Healthcare has entered a challenging new era where every resource needs to be optimized. One of the most valuable resources that hospitals have is their staff, as it is the workforce that accounts for 54.2% of operating costs\(^1\). The deployment of staff also impacts the quality of patient care. Studies have shown that staffing impacts readmission rates\(^2\), mortality rates\(^3\), and length of stay\(^4\).

Despite the importance of optimally using the workforce, many health systems have not yet done a careful examination of their staffing and scheduling policies, processes and procedures. In fact, more than 45% of hospitals in the United States still do employee staffing and scheduling manually\(^5\).

Common manual methodologies, including post-it notes, bulletin boards and push pins, pencil and paper and even color-coded spreadsheets, cannot effectively accommodate the complexity involved with creating schedules and staffing plans that optimize staff deployment.

Here are three key reasons to automate staffing and scheduling processes:

1. **Optimize Staffing Based on Patient Need**
   
   At the core, staffing decisions are based on matching patients with the caregivers who have the competencies and skill sets to best meet their care needs. This is often called acuity-based staffing, and it utilizes technology to be effective. With clear visibility into existing and predicted patient care needs as well as staff availability and skill sets, staffing decisions are data-driven to help optimize outcomes.

   Technology also provides insight into the staffing needs enterprise-wide. When staffing coordinators, unit managers and nurse executives can see the big picture of staffing across the entire organization, they are able to make better informed staffing decisions that have a positive impact across all departments.
Safe staffing legislation is also a consideration. To date, more than 1/4 of states have either enacted legislation or adopted regulations to address nurse staffing issues, and legislation has been proposed at the federal level. The specific staffing regulations range from mandated nurse-to-patient ratios to creating a committee to create staffing plans to disclosing staffing plans to the public. An automated staffing and scheduling system makes it easier to comply with those regulations, helping to ensure consistent compliance and mitigate risk.

Optimal staffing drives quality patient-centered care that can benefit both patients and the bottom line. Eliminating preventable readmissions demonstrates how a focus on staffing impacts both care and financial outcomes. According to the Healthcare Cost Utilization Project, the average cost of a readmission for any given cause is $11,200. Many readmissions are also preventable. In fact, about 12% of Medicare patients may be readmitted for avoidable reasons, according to the Medicare Payment Advisory Commission. Better staffing strategies can help reduce those preventable readmissions. A recent study in Health Affairs found that hospitals with higher nurse staffing levels were 25% less likely to be penalized for hospital readmissions within 30 days than otherwise similar hospitals with lower staffing. Staffing levels have a similar impact in the pediatric environment. According to a study by the Cincinnati Children’s Hospital Medical Center, hospitals with a nurse to patient ratio of 1 to 4 were less likely to be readmitted within 15 to 30 days than those hospitals with higher nurse to patient ratios. According to the study, when health systems increase their nurse-patient ratios by 1, or when each nurse is given one more patient, the readmission rate increases by 11 percent.

**ACHIEVE LABOR COST SAVINGS**

Labor cost savings initiatives can invoke concerns about staff layoffs or a decrease in the quality of patient care. However, staffing
and scheduling automation provides tools to help contain labor costs without layoffs while maintaining or even improving the quality of care.

Automating staffing and scheduling is the foundation of controlling overtime costs. By linking information about hours scheduled to be worked with time and attendance data that details hours that have already been worked, healthcare leaders can project potential overtime and take the appropriate measures to avoid it before it occurs.

Overtime carries more than a monetary cost. When nurses are consistently working overtime, they are often sacrificing the time away from the job that they need to rest and rejuvenate. In fact, a study that examined nurse work schedule characteristics and mortality found that the staffing component most frequently related to mortality was not enough time away from the job11.

Another approach to curtailing labor costs is to improve productivity. With this approach, each job or position is given a labor unit or standard (amount of work expected to be done in a certain period of time) that can be applied to the volume of work (patient needs based on census and/or acuity). Often, these standards are developed based on the unique care environment and patient population of each facility – or even each unit – to ensure that the standards are reflective of the unit in which they will be used. With the standards in place, the organization can match the appropriate labor to the amount of volume and patient care need within the hospital.

Making data-driven decisions to optimize PRN or per diem staff utilization can also yield significant savings. Often, nurses that are part of the per diem staff have committed to working a certain number of hours each pay period. When those resources fail to fulfill their commitment, it can lead to holes in the schedule that still need to be filled. Without visibility into the most appropriate, cost-effective available resources, the organization might use agency labor or incur unintended overtime costs to fill the staffing holes. However, an automated staffing and scheduling solution empowers the organization to utilize internal per diem staff effectively, ensuring that staffing holes are filled with the most appropriate resources to meet patient care needs and minimize costs.

**INCREASE EMPLOYEE ENGAGEMENT**

According to NDNQI data, patient outcomes improve when nurses are satisfied as reflected in decreased infection rates, decreased injury fall rates and fewer hospital-acquired pressure ulcers12. One way to improve nurse satisfaction is to empower them with more control over their work schedule. Automation can provide a win/win situation, making it easier to engage employees in the staffing process while ensuring that patient care needs are met.

When implemented effectively, self-scheduling delivers benefits for both employees and the organization. Nurses value a work/life balance. Providing them with the ability to self-schedule empowers nurses to better achieve that balance. When nurses have more control over their own schedule, it’s often easier to fill open shifts. A 2014 Nursing Solutions Inc. survey found using self-scheduling as a strategy to offset vacancies had an effectiveness rating of 65%13. And, a sophisticated self-scheduling solution ensures that staff can only pick up shifts that they are qualified to work. Parameters can even be set to prevent employees from self-scheduling for a shift that will put them into overtime.

An automated staffing and scheduling solution also provides mobile device capabilities. Tasks that used to drain valuable time, such as filling an open shift, can be done in a fraction of the time. For example, when a nurse calls in sick, a scheduling coordinator or unit manager can quickly generate a list of nurses who are qualified to fill the open shift, send out a text to those nurses and have the shift filled in just a couple of minutes rather than making phone call after phone call to find an available nurse to fill the need.

Consistency and equity are another benefit of automation. Everyone appreciates feeling like they are being treated fairly, and that includes the way staffing policies are applied. With an automated staffing system, practice matches policy for everyone. Employees know that there is equity for staffing issues such as call in and call off, floating, weekend shifts and holiday coverage.
THE BOTTOM LINE VALUE OF AUTOMATION

The creation of staffing plans represents the convergence of patient needs, caregiver skill sets and financial constraints. With so much data to take into account, the creation of an optimized staffing plan carries inherent complexity. An automated staffing and scheduling solution provides visibility into the staffing needs across the entire organization, making it easier to make data-driven staffing decisions that help drive better patient outcomes, elevate employee engagement and improve the organization's bottom line.

ARTICLE SOURCES


