a bottleneck that delays workforce entry and restricts the number of new nurses entering the field.
- High turnover and workforce churn.** Turnover is a primary driver of workforce demand in nursing occupations, with hiring needs largely driven by job replacements. LVNs in particular experience high levels of churn, with a 65% annual turnover rate and hiring volumes equal to 71% of the workforce in 2024. This imbalance is reinforced by relatively modest projected growth—approximately 6% for RNs and just 1.5% for LVNs³⁷—providing further evidence that backfilling vacant positions heavily influences hiring demand.
- Aging nursing workforce.** Approximately 24% of RNs and 26% of LVNs are aged 55 or older, with an additional 7% aged 65 and above, signaling elevated retirement risk in the near term.³⁸ As older nurses exit the workforce, employers face increasing pressure to replace both workforce capacity and institutional knowledge.
- Competition across employers and limited career mobility.** Hospitals reported strong competition for nursing talent between healthcare systems, contributing to workforce instability as workers move between employers. Further, limited clarity and accessibility of career advancement pathways, particularly from LVN to RN to BSN to nurse practitioner, can hinder long-term retention within the workforce.
- Workload and work-life balance challenges.** High patient demand, staffing shortages, and extended shifts contribute to poor work-life balance for nursing staff. These conditions increase burnout and reduce retention, particularly in entry- and mid-level nursing roles that are critical to the overall workforce pipeline.

The chart below highlights data underlying the challenges described above.

Occupation	2025 Jobs	2021–2025 % Change	10-year Projected Growth 2024–2034	Profile-to-Posting-Ratio	Job Openings Rate	2024 Job Hires Rate	2024 Turnover Rate	% 55+ (Retirement Risk)	COL Adjusted Median Annual Earnings	Median Annual Earnings
Registered Nurses	25,056	0%	6.0%	0.168	0.067	47.4%	46.3%	24.8%	\$ 86,920	\$ 133,422
Licensed Practical & Vocational Nurses	7,464	8%	1.5%	0.234	0.087	70.7%	69.4%	26.3%	\$ 52,438	\$ 80,493
Nursing Assistants	8,955	3%	4.0%	0.145	0.140	86.9%	83.9%	22.4%	\$ 31,464	\$ 48,298

Source: Lightcast



4. Middle-Skill Workforce Bottleneck

Orange County faces a significant shortage of middle-skill healthcare workers, particularly technicians, driven by constraints in training capacity and clinical placement availability that limit the number of workers entering these roles.

Middle-skill roles, including radiologic technologists, pharmacy technicians, EMTs, and surgical technicians, are essential to healthcare delivery. Because these workers support diagnostic imaging, emergency response, laboratory analysis, and procedural care, they are critical to the daily functioning of hospitals and outpatient systems. These positions typically require professional certification or state licensure and offer livable wages, making them desirable positions for students and job seekers in the healthcare industry.

Despite demand, employers reported difficulties filling these roles. Stakeholder interviews and survey data from HASC member hospitals identified persistent shortages in occupations such as MRI technologists, ultrasound technicians, cardiovascular technologists, and surgical technicians. They also highlighted various factors that contributed to workforce shortages in these middle-skill occupations, including competition from other hospitals, limited candidate pools, limited opportunities for career advancement, and burnout.³⁹

“

Expanding clinical placement capacity represents one of the most immediate and high-impact opportunities to strengthen the healthcare workforce pipeline in Orange County.

- Healthcare Employer



What's Driving the Middle-Skill Bottleneck

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Limited and uneven training capacity. Technicians fall within middle-skill healthcare roles, which typically require associate's degrees or postsecondary technical training. Waitlists for admission to technician training programs in Orange County vary. For example, candidates may be delayed from beginning cardiovascular and radiologic technician programs by up to four years.⁴⁰ Limited availability of training programs also contributes to delayed workforce entry. Employers and educators reported a lack of local training programs in certain occupations, including sterile processing technicians and surgical technicians, restricting the number of individuals who can enter these career pathways.
- 
High cost of training: limited affordable pathways to education and skills training. Training programs for some roles, such as radiologic and surgical technicians, are difficult to fill due to costs and time constraints. For example, an X-ray technician program costs nearly \$6,000 at a community college,⁴¹ over \$22,000 at a private vocational school,⁴² and approximately \$32,000 at a private institution in a bachelor of science degree program.⁴³ Limited seats in affordable training programs may deter potential trainees from enrolling at more costly private institutions, which may reduce returns on investment. While many training programs offer the flexibility of daytime and nighttime classes, internships are traditionally offered during the day, which may require candidates to choose between leaving the workforce to upskill and pursue training or remaining in lower-wage roles.⁴⁴
- 
Clinical placement bottleneck. The most significant constraint in the middle-skill workforce pipeline is the limited availability of clinical placement opportunities. After completing the educational requirements of a training program, candidates are required to complete clinical hours for licensure and workforce entry. This on-the-job training prepares jobseekers to navigate their roles under the supervision of experienced staff. However, healthcare employers report that the number of students requiring clinical placements far exceeds the available capacity of hospitals and other clinical sites in Orange County. This challenge is consistent with broader statewide findings, which estimate that California needs between 4.6 and 6.5 million additional clinical hours to meet statewide healthcare training demand.^{45,46}
- 
For many occupations, the clinical placement bottleneck prevents qualified candidates from entering the workforce. Clinical laboratory technologists and technicians training programs, for example, produce relatively high numbers of graduates. However, employers report that graduates face barriers with entering the workforce due to their difficulty obtaining mandatory clinical hours. A recent report highlights this bottleneck for candidates enrolled in medical laboratory programs. Across seven California community colleges during 2022 and 2023, programs reported clinical placements for 207 students, less than half of 431 enrolled students. Further, the number of students in clinical placements in four Orange County clinical sites ranged from 2 to 15.⁴⁷
- 
The clinical placement bottleneck limits the opportunity for career mobility. Many technician roles offer pathways to higher-skilled positions. For example, radiologic technicians can later pursue MRI technologist roles with additional education and training. When access to clinical training is constrained, these pathways are disrupted, limiting both workforce entry and advancement.



Retirement Risk

A significant share of Orange County's healthcare workforce is nearing retirement age, creating a looming workforce gap that will compound existing shortages and place additional strain on the healthcare system.

Approximately 28% of healthcare workers in Orange County are aged 55 or older, and 9.6% are aged 65 or older,⁴⁸ indicating that many older workers may exit the labor force in the next decade. As these workers retire, healthcare employers will need to replace both the number of workers and the institutional knowledge and experience they bring to patient care and clinical operations.

Retirement risk is particularly pronounced in several high-demand and hard-to-fill occupations where more than one-third of workers are 55 or older. For example, Lightcast data shows approximately 35% of physicians and nearly 40% of dentists are 55 or older. Similarly, 37% of home health and personal care aides are 55 or older, placing one of the largest

and fastest-growing segments of the workforce at elevated risk of attrition. These occupations are already experiencing workforce pressures, and retirements are likely to further intensify shortages.

The aging workforce has important implications for workforce planning as retirements will intensify existing shortages in multiple segments of the healthcare system.

As older professionals exit, employers must simultaneously recruit and train new workers, transfer and retain institutional knowledge, work to retain existing staff, and onboard new workers. Without proactive planning, these dynamics will accelerate workforce instability and reduce system capacity.

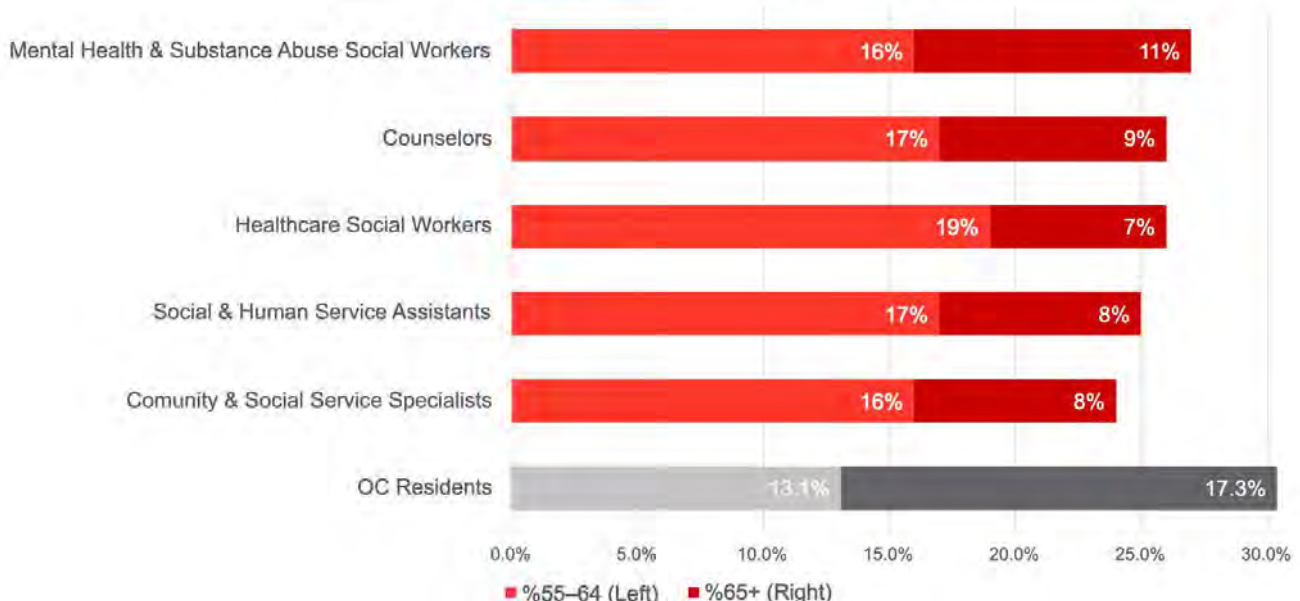
Where Retirement Risk Is Most Acute

Behavioral Health Workforce

Retirement risk is evident throughout the already strained behavioral health workforce, with elevated concentrations of older workers in multiple occupations. For example, among mental health and substance abuse social workers, more than one-quarter of the workforce is nearing or past traditional retirement age. Workers between the ages of 55 and 64 make up 16% of the workforce while 11% of the workforce are 65 or older. Similar patterns are seen in related roles, including 26% of counselors (17% aged 55–64, 9% aged 65+) and 26% of healthcare social workers (19% aged 55–64, 7% aged 65+).

Employers may face increasing difficulties replacing these experienced older professionals, particularly given existing shortages, licensure requirements, and limited clinical training capacity. This risk is especially acute in Orange County where demand for behavioral health services continues to grow due to rising mental health needs, greater integration of behavioral health into primary care, and increased recognition of its role in overall patient outcomes. **Without targeted intervention, the aging workforce is likely to significantly widen behavioral health workforce gaps over the coming decade.**

Community and Social Service Occupations, % Retirement Risk

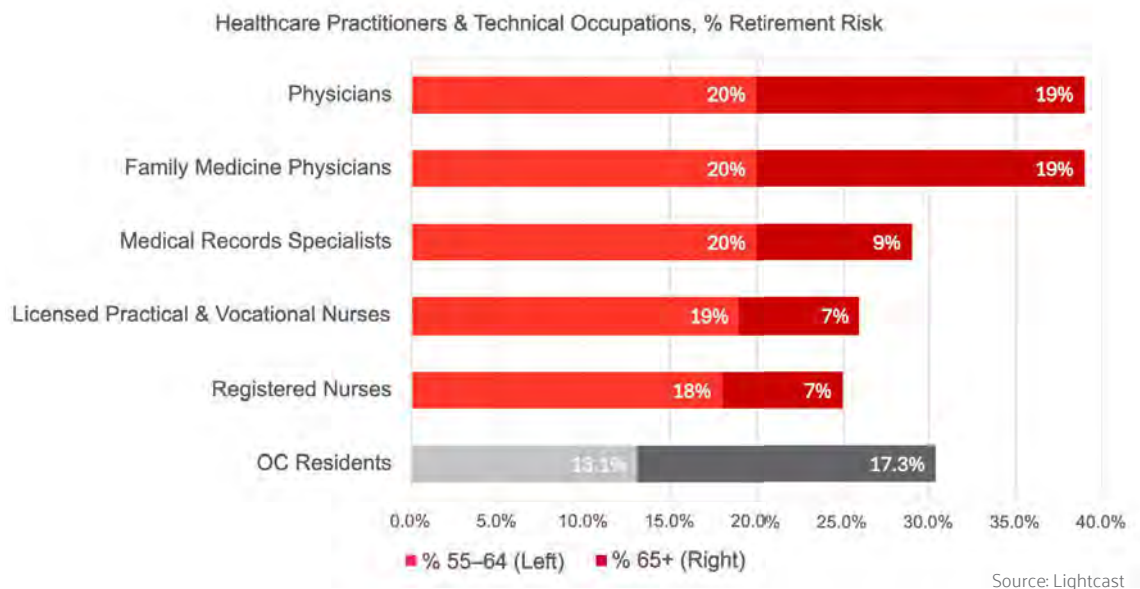


Source: Lightcast

Healthcare Practitioners and Technical Occupations

A large share of experienced clinicians are approaching retirement age, particularly physicians, nurses, and dentists—occupations that are essential to maintaining healthcare system capacity. Lightcast data shows that approximately 40% of physicians and family medicine physicians are close to or beyond traditional retirement age (20% aged 55–64, 19% aged 65+). The potential loss of these clinicians could create additional pressure on healthcare systems that are already facing challenges with recruiting and retaining qualified providers. This trend reflects broader national concerns. The Association of American Medical Colleges projects that the U.S. could face a shortage of up to 86,000 physicians by 2036, driven by population growth, increased demand for healthcare services, and an aging provider workforce.⁴⁹

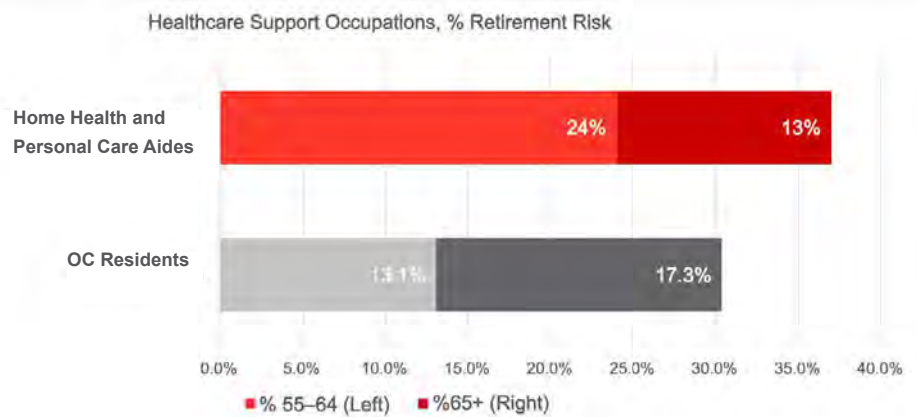
Similarly, LVNs (19% aged 55–64, 7% aged 65+) and RNs (18% aged 55–64, 7% aged 65+) show elevated retirement risk. This compounds existing workforce pressures in nursing by accelerating turnover, increasing replacement demand, and straining an already limited pipeline of new candidates.



Home Health and Personal Care Aides

More than 37% of home health and personal care aides in Orange County are close to or beyond traditional retirement age (24% aged 55–64; 13% aged 65+).⁵⁰ As stated in previous sections, this occupation represents one of the largest and fastest-growing segments of the healthcare workforce. Employment has already increased by 32% between 2021 and 2025, and it is projected to grow an additional 22% by 2034. Retirement risk for home health and personal care aides is especially concerning given the rapid growth in demand for these roles that support long-term care, aging-in-place services, and community-based healthcare delivery.

As demand for home-based care continues to rise as the population ages, retirements in this occupation could intensify workforce shortages. Therefore, expanding training pipelines, improving wages and retention strategies, and strengthening career pathways that encourage new workers to enter and remain in the home care workforce is necessary.



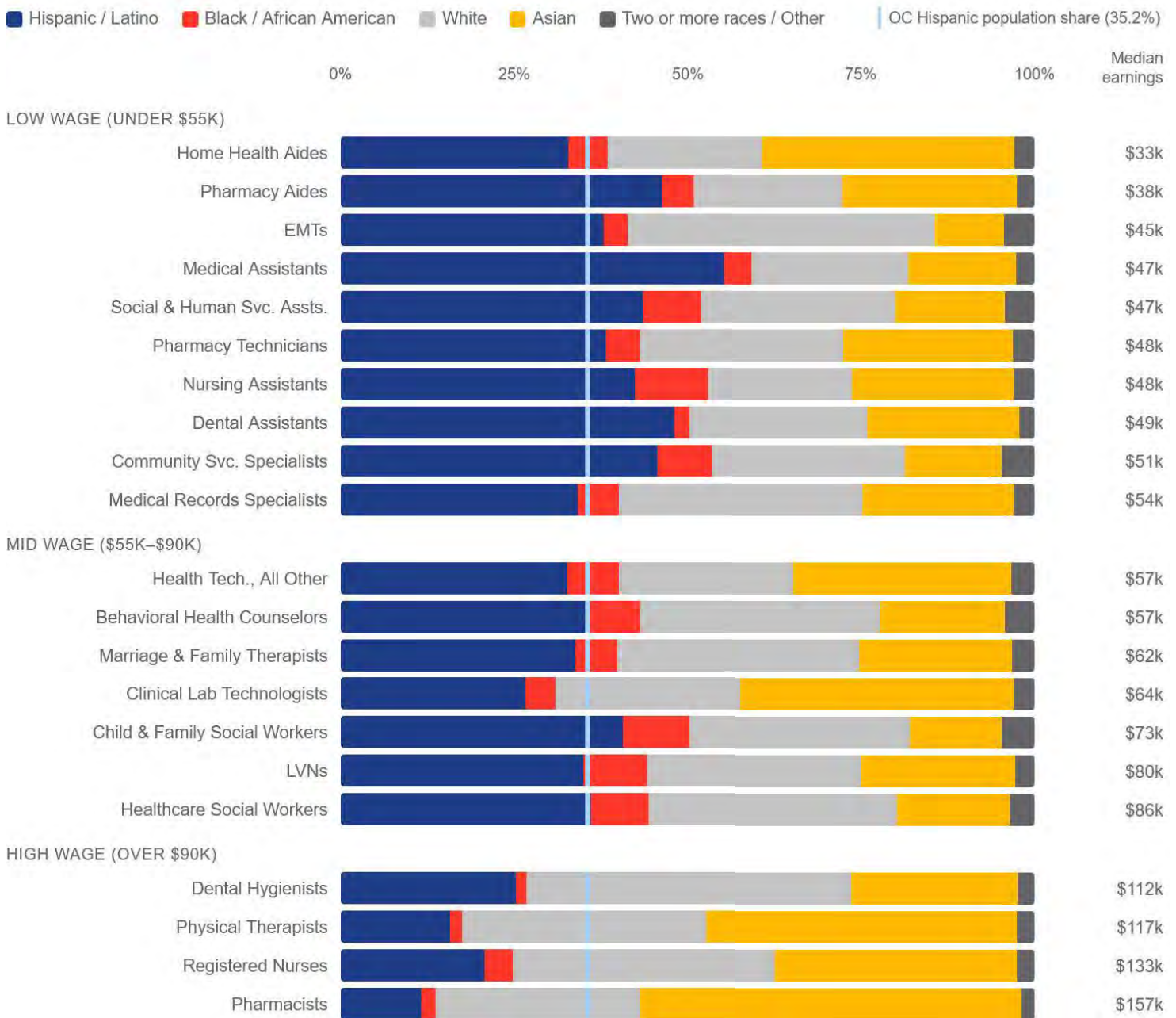
Home Health and Personal Care Aides: Fastest Growing and Highest Retirement Risk

Demand is accelerating while a large share of the workforce is nearing retirement—creating a widening gap in home- and community-based care.

-  **+32%** job growth (2021–2025)
-  **+22%** projected growth (through 2034)
-  **37%** of workforce aged 55+
-  One of the largest healthcare occupations in Orange County
-  Critical to aging-in-place and long-term care



Racial Disparities in Healthcare Occupations and Wages



Avg. Hispanic share — low wage

41.9%

vs 35.2% OC population

Avg. Hispanic share — high wage

18.3%

vs 35.2% OC population

Avg. Black share — low-to-mid wage

6.6%

vs 2.1% OC population

Source: Lightcast

RECOMMENDATIONS

Addressing Orange County's healthcare workforce challenges will require coordinated, system-level strategies that expand workforce supply, strengthen career pathways, and improve retention. These recommendations focus on the most critical levers to stabilize and grow the healthcare workforce.

- ✓ **Clarify and standardize career pathways and credential requirements** to accelerate workforce entry and advancement.
- ✓ **Expand and coordinate clinical training capacity**, particularly beyond hospital settings.
- ✓ **Strengthen cross-sector partnerships** to align training, funding, and workforce demand.
- ✓ **Improve retention and expand pathways into middle-skill roles**, particularly for frontline workers.
- ✓ **Retain experienced workers and strengthen knowledge transfer** as the workforce ages.
- ✓ **Advance equity and access** to ensure the workforce reflects and serves Orange County's diverse population.



Clarify and Standardize Career Pathways and Credential Requirements

Define and align clear credential requirements and credential stacks desired in the workplace to better prepare students, ensure training programs are designed accordingly, and support timely workforce entry.

- Define standardized credential pathways and career progressions (e.g., LVN → RN → BSN).
- Align employer expectations for skills, certifications, and clinical experience across organizations.
- Expand stackable credentials and earn-and-learn models to accelerate entry and advancement.

Inconsistent credential requirements and desired work experience across employers create barriers to entry and limit candidate pools. For example, individuals who meet the qualifications for a role (e.g., surgical technician) at one hospital may not be considered competitive at another due to differences in desired or required experience, certifications, or credentials. Thus, for each in-demand role, healthcare employers should align on experience, education, and skills needed to enter the workforce quickly and communicate these desires with education and training partners. Also, expanding stackable credentials and earn-and-learn models can further strengthen career pathways by allowing individuals to enter the workforce quickly while continuing to build skills and advance into higher-skilled roles.





Expand and Coordinate Clinical Training Capacity

Expand clinical training capacity by broadening the range of approved training sites, utilizing older workers as preceptors, addressing regulatory barriers, and establishing sustainable funding mechanisms to offset employers' costs. These strategies should be implemented through a coordinated regional clinical placement plan that aligns partners, expands placement capacity, and ensures efficient use of resources throughout the healthcare system.

- Broaden the range of healthcare settings approved to be clinical training sites.
- Address regulatory barriers that limit clinical placement sites.
- Develop phased retirement pathways to transition older clinicians into preceptors.
- Establish dedicated funding and financial incentives to offset the cost of training.
- Develop a regional clinical placement plan.

Healthcare workforce planning must extend beyond hospitals to include outpatient, community-based, and long-term care settings, where a substantial share of healthcare workers are employed and where demand for services continues to grow.

To ensure that trainees get sufficient clinical hours, training partners must look beyond hospital settings to find sufficient placements. While hospitals are often the most visible component of the healthcare system, they employ less than one-fifth (20%) of the healthcare workforce. A large share of workers are employed in outpatient and community-based settings such as physician offices (21%), home health care services (25%), and in diagnostic laboratories, ambulatory care centers, residential mental health facilities, and substance use disorder treatment programs (25%).⁵⁷ **Healthcare workforce planning must extend beyond hospitals to include outpatient, community-based, and long-term care settings, where a substantial share of healthcare workers are employed and where demand for services continues to grow.**

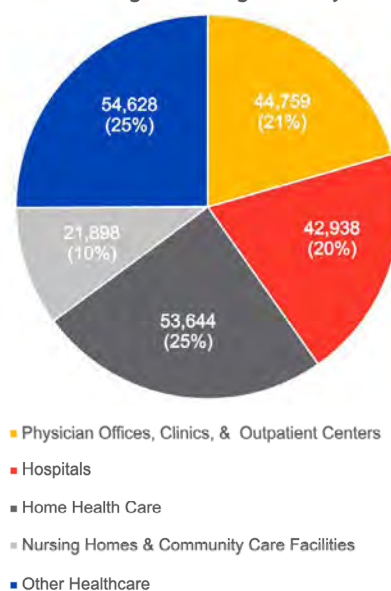


Policy Recommendation: Expanding clinical placements into senior care and community-based settings will require addressing regulatory, staffing, and financial barriers. This includes expanding state-approved training sites and possibly creating financial incentives for smaller providers to participate in training.

Healthcare employers can also develop phased retirement programs that allow experienced clinicians nearing retirement to transition into training roles (i.e., preceptors). These individuals already possess the clinical expertise, licensure, and institutional knowledge needed to effectively supervise trainees. This approach both expands clinical training capacity and supports retention by providing flexible, less physically demanding roles for late-career employees—addressing workforce shortages on both the supply and retention sides.

Dedicated funding is needed to expand clinical training capacity and reduce the financial burden on providers. Hosting trainees requires investments in supervision, staff time, and space that many providers, particularly community-based and long-term care providers, may not have the capacity to offer. Unlike in hospitals, which often integrate training into their operating models, these settings face greater barriers to participation. To enable broader participation, regional partners should establish financial incentives such as stipends, reimbursement models, or grant funding to offset the costs of supervision, infrastructure, and administration. Without dedicated funding mechanisms, expanding clinical placements into community-based settings will remain limited, regardless of partnership strength.

Healthcare Workforce Settings in Orange County



Source: Lightcast



Strengthen Cross-Sector Partnerships

Establish, strengthen, and scale partnerships between employers, training providers, government agencies, and philanthropy to align workforce development efforts with real-time labor market demand, expand training capacity, pursue and share resources, and address clinical placement needs.

- Align training programs with real-time employer needs.
- Develop a coordinated regional clinical placement system.
- Leverage public funding to fund initiatives and offset employer training and upskilling costs.
- Pursue joint public and philanthropic funding through multi-partner, cross-sector collaborations.

Cross-sector partnerships are essential to addressing systemic workforce challenges. When employers and training providers collaborate, training programs produce candidates who are better prepared to enter and succeed in the workplace, reducing hiring delays. Partnerships can also support and bolster training capacity and resources by connecting to existing workforce funding and programs that help reduce the cost of hiring and upskilling workers into in-demand roles. For example, employers and healthcare intermediaries should collaborate closely with the Orange County Workforce Development Board to identify ways that Employment Training Panel (ETP) funds and Incumbent Worker Training (IWT) funds can be used to address the needs outlined in this report while offsetting employer costs.

Partnerships also enable shared solutions such as coordinated clinical placements and joint funding strategies that would be difficult for individual organizations to achieve independently. Many public and philanthropic funding opportunities prioritize multi-partner, cross-sector approaches that demonstrate scale, coordination, and direct employer engagement. For example, the Health Career Connection Scaling Grant funded by the California Endowment is a partnership between Health Career Connection and the Coalition of Orange County Community Health Centers. Beginning in October 2025, this partnership leverages \$900,000 over three years to address workforce gaps in middle- and higher-skill roles, including radiologic technologists, surgical technologists, and physicians.⁵⁸



SPOTLIGHT: UpSkill OC by OC United Way

UpSkill OC, a workforce development program by OC United Way, demonstrates how coordinated cross-sector partnerships can expand access to middle-skill healthcare careers while supporting employer workforce needs. The program works with training providers (i.e., North Orange County ROP, HealthStaff Training Institute), industry intermediaries (i.e., HASC), partnered workforce development agencies (i.e., Working Wardrobes, Goodwill of Orange County, and Chrysalis), and public partners (i.e., CalOptima, the Orange County Workforce Development Board) to align training pathways with real-time labor market demand. By braiding public workforce funding with philanthropic investments, UpSkill OC helps offset training costs, support participant persistence, and pilot solutions to clinical placement barriers through work-based learning models while strengthening regional training capacity and improving employer access to job-ready candidates.



SPOTLIGHT: Behavioral Health Professions Pathways Program

In recent years, the California Department of Health Care Access and Information (HCAI) allocated \$426.75 million to address shortages in the behavioral healthcare workforce. In 2022, HCAI awarded over \$40 million in the Health Professions Pathways Program to address behavioral health shortages through career pipeline programs, summer internships for undergraduate students, and fellowships for students from underrepresented backgrounds who want to pursue careers in the field.⁵⁹ HCAI also awarded more than \$23 million to six organizations to provide education and paid job experience for 475 employees with positions in the substance use disorder workforce.⁶⁰



Improve Retention and Expand Pathways Into Middle-Skill Roles

Strengthen retention of entry-level workers and expand pathways into middle-skill roles to stabilize the workforce and support upward mobility. By investing in training, career advancement programs, and supportive workplace practices, healthcare systems can build sustainable pipelines that prepare workers for long-term healthcare careers.

- Invest in structured onboarding, mentorship, and ongoing upskilling programs.
- Expand internal career pathway programs for incumbent workers.
- Improve wages and benefits where feasible.

Healthcare employers can improve retention by investing in structured onboarding, mentorship, and skills development that prepare employees to succeed from the outset. For example, Kaiser Permanente Orange County provides comprehensive onboarding that includes soft-skills coaching during the first 90 days, clinical shadowing, competency-based skills validation, and ongoing mentorship. These types of supports build employee confidence, improve job performance, and reduce early turnover.

Expanding on-the-job training and upskilling is critical to both retention and workforce development. Hospitals expressed strong interest in strengthening their upskilling programs to increase employee skills and train candidates for higher-paying roles. Hospital representatives shared that employees benefit from being cross-trained in different responsibilities as well as skills that are needed across healthcare occupations such as crisis intervention, documentation, and behavioral health. Representatives also expressed that exposure to different care settings (e.g., per diem or cross-setting experience) often produces more-skilled employees who are able to adjust to different workplace needs.



Policy recommendation: Efforts to address workforce shortages—particularly in direct care and home- and community-based services—must incorporate policy reform to increase wages. Public programs such as Medi-Cal are the primary payers for long-term care, and reimbursement rates directly influence wages and workforce supply. Inadequate reimbursement contributes to persistently low wages, limiting recruitment and retention. Addressing these challenges will require policy reforms that align reimbursement with the true cost of care and support a sustainable healthcare workforce.⁶¹



SPOTLIGHT: Upskilling Non-Healthcare Staff at a Hospital in Orange County

Memorial Care developed an upskilling program that trains hospital staff who are employees in non-healthcare positions (e.g., food services, housekeeping) for healthcare roles. Importantly, these types of upskilling programs open career pathways with upward economic mobility, increase wages to support a better quality of life for staff, build skills, and add certifications that can be stacked to pursue advanced careers, resulting in employee retention and cost savings for the employer.



Retain Experienced Workers and Strengthen Knowledge Transfer

Retaining older workers is a critical strategy for maintaining workforce stability, preserving institutional knowledge, and supporting the next generation of healthcare professionals. As a growing share of the healthcare workforce approaches retirement age, employers face the dual challenge of replacing experienced staff while ensuring continuity of care and effective knowledge transfer.

- Transition experienced older clinicians into training and preceptor roles to support knowledge transfer and clinical training capacity.
- Develop phased retirement programs and flexible work models.

The [AdvantAGE LA Plan](#) highlights that older workers are a vital and underutilized segment of the labor force. Supporting longer workforce participation through age-inclusive practices can help mitigate workforce shortages while strengthening training capacity and overall healthcare system resilience.⁶² Healthcare employers in Orange County can retain older workers by creating pathways that allow them to remain engaged in roles that leverage their expertise while reducing physical demands. Transitioning these workers into mentorship, training, and preceptor roles can strengthen succession planning, expand clinical training capacity, and support the development of less experienced staff.

Additional approaches to supporting older workers include phased retirement and flexible work arrangements—such as reduced hours, shorter shifts, or nonclinical responsibilities—which can further support retention. Research shows that these strategies are effective in retaining older healthcare professionals, including physicians, by allowing them to gradually transition out of full-time roles while continuing to contribute their expertise.⁶³ Mentorship programs, as highlighted by the Institute of Medicine, also play a critical role in strengthening workforce capacity by enhancing the skills of newer employees while keeping workers with more years of experience in the workplace.⁶⁴ Offering these alternatives demonstrates thoughtful retirement planning and efforts to strengthen the future workforce.





Advance Workforce Equity, Access, and Diversity

Address disparities in access to higher-wage healthcare careers by expanding equitable pathways, increasing representation, and strengthening early- and mid-career advancement opportunities for underrepresented populations.

- Expand targeted outreach and training programs for underrepresented and low-income populations.
- Support advancement from entry-level to middle-skill roles by developing clear training pathways.
- Invest in early exposure and career pathway programs for youth and young adults.
- Increase representation in high-demand occupations and leadership roles.
- Support culturally responsive and bilingual workforce development strategies.

Expanding targeted outreach and training programs can help connect underrepresented populations to in-demand roles. Additionally, strengthening pathways from entry-level to clinical positions supports long-term advancement and retention. Early exposure to healthcare careers and clarity around how to advance in a career pathway provide potential trainees with the knowledge they need to proceed in a career. Employers should invest in various strategies that begin in high school and continue through early postsecondary education, such as health-focused summer programs and dual enrollment.⁶⁵

Employers and regional partners can also advance workforce diversity through intentional recruitment and training strategies. These include increasing the number of bilingual workers and designing programs that reflect the cultural and linguistic needs of the populations served. For example, the NURSE-OC program, funded by CalOptima Health, aims to recruit more than 50% of nursing participants from underrepresented groups or low-income backgrounds⁶⁶ while preparing them to deliver high-quality care to vulnerable populations through a specialized training curriculum.⁶⁷



SPOTLIGHT: Place-Based Hiring to Strengthen Workforce Diversity

UC Davis Health implemented a community-based hiring strategy by identifying high-need zip codes within a 20-minute commute of its medical center and prioritizing outreach and hiring from those communities.⁶⁸ With leadership and DEI staff actively involved in recruitment, onboarding, and internal alignment, the share of employees hired from these communities increased from 12% to 17% over two years. This approach demonstrates how place-based strategies can expand access to healthcare careers while strengthening community health outcomes.



Targeted Strategies for High-Need Occupations

Nursing

Address nursing shortages by improving retention and strengthening career pathways.

- Develop structured feedback mechanisms and engage nurses in decision-making to improve job satisfaction and retention.
- Improve scheduling flexibility and work-life balance to reduce burnout and turnover.
- Strengthen and expand nursing career pathways (e.g., CNA → LVN → RN → BSN) to support advancement and retention.
- Expand clinical training capacity and placement coordination to support pipeline growth.
- Invest in retention of older nurses through phased retirement and mentorship roles.

Taking initiative to clearly understand the needs of nurses on the ground is crucial. Research shows that nurses who were involved in institutional decision-making were significantly more satisfied with their jobs, were less likely to report burnout, and were less likely to have plans to leave their employer within a year.⁶⁹ This includes engaging nurses in shaping workplace practices such as flexible scheduling and selectable work hours, which are critical to improving retention.⁷⁰

The nursing training pathway must also be strengthened. This includes clarifying the pathway to career advancement and expanding clinical placement capacity to reduce bottlenecks that delay workforce entry and limit the number of new nurses entering the field. Additionally, healthcare employers should invest in retaining older nurses by developing phased retirement pathways and opportunities to transition into mentorship and training (preceptor) roles.



SPOTLIGHT: Place-Based Hiring to Strengthen Workforce Diversity

UC Davis Health implemented a community-based hiring strategy by identifying high-need zip codes within a 20-minute commute of its medical center and prioritizing outreach and hiring from those communities. With leadership and DEI staff actively involved in recruitment, onboarding, and internal alignment, the share of employees hired from these communities increased from 12% to 17% over two years. This approach demonstrates how place-based strategies can expand access to healthcare careers while strengthening community health outcomes.



SPOTLIGHT: A Cross-Sector Strategic Plan to Strengthen the Nursing Workforce in Southern California

The Los Angeles County Nursing 2035 Initiative is a coordinated, cross-sector plan to fix the nursing workforce shortage by redesigning education pathways, expanding training capacity, and aligning employers and schools. Healthcare providers, community colleges, and four-year institutions have come together to tackle the specific challenges within the nursing profession, using labor market data to guide their approach. Together they are developing targeted programs, expanding training, and building clinical placement strategies to address the challenges. This initiative can provide a model for addressing shortages in Orange County by focusing on one occupational cluster.



Targeted Strategies for High-Need Occupations (cont.)

Technicians

Technician shortages are driven primarily by training capacity constraints, high costs, and clinical placement bottlenecks that delay workforce entry.

Expand training capacity and reduce barriers to workforce entry.

- Expand high-quality, affordable training programs.
- Reduce financial barriers by investing in tuition support and low-cost training pathways.
- Develop flexible training models (e.g., evening/weekend programs) to accommodate working learners.
- Expand and coordinate clinical placement capacity to reduce bottlenecks and accelerate workforce entry.



SPOTLIGHT:

CalOptima Health's Provider Workforce Development Initiative

Through the Provider Workforce Development Initiative, CalOptima invested \$50 million in education, training, recruitment, and retention for nursing, technician, and behavioral health occupations.⁷¹ In the first phase of the initiative, \$25 million in workforce grants was provided to seven Orange County institutions to address the cost of training, strengthen career pathways, and build a sustainable pipeline of skilled service providers to meet the region's needs.

- Coast Community College District will utilize a \$2.04 million grant to develop a pathway to the radiologic technology certificate program at Orange Coast College for 30 students per year.
- Santiago Canyon College will utilize a \$1.2 million grant to increase the behavioral technician program capacity from 25 to 50 students to 50 to 100 students annually. Its medical assistant program will expand from 50 to 175 students annually.
- The Sue & Bill Gross School of Nursing at the University of California, Irvine, will use its \$5 million grant to provide a one-year externship to prelicensure nursing students and other activities that address Orange County's shortage of RNs.
- Orange County United Way will use its \$1.36 million grant to expand the UpSkill OC program. The program will provide career coaching, strengthen connections to paid training and certification programs, and expand job placements in the healthcare industry. An additional 25 clients will be served each year.
- CalOptima Health also invested \$5 million in behavioral health training and education.
- Concordia University Irvine will utilize a \$5 million grant to expand the Accelerated Bachelor of Science in Nursing (ABSN) program and increase the number of scholarships for pre-nursing and ABSN students.
- Coast Community College District will utilize a \$2.04 million grant to expand the registered nurse pipeline at Golden West College by 40 students per year.
- Santiago Canyon College will utilize a \$1.2 million grant to develop a licensed vocational nursing curriculum and attain program accreditation to produce more than 60 licensed graduates annually.

CONCLUSION

Orange County's healthcare workforce is at a critical inflection point. Demand for care is accelerating, yet the systems designed to train, recruit, and retain workers have not kept pace. The result is a set of structural challenges—training bottlenecks, high turnover, constrained career pathways, and an aging workforce—that are placing increasing pressure on the healthcare system.

Despite these challenges, Orange County is uniquely positioned to address existing gaps in the workforce. The region benefits from a highly diverse population, a strong network of education and training institutions, and a healthcare workforce rich in experience and institutional knowledge. Significant public and philanthropic investments are already being made to strengthen workforce pipelines, and there is growing alignment across employers, workforce partners, and policymakers to advance solutions.

These assets present a clear opportunity. By expanding clinical training capacity, strengthening career pathways, investing in retention, and leveraging the experience of the existing workforce, Orange County can not only close current workforce gaps but build a more resilient, equitable, and future-ready healthcare system. The path forward is not to rebuild from scratch—but to scale what is already working. Through coordinated action, sustained investment, and continued partnership among healthcare employers, education and training providers, and workforce stakeholders, Orange County can transform its workforce challenges into a model for regional workforce innovation and long-term system resilience.

By expanding clinical training capacity, strengthening career pathways, investing in retention, and leveraging the experience of the existing workforce, Orange County can not only close current workforce gaps but build a more resilient, equitable, and future-ready healthcare system.



APPENDIX

1. Methodology

2. Data Tables per Occupational Cluster

- a. Community and Social Service Occupations
- b. Healthcare Practitioners and Technical Occupations
- c. Healthcare Support Occupations

3. HASC Survey Results

4. Sources

METHODOLOGY

A mixed-methods research approach was used to provide a comprehensive understanding of the healthcare workforce in Orange County. The research combined labor market analysis, historical workforce data, surveys, and stakeholder interviews. Quantitative labor market data were used to identify workforce trends and potential shortages, while qualitative insights from employers and workforce partners provided additional context to better understand the challenges facing healthcare organizations in the region.

Literature Review. A literature review was conducted to identify national and statewide healthcare workforce trends, best practices related to recruitment and retention, and workforce development strategies relevant to healthcare employers. The review included reports, academic research, industry publications focused on healthcare workforce needs, and programs that may be relevant for organizations in Orange County.

HASC Member Survey Data. HASC has historically collected workforce data from member hospitals, including information related to salaries, job postings, and workforce needs across healthcare occupations. These data were used to provide historical context about the workforce from the past three years.

HASC Healthcare Provider Survey. In partnership with the Orange County Business Council on the Jobs First initiative, HASC distributed a brief survey to gather insights on workforce challenges experienced by healthcare organizations and opportunities to address these issues.

Stakeholder Interviews. Various interviews were conducted with subject matter experts, HR professionals from HASC member hospitals, training providers, and other workforce professionals. Using a structured protocol, participants responded to questions about their current programs or initiatives, hard-to-fill occupations in Orange County, challenges to filling these positions, potential solutions to address these challenges, existing partnerships to address healthcare needs, and recommendations for improvement.

Labor Market Data Analysis. Labor market data were analyzed using multiple sources, including Lightcast, the California Employment Development Department (EDD), and the U.S. Department of Labor. These data sources were used to examine healthcare industry trends, employment projections, workforce demographics, and occupation-level demand within Orange County.

Data Limitations

Several limitations should be considered when interpreting the findings presented in this report.

- Labor market data sources that rely on job postings may not fully reflect actual employer demand. Job postings may remain active after positions have been filled, and a single job posting may represent multiple openings for the same role. These factors may affect the accuracy of job posting data as a measure of labor demand.
- Also, participation in stakeholder interviews and focus groups represents only a portion of hospitals and healthcare stakeholders across the region. While survey data and interviews provided valuable insights into workforce challenges and potential solutions, it is possible that some employer perspectives were not captured.
- Finally, this report focuses specifically on the healthcare workforce in Orange County. While Orange County is part of the broader Southern California region, workforce dynamics vary significantly across counties due to differences in population size, demographics, labor markets, and cost of living. As a result, findings from this report may not be directly generalizable to other counties in Southern California.

DATA TABLES PER OCCUPATIONAL CLUSTER

Community and Social Service Occupations Data Table

The hardest Community and Social Service Occupations roles to fill in Orange County are ranked in the table from hardest to least hard to fill based on the following metrics:⁵⁴ profile-to-posting ratio, profile concentration, posting concentration, retirement risk, and education completions-to-openings.

Demographics															
Earnings															
Role	# 2025 Jobs	Profile-to-Posting Ratio	Posting Conc.	Profile Conc.	Typical Entry-Level Education	Regional Completions	Median Annual Earnings	COL-Adjusted Median Annual Earnings	% 55+	% Male	% Female	% Hispanic/Latino	% White	% Asian	% Black
Community and Social Service Specialists, All Other	1,251	0.248	1.102	0.838	BA Degree	1,381	\$50,676	\$33,014	24%	32%	68%	46%	28%	14%	8%
Counselors, All Other *	1,197	0.113	1.681	0.967	MA Degree	3,758	\$43,923	\$28,614	26%	34%	66%	37%	36%	16%	8%
Healthcare Social Workers	1,721	0.488	1.020	0.869	MA Degree	4,963	\$86,001	\$56,027	26%	27%	73%	36%	36%	16%	8%
Substance Abuse, Behavioral Disorder, and Mental Health Counselors	5,860	0.237	0.715	0.504	BA Degree	5,257	\$56,865	\$37,046	20%	33%	67%	36%	35%	18%	7%
Mental Health and Substance Abuse Social Workers	2,092	0.191	0.835	1.112	MA Degree	4,167	\$72,250	\$47,068	27%	24%	76%	34%	39%	16%	7%
Child, Family, and School Social Workers	4,741	0.697	0.797	0.807	BA Degree	7,005	\$72,995	\$47,554	23%	19%	81%	41%	32%	13%	10%
Marriage and Family Therapists	3,086	0.918	1.349	2.241	MA Degree	4,763	\$58,588	\$38,168	23%	28%	72%	34%	35%	22%	6%
Health Education Specialists	1,280	0.892	0.995	0.938	BA Degree	1,869	\$58,652	\$38,210	22%	32%	68%	40%	32%	14%	8%
Social and Human Service Assistants	3,885	0.805	0.691	0.874	HS Degree	27,573	\$47,374	\$30,863	25%	28%	72%	44%	28%	16%	8%

*Note: Examples of occupations include Grief Counselor and HIV Counselor

Source: Lightcast

- **Posting Concentration:** The number of job postings for an occupation in Orange County relative to the national average. Higher values indicate stronger local demand compared to other regions.
- **Profile Concentration:** The number of available workers with online professional profiles (such as on Indeed) relative to the national average. Values above 1 indicate a higher concentration of potential workers in the region, while values below 1 indicate fewer available workers.
- **Retirement Risk:** The percentage of workers aged 55 and older within an occupation, which may indicate potential workforce shortages as employees approach retirement.
- **Profile-to-Posting Ratio:** A comparison of the number of potential workers to the number of job postings for an occupation. Lower ratios suggest fewer available workers relative to employer demand.
- **Education Completions-to-Openings Ratio (2024):** A comparison of the number of individuals completing relevant education or training programs with the number of projected job openings, indicating whether the training pipeline is sufficient to meet employer demand.

Healthcare Support Occupations Data Table

The hardest **Healthcare Support Occupations** roles to fill in Orange County, based on labor market data, are ranked in the table below from hardest to least hard to fill based on the following metrics: profile-to-posting ratio, profile concentration, posting concentration, retirement risk, and education completions-to-openings.

		Earnings							Demographics						
Role	# 2025 Jobs	Profile-to-Posting Ratio	Posting Conc.	Profile Conc.	Typical Entry-Level Education	Regional Completions	Median Annual Earnings	COL-Adjusted Median Annual Earnings	% 55+	% Male	% Female	% Hispanic/Latino	% White	% Asian	% Black
Home Health and Personal Care Aides	60,702	0.105	0.675	1.177	HS degree	37	\$33,491	\$21,818	37%	25%	75%	33%	22%	36%	6%
Nursing Assistants	8,955	0.145	0.427	0.795	Non-Degree Credential	154	\$48,298	\$31,464	22%	18%	82%	42%	21%	23%	11%
Phlebotomists	1,439	0.132	0.735	1.205	Non-Degree Credential	3	\$60,398	\$39,347	14%	20%	80%	45%	26%	19%	6%
Dental Assistants	6,239	0.103	0.889	1.948	Non-Degree Credential	265	\$48,567	\$31,640	13%	12%	88%	48%	26%	22%	2%
Healthcare Support Workers, All Other	1,343	0.203	2.242	1.538	HS Degree	224	\$56,006	\$36,486	21%	30%	70%	40%	28%	20%	9%
Physical Therapist Assistants	1,035	0.286	0.756	0.680	AA Degree	113	\$76,808	\$50,038	12%	35%	65%	32%	37%	25%	3%
Medical Assistants	9,860	0.250	1.062	1.269	Non-Degree Credential	2,667	\$46,909	\$30,559	10%	12%	88%	55%	23%	15%	4%
Pharmacy Aides	1,130	0.362	1.504	0.670	HS Degree	135	\$38,053	\$24,790	16%	24%	76%	46%	21%	25%	5%

Source: Lightcast

Healthcare Practitioners and Technical Occupations Data Table

The hardest Healthcare Practitioners and Technical Occupations roles to fill in Orange County are ranked in the table below from hardest to least hard to fill based on the following metrics:⁵⁵ profile-to-posting ratio, profile concentration, posting concentration, retirement risk, and education completions-to-openings.

Note: Data for Speech-Language Pathologists were not available. Demographic data for Family Medicine Physicians, Radiologic Technologists and Technicians, Respiratory Therapists, and Occupational Therapists reflect information from the general occupation groups (i.e., Physician, Diagnostic Related Technician, Therapists).

Role	# 2025 Jobs	Profile-to-Posting Ratio	Posting Conc.	Profile Conc.	Typical Entry-Level Education	Regional Completions	Earnings		Demographics						
							Median Annual Earnings	COL-Adjusted Median Annual Earnings	% 55+	% Male	% Female	% Hispanic/Latino	% White	% Asian	% Black
Emergency Medical Technicians	2,199	0.006	0.577	0.647	Non-Degree Credential	86	\$44,788	\$29,178	6%	69%	31%	38%	44%	10%	3%
Opticians, Dispensing	1,056	1.411	1.684	1.043	HS degree	0	\$57,928	\$37,738	23%	27%	73%	41%	35%	17%	3%
Family Medicine Physicians	1,304	0.750	0.524	0.750	PhD	112	\$183,287	\$119,405	37%	74%	26%	13%	28%	56%	1%
Registered Nurses	25,056	0.168	0.693	0.797	BA degree	3,495	\$133,422	\$86,920	25%	14%	86%	21%	38%	35%	4%
Pharmacy Technicians	4,070	0.257	0.755	0.718	HS degree	135	\$48,062	\$31,311	14%	24%	76%	38%	29%	25%	5%
Health Technologists and Technicians, All Other	2,121	0.208	0.873	0.662	Non-Degree Credential	1,437	\$56,709	\$36,944	18%	44%	56%	33%	25%	31%	7%
Dentists, General	1,370	3.283	0.751	1.685	PhD	0	\$184,436	\$120,154	40%	81%	19%	13%	32%	53%	1%
Radiologic Technologists and Technicians	1,712	0.373	0.598	0.844	AA degree	270	\$103,483	\$67,416	20%	38%	62%	30%	39%	25%	3%
Speech-Language Pathologists	1,118	0.970	0.998	0.888	MA Degree	280	\$109,080	\$71,062	16%	-	-	-	-	-	-
Licensed Practical and Licensed Vocational Nurses	7,464	0.234	0.331	0.707	Non-Degree Credential	972	\$80,493	\$52,438	26%	15%	85%	35%	31%	22%	9%
Medical Records Specialists	2,099	0.250	1.478	0.909	Non-Degree Credential	884	\$54,324	\$35,391	29%	13%	87%	34%	35%	22%	6%
Dental Hygienists	2,642	0.302	0.907	0.850	AA Degree	197	\$111,597	\$72,701	21%	10%	90%	25%	47%	24%	2%
Nurse Practitioners	1,829	1.212	0.511	0.600	MA Degree	2868	\$167,132	\$108,881	22%	15%	85%	18%	48%	27%	4%
Respiratory Therapists	1,703	1.589	0.512	0.840	AA Degree	183	\$100,736	\$65,626	25%	28%	72%	21%	44%	28%	3%
Physical Therapists	2,166	0.286	0.485	0.867	PhD	73	\$117,347	\$76,447	14%	42%	58%	16%	35%	45%	2%
Occupational Therapists	1,153	1.569	0.554	0.827	MA Degree	87	\$115,614	\$75,318	13%	28%	72%	21%	44%	28%	3%
Physician Assistants	1,342	3.030	0.562	0.836	MA Degree	94	\$158,575	\$103,306	14%	42%	57%	26%	39%	30%	2%
Clinical Lab. Technologists and Technicians	3,050	0.281	0.988	1.086	BA Degree	3,982	\$64,321	\$41,903	23%	34%	66%	27%	27%	39%	4%
Pharmacists	3,088	1.246	0.575	1.277	PhD	219	\$156,545	\$101,984	23%	50%	50%	12%	29%	55%	2%
Physicians, All Other	1,804	3.929	0.384	0.995	PhD	770	\$78,171	\$50,926	35%	74%	26%	13%	28%	56%	1%

Note: Data for Speech-Language Pathologists were not available. Demographic data for Family Medicine Physicians, Radiologic Technologists and Technicians, Respiratory Therapists, and Occupational Therapists reflect information from the general occupation groups (i.e., Physician, Diagnostic Related Technician, Therapists).

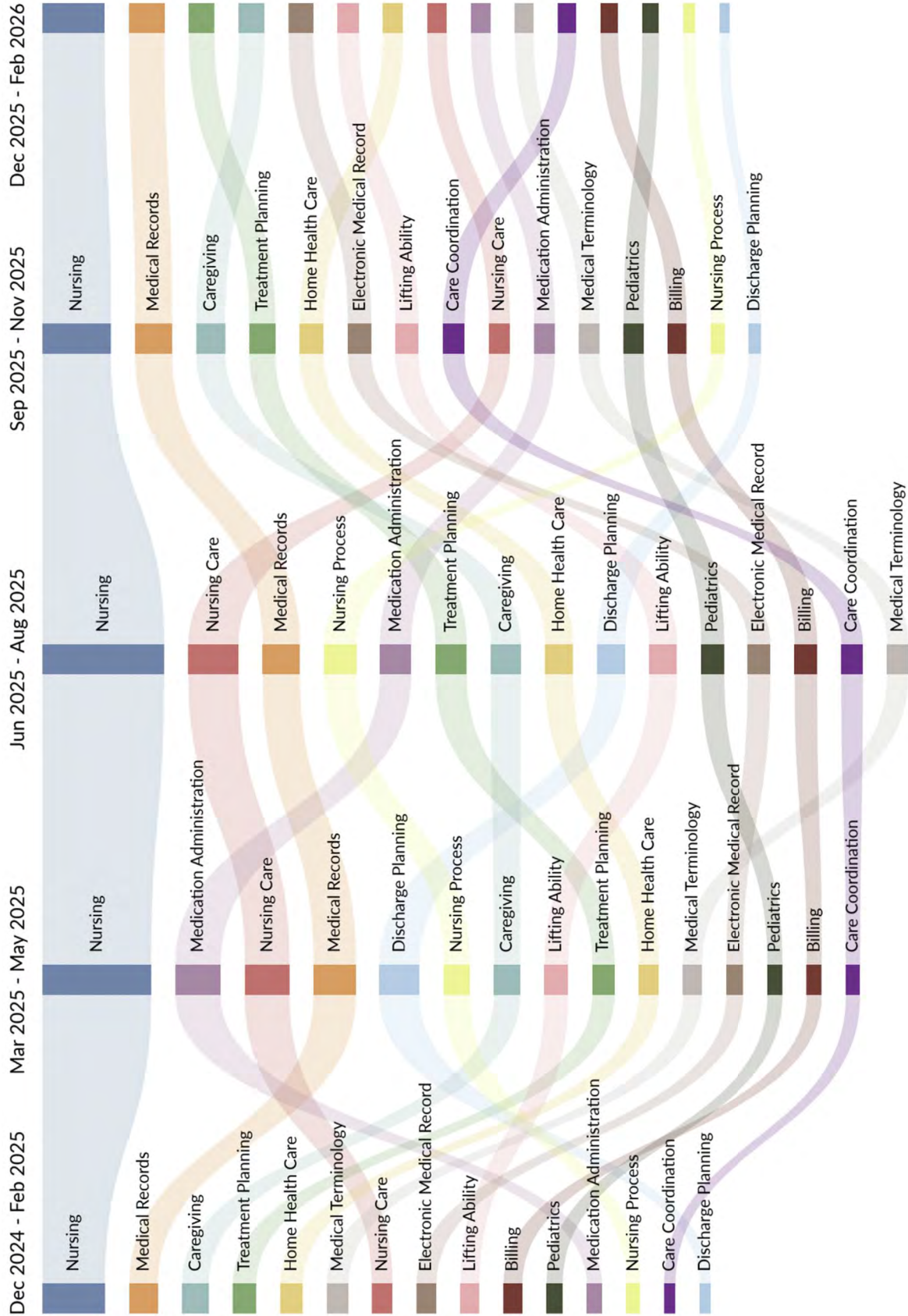
HASC MEMBER HOSPITAL SURVEY RESPONSES

Reasons for Healthcare Practitioners and Technical Occupations Shortages

Occupation	Limited Candidate Pool	Limited Career Advancement Opportunities	Lack of Training Programs Locally	Burnout or Work-Life Balance Issues	Noncompetitive Pay	Competition from Other Hospitals
Registered Nurse (RN)	✓	✓	-	-	-	✓
Licensed Vocational Nurse (LVN)	✓	✓	-	✓	✓	✓
Certified Nursing Assistant (CNA)	✓	✓	-	✓	-	✓
Cardiovascular Technologist/ EKG Tech	✓	✓	-	-	-	✓
CT Technologist	✓	-	-	-	-	✓
MRI Technologist	✓	✓	-	-	-	✓
Radiologist Technologist	✓	✓	-	✓	-	✓
Ultrasound Technician/ Sonographer	✓	✓	-	✓	-	✓
Medical Laboratory Technician	✓	✓	✓	✓	-	✓
Pharmacy Technician	✓	✓	-	✓	✓	✓
Sterile Processing Technician	✓	✓	✓	-	-	✓
Surgical Technician	✓	✓	✓	-	-	✓
Mental Health Technician/ Behavioral Health Technician	✓	✓	-	-	-	✓
Health Information Technician/ Medical Coder	✓	✓	✓	-	-	✓
Respiratory Therapist (RT)	✓	✓	-	-	✓	✓

Source: HASC Member Survey

TOP SKILLS NEEDED IN ORANGE COUNTY HEALTHCARE WORKFORCE (2024-2025)



Source: Lightcast

SOURCES

- ¹ Lightcast. (2025, November). Retrieved from <https://lightcast.io/>(2025, November).
- ² Lightcast. (2025, November). Retrieved from <https://lightcast.io/>(2025, November).
- ³ Lightcast. (2025, November). Retrieved from <https://lightcast.io/>(2025, November).
- ⁴ Center for Demographic Research. (2025). *Orange County facts and figures*. California State University, Fullerton. https://www.fullerton.edu/cdr/_resources/pdf/ocff.pdf
- ⁵ Lightcast. (2025, November). Retrieved from <https://lightcast.io/>(2025, November).
- ⁶ Lightcast. (2025, November). Retrieved from <https://lightcast.io/>(2025, November).
- ⁷ Lightcast. (2025, November). Retrieved from <https://lightcast.io/>(2025, November).
- ⁸ Lightcast. (2025, November). Retrieved from <https://lightcast.io/>(2025, November).
- ⁹ Orange County Workforce and Economic Development Division. (2024). 2024–2029 comprehensive economic development strategy report to the U.S. Department of Commerce, Economic Development Administration. <https://workforce.ocgov.com/sites/cid/files/2024-10/OC%20CEDS%20%282024-2029%29%20Approved.pdf>
- ¹⁰ Lightcast. (2025, November). Retrieved from <https://lightcast.io/>(2025, November).
- ¹¹ Lightcast. (2025, November). Retrieved from <https://lightcast.io/>(2025, November).
- ¹² Lightcast. (2025, November). Retrieved from <https://lightcast.io/>(2025, November).
- ¹³ Lightcast. (2025, November). Retrieved from <https://lightcast.io/>(2025, November).
- ¹⁴ Lightcast. (2025, November). Retrieved from <https://lightcast.io/>(2025, November).
- ¹⁵ Demographic Research Unit. (n.d.). Projections. State of California Department of Finance. <https://dof.ca.gov/Forecasting/Demographics/Projections/>
- ¹⁶ (n.d.). Navigating the healthcare workforce crisis: An organization’s survival guide. Retrieved from Lightcast. <https://lightcast.io/resources/research/navigating-the-healthcare-workforce-crisis-an-organization-s-survival-guide>
- ¹⁷ Self, W., Lezotte, D., Sengupta, I., Stucky, B., Raffo, C., & Santhanakrishnan, S. (2024). Future of the U.S. healthcare industry: Healthcare labor market projections by 2028. Mercer. <https://www.mercer.com/en-us/insights/talent-and-transformation/attracting-and-retaining-talent/future-of-the-us-healthcare-industry/>
- ¹⁸ Pappas, M. A., Stoller, J. K., Shaker, V., Houser, J., Misra-Hebert, A. D., & Rothberg, M. B. (2022). Estimating the costs of physician turnover in hospital medicine. *Journal of hospital medicine*, 17(10), 803–808. <https://doi.org/10.1002/jhm.12942>
- ¹⁹ 2026 NSI National Health Care Retention & RN Staffing Report. https://www.nsinursingsolutions.com/Documents/Library/NSI_National_Health_Care_Retention_Report.pdf
- ²⁰ California Department of Health Care Access and Information. (2025). Supply and demand modeling for California’s behavioral health workforce. <https://hcai.ca.gov/visualizations/supply-and-demand-modeling-for-californias-behavioral-health-workforce/>
- ²¹ Self, W., Lezotte, D., Sengupta, I., Stucky, B., Raffo, C., & Santhanakrishnan, S. (2024). Future of the U.S. healthcare industry: Healthcare labor market projections by 2028. Mercer. <https://www.mercer.com/en-us/insights/talent-and-transformation/attracting-and-retaining-talent/future-of-the-us-healthcare-industry/>
- ²² California Department of Health Care Services. (n.d.). Proposition 1 fact sheet: Behavioral health transformation. <https://www.dhcs.ca.gov/BHT/Pages/Fact-Sheet-Prop-1.aspx#:~:text=The%20Solution:%20Proposition%201,changes%20as%20Behavioral%20Health%20Transformation.>
- ²³ Lightcast. (2025, November). Retrieved from <https://lightcast.io/>(2025, November).
- ²⁴ California Department of Health Care Access and Information. (2024, August 28). Behavioral health workforce strategy [Presentation for Behavioral Health Task Force]. https://www.calbhbc.org/uploads/5/8/5/3/58536227/hcai_240828_bhbf_workforce_presentation.pdf
- ²⁵ California Hospital Association. (2025). Key messages: Shortage of behavioral health resources means many Californians can’t get the treatment they need. <https://calhospital.org/file/behavioral-health-key-messages-2025/>
- ²⁶ Echelman, A. (2025, May 7). Many Californians can’t get mental health help. Is it too hard to become a therapist? CalMatters. <https://calmatters.org/health/mental-health/2025/05/mental-health-providers-california/#:~:text=Nearly%20one%2Dthird%20of%20California's,regular%20salary%20as%20a%20therapist.>
- ²⁷ Simpson, S. (2024, August 5). *How a lack of supervisors keeps new mental health workers from entering the field*. The Texas Tribune. <https://www.texastribune.org/2024/08/05/texas-mental-health-supervisors-training-students/>
- ²⁸ Self, W., Lezotte, D., Sengupta, I., Stucky, B., Raffo, C., & Santhanakrishnan, S. (2024). Future of the U.S. healthcare industry: Healthcare labor market projections by 2028. Mercer. <https://www.mercer.com/en-us/insights/talent-and-transformation/attracting-and-retaining-talent/future-of-the-us-healthcare-industry/>
- ²⁹ Glasmeier, A.K. (n.d.). Living wage calculator. Massachusetts Institute of Technology. <https://livingwage.mit.edu/>

- ³⁰ McConville, S., Payares-Montoya, D., & Bohn, S. (2025, October). Training for health care jobs in California: Opportunities for workers without a four-year degree. Public Policy Institute of California.
<https://www.ppic.org/publication/training-for-health-care-jobs-in-california-opportunities-for-workers-without-a-four-year-degree/#:~:text=Shorter%2Dterm%20health%20training%20that,%E2%86%92>
- ³¹ Lightcast. (2025, November). Retrieved from [https://lightcast.io/\(2025, November\)](https://lightcast.io/(2025, November)).
- ³² Lightcast. (2025, November). Retrieved from [https://lightcast.io/\(2025, November\)](https://lightcast.io/(2025, November)).
- ³³ Lightcast. (2025, November). Retrieved from [https://lightcast.io/\(2025, November\)](https://lightcast.io/(2025, November)).
- ³⁴ UC Irvine Health Affairs. (2025, March 26). Nurse-OC: Cultivating equity through healthcare education. Bridging the Gap.<https://healthaffairs.uci.edu/news-and-media/digital-publications/nurse-oc-cultivating-equity-through-healthcare-education/>
- ³⁵ California Department of Health Care Access and Information. (2025). Supply and demand modeling for California's behavioral health workforce.
<https://hcai.ca.gov/visualizations/supply-and-demand-modeling-for-californias-behavioral-health-workforce/>
- ³⁶ Lightcast. (2025, November). Retrieved from [https://lightcast.io/\(2025, November\)](https://lightcast.io/(2025, November)).
- ³⁷ Lightcast. (2025, November). Retrieved from [https://lightcast.io/\(2025, November\)](https://lightcast.io/(2025, November)).
- ³⁸ California Department of Health Care Access and Information. (2025). Member survey.
- ³⁹ School of Allied Health Professions. (2026, February 26). Allied Health Program informational grid. Orange Coast College.
<https://acrobat.adobe.com/id/urn:aaid:sc:VA6C2:9cab872e-1500-4924-bb33-a6b1eeae343f?viewer%21megaVerb=group-disc-over>
- ⁴⁰ Orange Coast College. (n.d.). Program information: Radiologic technology.
<https://orangecoastcollege.edu/academics/consumer-health/allied-health/radiologic-technology/program-information.html>
- ⁴¹ Modern Technology School. (n.d.). X-ray technician program. <https://mtschoool.edu/x-ray-technician/>
- ⁴² Kaiser Permanente School of Allied Health Sciences. (2026, January 1). Tuition & fees.
<https://kpsahs.edu/tuition-and-financial-aid/tuition-and-fees>
- ⁴³ Modern Technology School. (2019, April 28). X-ray tech night school in Orange County: Become an X-ray technician taking evening X-ray classes at Modern Technology School. <https://mtschoool.edu/x-ray-tech-night-school-in-orange-county/>
- ⁴⁴ Antrobus, R., Bollella, A., & Lemmon, C. (2025). Strengthening L.A.'s health care talent pipeline. L.A. Region K-16 Collaborative.
<https://losangelesk16.org/2025/11/20/strengthening-la-health-care-talent-pipeline/>
- ⁴⁵ California Competes: Higher Education for a Strong Economy. (2021, February). Meeting California's demand for allied health workers.https://californiacompetes.org/wp-content/uploads/2022/12/CA-Competes-Allied-Health_Final.pdf
- ⁴⁶ California Community Colleges Chancellor's Office. (2025, March 31). 2022–23 Allied Health Programs clinical placement report. Workforce and Economic Development Division.
<https://www.cccco.edu/-/media/CCCCO-Website/docs/report/2022-23-allied-health-report-a11y.pdf?la=en&hash=3A2CB3DAB235571FCC2F74F33D452E9474BA79D>
- ⁴⁷ Lightcast. (2025, November). Retrieved from [https://lightcast.io/\(2025, November\)](https://lightcast.io/(2025, November)).
- ⁴⁸ Association of American Medical Colleges (n.d.). Addressing the physician workforce shortage.
<https://www.aamc.org/advocacy-policy/addressing-physician-workforce-shortage>
- ⁴⁹ Lightcast. (2025, November). Retrieved from [https://lightcast.io/\(2025, November\)](https://lightcast.io/(2025, November)).
- ⁵⁰ U.S. Census Bureau. (n.d.). *QuickFacts: Orange County, California*.
<https://www.census.gov/quickfacts/fact/table/orangecountycalifornia/PST045224>
- ⁵¹ U.S. Census Bureau. (n.d.). *QuickFacts: Orange County, California*.
<https://www.census.gov/quickfacts/fact/table/orangecountycalifornia/PST045224>
- ⁵² United Ways of California. (n.d.). The real cost measure in California. <https://unitedwaysca.org/realcost/>
- ⁵³ U.S. Census Bureau. (n.d.). *Orange County, California*. Census Bureau Data.
https://data.census.gov/profile/Orange_County,_California?g=050XX00US06059
- ⁵⁴ U.S. Census Bureau. (n.d.). *California*. Census Bureau Data. <https://data.census.gov/profile/California?g=040XX00US06>
- ⁵⁵ Jetty, A., Jabbarpour, Y., Pollack, J., Huerto, R., Woo, S., & Petterson, S. (2022, February). Patient-physician racial concordance associated with improved healthcare use and lower healthcare expenditures in minority populations. *Journal of Racial and Ethnic Health Disparities*, 9(1), 68–81. <https://doi.org/10.1007/s40615-020-00930-439> (2025, November).
- ⁵⁶ Lightcast. (2025, November). Retrieved from [https://lightcast.io/\(2025, November\)](https://lightcast.io/(2025, November)).
- ⁵⁷ Health Career Connection. (2025, June 10). Health Career Connection (HCC) regional health workforce initiative grant FAQ.
<https://hccinitiative.grantplatform.com/page/JpBVYKKd#:~:text=Health%20pathway%20and%20training%20programs,action%20to%20strengthen%20health%20workforce>
- ⁵⁸ Children and Youth Behavioral Health Initiative. (n.d.). Workstream: Broad behavioral workforce capacity.<https://cybhi.chhs.ca.gov/workstream/broad-behavioral-health-workforce-capacity/>
- ⁵⁹ Children and Youth Behavioral Health Initiative. (n.d.). Workstream: Broad behavioral workforce capacity.<https://cybhi.chhs.ca.gov/workstream/broad-behavioral-health-workforce-capacity/>

- ⁶⁰ RTI International & HHS Office of the Assistant Secretary for Planning and Evaluation. (2024, January). State efforts to improve direct care workforce wages: Final report. U.S. Department of Health and Human Services. <https://aspe.hhs.gov/sites/default/files/documents/e88ca623469819d2444d07fe9564fb67/state-efforts-improve-dcw-wages-final.pdf>
- ⁶¹ Economic & Workforce Development Department. (2024). AdvantAGE LA: A blueprint for employing, retaining, and advancing Older Workers across LA. City of Los Angeles Workforce Development Board. https://www.wiblacity.org/images/reports/AdvantAGE_LA_Report_Report_June2024.pdf
- ⁶² Silver, M. P., Hamilton, A. D., Biswas, A., & Warrick, N. I. (2016). A systematic review of physician retirement planning. *Human Resources for Health*, 14(1), 67. <https://doi.org/10.1186/s12960-016-0166-z>
- ⁶³ Institute of Medicine (US) Committee on the Future Health Care Workforce for Older Americans. (2008). Retooling for an aging America: Building the health care workforce. National Academies Press (US). <https://doi.org/10.17226/12089>
- ⁶⁴ Ackerman-Barger, K., Ngo, V., Cavanagh, S. J., Lubarsky, D. A., & Draughon Moret, J. E. (2023, December 20). Attracting, admitting, supporting, and graduating a diverse nursing student body. *NEJM Catalyst Innovations in Care Delivery*, 5(1). <https://catalyst.nejm.org/doi/full/10.1056/CAT.23.0302>
- ⁶⁵ UC Irvine Health Affairs. (2025, March 26). Nurse-OC: Cultivating equity through healthcare education. Bridging the Gap. <https://healthaffairs.uci.edu/news-and-media/digital-publications/nurse-oc-cultivating-equity-through-healthcare-education/>
- ⁶⁶ Sue & Bill Gross School of Nursing. (n.d.). NURSE-OC grant, the NURSE-OC program: Addressing Orange County's nursing shortage. University of California, Irvine. <https://nursing.uci.edu/home/nurse-oc-grant/>
- ⁶⁷ Yehya, N. H. (2024, January 5). UC Davis Health creates road map to diversify health care workforce. UC Davis Health. <https://health.ucdavis.edu/news/headlines/uc-davis-health-creates-road-map-to-diversify-health-care-workforce/2024/01>
- ⁶⁸ Kutney-Lee, A., Germack, H., Hatfield, L., Kelly, S., Maguire, P., Dierkes, A., Del Guidice, M., & Aiken, L. H. (2016). Nurse engagement in shared governance and patient and nurse outcomes. *The Journal of Nursing Administration*, 46(11), 605–612. <https://doi.org/10.1097/NNA.0000000000000412>
- ⁶⁹ Gray, S., Morris, M., & Bowie D. (2023, December 30). The power of self-scheduling: Frontline nurses' insights and perspectives to achieve staffing flexibility. *Nurse Leader*, 22(4), 438–444. <https://doi.org/10.1016/j.mnl.2023.11.012>
- ⁷⁰ CalOptima Health. (2024, April 9). CalOptima Health gives \$25 million to bolster safety net, reduce health disparities, and ease workforce shortages [Press release]. <https://www.caloptima.org/en/about-us/press-releases/caloptima-health-gives-25m-to-bolster-safety-net-reduce-health-disparities-ease-workforce-shortages>

Strengthening Orange County's Healthcare Workforce

Recommendations for a Resilient Future

Thank you to all of the individuals, organizations, and partners who contributed to this report.



Report written by:

