Guided Analytics: Uncovering Hidden Labor Costs
While hospitals’ profit margins are thin even in the best of times, the deeply entrenched economic recession has taken a heavy toll, pushing patient volumes and revenues down while driving up the numbers of uninsured seeking care. Now more than ever, it’s crucial for hospitals to turn a laser focus on efficiently managing their largest expense — the labor costs that are escalating at a rate of 6 percent a year.

Most healthcare organizations, however, attempt to manage their workforce costs with a simple productivity metric that measures hours worked to fluctuating patient census or other units of workload volume, and with the most basic cost data indicating whether or not gross budget targets are being met. At best, the information offers only a partial view of productivity and labor costs. More likely, it leads managers astray with a false picture.

At the end of each pay period, for example, a nurse manager might review a labor report that tells her that payroll costs were $60,000 — 8 percent more than she had budgeted — and productivity showed the unit operating 12.5 percent under the goal of 100 percent. She knows she has a problem but lacks the information to identify why she has cost and productivity variances. Did she have to pay for overtime and agency staff because she isn’t correctly scheduling regular staff? Do her employees have the right mix of skills — an error that can jeopardize patient safety as well as the budget? Is she positive that work hours charged to her department are accurate? Lacking insight to the root cause of her problem, the manager reacts with the information on hand — by deeply cutting her staff’s hours to compensate for last pay period’s budget shortfall and to try to realign labor costs with the department’s expectations. Her unguided and unnecessarily severe remedy, however, will only compound her labor management problems, creating possible lapses in quality care, nurse-patient ratios that may be out of compliance with state laws and professional standards, and a stressed workforce that will leave at the first opportunity, also negatively affecting patient care.

“Managing with limited data can mislead you into thinking that you have a particular problem to solve when, in reality, a deeper analysis shows that the underlying problem is very different than you assumed,” says Susan M. Reese, RN, BSN, MBA, senior industry consultant, healthcare. “So the solution you devise won’t deliver the effect you intend. Or, a superficial snapshot of labor costs and productivity may not reveal a brewing problem until it’s too late to make simple adjustments to get back on track.”

A new approach called guided analytics goes beyond basic productivity tracking and provides comprehensive, real-time data that allow managers to clearly identify hidden labor management problems and correct them. Guided analytics presents in-depth and high-quality data, without which it is very difficult for managers to identify the true issues and effectively bring costs under control to meet the organization’s labor cost goals. Guided analytics, coupled with a culture of accountability, lead to control, and control is what keeps results within expectations.

This white paper presents four real-life scenarios involving a labor management issue that was invisible to managers when they reviewed their basic productivity and labor cost reports. All the managers were poised to make the wrong decisions based on the limited information they had until they took a guided analytics approach. Guided analytics provided the data that isolated the problem and led the managers to take the appropriate corrective steps, which, in each case, resulted in lower direct and indirect costs.
Situation #1: The Wrong Employees Working Too Many Hours

The director of surgical services was more than a little upset when she saw that one of her managers had scheduled RNs to work 244 hours over the actual 1,744 hours required. She knew that the patient volume during that time period didn’t merit the extra staff hours. The director asked the manager to explain why she hadn’t flexed down the staff’s hours when she saw a decline in patient census.

What Really Happened?

The manager was adamant that she did flex staff’s hours, showing her director that she had given 18 percent of the staff paid time off, compared to the average 10 to 12 percent of staff who typically were paid for time off during a pay period. And would the manager have ready access to the amount of PTO she gave without guided analytics? So who was working those extra hours? The answer was apparent with guided analytics: The manager was mixing fixed and variable staffing approaches and had inadvertently scheduled supplemental labor to fill every reduction in her regular staff’s hours and then some. “By backfilling the schedule with supplemental labor, this manager not only paid too many people to do the required work, she incurred significantly higher costs by using more expensive labor than her regular staff,” says Reese.

The Guided Analytics Approach:

The manager began reviewing daily productivity reports that provided specific direction on what she should do each day to continually correct her course toward 100 percent productivity. The daily productivity reporting evaluated how productive staff had been to date in the pay period and calculated the exact hour adjustment required to achieve her productivity goal. Guided analytics provided actionable information. She also started tracking her use of supplemental labor, both in number of hours and cost, which helped her make better decisions on the type of employee to schedule when she was short-staffed. Instead of calling an agency nurse, for example, the manager found that she could stay on budget by scheduling part-time employees to work extra hours — at regular pay. And because guided analytics captured the manager’s decisions when she made them, the director was able to monitor the manager’s performance and provide relevant training on building better schedules and adjusting staffing appropriately.
**Situation #2: Out-of-Control Labor Costs**

The director of food and nutrition was baffled as to why the labor summary report for the cafeteria showed that her manager had clocked in 50 percent more hours than she had anticipated, pushing labor costs 71 percent over budget for the pay period. The mystery only deepened when she confirmed that her manager worked 80 hours — exactly according to plan — and that she had used no supplemental labor during that period.

**What Really Happened?**

It wasn’t until the director viewed the detailed variance analysis report that she uncovered a surprising fact — 40 hours of float-in managerial labor had been allocated to her unit. Another click on the automated report and she discovered that a manager named John Hill — who had never set foot in the cafeteria — nevertheless had his hours and salary charged to it.

**The Guided Analytics Approach:**

With a little bit of digging, the director discovered that the payroll department had mistakenly allocated Hill’s hours to her cost center — an error that was easily rectified. “Without the ability to find out why this unit’s labor costs were skewed, the director would have paid for a service she never received,” says Reese. “Charging the wrong cost center for employee labor is a common error in hospitals, so managers need granular productivity data that specifies the classifications of employees who worked and even their names, to quickly spot mistakes that affect budgets.”

**Situation #3: Jeopardizing Patient Care**

The manager of an orthopedics unit was congratulating himself on how well he had forecasted his labor needs. His unit had paid for 1,217 hours of work — two hours fewer than his projection of 1,219 hours. Since his hours per patient day (HPPD) were right on target and his labor costs were in line, he was confident that his unit was providing quality nursing care. It wasn’t until several days into the next pay period that a potential problem surfaced. The staffing office had assigned a nurse from another unit to work her shift on the orthopedic unit. Irritated at being floated yet again, the nurse complained to the manager that she didn’t enjoy having to frequently work on unfamiliar units. The manager was stunned when she told him that many of the other nurses working on the unit that day had been floated from other departments. Concerned about the nurse’s negative attitude and her lack of experience caring for orthopedic patients, the manager began worrying that the quality of care his staff was providing might not be as stellar as he had assumed.

**What Really Happened?**

The manager was delivering the correct number of employee hours per patient day, but the detailed variance analysis report revealed that a large number of employees were floating in and out of the unit. During one pay period, the manager had to scramble to find nurses from other units to fill in for the 202 hours he had failed to schedule his regular employees to work. On other days, he had scheduled too many nurses for the number of patients on his unit, so he floated those employees to work 105 hours on other units. “The manager wasn’t adept at identifying the trends and patterns in historical patient census data, so he consistently under- or overscheduled his regular staff,” says Reese.

The manager’s inaccurate scheduling didn’t have a financial impact on his labor budget, since the nurses who floated in and out received regular pay. But he was jeopardizing the quality of nursing on his unit by frequently using nurses from other units who were unfamiliar with his unit’s care and safety protocols or less skilled in caring for the medical problems his regular nurses typically encountered.

**The Guided Analytics Approach:**

The manager began using an automated workforce scheduler that could adequately support predictable variations in workload volume. By viewing historical workload data, the manager was able to greatly improve his forecasting of future labor needs. In addition, he was able to easily create schedules based on employee preferences and identify available and qualified staff to quickly fill any open shifts.
Situation #4: Flirting with Noncompliance

An oncology department had paid for 1,071 hours of labor, performing even better than the expected target of 1,078 hours. Yet the department’s labor costs for that period were $5,168 — or 17.7 percent over budget. Since staff was working the right number of hours, the manager assumed that she must be paying more per labor hour than she had budgeted. So she took no action at all, figuring that the dollar variance was due to either inaccurate data used in preparing the budget or the department’s large number of veteran staff members who were compensated at the high end of the pay scale.

What Really Happened?

With guided analytics, the manager would have realized that there was more than one possible reason for the $5,168 discrepancy. The analytics technology segregates the aggregate cost total into two variances — efficiency and rate. The efficiency variance — or the difference between the targeted total paid hours and the actual total paid hours — was a much larger number, and therefore more critical, than was the rate variance — or the difference between the targeted hourly salary rate and the actual hourly salary rate. The high efficiency variance indicates that the primary reason for the total cost variance was that the manager was using the wrong number of labor hours rather than paying too much for the hours. And when the manager looked at the skill level of the employees she had paid, she found the problem. The clinical professionals on the unit, who included therapists and dieticians, worked 267 more hours than expected, while the RNs worked 120 fewer hours than anticipated and the secretarial staff had reduced it’s work schedule by 136 hours. Although the total number of hours worked in the department matched the projection, the greater number of hours worked by the highly compensated clinical professional staff created the dollar variance. “The manager has a skill mix issue that is not readily apparent without the rate and efficiency variance information,” says Reese. “The proper management of skill mix when providing patient care is essential to maintain regulatory compliance, avoid monetary and operational penalties, and ensure safe, quality care.”

The Guided Analytics Approach:

Instead of limiting analysis of labor productivity to the number of hours worked per unit of volume and the gross dollars, this manager used guided analytics to understand the composition of those hours and dollars. Quickly she realized that she had been compensating for the shortage of RNs on her staff with clinical professional staff — and was seriously out of compliance with the planned skill mix. She began recruiting RNs to her unit in earnest.
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Summary
Many healthcare organizations focus only on managing their nursing labor hours and costs. With labor costs comprising 50 percent of hospitals’ total expenses, controlling the cost of nursing labor — the largest single expense — is crucial. But by ignoring the rest of their hourly workforce, hospitals are leaving 40 percent of their labor costs unmanaged — too large an expense to ignore in any economic climate. Even the most cost-efficient hospital can reduce payroll by 2 to 5 percent with guided analytics, according to Kronos Analytics for Healthcare deployments at more than 1,000 hospitals.

Metrics to manage by
The guided analytics approach gives managers the opportunity to realize significant labor saving by incorporating sophisticated labor metrics in their labor management. Here are three ways to turn labor metrics into operational advantage.

Track FTEs by skill
The ideal healthcare staffing model for departments that have fluctuating workload volumes employs fewer FTEs than the predicted volume of work requires, creating flexibility. Maintaining a staffing level that provides adequate coverage most of the time and using overtime or flexible workers — agency, float, or per diem — when patient volume sporadically spikes is the most cost-effective use of a hospital labor pool. But without careful monitoring, labor costs can escalate when too many flexible workers fill in for an overly lean staff. Guided analytics track the ratio of FTEs to patient volume by skill level so that managers can identify the precise point at which it is more cost-advantageous to hire another FTE than to continue using supplemental labor.

Manage supplemental labor
Supplemental labor can be expensive or not. Part-time employees who work extra hours usually are paid straight salary, a much less expensive choice than hiring agency workers at a premium. Managers who track the number of supplemental labor hours they use and the cost of those hours by worker type know when they are in danger of exceeding their budgets. They also consistently pick the most cost-effective option when scheduling supplemental labor.

Keep nonproductive time consistent through the year
Most healthcare organizations build into their annual labor budgets approximately 10 to 12 percent of nonproductive time for holidays and vacations. Nonproductive time can fluctuate wildly through the year, however. By monitoring their department’s nonproductive time each pay period and judiciously approving time-off requests, managers can avoid or significantly diminish gaps in coverage that would require budget-breaking use of supplemental labor.

For more information on the guided analytics approach, see the Kronos white paper “Beyond Productivity: A New Approach to Controlling Healthcare Labor Costs” by visiting www.kronos.com/healthcare.