



Optimizing the healthcare workforce

*A guide to technology solutions for
cost reduction and efficiency*

Executive summary

Healthcare organizations face significant workforce challenges, including staffing shortages, burnout, and rising labor costs. These issues not only impact patient care but also strain operational budgets and can affect employee satisfaction.

To better address these challenges, technology solutions can help optimize workforce management while maintaining high-quality care.

Technology solutions include tools that provide AI-powered staffing and scheduling platforms, real-time workforce analytics, and talent acquisition management systems. These technologies streamline operations, reduce administrative burdens, and enhance decision-making, leading to a more sustainable healthcare workforce.

Implementing workforce technology can provide benefits such as cost savings, improved efficiency, better compliance, and greater access to data insights. By optimizing staffing levels and automating administrative tasks, healthcare organizations can reduce labor costs while improving productivity and patient outcomes.

Several factors should be considered prior to implementing new technology to ensure optimal adoption. These include integration with existing systems, data security and privacy, user adoption strategies, ROI analysis, and scalability.

Ultimately, careful selection and implementation of technology solutions can transform workforce management while driving improvements in employee satisfaction, clinical outcomes, and overall organizational performance.

“
Careful selection and implementation of technology solutions can transform workforce management while driving improvements in employee satisfaction, clinical outcomes, and organizational performance.”

Optimizing the healthcare workforce

A guide to technology solutions for cost reduction and efficiency

Contents

The growing healthcare workforce crisis 4

Understanding the landscape: The state of healthcare workforce challenges 6

Tech-driven solutions: Modernizing workforce management 9

Benefits of implementing workforce technology 13

Key considerations for successful deployment..... 17

The road ahead 22

References 23

About CHG Healthcare 24



The growing healthcare workforce crisis

The growing healthcare workforce crisis

Healthcare organizations are increasingly challenged by staffing shortages, burnout, and rising labor costs. These pressures not only strain operational budgets but also impact patient care and employee satisfaction.

As demand for healthcare services continues to rise, organizations must find innovative ways to optimize their workforce while maintaining high-quality care.

Technology presents a promising solution, offering tools that can streamline operations, improve workforce management, and enhance decision-making.

However, navigating the workforce technology landscape can be overwhelming, with a wide range of solutions available, each with different capabilities and integration requirements.

Selecting the right solution requires a strategic approach to ensure maximum impact, seamless integration, and efficient implementation. This will ultimately lead to a more sustainable and resilient healthcare workforce.



Understanding the landscape: The state of healthcare workforce challenges

Understanding the landscape: The state of healthcare workforce challenges

An industry-wide workforce crisis

The healthcare industry is facing a workforce crisis. A recent report by Mercer highlights a projected shortage of 100,000 healthcare workers in the United States by 2028.¹ Further, nurse turnover rates exceed 20% annually in many hospitals, contributing to staffing instability and increased reliance on temporary labor.² These shortages place immense pressure on healthcare organizations, leading to workforce gaps that can impact patient care, increase stress and burnout on remaining staff, and drive up operational costs.

In addition to workforce shortages, rising labor expenses continue to strain healthcare budgets. The American Hospital Association (AHA) reports that hospitals and health systems have seen a 17% increase in labor costs since 2019.³ This rise is attributed to factors such as wage inflation and expanded employee benefits aimed at retention.

At the same time, administrative inefficiencies add to the burden. Manual scheduling, inefficient credentialing processes, and fragmented data management contribute to increased costs and lost productivity.

As organizations struggle to balance cost containment with the need to attract and retain skilled professionals, finding more efficient ways to manage the workforce has become a top priority.

A recent report by Mercer highlights a projected shortage of

100,000
healthcare workers in the
United States by
2028

The American Hospital Association reports that hospitals and health systems have seen a

17%
increase
in labor costs since
2019

Technology as a solution

Workforce technology solutions aim to address these challenges. By leveraging automation, predictive analytics, and AI-driven tools, healthcare organizations can reduce administrative strain, improve staff satisfaction, and enhance patient care quality.

Implementing the right workforce technology is not just a matter of operational efficiency—it is a critical step toward ensuring the long-term sustainability of healthcare delivery.

According to The Health Management Academy's report, *"Health Systems at a Liminal Moment: Health System Strategic Priorities for 2025,"* an evaluation of healthcare organization executives' priorities reveals a focus on improving access, operational efficiencies, and cost efficiency as top goals for 2025.

Top executive goals for 2025:

- improving access
- operational efficiencies
- cost efficiency





Tech-driven solutions: Modernizing workforce management

Tech-driven solutions: Modernizing workforce management

Implementing workforce technology can help healthcare organizations reduce costs, improve efficiency, and enhance patient care. Here are several categories of workforce technology solutions that can drive meaningful improvements.

Staffing and scheduling solutions

AI-powered staffing and scheduling platforms can help healthcare organizations optimize workforce management to:

- Automate shift assignments
- Reduce administrative burdens
- Ensure adequate staffing levels

These tools can rapidly fill open shifts, track credentials, and ensure compliance with labor regulations, ultimately improving workforce efficiency. By leveraging predictive analytics, these platforms can also anticipate staffing needs based on historical trends and patient volume, further enhancing operational effectiveness.

What to look for in staffing and scheduling solutions

- 1 Flexibility and customization**
Choose a solution that can adapt to your organization's unique staffing needs and shifts.
- 2 Integration with existing systems**
Ensure that the solution integrates seamlessly with your electronic health records (EHR) and payroll systems to prevent data fragmentation.
- 3 Predictive analytics**
Look for platforms that offer AI-driven forecasting based on patient volume and seasonal trends. This will help anticipate and address staffing shortages proactively.

Workforce analytics and reporting

Real-time analytics and reporting tools provide healthcare organizations with deeper visibility into key workforce metrics.

These platforms consolidate data across various sources to track labor costs, staffing ratios, overtime trends, employee turnover, and overall workforce efficiency.

By leveraging workforce analytics, healthcare leaders can make data-driven decisions to:

- Optimize resource allocation
- Reduce unnecessary expenses
- Improve retention strategies

Additionally, advanced reporting features allow organizations to track compliance metrics, ensuring adherence to regulatory requirements.

What to look for in workforce analytics and reporting

- 1 Real-time data access**
Choose solutions that provide instant access to up-to-date metrics so that timely decisions can be made.
- 2 Customizable dashboards**
Ensure the platform allows for customizable reports and dashboards that reflect the key performance indicators (KPIs) most relevant to your organization.
- 3 Actionable insights**
Look for tools that provide data and offer recommendations on optimizing labor costs, reducing turnover, and improving workforce efficiency.

Talent acquisition and management solutions

Efficient talent acquisition and management platforms help healthcare organizations streamline the recruitment and retention of skilled professionals.

Modern applicant tracking systems (ATS) and onboarding automation tools enhance the hiring process by simplifying:

- Candidate sourcing
- Interview scheduling
- Credential verification

AI-powered recruitment solutions can further improve hiring outcomes by matching candidates to positions based on skills, experience, and workforce needs. By automating these processes, healthcare organizations can reduce time-to-fill, improve retention rates, and build workforce resiliency.

What to look for in talent acquisition and management solutions

- 1 AI-powered matchmaking**
Look for solutions that use AI to match candidates to the right positions, ensuring a better fit and higher retention.
- 2 Streamlined onboarding**
Ensure the platform automates credentialing and background checks, reducing delays and improving the candidate experience.
- 3 Scalability**
Choose a system that can scale as your organization grows and can handle fluctuations in recruitment demands.



Benefits of implementing workforce technology

Benefits of implementing workforce technology

Implementing workforce technology offers numerous advantages for healthcare organizations, including enhancing operational efficiency, improving patient care, and reducing costs. These benefits can directly impact the bottom line while fostering a more resilient and satisfied workforce. Here are some of the key benefits that workforce technology solutions can provide.

Cost reduction

Workforce technology can significantly reduce labor costs by optimizing staffing levels, reducing reliance on temporary labor, and minimizing overtime expenses. Through predictive analytics, these tools can help healthcare organizations better forecast staffing needs, enabling them to avoid over- or under-staffing while ensuring the right number of skilled professionals are available.

Moreover, technology can streamline the invoice management process, reducing the administrative time and errors associated with billing and further driving down costs.

Improved efficiency

One of the most notable benefits of workforce technology is improved operational efficiency. By automating administrative tasks such as scheduling, timekeeping, and credential verification, these solutions reduce administrative burdens and free up valuable time for healthcare staff to focus on patient care.

In addition, AI-driven scheduling tools ensure that shifts are filled more quickly and accurately, minimizing staffing challenges and increasing overall productivity.

Enhanced patient care

When healthcare organizations can optimize staffing and reduce burnout, patient care quality improves. Workforce technology helps ensure that the right staff are in place at the right time, which not only enhances operational efficiency but also leads to better patient outcomes.

With fewer gaps in care coverage, healthcare providers can respond more effectively to patient needs, improving satisfaction and overall care quality.

Better compliance

Maintaining regulatory compliance is of critical importance in healthcare. Workforce technology solutions help ensure accurate timekeeping, credential management, and adherence to labor regulations, mitigating the risks associated with non-compliance.

Automated systems can track employee certifications and training, alerting managers when updates are required. This minimizes human error and the administrative burden associated with compliance tracking.

Greater visibility

Workforce technology provides real-time visibility into key workforce metrics, including labor costs, staffing ratios, and employee turnover. This allows healthcare leaders to make data-driven decisions, optimize workforce allocation, and identify areas for improvement.

Enhanced visibility into the contingent workforce, such as locum staff, also provides a more accurate picture of staffing needs and costs.

Increased flexibility

Healthcare environments often face fluctuating patient volumes, necessitating the need for flexibility in staffing. Workforce technology solutions offer greater adaptability by enabling rapid adjustments to staffing levels based on demand.

Whether responding to seasonal spikes or urgent patient needs, these tools allow healthcare organizations to quickly and effectively source talent and fill shifts, ensuring that staffing is always aligned with patient care requirements.

Workforce redeployment

With the right workforce technology, healthcare organizations can manage their contingent workforce more effectively through talent pooling and redeployment.

When full-time employees are unavailable or when specific expertise is required, organizations can pull from a pool of pre-qualified workers, reducing time-to-fill and ensuring a more cost-effective use of resources. This enables organizations to avoid costly agency staffing and maintain continuity in patient care.

AI-powered insights

AI technology plays a key role in workforce management by automating routine tasks and providing deeper insights into workforce performance. By analyzing historical data and real-time trends, AI-driven tools can predict staffing needs, identify performance bottlenecks, and recommend solutions to improve efficiency.

The insights generated through AI can empower leaders to make proactive, data-driven decisions, enhancing both operational outcomes and employee satisfaction.

According to The Health Management Academy, some uses of AI are becoming “table stakes,” while others are emerging as strategic differentiators that allow organizations to stand out in a competitive landscape. However, AI is only as transformative as the health system infrastructure will allow.

As AI-driven solutions become more standardized across the industry, healthcare systems will need to find ways to differentiate themselves and leverage these tools in ways that align with their unique needs and priorities.



Key considerations for successful deployment

Key considerations for successful deployment

Selecting and deploying workforce technology requires careful planning to ensure seamless integration and maximum benefits. Key considerations include:

Integration with existing systems

When evaluating workforce technology, one of the first considerations should be how well the solution integrates with your organization's existing systems, including EHR, payroll, and scheduling systems. A seamless integration ensures that data flows smoothly across platforms without the need for redundant manual data entry, reducing the risk of errors and saving valuable time.

Moreover, integration with these systems can help ensure that staffing decisions are aligned with patient needs and organizational goals.

During the selection process, healthcare organizations should assess the availability and type of application programming interface (API) and examine the technical requirements for integration.

Additionally, understanding potential data migration challenges—especially when transitioning from legacy systems—can prevent delays and ensure a smoother implementation process.

Data security and privacy

Healthcare organizations must prioritize data security and privacy when implementing new technology, particularly because they deal with sensitive patient and employee information. Any workforce technology solution must comply with regulatory frameworks such as the Health Insurance Portability and Accountability Act (HIPAA) to ensure the confidentiality and integrity of patient data.

It is crucial to assess the security protocols provided by the technology vendor, such as data encryption, secure user authentication, and regular security updates. Healthcare organizations should also understand how the technology vendor stores and handles data, as well as their track record in preventing data breaches.

By ensuring compliance with data privacy standards, organizations can protect patient trust and avoid costly penalties associated with data security violations.

Change management and user adoption

Adopting new workforce technology often requires a cultural shift within the organization, which can be met with resistance from staff accustomed to traditional processes.

According to a recent report from Staffing Industry Analysts, new vendor management system enhancements and developments are only worthy of investment if adoption is sufficient to drive meaningful organizational benefit.⁴

A successful implementation hinges on a well-defined change management strategy, and the right vendor should be committed to collaborating with healthcare organizations to create and execute this strategy. This includes providing clear communication to employees about the benefits of the new system, addressing concerns, and outlining how the technology will improve their daily tasks.

Engaging stakeholders early in the process can help create buy-in and foster enthusiasm for the change.

Comprehensive training and ongoing support from the vendor are crucial throughout the transition to ensure smooth user adoption. Offering a feedback loop to address challenges as they arise can also ensure that any issues are resolved promptly, maintaining morale and ensuring that the technology delivers its full potential.

Return on investment (ROI) analysis

Before moving forward with the adoption of workforce technology, healthcare organizations must clearly define how success will be measured. An ROI analysis will help determine whether the solution justifies the costs and delivers meaningful benefits.

Key performance indicators (KPIs) for workforce technology might include reduced agency spend, improved employee retention rates, or a decrease in labor costs per adjusted discharge.

Healthcare leaders should identify these metrics upfront and ensure they are aligned with organizational goals. It is also important to track the impact of technology on staff satisfaction, patient care quality, and overall operational efficiency.

An effective ROI analysis can help organizations determine whether the investment in technology is generating tangible improvements, providing a clear justification for further investment.

Scalability and growth considerations

As healthcare organizations grow and evolve, their workforce needs will change. Therefore, it's essential to choose workforce technology that is scalable and adaptable to future demands.

A system that works well for a smaller hospital may not be as effective for a larger organization, particularly if there are significant changes in patient volume or staffing needs. When evaluating solutions, healthcare organizations should inquire about the technology's capacity to scale with their growth.

Additionally, it's essential to consider the vendor's commitment to ongoing innovation. The healthcare sector is constantly evolving, and technology solutions must be capable of incorporating new features, updates, and regulatory changes.

Understanding the vendor's roadmap for future upgrades can help ensure that the technology remains relevant and effective as the organization's needs evolve.

Vendor selection

Healthcare organizations must carefully assess vendors based on their ability to meet specific needs, provide adequate support, and deliver a solution that aligns with organizational goals. To guide the selection process, consider asking the following questions:

- **How do the vendor's features address our organization's specific challenges?**
Map out organizational pain points (such as high turnover or inefficient scheduling) and ensure the technology aligns with the issues you're aiming to address.
- **What is the vendor's implementation timeline?**
Ask about the expected rollout schedule and the resources needed for a smooth transition.
- **What is the total cost of the solution?**
Request a comprehensive breakdown, including software licensing, hardware, implementation, training, and ongoing maintenance.
- **What kind of training and ongoing support does the vendor offer?**
Ensure that the vendor provides robust training programs and accessible support to assist staff throughout and after the implementation.

By asking these questions, healthcare organizations can make an informed decision and choose a vendor that offers the best value and long-term success.



The road ahead

Healthcare organizations must embrace workforce technology to effectively address the challenges of staffing shortages, rising labor costs, and administrative inefficiencies. As the healthcare landscape becomes increasingly complex, leveraging the right technology is no longer optional—it's a strategic imperative.

By carefully selecting and implementing solutions well matched to their organization's needs, healthcare leaders cannot only optimize workforce management but also enhance patient care and achieve long-term financial sustainability.

The right technology enables organizations to streamline operations, improve decision-making, and empower staff. With thoughtful planning and the right tools, healthcare organizations can transform their workforce operations and drive improvements in employee satisfaction, clinical outcomes, and overall organizational performance.



References

1. Mercer. *Future of the US healthcare industry labor market projections by 2028*. (2024). Accessed March 30, 2025. <https://www.mercer.com/en-us/about/newsroom/future-of-the-us-healthcare-industry-labor-market-projections-by-2028/>
2. American Hospital Association. (2021). *Data brief: Health care workforce challenges threaten hospitals' ability to care for patients*. (2021). Accessed March 30, 2025. <https://www.aha.org/system/files/media/file/2021/11/data-brief-health-care-workforce-challenges-threaten-hospitals-ability-to-care-for-patients.pdf>
3. American Hospital Association. *2023 costs of caring report*. (2023). Accessed March 30, 2025. <https://www.aha.org/guidesreports/2024-05-01-2023-costs-caring>
4. Staffing Industry Analysts. *VMS Global Landscape and Differentiators*. (2022). Accessed March 30, 2025. <https://magnitglobal.com/content/dam/prounlimited/content/report/vms-global-landscape-and-differentiators-2022-magnit.pdf>



About CHG Healthcare



CompHealth.



IS locumsmart.

Nursesmart

CareerMD.

Since founding the locum tenens industry in 1979, CHG Healthcare has been a leader in workforce solutions for healthcare organizations. Through its trusted brands—CompHealth, Weatherby Healthcare, CareerMD, Global Medical Staffing, Locumsmart, Nursesmart, and Modio—CHG connects healthcare professionals with facilities across the U.S. and internationally.

Discover a smarter way to manage healthcare staffing at www.chghealthcare.com.