HEALTH WEALTH CAREER

# HEALTHCARE WORKFORCE 2025

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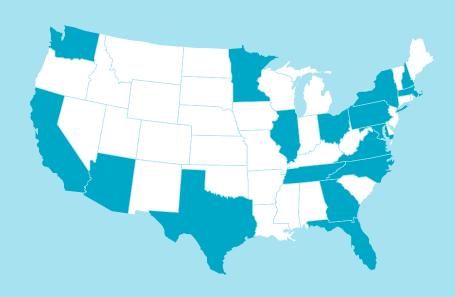
The healthcare industry is changing. New technologies, such as telemedicine, are transforming how healthcare is delivered.

New competition, such as retail health outlets, is changing where healthcare is delivered.

New reimbursement models, such as those emphasizing health outcomes (value) over a fee for service (volume), are changing how healthcare is paid for and how healthcare systems manage costs.

These changes, combined with demographic trends and regulatory uncertainties, are likely to transform the healthcare workforce in coming years. But how? Using methods developed as part of Mercer's External Labor Market. Analysis, we examine the changing healthcare labor markets in 20 states—identifying which healthcare occupations are likely to grow the most and the fastest through 2024, estimating the gaps between projected demand for and supply of critical healthcare talent during the same time period, and locating where healthcare workers are versus where they need to be in the future.

We share some high-level observations gleaned from our state-by-state analysis and offer some thoughts on what these observations mean for healthcare leaders as they develop and execute their workforce plans. As the findings from Ohio will demonstrate, every state is different and every healthcare system needs to assess how anticipated changes to its external labor market(s) will ultimately affect its people and its patients in coming years.



#### LABOR DEMAND

#### Support Needed, and Downstream Demand Growing

Although growth in the healthcare industry will account for nearly one in three new jobs created in the United States by 2024, growth in the healthcare workforce will be uneven. Healthcare support and technician occupations as well as "downstream" practitioners are expected to grow the most and the fastest, according to our state-level analysis of projected job openings through 2024.

Healthcare support and technologist or technician occupations sit at the confluence of two major factors driving demand for healthcare services: an aging and sicker patient population. The number of Americans over 65 years is expected to quadruple by mid-century, while the effects of an increasingly sedentary lifestyle on the health of younger Americans means that nearly 150 million people are likely to suffer a chronic illness, such as heart disease or diabetes, by 2020.<sup>2</sup>

Americans as a whole are getting older, and they're getting sicker. But others are also getting better access to healthcare, namely through policy changes brought about by legislation such as the Affordable Care Act (ACA). These Americans tend to be middle-aged and more likely to have deferred medical treatment in the past — because they were either unable to get health insurance or unable to afford treatment.

Generally speaking, these patient populations require greater long-term care and greater access to diagnostic services. As a result, demand for home health aides, physical therapists and occupational therapists is expected to increase by an average of 40% in the states we examined — with some states projecting triple-digit growth in demand. Openings for medical and laboratory technicians, pharmacy technicians, and cardiovascular technologists and technicians are also projected to increase dramatically as healthcare systems cope with more patients requiring more diagnostic services.

At the same time, demand for downstream practitioners, such as nurse practitioners, registered nurses and physician assistants, is likely to increase across many states as hospital systems work to fill physician shortages and/or contain costs. Medical doctors increasingly choose specialization over general practice, creating physician shortages further "upstream." Changing reimbursement models coupled with aging patient populations force many healthcare systems to seek cost-saving measures that do not negatively impact quality of care. Nurse practitioners and physician assistants can address both needs — filling upstream shortages while also containing costs.

https://www.bls.gov/ooh/most-new-jobs.htm

http://thelancet.com/journals/lancet/article/PIIS0140-6736(09)60048-9/fulltext

https://www.ncbi.nlm.nih.gov/pubmed/20040165

We see a particularly strong correlation between downstream practitioner demand and state practice and licensure laws. Projected demand for nurse practitioners, for instance, is often higher in states allowing for full practice authority. But we also see future downstream practitioner demand driven by recent industry developments. The growth of retail healthcare clinics operating out of pharmacies, grocery stores and other nontraditional medical settings is likely to increase demand — and competition — for key downstream talent, such as nurse practitioners and physician assistants. This is especially true in large southern and Midwestern metropolitan areas, where most of these retail clinics are currently located.<sup>4</sup>

Not all healthcare occupations are likely to experience rapid growth. Physicians, surgeons, anesthesiologists and other highly skilled practitioner occupations are expected to grow the least and the slowest through 2024. Indeed, we generally see a negative correlation between projected job growth and job complexity. That is, jobs that are likely to grow the most are also likely to require less formal training.

There are important exceptions, especially for states experiencing strong domestic or international migration as well as economic growth (for example, Georgia and Washington). But the general trend toward higher growth in lower-skilled occupations signals a significant shift in the type of work — and, consequently, the type of worker — needed within the healthcare industry in coming years.

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<sup>4</sup> http://www.rand.org/pubs/research\_briefs/RB9491-2.html

## LABOR SUPPLY

#### Gaps in Critical Occupations

Demand for healthcare workers is growing. But in many states, the projected supply of healthcare workers is unlikely to meet projected demand. Gaps are likely in certain occupations — especially in nursing, therapy and healthcare support occupations. But every state is different, and which occupations are likely to become "critical occupations" for which supply is unable to meet demand depends largely on a state's education pipeline, its general labor force and the degree of misalignment between where workers are and where they need to be by 2024.

Critical occupations depend largely on a state's projected supply of graduates in healthcare-related fields. Education pipelines are critical to meeting future demand. And yet state budget cuts, a lack of qualified faculty and limited classroom space are constricting education pipelines. In 2014–2015 alone, nearly 70,000 qualified applicants to professional nursing programs were turned away due to a lack of space. In short, some states simply aren't producing enough graduates to meet future demand.

Critical occupations also depend on who's moving in, who's moving out and who's likely to stay. In other words, migration and demographic trends also impact future labor supply and, in some instances, can compensate for weaker education pipelines. We see states with strong domestic or international migration and favorable long-term demographics as significantly less likely to face shortages in their general labor force and, consequently, more likely to supply the talent needed to meet projected demand in healthcare occupations. Some states produce talent; others poach it.

But risks remain, especially in rural areas and even in those states where the overall general labor supply is strong and education pipeline robust. As rural areas continue to lose younger residents to cities and suburbs, rural residents are trending older and sicker. We see marked increases in the demand for home health aides and physical therapists in rural areas across a number of states. This is likely to



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<sup>&</sup>lt;sup>5</sup> American Association of Critical-Care Nurses. "New AACN Data Confirm Enrollment Surge in Schools of Nursing" (2015).

present exceptional challenges to healthcare systems operating in these areas — challenges that cannot easily be met by a tech solution like telemedicine, which has been successful in meeting other rural challenges, such as better access to physician care.<sup>6</sup>

Finally, critical occupations vary not only by state but also within states. Demand and supply are not uniform across states, and this has important implications for healthcare systems. Healthcare systems are more likely to fill anticipated gaps in their workforce in regions where projected demand and supply are aligned. But we see numerous instances where demand and supply are misaligned — where projected demand far outpaces supply. Critical occupations are likely, in other words, to be more critical in certain parts of a state than in others. For healthcare systems, it's important to know where these hot spots are and how they may affect strategic workforce planning in the future.

Mercer has conducted analyses of each state labor market, looking at the relative expected supply and demand for 2024. In our next section, we drill down into one particular state: Ohio.

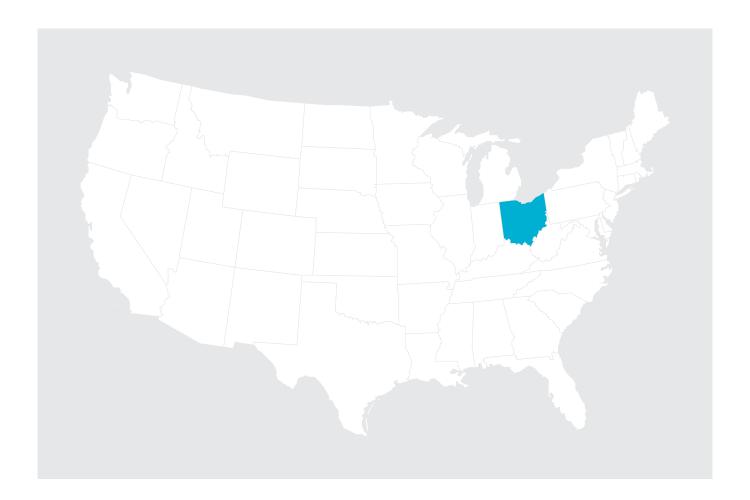


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<sup>6</sup> http://jamanetwork.com/journals/jama/fullarticle/2520619

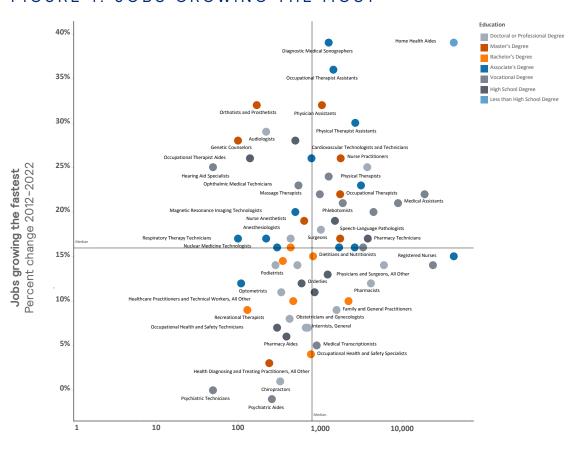
# CASE STUDY: SOME FINDINGS FROM OHIO

Healthcare demand is growing in Ohio, but growth is slow and uneven. Like other large Rust Belt states, continued population decline and an increasingly older demographic profile mean that future demand for healthcare occupations in Ohio skews toward support services and technologist/technician occupations. Demand for more high-skill occupations, such as surgeons, is likely in urban centers like Columbus, where health systems will need to compete with other systems in neighboring states for critical talent. But overall, Ohio is likely to experience higher growth in lower-skilled occupations. More rural parts of Ohio, especially coal country, are at risk for future labor shortages as shifts in energy production impact local economies.



We estimate Ohio's future demand for healthcare talent by first comparing the total number of job openings to the total percent change in job openings projected from 2012 to 2022 (Figure 1). Plotting these data helps to identify which jobs are likely to grow the most (that is, total openings on the x-axis) and which jobs are likely to grow the fastest (that is, percent change on the y-axis). Classifying jobs by occupation groups, such as health technologists or health practitioners, further helps to identify broader shifts in occupational demand.

# FIGURE 1: JOBS GROWING THE MOST



**Jobs growing the fastest** Total openings 2012-2022

Source: Mercer's Healthcare Workforce 2025 External Labor Market Analysis

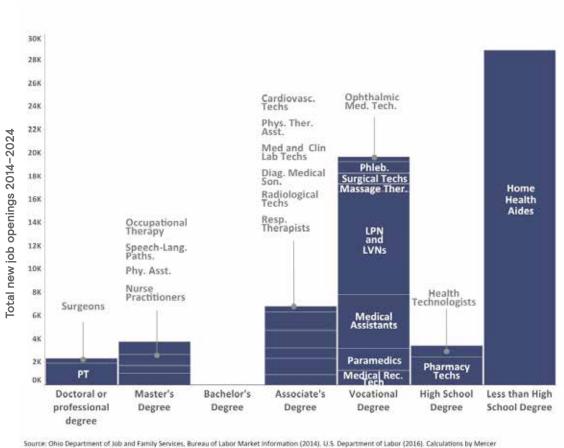
Jobs falling in the upper-right-hand quadrant are the jobs likely to grow the most and the fastest in Ohio — and they're the focus of subsequent analyses. Home health aides, physical therapists, physician assistants and diagnostic medical sonographers all fall within this area, reflecting key demographic shifts in Ohio's population as well as growth in downstream practitioner demand. More broadly, many jobs in the health technologist and technician occupation group fall within Ohio's high-growth quadrant. Healthcare systems seeking to fill these types of roles in their organization should expect increased competition for talent.



Examination of the education or training requirements of high-growth jobs in Ohio reveals a negative correlation between job growth and job complexity (Figure 2). That is, jobs likely to grow the most and the fastest in Ohio are also likely to require less formal training.

Indeed, as Figure 2 illustrates, most job openings in Ohio will require a vocational degree or less. There are both opportunities and challenges for healthcare systems in this finding. At the very least, healthcare systems will likely need to prepare for managing a very different workforce in the future.

# FIGURE 2: TOTAL JOB OPENINGS 2012-2022



Source: Unio Department of Job and Family Services, Bureau of Labor Market Information (2014), U.S. Department of Labor (2016), Calculations by Merce

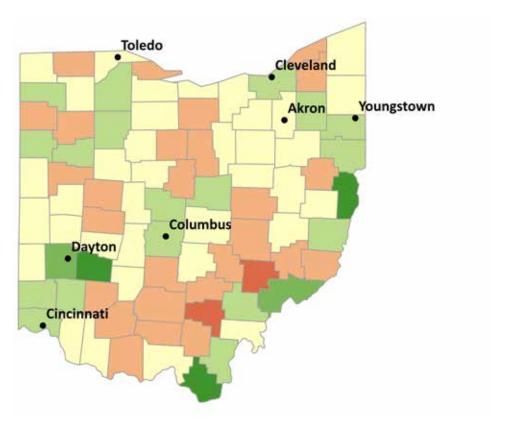
The most acute critical occupations in Ohio - that is, jobs where projected supply are unlikely to meet projected demand - are home health aides, LPNs and several health technician occupations, according to our estimates (Figure 3).

# FIGURE 3: CRITICAL OCCUPATIONS IN OHIO

|                       |  | PROJECTED<br>OPENINGS<br>THROUGH 2022 | PROJECTED<br>ENTRANTS<br>THROUGH 2022 | PROJECTED<br>GAP BY 2022 |
|-----------------------|--|---------------------------------------|---------------------------------------|--------------------------|
| +                     | Home Health<br>Aides                                 | 40,000                                | 24,000                                | -16,000                  |
| \(\frac{1}{2}\).      | Licensed Practical and<br>Licensed Vocational Nurses | 20,000                                | 10,000                                | -10,000                  |
|                       | Speech-Language<br>Pathologists                      | 2,000                                 | 100                                   | -1,900                   |
| Ä                     | Health Technologists and<br>Technicians, All Other   | 1,500                                 | 500                                   | -1,000                   |
|                       | Medical and Clinical<br>Laboratory Technicians       | 3,000                                 | 2,000                                 | -1,000                   |
| - <b>∕</b> \_=<br>⊝⊙□ | Radiologic<br>Technologists                          | 3,000                                 | 2,000                                 | -1,000                   |
| <b>W</b>              | Cardiovascular Technologists and Technicians         | 1,000                                 | 500                                   | -500                     |
| $\longleftrightarrow$ | Physical<br>Therapists                               | 4,000                                 | 3,000                                 | -1,000                   |

Source: Mercer's Healthcare Workforce 2025 External Labor Market Analysis

Up to 10,000 LPN positions, for instance, could remain unfilled by 2022. Gaps are also likely in higher-skilled occupations such as physical therapists, but, in general, Ohio will face healthcare worker shortages in lower-skilled occupations. Where these gaps are likely to occur is critical.



# FIGURE 4: LABOR SHORTAGE RISKS IN OHIO

Source: Mercer's Healthcare Workforce 2025 External Labor Market Analysis

Assessments of labor shortage risks (Figure 4) — which take into account various demographic and migration trends at the county level — suggest that Ohio's urban centers are better positioned than rural areas to meet future changes in the state's healthcare workforce.

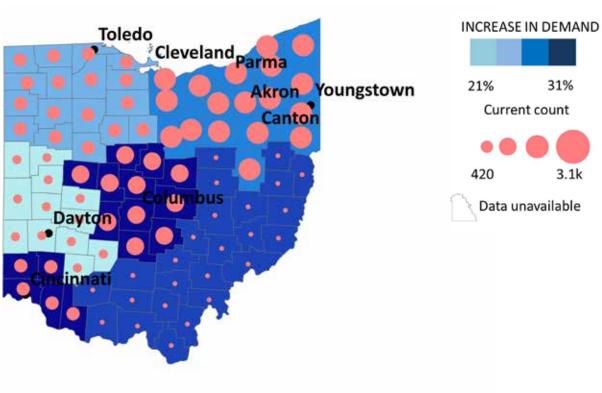
Very low population growth and continued in-state migration to urban centers mean that rural areas are most at risk for future labor shortages. In the eastern mining regions of the state, for instance, a shrinking consumer base for coal-powered electricity is likely to increase local unemployment and further accelerate the exit of younger residents and working-age residents.

What's more, we see misalignment between where workers in critical occupations are and where they need to be in Ohio to meet expected increases in demand by 2022. For instance, high growth in the demand for physical therapists (shaded in blue in Figure 5) is likely in and around Columbus and Cincinnati. In these areas, the supply of physical therapists (depicted as proportionally sized red dots) is likely to meet this increased demand.

But the same can't be said for southeastern Ohio, where a low supply of physical therapists is unlikely to meet increases in demand projected for this region. Healthcare systems operating in this part of the state, which is already at a very high risk of future labor shortages, will need to consider how shortages in the local labor market will affect their workforce plans for talent recruitment and retention.

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# FIGURE 5: THE DEMAND FOR PHYSICAL THERAPISTS IN OHIO



Source: Mercer's Healthcare Workforce 2025 External Labor Market Analysis

## KNOWN UNKNOWNS

Broad, long-term shifts such as an aging patient population are unlikely to change very much in coming years. In many respects, then, accelerated growth in the demand for and supply of healthcare talent is fairly certain. However, short-term shifts in healthcare and immigration policy could have profound effects on how healthcare systems address the challenges created by these longer-term changes in the healthcare workforce.

The repeal and replacement of the ACA would almost certainly change who has access to healthcare. At the time of this writing, proposed changes to health insurance mandates and Medicaid expansion would significantly reduce the number of Americans with healthcare coverage by 2025. Recent estimates suggest that older, sicker Americans or Americans living in rural areas where health insurance premiums are often higher would be disproportionately affected by these proposed changes.<sup>7</sup>

The impact of these changes on healthcare labor demand is less certain. It's possible that fewer Americans with less comprehensive health insurance or more limited access to healthcare could reduce the demand for diagnostic services or reduce downstream demand for healthcare practitioners under these scenarios. However, it's also possible that demand for such occupations will remain strong as

more Americans reach Medicare eligibility and demand for health services will naturally increase.

Proposed changes to immigration policy also present a host of unknown consequences, especially for the projected supply of healthcare talent in the future. Healthcare has the largest percentage of foreignborn workers of any industry in the United States, with nearly a quarter of practicing physicians born in another country.8,9 Physicians are not alone. Physical therapists, dentists and pharmacists also comprise a sizable number of H-1B applications. according to recent studies - and they disproportionally serve rural and lower-income communities.10

Indeed, immigration schemes requiring foreign-born nurses and physicians to serve in rural or underserved communities succeeded in reducing labor shortages in these locations during the 1990s and early 2000s. Although unlikely to affect the high demand for lower-skilled labor, changes to H-1B visa programs could have implications on the supply of highly skilled talent in many vulnerable areas.

<sup>&</sup>lt;sup>7</sup> https://www.cbo.gov/publication/52486

https://cew.georgetown.edu/wp-content/uploads/2014/11/Healthcare.ExecutiveSummary.090712.pdf

https://www.uscis.gov/sites/default/files/USCIS/Resources/Reports%20and%20Studies/H-1B/h1b-fy-12-characteristics.pdf

<sup>&</sup>lt;sup>10</sup> http://www.migrationpolicy.org/article/foreign-born-health-care-workers-united-states

## **NEXT STEPS**

Healthcare systems need to think critically about how state-level trends in labor demand and supply will affect how they plan for and invest in their workers. Every state is different, and healthcare leaders should rely on state-level details to make planning decisions. Nevertheless, we see a number of potential next steps around analytics, recruitment, careers and management that health systems should consider in light of our findings.

First, healthcare systems need to ensure they have the capability to make data-driven, evidence-based workforce decisions that do not compromise patient satisfaction or quality of care. Understanding the internal labor market - that is, how and why employees move in, through and out of an organization - is crucial to successfully navigating the future external labor market changes detailed in our analysis. This understanding should lead to action, but action that is grounded in an empirical assessment of how changes in the workforce ultimately affect patients. Skillful use of predictive workforce analytics on a facility-byfacility basis will help organizations understand what levers to pull to both minimize cost and maximize positive patient outcomes.

Second, healthcare systems need to think both strategically as well as geographically about their recruitment strategies. More direct competition with other industry sectors for some key talent is very likely. Indeed, the training and skill requirements of home health aides, for instance, are comparable to similarly paid occupations in the service sector. In areas where labor supply is tight or shortage risks high, industries will be competing for these workers.

At the same time, understanding where workers are or are not is important to developing more efficient recruiting strategies. Our analysis uncovered many areas of misalignment between future demand and current supply. These are fertile recruiting grounds for healthcare systems operating in high-demand, competitive regions.

Third, healthcare systems should assess their training incentives and career pathways. Because the training threshold for many highgrowth healthcare occupations is low, healthcare systems have an opportunity to build talent with the right incentives. For instance, integrating training opportunities within a career pathway framework may allow healthcare systems to meet increasing demand for nurses by incentivizing high performers to move along the nursing continuum (for example, from nursing assistant to LPN/LVN). Communicating these opportunities to employees is important, and career opportunities require robust communication plans.

Finally, healthcare systems need to prepare for the logistics and risks associated with a lower-skilled workforce. Workers in lower-skilled occupations face challenges including longer commute times and fewer options for affordable child or eldercare, especially in areas where the cost of living is high. Healthcare systems need to anticipate and seek to mitigate the effects of increased employee turnover and absenteeism in order to maintain quality of care.

Understanding the internal labor market — that is, how and why employees move in, through and out of an organization — is crucial to successfully navigating the future external labor market changes detailed in our analysis.

# MERCER HEALTH PROVIDER ADVISORY

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Our specialized team of healthcare industry experts, supported by Mercer's wide breadth of human capital resources and integrated solutions across health, wealth and careers, partners with you to design effective strategies for taking care of what matters most — your people.

# ABOUT OUR CAPABILITIES

In the Workforce Strategy and Analytics area, Mercer assists clients to determine the quantity and quality of workforce required in each critical job family and formulates workforce strategies to address any gaps and risks. We also use data analytics to help clients to resolve complex talent issues.

#### ABOUT THE AUTHORS

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Matt Stevenson is a Partner and the co-leader of Mercer's Workforce Strategy and Analytics practice in North America. He is based in Washington, DC and has worked at Mercer since 2000. His work involves using data science to help Mercer clients define their human capital strategy and fine tune the implementation and planning of that strategy in order to support business objectives. He is also a member of Mercer's Healthcare and Energy verticals.

Matt holds a BA in economics from McGill University (1993), and an MA and a PhD in international relations from Arizona State University (1995, 2000). His work has been presented at national conferences and published in professional journals. His most recent publications include Staying Ahead of the Curve: Employer Best Practices for Mature Workers, co-authored with Anna Rappaport, and The Talent Crisis in the Canadian Energy Sector: Where Are We Now? with Steve Diotte of MEG energy.

#### CONTACT US

Since publication, Mercer's healthcare labor market analysis is now available for all 50 states. If you would like a more in-depth analysis of the critical occupations and projected labor trends in your location, please contact:

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