
USING TECHNOLOGY TO IMPROVE DECISION MAKING

Technology is helping healthcare leaders improve their decision-making ability at the bedside, in team meetings, and in the executive suite.

As discussed in Section 3, the increased use of EHRs, mobile platforms, and other technologies can add to a healthcare organization's risk profile. Data breaches and accompanying penalties can cost millions or even billions. Other risks include equipment breakdowns and investments in rarely used technologies.

But the potential benefits to be gained from technology typically outweigh the risks. In particular, as illustrated in this section, technology is becoming a critical component of provider efforts to improve quality and reduce costs. The technology is helping them track data/trends and identify better approaches for improved efficiency and patient care—thus, allowing healthcare organizations to better manage risk and improve overall value.

CASE STUDY: IMPROVING PATIENT FLOW AND NURSE STAFFING

During a three-month period earlier this year, St. Anthony's Medical Center in suburban St. Louis treated 1,000 more patients in its emergency department (ED) than during the same period two years earlier. This was possible because the St. Louis hospital eradicated its long-standing problem of ambulance diversions.

"Eliminating diversions for St. Anthony's is found money," says CFO John Skeans. "We were basically telling patients that we were closed for business."

The ambulance diversion problem went away after St. Anthony's developed a software program that helps managers quickly redeploy nurses to where they are most needed, improving the flow of patients from the ED to inpatient units.



COMMON APPROACHES

While every technology project is different, the two providers in this section share some common lessons learned.

- > Focusing not on the technology, but on how the technology will improve patient care, increase efficiency, and improve the work environment for staff
- > Overhauling workflow and processes before implementing the technology
- > Designing technology around what staff and patients really need—and possibly saving dollars by forgoing bells and whistles
- > Involving physicians, nurses, and other staff in technology design and implementation
- > Using technology's data analysis and tracking ability for better decision making—at all levels of management
- > Determining and celebrating the ROI

That technology is one component of a complete overhaul of the hospital's nurse staffing system that resulted in a dramatic improvement in the hospital's financial position. "Where other hospitals and health systems have had layoffs and salary freezes, we have continued to have merit increases," says Sherry Nelson, St. Anthony's vice president of patient care services and CNO.

On top of that, St. Anthony's will pay out "shared fruit" bonuses averaging \$500 to each staff member because the hospital met its financial and patient experience goals for the fiscal year that ended June 30. It also paid out bonuses for the previous fiscal year.

That is a far cry from 2009, when a cash flow crunch required St. Anthony's to drastically cut expenses. The hospital chose to address the financial problem by addressing its single biggest expense: nurse labor costs. Not wanting to inadvertently harm quality, the hospital identified creative solutions to use nursing resources more wisely.

The result: St. Anthony's cut \$25 million from its budget in 2009 and kept the hospital in the black—while improving the caliber of its nursing staff.



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ST. ANTHONY'S AMY BAKER, MSN, RN, CONDUCTS A PRESURGICAL ASSESSMENT WITH A PATIENT.

HIRING TO SAVE MONEY

"One of the things that is important to the bottom line is having the right staffing," says Nelson. That is why St. Anthony's staffing overhaul focused on reducing turnover among nurses, improving job satisfaction, and upgrading the level of nursing skill and experience.

For starters, St. Anthony's increased nursing hires by 8 percent in 2009 so that it could stop relying on expensive travel nurses. Nelson also sought to recruit highly skilled registered nurses (RN) and limit the number of practical and vocational nurses on staff. At the same time, Nelson instituted consistent work schedules in each unit, which improved morale and reduced absences that, in the past, had required the use of contract nurses.

Those practices helped St. Anthony's cut its travel nurse budget and achieve its ultimate goal of reducing turnover in the nursing ranks. The hospital's total voluntary RN turnover rate fell from 15 percent in FY10 to 13.5 percent in FY11.

"Every time we lose a nurse, it costs the organization approximately \$60,000, so reducing turnover is at the forefront of what we're working toward," says Nelson. "My goal is that the best nurses in St. Louis see their career endpoint at St. Anthony's Medical Center and that they would never want to work anywhere else."

To build on the success to date, Nelson continues to introduce new initiatives to boost nurse satisfaction. Because it is difficult to recruit experienced nurses in the highly competitive St. Louis market, St. Anthony's must hire new graduates who have little real-world experience in the hospital setting. That is why the hospital created a nurse preceptor program in which experienced RNs receive bonuses for working one-on-one with new graduates to help them succeed on the job.

SHIFTING RESOURCES

St. Anthony's also looked to technology—an internally developed software program called N Quality Staffing—to improve the allocation of nursing resources. Two hours into each shift, unit managers enter the unit's patient census into the staffing software, along with the number of nurses, unit secretaries, aides, and other staff members on duty. The software program compares this real-time data with the unit's standard patient-nurse ratio and gives a color-coded visual cue to automatically communicate staffing needs. The color orange means the unit is close to full capacity, and red means another nurse is needed.

When nurse managers from all units gather for their daily huddles during each shift, they use this information to quickly reassign nurses to where they are needed most. Those staffing adjustments allow patients to move from the ED into an inpatient bed more quickly, freeing up ED beds and eliminating the need for ambulance diversions.

"Improving throughput has increased revenue," says Skeans.

Investing in a new software program during a financial crunch seemed daunting. By focusing on what nursing leaders really needed to manage staffing, St. Anthony's was able to develop a relatively simple system internally. "The commercial systems are more sophisticated, but this system lets nurse managers know visually if they have enough nursing staff to take more patients," says Nelson.

AUTOMATING TIME AND ATTENDANCE

Additionally, St. Anthony's recently started using an automated system to standardize the capture of time and attendance information. Previously, nurse managers kept track manually of a nurse's work absences, lunch hours that were missed because of too much work, and other payday-important information. This led to inconsistencies in applying attendance policies, misunderstandings, and on occasion, inaccurate paychecks that required time-consuming paperwork to fix.

Under the new system, the time clock that nurses use is equipped with a computer screen that captures all details of a nurse's time and attendance electronically. "You can swipe your badge and, for example, put in a code that says 'pay through lunch,'" says Nelson.

This system improves attendance because nurses know what the official record of their work attendance says. "This consistent, standardized approach will decrease our call-ins from nurses asking for time off because everybody will know where they stand," says Nelson.