Healthcare Workforce 2025
Part II

Trends In The Healthcare Workforce

Jason Narlock, PhD
Matthew Stevenson, PhD

Q4 2016
Industry Trends
Macro Trends In US Healthcare
We see seven major themes driving the transformation of work within the healthcare industry.

- Value Over Volume
- Rise of Retail
- Technology
- Pressure on Costs and Outcomes
- Rise of Consumerism
- Consolidation And Expansion
- Changing Regulatory Environment
Lack of new talent across the nation
Healthcare will account for a third of US job growth, especially in target segments.

### Job Projections for the Fastest Growing Healthcare-Related Segments

<table>
<thead>
<tr>
<th>Healthcare segment</th>
<th>2014 Employment</th>
<th>2024 Projected</th>
<th>GROWTH %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offices of physicians</td>
<td>2.4M</td>
<td>3.0M</td>
<td>25%</td>
</tr>
<tr>
<td>Offices of other health practitioners</td>
<td>784K</td>
<td>1.1M</td>
<td>40%</td>
</tr>
<tr>
<td>Private Hospitals</td>
<td>4.8M</td>
<td>5.2M</td>
<td>8%</td>
</tr>
<tr>
<td>Home health care services</td>
<td>1.3M</td>
<td>2.0M</td>
<td>54%</td>
</tr>
<tr>
<td>Nursing and residential care facilities</td>
<td>3.3M</td>
<td>4.0M</td>
<td>21%</td>
</tr>
<tr>
<td>Outpatient care centers</td>
<td>711K</td>
<td>1.1M</td>
<td>55%</td>
</tr>
<tr>
<td>Physician assistants</td>
<td>94K</td>
<td>123K</td>
<td>31%</td>
</tr>
<tr>
<td>Nurse practitioners</td>
<td>127K</td>
<td>172K</td>
<td>35%</td>
</tr>
<tr>
<td>Nursing assistants</td>
<td>1.5M</td>
<td>1.8M</td>
<td>20%</td>
</tr>
</tbody>
</table>

Methodology
Our methodology
The Workforce Opportunities and Investment Act (WOIA) requires states to provide regional-level occupational projections every four years. Using these data, along with historical labor, demographic, and education data, we assessed the projected demand for and supply of critical healthcare occupations in five states: New York, Florida, Illinois, Texas, and California.

The most, the fastest. State occupational projections through 2023 or 2024 provide details on which healthcare jobs are likely to grow the most (i.e., total job openings from growth and replacements) as well as which jobs are likely to grow the fastest (i.e., percent increase in demand from 2014 to 2023 or 2024). We focus on those occupations projected to grow both the most and the fastest relative to all other healthcare occupations—that is, those jobs that fall within the upper right quadrant of each scatterplot.

The right stuff. Education data provided by the Department of Labor provide information on the educational requirements for each of the fastest growing occupations identified above. We plotted these requirements alongside projected demand in order to examine the distribution of skillsets needed to fill high-growth jobs in each state.

Critical Occupations. Using historical graduation data provided by the National Center for Education Statistics, as well as demographic data provided by the Census Bureau, we estimated the projected supply of graduates with the degrees required to fill high-growth jobs in each state. We compared this to the projected demand and identified ‘critical occupations’ where demand may outpace supply.

Labor risks. We used a two-step process to estimate potential labor shortages for each county in the five states examined. First, we used demographic information to calculate a ratio of individuals likely to enter and likely to leave the workforce in the next decade. Next, we added trend data estimating the number of individuals moving into each county from another state or country, and calculated a composite score expressed as a standard deviation from the national mean. We mapped these scores, identifying counties with very high to very low labor shortage risks through 2026.

Where the workers are(n’t). Using current labor statistics as well as regional projections, we mapped where workers in critical occupations currently are, and where they need to be by 2023 or 2024. We used demographic data to control for anticipated population shifts and highlight regions within states where potential supply shortages may be most acute.
Workforce of the future: 2025
Mind the Gaps: Workforce Trends in Healthcare
Our analysis of future workforce trends in healthcare across five states reveals five major themes.

**Support Needed.** By far, the greatest anticipated gaps will be in healthcare support occupations, such as Home Health Aides, as the US grapples with the confluence of community health, an aging population, and a tightening labor pool.

**Downstream Demand is Growing.** Health practitioners, such as Nurse Practitioners, will also experience ‘downstream demand’ as healthcare systems seek to fill anticipated gaps in certain occupations such as General Practitioners, and contain or manage costs. There are important policy implications here, especially in states which do not allow for full practice authority.

**High Growth in Low-Skill Occupations.** Many of the fastest-growing occupations are comparatively low-skill, which means health systems may need to compete with other industry sectors for available talent—especially in areas where such labor can be tight. At the same time, the training threshold is low for these occupations, so there’s opportunity here to build talent with the right incentives. Regardless, providers will need to address the logistics and risks associated with a lower-skilled workforce.

Where demand for high-skill labor remains strong, providers will need to consider how to best attract and retain talent in highly-competitive markets.

**Every State Has Its Own Story.** Assessments of the healthcare workforce are often described in national or regional terms. As this report illustrates, such assessments can be misleading. Each state examined faces different challenges in developing the talent needed to meet future healthcare demands.
Mind the Gaps: Workforce Trends in Healthcare (Cont’d)
Our analysis of future workforce trends in healthcare across five states reveals five major themes.

**Geographies of Demand.** Critical occupations—that is, occupations where demand is projected to outpace supply—not only vary by state but also within states. In other words, questions of supply or demand should be answered in the context of distribution: which healthcare occupations are needed in the future and where? And where are these healthcare workers likely to be located?

**Regulatory change is coming, but some labor trends will not change.** Regulatory changes, such as the repeal of the Affordable Care Act (ACA) or changes to immigration policy are likely to cause major disruption to the healthcare industry in coming years. These changes are likely to impact the type and quantity of healthcare workers. However, we believe that broad, long-term changes in demographics, along with state-level changes to healthcare regulations will continue to drive accelerated demand for healthcare labor in the future.

Perhaps the biggest question becomes: will there by enough supply to fill potential demand?
Key Trends in the Future of Healthcare
The five major themes in the healthcare workforce uncovered in our state-level analysis align with broader, national trends identified by other researchers and practitioners.

LACK OF NEW TALENT
SHORTAGE OF CLINICAL STAFF
SHORTAGE OF SKILLED IT PROFESSIONALS
PHYSICIAN DISSATISFACTION
CLINICAL EDUCATION SUPPLY
TECHNOLOGY, JOBS AND SKILLS
ROLE SHIFTS: TOP OF LICENSE
IMPENDING TURNOVER
What’s Happening in Each State?

**Big Growth, but just in the Big Apple.** New York is expected to see a sizeable increase in demand for healthcare support occupations and some practitioner occupations through 2023—meaning that the skill profile for high-growth occupations is concentrated at the extremes of degree requirements. New York has a relatively low risk of general labor shortages, but that’s mainly a result of very strong growth in the New York City area. Healthcare providers should be aware of supply disparities for critical occupations.

**A Balanced Boom.** Florida remains one of the fastest growing states, and demand for healthcare occupations reflect this continued growth. And yet, Florida is better positioned than most states to meet this surge in demand. Filling the modest gaps in the mix of high- and low-skilled critical occupations is possible if current supply trends hold, and Florida’s current healthcare workforce is located where future job growth is most likely.

**Heading for the Exits.** Future demand for healthcare occupations is compressed in Illinois, even in Chicagoland where current supply trends will likely meet increases in demand. In other words, occupations projected to grow the most and the fastest in Illinois aren’t growing all that much or that fast, and critical occupations are less critical if people continue to leave. Rather than planning for large increases in demand, providers should begin considering low/no-growth demand scenarios, especially for high-skill talent.

**Rural Risks.** Although population growth in Texas has been primarily concentrated in metropolitan areas such as Dallas, Houston, and Austin, the geography of future healthcare demand is decidedly more rural. Critical occupations are projected to grow quickly in more rural parts of the state, including West Texas and the Concho Valley—places where current talent supply trends are unfavorable. Healthcare providers in urban areas may need to look beyond the Lone Star State for some critical occupations in order to meet expected demand increases.

**East-West Rather than North-South.** Although California is economically and culturally oriented between north and south, the geography of future healthcare demand suggests an east-west split is emerging in the Golden State. Critical, primarily ‘mid-skill’ occupations are projected to grow more quickly in interior communities where supply trends are less robust than coastal megacenters.
New York
New York: Increasing Demand for Healthcare Support and Non-specialist Jobs

Health technologist and technician occupations are projected to grow the fastest in New York, alongside healthcare support occupations such as Home Health Aides. Although demand for most practitioner occupations will remain flat, demand for ‘non-specialist’ roles such as Physician Assistants and Nurse Practitioners will increase by 2023.
New York: The Most, The Fastest
New York will need an additional 50,000 Home Health Aides by 2023—a 45% increase from 2013. Apart from healthcare support roles such as PT Aides and Nurse Practitioners, New York will also require more surgeons and nurses by 2023—occupations that both currently have national shortages.
**New York: Critical Occupations**

Like the United States as a whole, there’s a potential nursing shortage in New York. Although the potential gap in Home Health Aides is also large, the low-skill level required for this occupation means that there’s potentially a much larger supply of labor to draw from. LPNs and NPs require more advanced training—and New York’s current education pipeline is unlikely to meet demand by 2023.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Projected Openings through 2022</th>
<th>Projected Entrants through 2022</th>
<th>Potential Gap by 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Health Aides</td>
<td>50,000</td>
<td>30,000</td>
<td>-20,000</td>
</tr>
<tr>
<td>Licensed Practical and Licensed Vocational Nurses</td>
<td>23,000</td>
<td>2,000</td>
<td>-21,000</td>
</tr>
<tr>
<td>Medical and Clinical Laboratory Technicians</td>
<td>4,000</td>
<td>1,000</td>
<td>-3,000</td>
</tr>
<tr>
<td>Optometrists</td>
<td>1,300</td>
<td>700</td>
<td>-600</td>
</tr>
<tr>
<td>Nurse Practitioners</td>
<td>4,000</td>
<td>400</td>
<td>-3,600</td>
</tr>
</tbody>
</table>
New York: High Growth in Low-Skilled Labor

Most new healthcare-related occupations created in New York over the next seven years will require a high school degree or less—meaning that healthcare providers will need to consider how fluctuations in the general labor supply may affect their ability to attract and retain talent. On the opposite end of the skill-level distribution, New Yorkers will also need more healthcare providers with advanced professional degrees, mainly PTs and physicians.

Taken as a whole, New York is experiencing high rates of in-migration and boasts a sustainable ratio of young to older workers. However, this rather encouraging picture is mainly the result of large growth in the New York City area. Taken on a local level, much of New York faces at least a moderate risk of general labor shortage by the mid part of the next decade.

Source: U.S. Census Bureau (2014).
Calculations by Mercer
New York: Where the Workers Are(n’t)
Indeed, areas where general labor shortages are most likely are also more likely to not have a sufficient number of workers in critical occupations to meet demand. Medical and Clinical Lab Technicians are projected to grow fastest in the Mohawk Region between Syracuse and Albany—the same region where the current number of these workers is lowest.

Calculations by Mercer
New York: Where the Workers Are(n’t)
Disparities between locations of future growth and current supply also exist in other critical occupations, such as Nurse Practitioners. Healthcare providers located in these regions must not only deal with increased demand, but may also need to consider how to recruit needed talent from other parts of the state or country.

### Licensed Practical and Vocational Nurses

<table>
<thead>
<tr>
<th>Region</th>
<th>Increase in Demand</th>
<th>Current Count</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12%</td>
<td>2,170</td>
</tr>
<tr>
<td></td>
<td>29%</td>
<td>14,310</td>
</tr>
</tbody>
</table>

### Nurse Practitioners

<table>
<thead>
<tr>
<th>Region</th>
<th>Increase in Demand</th>
<th>Current Count</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>17%</td>
<td>280</td>
</tr>
<tr>
<td></td>
<td>36%</td>
<td>2,890</td>
</tr>
</tbody>
</table>

Potential future supply constraints in Mohawk Valley and North Country

However, supply/demand is balanced in New York City and Mid-Hudson regions

New York: Where the Workers Are(n’t)

Although disparities between locations of future growth and current supply exist, for some critical occupations, the difference is more muted. Optometrists are a critical occupation, however projected growth and current supply is relatively balanced.

Calculations by Mercer
New York: Conclusions
Like the United States as a whole, there’s a potential nursing shortage in New York. Although the potential gap in Home Health Aides is also large, the low-skill level required for this occupation means that there’s potentially a much larger supply of labor to draw from. LPNs and NPs require more advanced training—and New York’s current education pipeline is unlikely to meet demand by 2023.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Projected Openings through 2022</th>
<th>Projected Entrants through 2022</th>
<th>Potential Gap by 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Health Aides</td>
<td>50,000</td>
<td>30,000</td>
<td>-20,000</td>
</tr>
<tr>
<td>Licensed Practical and Licensed Vocational Nurses</td>
<td>23,000</td>
<td>2,000</td>
<td>-21,000</td>
</tr>
<tr>
<td>Medical and Clinical Laboratory Technicians</td>
<td>4,000</td>
<td>1,000</td>
<td>-3,000</td>
</tr>
<tr>
<td>Optometrists</td>
<td>1,300</td>
<td>700</td>
<td>-600</td>
</tr>
<tr>
<td>Nurse Practitioners</td>
<td>4,000</td>
<td>400</td>
<td>-3,600</td>
</tr>
</tbody>
</table>

Florida
Florida: The Boom Continues

Although the growth profile of Florida is similar to New York, with healthcare support and technologist occupations projected to grow the most, the magnitude of this growth reflects Florida’s continued population boom. Rather than clustering near the center of the chart below, occupations are spread out—indicating multiple high-growth occupations.
Florida: The Most, The Fastest
Health Technologists and Technician roles dominate those occupations projected to grow the most and the fastest in Florida. However, unlike many other states examined, Florida will also require more high-skill workers such as Surgeons, Physicians, and Physical Therapists.

Healthcare Occupation Groups
- Diagnosing and Treating Health Practitioners
- Health Technologists and Technicians
- Healthcare Support Occupations
- OT and PT Asst. and Aides
- Other Healthcare Practitioners
- Other Healthcare Support

Source: Florida Department of Economic Opportunity (2015). Calculations by Mercer
Florida: High Growth in Highly-Skilled Occupations

Although a large number of new healthcare job openings will require less than a bachelor’s degree—suggesting that high-demand occupations could be filled with the right incentives—Florida will also require a sizeable number of highly-trained healthcare professionals.

Florida: Critical Occupations
Healthcare providers in Florida may face challenges filling a mix of high- and low-skilled occupations by 2023. However, the projected gap between demand and supply is relatively low compared to other states—suggesting that providers may be less constrained in their ability to fill critical roles.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Projected Openings through 2022</th>
<th>Projected Entrants through 2022</th>
<th>Potential Gap by 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Technologists and Technicians, All Other</td>
<td>2,400</td>
<td>400</td>
<td>-2,000</td>
</tr>
<tr>
<td>Home Health Aides</td>
<td>18,000</td>
<td>13,000</td>
<td>-5,000</td>
</tr>
<tr>
<td>Nurse Practitioners</td>
<td>4,000</td>
<td>2,000</td>
<td>-2,000</td>
</tr>
<tr>
<td>Ophthalmic Medical Technicians</td>
<td>1,300</td>
<td>600</td>
<td>-700</td>
</tr>
<tr>
<td>Physicians and Surgeons, All Other</td>
<td>8,000</td>
<td>6,000</td>
<td>-2,000</td>
</tr>
<tr>
<td>Physical Therapists</td>
<td>7,000</td>
<td>6,000</td>
<td>-1,000</td>
</tr>
<tr>
<td>Speech-Language Pathologists</td>
<td>3,000</td>
<td>2,000</td>
<td>-1,000</td>
</tr>
<tr>
<td>Radiologic Technologists</td>
<td>5,000</td>
<td>4,000</td>
<td>-1,000</td>
</tr>
<tr>
<td>Medical and Clinical Laboratory Technicians</td>
<td>4,000</td>
<td>2,000</td>
<td>-2,000</td>
</tr>
<tr>
<td>Nursing Assistants</td>
<td>40,000</td>
<td>38,000</td>
<td>-2,000</td>
</tr>
</tbody>
</table>

Critical Counties: Future Labor Shortages in Florida

Indeed, strong in-migration and natural population increases mean that a very few regions of Florida face potential labor shortages in the future. Combined with relatively small supply gaps in critical occupations, healthcare providers in Florida may be able to meet projected demand increases.
Florida: Where the Workers Are(n’t)

In addition to relatively small projected labor gaps to fill, areas where occupational demand is likely to grow the most are also areas where current supply is the highest. Demand for Health Technologists and Technicians is projected to increase by 30% in areas around Orlando, yet this area also boasts high numbers of these workers based on current labor trends.

**Health Technologists and Technicians**

- Orlando: 877 current count, 0% increase in demand
- Port St. Lucie: 82 current count, 0% increase in demand
- Miami: Data unavailable

**Home Health Aides**

- Orlando: 4,806 current count, 39% increase in demand
- Port St. Lucie: 245 current count, 0% increase in demand
- Miami: Data unavailable

Calculations by Mercer
Florida: Where the Workers Are(n’t)
Demand and supply for Nurse Practitioners and Nursing Assistants are also well-balanced. Again, while projected growth in demand for these occupations is high, healthcare providers in Florida should be able to draw on existing supply to fill needs—assuming that current supply trends hold into the next decade.

Nurse Practitioners

<table>
<thead>
<tr>
<th>Location</th>
<th>Increase in demand</th>
<th>Current count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Florida</td>
<td>15%</td>
<td>687</td>
</tr>
<tr>
<td>Miami</td>
<td>Data unavailable</td>
<td></td>
</tr>
<tr>
<td>Port St. Lucie</td>
<td>Data unavailable</td>
<td></td>
</tr>
<tr>
<td>Tampa</td>
<td>Data unavailable</td>
<td></td>
</tr>
<tr>
<td>Orlando</td>
<td>Data unavailable</td>
<td></td>
</tr>
</tbody>
</table>

Nursing Assistants

<table>
<thead>
<tr>
<th>Location</th>
<th>Increase in demand</th>
<th>Current count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Florida</td>
<td>28%</td>
<td>10,690</td>
</tr>
<tr>
<td>Miami</td>
<td>Data unavailable</td>
<td></td>
</tr>
<tr>
<td>Port St. Lucie</td>
<td>Data unavailable</td>
<td></td>
</tr>
<tr>
<td>Tampa</td>
<td>Data unavailable</td>
<td></td>
</tr>
<tr>
<td>Orlando</td>
<td>Data unavailable</td>
<td></td>
</tr>
</tbody>
</table>

There’s a shortage risk for parts of East Central Florida and the Panhandle—and competition risk from nearby growth centers.

Calculations by Mercer
Florida: Where the Workers Are(n’t)

Although data is scarce, there are potential oversupply issues for some critical occupations in more urban parts of Florida.

**Ophthalmic Medical Technicians**
- Increase in demand: 21%
- Current count: 84
- Potential oversupply in Miami-Dade?

**Radiologic Technologists**
- Increase in demand: 12%
- Current count: 123
- Data unavailable for some counties.

Calculations by Mercer
Florida: Where the Workers Are(n’t)

Demand for high-skilled occupations, including physicians and physical therapists, is likely to increase the most in Central Florida’s urban centers, as well as high-growth areas around Jacksonville. Fortunately, supply trends suggest that providers in these areas will be able to meet future demand.

**Physicians and Surgeons**
- Increase in demand: 21% - 36%
- Current count: 183 - 1,498
- Data unavailable

**Physical Therapists**
- Increase in demand: 12% - 29%
- Current count: 38 - 2,362
- Data unavailable

Source: Florida Department of Economic Opportunity (2015). Calculations by Mercer
Florida: Where the Workers Are(n’t)

Again, the balance between future demand and current supply trends suggests that healthcare providers can meet the changing healthcare needs of Floridians over the next decade. There are some pockets of potential supply constraints, however, especially in the Panhandle region.

Calculations by Mercer
Illinois
Illinois: Heading for the Exits
Unlike other states examined, Illinois is losing population—though the rate of decline has moderated over the past ten years. As a result, projected growth in healthcare occupations is compressed.
Illinois: The Most, The Fastest

Illinois will experience increased demand in some occupations—with a mix of high- and low-skilled occupations more similar to New York than Florida. But the magnitude of these increases is much less than other states examined. In other words, occupations projected to grow the most and the fastest in Illinois aren’t growing that much, or that fast.

Healthcare Occupation Groups

- Diagnosing and Treating Health Practitioners
- Health Technologists and Technicians
- Healthcare Support Occupations
- OT and PT Asst. and Aides
- Other Healthcare Practitioners
- Other Healthcare Support

Calculations by Mercer
Illinois: High Growth in Low-Skilled Labor

Much of the growth in healthcare occupations for Illinois will be low-skilled labor, though a sizeable number of occupations will require vocational training.

- Anesthesiologists
- Optometrists
- Chiropractors
- PT
- Chiropractors
- Optometrists
- Anesthesiologists
- Nurse Pract.
- OT
- Athletic Trainers
- PT Asst.
- OT Asst.
- Diagnostic Med. Son.
- Med. and Clinical Lab Techs
- Surgical Tech
- Phlebotomists
- Massage Therapist
- Medical Assistants
- LPN and LVN
- Nursing Assistants
- LPN and LVN
- Medical Assistants
- Massage Therapist
- Phlebotomists
- Surgical Tech
- Opticians
- PT Aides
- Pharmacy Tech.
- Home Health Aides
- Less than High School Degree
- High School Degree
- Vocational Degree
- Associate’s Degree
- Bachelor’s Degree
- Master’s Degree
- Doctoral or Professional degree

**Illinois: Critical Occupations**
Although the gap between projected demand and supply of some occupations is large—especially for Home Health Aides—gaps for more skill-intensive occupations are modest.

<table>
<thead>
<tr>
<th></th>
<th>Projected Openings through 2022</th>
<th>Projected Entrants through 2022</th>
<th>Potential Gap by 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Health Aides</td>
<td>18,000</td>
<td>8,000</td>
<td>-10,000</td>
</tr>
<tr>
<td>Physical Therapists</td>
<td>5,000</td>
<td>3,000</td>
<td>-2,000</td>
</tr>
<tr>
<td>Medical and Clinical Laboratory Technicians</td>
<td>2,500</td>
<td>700</td>
<td>-1,800</td>
</tr>
<tr>
<td>Licensed Practical and Licensed Vocational Nurses</td>
<td>10,000</td>
<td>9,000</td>
<td>-1,000</td>
</tr>
<tr>
<td>Nurse Practitioners</td>
<td>2,000</td>
<td>600</td>
<td>-1,400</td>
</tr>
</tbody>
</table>


Even as Illinois experiences anemic growth, the potential risk of future labor shortages remain. For areas outside of Chicagoland and college towns such as Urbana-Champaign, this is largely the result of out-migration combined with population decline.

Source: U.S. Census Bureau (2014).
Calculated by Mercer
Illinois: Where the Workers Are(n’t)

Demand for critical occupations is concentrated in the Collar Counties that surround Chicago. In the case of Nurse Practitioners and LPNs, demand and supply are well-balanced in these communities.

---

**Source:** Illinois Department of Commerce and Economic Opportunity (2014).

Calculations by Mercer
Illinois: Where the Workers Are(n’t)
A similar story is unfolding for Physical Therapists and Medical and Clinical Laboratory Technicians. Increased growth is highest in and around Chicago, but across the state there is a good balance between future demand and current supply.

<table>
<thead>
<tr>
<th>Profession</th>
<th>Increase in Demand</th>
<th>Current Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Therapists</td>
<td>21%</td>
<td>97</td>
</tr>
<tr>
<td>Medical and Clinical Lab.</td>
<td>7%</td>
<td>79</td>
</tr>
<tr>
<td>Laboratory Technicians</td>
<td>58%</td>
<td>4,175</td>
</tr>
<tr>
<td></td>
<td>26%</td>
<td>2,668</td>
</tr>
</tbody>
</table>

Calculations by Mercer
Illinois: Where the Workers Are(n’t)

An possible exception to Illinois’ balanced labor market exists for Home Health Aides. Graying suburbs in Lake and Will Counties north of Chicago may face supply constraints in the future. Outside of Chicagoland, growth and supply are projected to remain relatively balanced.

Calculations by Mercer
Texas
Texas: High Demand for Low-Skilled Occupations

Similar to the rest of the United States, there is a negative correlation between extent of future demand and the level of job complexity.
Texas: The Most, The Fastest
The greatest needs will be in Advanced Practice Providers, Technicians and Home Health Aids. This increase in demand is driven primarily by the infusion of new technologies, cost containment strategies, and an aging population—particularly in more rural parts of the state.

Calculations by Mercer
Texas: Future Roles Can Be Trained Quickly
The vast majority of future need can be met with educational attainment far below physician levels—indicating that solutions can be attained with the right incentives.
**Texas: Critical Occupations**

Generally speaking, occupations where projected supply will be unable to meet projected demand in Texas are the easiest to train—suggesting an opportunity for widening the supply pipeline. However, the nature of the role will require different supervisory and management models than traditional medical practice.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Projected Openings through 2022</th>
<th>Projected Entrants through 2022</th>
<th>Potential Gap by 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular Technologists and Technicians</td>
<td>2,000</td>
<td>700</td>
<td>-1,300</td>
</tr>
<tr>
<td>Dietitians and Nutritionists</td>
<td>2,000</td>
<td>1,000</td>
<td>-1,000</td>
</tr>
<tr>
<td>Home Health Aides</td>
<td>29,000</td>
<td>20,000</td>
<td>-9,000</td>
</tr>
<tr>
<td>Physical Therapists</td>
<td>7,000</td>
<td>5,000</td>
<td>-2,000</td>
</tr>
<tr>
<td>Occupational Therapists</td>
<td>3,000</td>
<td>2,000</td>
<td>-1,000</td>
</tr>
<tr>
<td>Occupational Therapy Assistants</td>
<td>3,000</td>
<td>2,000</td>
<td>-1,000</td>
</tr>
<tr>
<td>Medical Records and Health Information Technicians</td>
<td>9,000</td>
<td>6,000</td>
<td>-3,000</td>
</tr>
<tr>
<td>Medical and Clinical Laboratory Technicians</td>
<td>7,000</td>
<td>3,000</td>
<td>-4,000</td>
</tr>
<tr>
<td>Nurse Practitioners</td>
<td>3,000</td>
<td>1,000</td>
<td>-2,000</td>
</tr>
<tr>
<td>Phlebotomists</td>
<td>4,000</td>
<td>1,000</td>
<td>-3,000</td>
</tr>
</tbody>
</table>

Calculations by Mercer
Critical Counties: Future Labor Shortages in Texas

Although Texas has experienced strong population growth over the past three decades—mainly the result of immigration—this growth has been primarily concentrated in urban centers. As a result, much of rural Texas is at a relatively high risk of future labor shortages.
Texas: Where the Workers Are(n’t)

Critical occupations in Texas—that is, those occupations where projected supply may not meet projected demand—vary widely by specialty and region. In the case of Cardiovascular Techs, for instance, current supply and future demand are generally well aligned, except for the Texas Forest Country region where growth is expected to exceed 50% but current supply is low.

Cardiovascular Technologists and Technicians

Medical and Clinical Laboratory Technicians

Calculations by Mercer
Texas: Where the Workers Are(n’t)
Communities around and between Austin and Houston face potential supply issues for Physical Therapist and Occupational Therapist workers by the middle of the next decade.

<table>
<thead>
<tr>
<th>Region</th>
<th>Physical Therapists</th>
<th>Occupational Therapists</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Increase in demand</td>
<td>Increase in demand</td>
</tr>
<tr>
<td></td>
<td>20%</td>
<td>43%</td>
</tr>
<tr>
<td></td>
<td>Current count</td>
<td>140</td>
</tr>
<tr>
<td></td>
<td>Data unavailable</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Increase in demand</td>
<td>14%</td>
</tr>
<tr>
<td></td>
<td>Current count</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>Data unavailable</td>
<td></td>
</tr>
</tbody>
</table>

Rural Capital Area and Brazos Valley at risk for supply constraints in OT and PT jobs by 2023

Calculations by Mercer
Texas: Where the Workers Are(n’t)
The highest increase in demand for Nurse Practitioners will occur in west Texas—areas that have traditionally struggled to attract and retain talent. For other occupations, such as Dietitians and Nutritionists, the entire state may face supply constraints in the future—meaning that healthcare providers may need to look outside Texas in order to fill roles.

Calculations by Mercer
Texas: Where the Workers Are(n’t)
Projected demand and current supply trends for Medical Records and Health Information Technologists and Phlebotomists exemplify the rural risks facing Texas. Increased demand is likely to be met by current supply trends in metropolitan areas such as Dallas-Ft. Worth and Houston. But similar demand increases in more rural areas such as West Central Texas will challenge healthcare providers as supply is currently low.

Texas: Where the Workers Are(n’t)

A similar story is unfolding for other healthcare support occupations. Healthcare providers serving more rural parts of the state may struggle to fill new roles expected to open over the next decade.

### Occupational Therapist Assistant

- Increase in demand: 33%
- Current count: 30

### Home Health Aides

- Increase in demand: 28%
- Current count: 560

Calculations by Mercer
California
California: Demand for Technicians and Technologists

Apart from surges in demand for healthcare support occupations such as Home Health Aides similar to other states, California is expected to experience high growth in technician and technologist occupations through 2022.
California: The Most, The Fastest

In addition to growth in health technologist and technician occupations, non-specialist provider roles such as Nurse Practitioners will also grow quickly in California—reflecting the ‘downstream demand’ created by efforts to contain costs and shift healthcare provision away from physicians.

Calculations by Mercer
California: Growth in ‘Mid-Skill’ Occupations

The skills required to fill most of California’s new healthcare jobs falls between low- and high-skill occupations. Similar to Texas, this suggests opportunities for providers to incentivize uptake of programs to quickly train workers as Medical and Nursing Assistants.

**California: Critical Occupations**
Potential gaps in Nursing Assistants and Medical and Laboratory Technicians are most acute in California.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Projected Openings through 2022</th>
<th>Projected Entrants through 2022</th>
<th>Potential Gap by 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Technologists and Technicians, All Other</td>
<td>5,400</td>
<td>200</td>
<td>-5,200</td>
</tr>
<tr>
<td>Home Health Aides</td>
<td>26,000</td>
<td>23,000</td>
<td>-4,000</td>
</tr>
<tr>
<td>Medical and Clinical Laboratory Technicians</td>
<td>9,000</td>
<td>1,000</td>
<td>-8,000</td>
</tr>
<tr>
<td>Medical Records and Health Information Technicians</td>
<td>8,000</td>
<td>6,000</td>
<td>-2,000</td>
</tr>
<tr>
<td>Phlebotomists</td>
<td>5,000</td>
<td>4,000</td>
<td>-1,000</td>
</tr>
<tr>
<td>Licensed Practical and Licensed Vocational Nurses</td>
<td>30,000</td>
<td>23,000</td>
<td>-7,000</td>
</tr>
<tr>
<td>Nursing Assistants</td>
<td>42,000</td>
<td>29,000</td>
<td>-13,000</td>
</tr>
<tr>
<td>Nurse Practitioners</td>
<td>4,000</td>
<td>2,000</td>
<td>-2,000</td>
</tr>
</tbody>
</table>

Critical Counties: Future Labor Shortages in California

Geographically speaking, California's risk of future labor shortages is less north and south and more east and west. Metropolitan centers along the coast are less likely to experience labor shortages while communities farther east have an elevated risk. Overall, however, California is less likely than other states to experience future labor shortages.

Source: U.S. Census Bureau (2014).
Calculations by Mercer
California: Where the Workers Are(n’t)

Examining the balance between future demand and current supply reveals a continued east-west divide in California. Supply constraints of Health Technologists and Technicians is likely the Central Sierra, while the supply of Medical and Laboratory Technicians could be constrained for both the Northern Sacramento Valley and dessert interior of Southern California.

Source: California Workforce Development Board (2015). Calculations by Mercer
An exception to the east-west split in future demand is for Medical Records and Health Information Technologists, where multiple areas of high growth and low supply exist. Demand growth for Home Health Aides is greatest in those areas experience the largest increases in older Californians—San Luis Obispo and Imperial counties.

Calculations by Mercer
California: Where the Workers Are(n’t)

Although critical occupations may be ‘critical’ at a state level, regional variations mean that issues of demand are sometimes more about distribution than supply. Nursing Assistants in California provide an excellent example. While supply constraints are possible for most of Southern California, demand is projected to decrease in northwestern California and parts of Silicon Valley.

Calculations by Mercer
California: Where the Workers Are(n’t)
Demand for nurses in California is more dispersed across the state, but the east-west split remains—especially for Nurse Practitioners.

Nurse Practitioners

Licensed Practical and Vocational Nurses

What can healthcare providers do to address the future changes and challenges to the healthcare workforce?
The Way Forward

While the future workforce of 2025 represents many challenges, it also is an opportunity for differentiation and excellence. The seven areas shown below are each part of a proactive and systematic approach to create the necessary future healthcare workforce.

- **WORKFORCE PLANNING & ANALYTICS**
  How rigorous are your plans and insights for your current to future workforce?

- **EMPLOYEE VALUE PROPOSITION (EVP) AND TOTAL REWARDS**
  Are your Employee Value Proposition (EVP) and Total Rewards compelling and differentiated for the workforce of the future?

- **FINANCIAL WELLBEING**
  Are you helping employees to build financial health (e.g., debt, retirement)?

- **DIVERSITY AND INCLUSION**
  Is your workforce culturally competent for the population you serve?

- **TALENT ACQUISITION**
  Will you be able to recruit the numbers and quality of employees you need?

- **LEADERSHIP BENCH**
  Do you have leaders who engage stakeholders and drive the changes needed?

- **REINVENTING THE HR FUNCTION**
  Is HR ready to support transformation and the talent needs of the future?