



Carolinas HealthCare System Achieves \$23.7M Cost Avoidance

Centricity™ Solutions for Workforce Management by API Healthcare enables optimization strategy to help support Magnet® Principles.

As one of the nation's largest and most comprehensive healthcare systems, Carolinas HealthCare System provides a full spectrum of healthcare and wellness programs throughout North and South Carolina.

As the largest comprehensive healthcare system in the Carolinas, as a whole, the health system regularly operates at extremely high volumes. While a testament to the quality of care being delivered by its healthcare professionals, the high census also creates a number of challenges for the organization, namely the deployment of resources in an effective and cost efficient manner.

Premium labor can play an effective part in an organization's overall workforce management strategy. However, it's when the use of premium resources becomes the default solution for staffing challenges that the cost begins to have a negative impact on organizational goals. Staffing inefficiencies, disparate technologies, and lack of visibility into critical employee data such as availability, hours worked and skills and competencies, made it easy for Carolinas to rely on premium labor resources. By creating a comprehensive workforce optimization strategy, supported with technology, Carolinas was able to achieve labor cost avoidance of nearly \$24 million in less than two years.

The Value of Optimizing for Skill Set

Ensuring the right nurse with the right competencies is placed with the right patient at the right time is critical to achieving care quality goals. It also supports a core Magnet principle of ensuring excellence in the delivery of nursing services to patients. When scheduling in silos, the potential to optimize for skill is low. For Carolinas, the lack of visibility and communication created situations where it would not be uncommon to send teammates home if a unit or department census numbers were low, while at the



Carolinas HealthCare System

Outcome Goals

- Achieve skill optimization system-wide
- Avoid premium labor costs
- Support Magnet principles

Challenges

- Staffing inefficiencies when operating at full census
- Heavy dependence on incentives to fill less desirable shifts
- Disparate and antiquated technology providing incomplete information
- Lack of visibility and communication creating staffing and scheduling silos



same time at a facility 10 miles down the road they were struggling to fill shifts because census numbers were high. In some cases, open shifts were filled with overly qualified teammates, which is not the most cost-effective solution.

According to Senior Vice President and System Nurse Executive Mary Ann Wilcox, “last minute call-ins are particularly challenging, especially when the level of skill needed to fill the gap is different than the skills managers have access to. Often this results in the filling of an administrative role such as unit secretary, with a skilled RN, which is not only costly but a misappropriation of skilled RN talent that could have been put to better use on the floor.”

Added Wilcox, “standardized skill requirements, better communication, proper visibility, and consistent policies would allow for more cost-effective staffing across the board because we could more effectively float teammates between nearby facilities instead of staffing with overqualified resources or relying on overtime, incentive pay or external contract labor.”

Standardizing Staffing Processes System-wide for Nursing

Staffing an organization the size and breadth of Carolinas is not a simple task. Carolinas HealthCare System consists of multiple facilities, each with its own staffing and scheduling policies and volume of patients. Lacking visibility into available staff without a means for effective communication between facilities coupled with lack of a system-wide standard for staffing and scheduling, Carolinas relied heavily on premium resources to fill scheduling gaps.

Incentive pay, or the use of premium dollars to encourage the filling of open shifts during times of critical-staffing, is a tactic Carolinas relied on to manage challenging staffing situations, particularly when trying to fill less than desirable shifts.

“From a strictly budgetary perspective, critical-staffing incentives cost the organization a significant amount of dollars, especially because we were consistently managing high volumes and needed staff to manage the demand,” said Wilcox.

By creating a more unified staffing and scheduling process for nursing with expansion to additional clinical areas, Carolinas has been able to break down silos and give employees a multitude of options when it comes to scheduling. Providing complete visibility into available shifts and required skills and competencies, teammates are better able to make educated decisions about which shifts to accept. For managers, better insight into employee competencies and other critical data such as hours worked, allows them to make more informed, cost-effective scheduling decisions. And in times of high volume, leaders can leverage the staffing and scheduling system to ensure the positions and shifts are posted.

Centralized Resource Pool

The resource team, commonly referred to as a float pool, is not a new concept for Carolinas. Historically, the organization leveraged float pools, but only within a single facility, and in some cases within a single department or business unit. This insulated approach frequently results in



staff not getting hours because there wasn't a specific need within that group.

By thinking about deploying float pool resources from a more holistic, centralized and regional point of view, Carolinas was able to more effectively optimize skill sets and leverage staff between multiple facilities and business units within the organization.

According to Wilcox, "since moving all of our disparate float pool nurses into a single centralized regional pool we have seen a really good rate of adoption. The staffing and scheduling technology we use to manage regional float pool teammate deployment has enabled us to more effectively utilize our own resources instead of looking at contract labor or incentive pay to fill open shifts, and we are better equipped to support flexing census numbers."

Workforce Management Technology

The use of a system-wide staffing and scheduling system gave Carolinas the support it needed to increase visibility and communication, as well as establish standardized skill requirements and competencies for every level of care. Technology has improved visibility into critical employee information, which is making it easier for managers to build effective schedules that meet the needs of patients while fulfilling Carolinas' commitment to its nursing staff of improving standards and practices, a core Magnet principle.

According to Wilcox, "skill optimization, improved engagement, and more effective deployment of resources are difficult to achieve without visibility into the workforce and implementation of consistent staffing and scheduling policies across the enterprise. Accomplishing all of these goals was next to impossible with a pen and piece of paper."

Supporting Core Magnet Principles

Standardizing the minimum competencies and skills for care across the enterprise has also made a positive impact on the organization's efforts to support Magnet principles. Magnet hospitals are recognized for quality patient care, nursing excellence and innovations in professional nursing practice. In a highly competitive market, hospitals and health systems are embracing strategies that attract and retain patients.

Said Wilcox, "Having achieved Magnet designation, we are dedicated to continuing the journey and maintaining the core principles of encouraging teammate engagement and satisfaction, which yields an increase in quality care and patient satisfaction."

A Unified Approach to Managing the Workforce Yields Significant Cost Avoidance

By focusing on optimizing the workforce, Carolinas has been able to make significant progress towards containing labor costs, creating a more collaborative and engaging environment for employees, and improving overall productivity. Through their unified

Strategic Initiatives

- Standardize skill requirements and competencies for every level of care
- Develop a unified staffing strategy that would allow for holistic staffing and scheduling processes across the entire system
- Leverage an internal resource pool that will enable employees to float between facilities, and more cost effectively fill scheduling gaps as needed
- Increase visibility and communication across the organization through deployment of workforce management technology that helps ensure that the right person with the right competencies are placed with the right patient at the right time

Outcomes

- Achieved \$23.7M labor cost avoidance in less than 2 years
 - By the end of 2014, achieved \$3.2 million (3%) reduction in labor expenses, per unit, across 35 departments
 - As of the third quarter 2015, achieved \$20.5 million (5%) overall improvement in labor expenses, per unit, across 460 departments
 - 14% reduction in agency use
 - 3% reduction in overtime utilization
 - 36% reduction in the number of shifts filled with critical staffing incentives
 - 150,000 open shifts filled with the collaborative approach
 - 40% of open shifts awarded to staff working outside of their home unit
- Continued support of Magnet principles



workforce strategy, and the support of technology, Carolinas has realized an overall cost avoidance of 5%, or \$23.7 million in less than two years.

Transparency that flows both ways is having a positive impact on Carolinas. Both managers and employees have clear views into the scheduling process, which is leading to better, and more cost effective scheduling decisions.

By the end of 2014, Carolinas achieved a 3% improvement or \$3.2 million reduction in labor expenses per unit across 35 nursing departments. In addition, agency use was reduced by 14% along with a 3% reduction in overtime utilization (volume adjusted). As of the third quarter 2015, the organization improved its labor expenses per unit by 5% or \$20.5 million across 460 departments, when compared to 2014. In addition, Carolinas achieved a 36% reduction in the number of shifts filled with critical staffing incentives.

According to Operations Manager, Allison Foscue, "in less than two years we filled nearly 150,000 open shifts with the collaborative approach. More than 40% of open shifts posted have been awarded to teammates outside of their home unit, and premium labor spend on things like overtime and agency use are down

significantly due to our ability to schedule our PRN staff more efficiently across the enterprise."

Carolinas' focus and success with optimizing its nursing workforce is serving as a catalyst for expansion of its strategies and tactics to other non-nursing departments and groups within the organization. In use by over 14,000 teammates at 16 hospitals, six free standing emergency care centers, and 27 urgent care locations, consideration is being given to expand deployment to include Carolinas' robust physician practice.

Said Assistant Vice President, Lindsay Durgin, "Carolinas is a very large organization that operates at high volume levels, which means our workforce is key to achieving clinical and financial success. Through our nursing teammates we've proven that improvements to workforce strategy, specifically optimizing for skill, and improving communication and collaboration, yields positive results for patients, employees and the organization's bottom line."

GE Healthcare Workforce Management Solutions used at Carolinas HealthCare System – Centricity™ ShiftSelect®

Carolinas HealthCare System has been rewarded for participation in this case study and is an active participant in the GE Healthcare STAR client reference program that rewards clients for sharing their outcomes, expertise and opinions.

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Partnering for improvement

"Effective staffing that includes skill optimization and complete visibility across the enterprise is fundamental to achieving downstream financial, quality and safety goals."

Mary Ann Wilcox, MS, RNC, NEA-BC
Senior Vice President
System Nurse Executive

"As part of our efforts to achieve Magnet recognition, the organization focused on workforce improvements that would create a collaborative and supportive workplace culture for our nurses."

Mary Ann Wilcox, MS, RNC, NEA-BC
Senior Vice President
System Nurse Executive

"For an organization as large as Carolinas, transparency, open communication, and the strategic deployment of teammates across the enterprise play a significant role in achieving clinical and financial goals."

Lindsay Durgin
Assistant Vice President