Five Steps to Advance Quality Care Through Optimal Staffing
Decisions on deploying the most qualified employees to the ideal location at precisely the right time are never far from a manager’s mind. Managing a workforce’s productivity is not only challenging, it's never-ending. Staffing plans are always in the works, starting with the yearly labor plan established in conjunction with the annual budget. Schedules that outline labor needs over multiple future pay periods have to be created, followed by a detailed plan to align the right mix of skilled employees to each shift’s continually fluctuating workload volume. But the minute a schedule is executed, the best-laid plans change, forcing managers to quickly make adjustments to accommodate variable patient census, staff vacancies, and employee requests for time off.

Then, at the end of the day, come the questions each manager must answer. Did the schedule deliver optimal staffing levels? Or were there scheduling gaps that could potentially jeopardize quality of care, staff morale, and safety, requiring last-minute interventions and unplanned costs? By analyzing employee-coverage data at the skill level and comparing them to a staffing plan flexed for volume, managers can quickly identify staffing problems in time to make the right resource and cost decisions. But without good data, managers may have no choice but to take a hit-or-miss approach to solutions that may work — or may perpetuate and magnify the problem. Ideally, whatever lessons a manager learns from one scheduling cycle get applied to the next one, in hopes of making the complex staffing and scheduling process better as it begins anew.

Some departments in healthcare organizations rely on pen and paper to develop work schedules, laboriously churning out new iterations as managers field requests for time off for the next scheduling period. Simultaneously, they are revising current schedules to keep pace with changes in workload. Other departments may have automated their scheduling and staffing with basic, stand-alone software. But without a system that integrates data of hours actually worked, managers are unable to monitor productivity. Yet productivity data is necessary to determine whether managers are meeting targets that support specific clinical outcomes, to decide when it’s time to add or reduce authorized positions, and to monitor their progress toward meeting fiscal expectations.

In today’s healthcare environment, homegrown or rudimentary staffing and scheduling methodologies carry significant liabilities — most notably, the real risk of shortchanging the quality of patient care, which adversely impacts employee satisfaction and affects the safety of both patients and employees. Over the past two decades, numerous studies have found positive associations between nurse staffing levels and patient outcomes. In a 2006 study, for example, nursing workforce expert Peter Buerhaus found that increasing nurse staffing will potentially avoid 6,700 in-hospital deaths as well as reduce the incidence of urinary tract infections, pneumonia, and cardiac arrest in hospitalized patients. Nursing groups are also calling for hospitals to adjust nurse staffing or risk an even greater nurse shortage as disgruntled nurses depart for other organizations. Staff stress and burnout lead to errors that jeopardize employees’ own safety as well as that of patients. And with healthcare reform’s emphasis on reducing rehospitalizations, improving patient outcomes, and decreasing healthcare costs, it’s more important than ever to adopt a holistic workforce management solution that advances your mission of quality care while helping you control labor costs.

This white paper explores a conceptual framework for managing your workforce — the plan you create to deploy your staff, the way you execute your plan, how you analyze and respond to labor management problems, and what you learn to make the process better. Each of these five steps represents an opportunity to support high-quality care and create a safe environment for patients and employees — if you leverage the right enterprisewide workforce management solutions.
**Step One: Plan**

Proactive workforce planning is essential to delivering quality patient care day in and day out, and it involves much more than building schedules that maintain proper staff-to-patient ratios. Employee skills, availability, shift preferences, and sometimes seniority must be considered in deploying staff who are the most qualified and motivated to care for a patient population that changes continually.

A workforce management solution for staff scheduling ideally will automatically calculate the appropriate employee coverage for the day’s workload. It should decrease the risk of scheduling the wrong resource, by producing a list of the most qualified and cost-effective employees to fill any open shifts. The technology should also alert managers if a schedule deviates from a safe-practice policy of sufficient rest periods between shifts or excessive overtime, and it should select only employees whose certifications and licensures are up to date. Union policies, regulatory requirements, and the organization’s work and pay rules should be automatically applied to each schedule, giving employees the confidence that their work hours and assigned tasks are fairly and equitably distributed.

Being able to schedule the right people at the right time also reduces costly unplanned overtime and agency workers. As managers stay on budget by appropriately using staff to provide coverage, patient care and safety are enhanced by having employees familiar with a unit’s clinical and safety protocols provide the care. And because managers have access to real-time labor cost information, they can manage their scheduling to their budgets.

A best-in-class workforce management tool also allows staff to access a work schedule online and sign up for open shifts, swap shifts, request time off, and state their scheduling preferences. Employees who participate in building a schedule around the hours they want to work have better work-life balance and report higher job satisfaction. Predictable shifts and more equitable distribution of overtime also reduce employee turnover. Flexing staffing to the actual workload prevents the employee stress associated with understaffing, which in turn gives patients what they deserve — care from employees who are supported and like their jobs.

The benefits of a workforce management solution also extend to long-range planning when managers establish annual budgets based on projected future deployment of their workforce. The tool can be used to mine a hospital’s unique historical patient census; acuity data; and other workload/volume measurements, such as cases, procedures, or visits. Predicting future patient-flow patterns by using actual historical information will result in a much more accurate schedule than basing it on a manager’s intuition. With forecasting capability, data rather than hypotheses drive scheduling decisions.

**Step Two: Execute**

A workforce schedule is always in flux as workload volumes fluctuate hour by hour, resulting in the need for more or less staff than scheduled. Employees who were scheduled to work are also unexpectedly absent. A workforce management tool will automatically identify available employees with the right skills to fill these last-minute gaps in coverage.

Enabling mobile technology within the scheduling and staffing tool allows managers to fill gaps in schedules even more quickly and efficiently. Coverage requests can be sent to all eligible employees, using text, intelligent voice response, and email. Employees accept or decline the shifts in a single message, using the same technology. With mobile technology, the time it takes to fill most open shifts with a qualified staff member is typically less than five minutes.

![Response Time](image)

Mobile scheduling technology allows managers to fill most of these open shifts with a qualified staff member in less than five minutes, on average.
The ability to quickly respond to changes in workload demand and to choose the best solutions and resources, while respecting the work environment, is critical to providing quality care. Scheduling and staffing technologies should help managers achieve this goal.

**Step Three: Analyze**

Typical approaches to workforce productivity in healthcare organizations provide the “what” — the historical data representing what happened during a pay period. But the “why” — an analysis of the results and evaluation of whether or not expectations were met — is often missing. Say a nurse manager gets a labor report that shows that payroll costs for a particular pay period were more than she had budgeted and that the unit operated below its productivity target. She knows she has a problem, but what is it? Is she scheduling too many staff and then not flexing to the actual workload demand? Or perhaps she is not scheduling enough staff and, therefore, paying high-cost overtime or agency staff. Maybe she’s deploying employees with the wrong mix of skills. Or possibly extra work hours are being erroneously charged to her unit. The solution to each of these issues requires a different course of action, and without an advanced analytics tool to identify the root problem, a manager’s fixes could make the situation worse and negatively affect patient care and staff safety.

Managers need quality data compiled from multiple sources — the scheduling system, payroll, admitting, and the patient accounting system, among others — that are consolidated in one place for quick on-demand access. And they need data both daily and at the end of the pay period. Daily productivity data allow a manager who has veered off course to make relatively small and manageable changes each day to get back on track — avoiding later deep reductions in labor levels that would jeopardize quality of care and be, therefore, untenable. Productivity data from the end of the pay period reflect how well managers keep productivity costs in line with their budgets.

Industry-leading workforce management solutions not only calculate the magnitude of a productivity variance, but include identification of the cause of the variance. It segregates aggregate labor cost totals into two variances — efficiency and rate — so a manager who is missing budget targets knows whether she is staffing the wrong number of labor hours or if she is paying more per hour than planned. The ability to drill down through the labor data and do a true root-cause analysis of labor variances is essential to determine the right course of action to improve labor management performance.

**Step Four: Respond**

Correct responses to data result in improvements. But if detailed data on labor performance are not easy to interpret, they can be overwhelming — and thus ignored — and might not lead managers to take action to remedy a problem. Early warnings and alerts should notify frontline managers of potential labor-performance problems.

The technology should provide guidance and suggest appropriate actions that a manager can take to achieve
expected results. Actionable data that give meaningful advice to managers are critical in the fast-paced, complex healthcare environment. The technology should not only provide the data, but help guide decision-making that will support improvements to the quality of patient care and fiscal responsibility through controlled costs.

**Step Five: Learn**

Organizations that expect their managers to meet performance targets and thresholds establish a culture of accountability that is critical to quality improvement. But for managers to embrace goals as reachable and meaningful, they first must be given a tool that monitors their progress in meeting those expectations and provides decision support for labor management. There are times, however, when performance variances are unavoidable and justified. These situations should also be tracked. And when day-to-day staffing decisions deviate from guidance or present plans, managers should document their rationale for their deployment decisions. This documentation should ideally be part of the labor management tools.

The technology should also assist in creating a comprehensive database of labor management challenges and solutions that serves to inform the individual manager as well as the organization. By mining the performance variance database, individual managers may find proven solutions from their colleagues and the executive management team can clearly identify the organizationwide challenges and individual manager concerns. Leading workforce management solutions support learning by directing managers to improve their performance over time through a process of constant analysis and adjustments.

Leveraging an integrated workforce management solution can help every department in a healthcare organization fulfill its critical missions of delivering quality care, controlling labor costs, and retaining productive, satisfied employees. Managers spend a fraction of the time they formerly did on scheduling and staffing processes, yet they consistently deploy their most cost-effective and qualified staff no matter how often the workload fluctuates. And employees are happier because they have a say in the hours they work and they know that staffing decisions are being made fairly. Managers also receive the real-time information they need to make labor management decisions that yield the desired financial and clinical results — advancing the organization’s mission of quality patient care through optimal staffing practices.

**True analytics provides guided decisions and suggest appropriate actions that a manager can take to achieve expected results.**
Five Steps to Advance Quality Care Through Optimal Staffing

**Plan**
- Do schedules take into account employee skills, availability, seniority, and shift preferences in addition to required staffing ratios?
- Are labor regulations and organizational and union policies reflected in every schedule?
- Are historical workload-flow trends available and used to predict future workload requirements?

**Execute**
- Do staffing systems quickly create a call list of available, qualified, and cost-effective employees to fill open shifts?
- Does your organization maintain optimal staffing levels to reduce employee stress and foster the fair and equitable application of personnel policies?
- Are staff members empowered to manage their own work schedules?
- Are you leveraging mobile technologies to support staffing and scheduling?

**Analyze**
- Do managers have the high-quality information they need in order to evaluate whether their staffing creates a safe environment for patients and staff?
- Can managers isolate the root cause of a labor performance issue or cost variance from the data they are given?
- Is the labor management data available on demand?
- Does your organization provide managers with insightful labor productivity information so they can consistently align staff to patient volume and census?

**Respond**
- Does your organization provide front-line managers with early warnings and alerts to identify potential labor performance problems?
- Are managers given decision support so that their staffing deployment decisions meet financial and clinical performance benchmarks?
- Do managers respond to performance variances with “actionable” solutions?

**Learn**
- Does your organization support a culture of accountability by providing managers with the information they need to manage their workforce responsibly?
- Do managers learn from one another and leverage each other’s past experiences in improving workforce management practices?
- Can the executive management team identify the true organizationwide challenges in labor management?