Nurses improve medication administration accuracy

Many solutions are simple, low-cost

A group of seven hospitals in the San Francisco Bay area participated in an 18-month-long program designed to improve the reliability of medication administration by deploying nurse leadership and PI skills on a single med/surg unit. The results? Among the six hospitals that were included in the first analysis, accuracy improved from 85% to 92% in the first six months and to 96% 18 months after the intervention. The study was published in the Joint Commission Journal on Quality and Patient Safety.

The study involved the implementation of the Integrated Nurse Leadership Program (INLP), which provides frontline nurses and other hospital staff with training, resources, and authority to devise and implement solutions. In addition to showing the importance of empowering frontline nurses, the most significant finding of the study is that “significant improvement in outcomes can be accomplished without very expensive fixes,” says Julie Kliger, MPA, BSN, RN, INLP creator and program director at the Center for the Health Professions, University of California, San Francisco; principal and founder of The Altos Group; and lead author of the article.

“That’s important because there are a lot of financial and resource pressures today, and people sometimes think they need to spend millions for bar-coding; this demonstrates through almost old-fashioned QI and engaging the people who are doing the work and providing them with tools, skills, and resources, that they can make statistically significant improvement.”

Empowerment is critical

Why is it critical to empower frontline nurses to obtain such results? “I think it’s essential to empower frontline clinicians because they are the ones doing the work,” Kliger explains. “They know, see, observe, and live the problems, and have often thought about how to correct them — but are not typically put in the position where they can exercise that knowledge. When you give them the time, the resources, some tools, and support to do that in an organized framework and they are able to take what they intuitively know and funnel it in a framework and apply it, you not only get the right answers and solutions, you also get engaged workers.”

That’s why the INLP model is successful, says Kliger. “It weaves together both the technical framework we like to see in PDSA [Plan, Do, Study, Act], and it engages anyone who is closest to the issue. Having been a frontline nurse and been on the management end, I know you have to do that. As a frontline nurse I always had opinions, but the organizations were not set up to help me fix the problem. This model weaves together the frame and reliability, knowledge, understanding, using data, along with whatever outcome you are trying to advance.”

In addition, she says, it weaves in “softer” skills, such as effectively communicating the key message. “Things will change depending on who you speak with, how well you understand the dynamics, your organizational savvy, and learning how to reach your environment,” Kliger explains.

Customize your solutions

There is no “one size fits all” solution to medication administration accuracy, Kliger emphasizes; your solution must be customized to your facility. “Customization is very important because each unit is in itself a microsystem — even within a facility,” she explains. “Its culture, attitude, flow, processes — they all function quite differently.”

This is not to say, she continues, that the outcome or patient indicator can vary, but the solution to get there has to be customized. “You can’t say the ED, for example, can have sloppier medication administration because it’s hectic,” Kliger asserts, adding that through variation, the changes are readily shared and become a “library” that can be compared across hospital and unit settings.

It also is this customization that led to creative and often low-cost solutions. For example, one of the hospital’s solutions, which later was picked up by many of the others, was the notion of a

Key Points

- Frontline nurses often have good ideas, but are not empowered to express or implement them.
- QI solutions do not have to “break the bank” of your hospital.
- Ongoing monitoring is critical if you want to sustain the gains you achieve.
communication tree. “One med/surg unit decided that too many nurses needed to communicate via e-mail, which was not very effective because not many people would actually read them,” says Kliger.

If you picture a tree with branches, she continues, each member of the team had a name on a branch, and each leaf was the name of somebody they were responsible for calling. “Whenever there was a substantial change in policy, procedure, or you needed input from members of the team, 10 members reached out to 60-plus staff,” says Kliger. “This needs to be seen as a collective piece of work, to help units that are struggling, and to share the knowledge of those that are doing well. In particular, the quality people can run more data and talk with staff to convince them of the importance of the initiative.”

The quality manager also can play a role in convincing the administration that QI initiatives such as these are worth undertaking. According to Kliger, it is an easy pitch.

“Fundamentally, when I go to speak to hospital executives about this model, it’s all about improving outcomes,” she says. “And the hospitals have to do this anyway — improve outcomes, reduce malpractice and risk — so it aligns with their mission and organizational goals.”

The “pitch” is now strengthened by a business case analysis conducted following the San Francisco study. “We had a very positive ROI [return on investment]; even if you fold in the costs (of retaining her services) and releasing the staff to do medication administration, it will come in at over 150%; so it’s not only the right thing to do but it saves more money than you would by doing nothing,” says Kliger.

According to the Institute of Medicine, Kliger adds, the cost of each medication administration error averages out to $10,600. “When you have a baseline error rate of 20%, and decrease that by 88% like we did, you save a lot of money — not to mention [avoiding] possible litigation,” she says. ■

Ensuring compliance

The program also involved compliance tracking activities. For example, every month there were two small data measures of 10-measure sets. “Twice a month we would ‘naively’ observe 10 medication administrations,” Kliger shares. “And every month we would have two data points — such as interruptions or labeling — and every month we’d see if the ‘test of change’ worked; that informed the next steps.”

The goal, of course, is to keep the trend of errors on a downward slope. “We need to be at 90%-95%, so the goal is to strive that way,” says Kliger. “When I visited with teams, they’d be reviewing how the data looked on each of the units. We developed an Excel-based electronic
dashboard, which included raw data, percentages, and graphs, so the frontline staff could look at their progress, and at the governance level they can see an organizational error rate.”

The method is apparently working. “We now have 36 months of data on the pilot units; all seven hospitals are either maintaining or improving their rates,” Kliger reports. “And during that time we were spreading the program to all units in the hospital, adding complexity, which is hard to do.”

The teams meet regularly, and it’s important for them to have data to look at in order to sustain improvement, Kliger continues. “Data are like the headlights on a car,” she notes. “If things are not working, then you draw on leadership skills and how you present the data; that’s how you get people coming on board.”

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Reference


First the RACs, now wait for what’s coming next

Medicaid, commercial insurers starting their audits

By the end of the year, it’s likely that every type of medical record in your hospital will be scrutinized by one auditor or another, predicts Brian Flood, managing director for KPMG LLP, the U.S. audit, tax, and advisory firm.

“It’s a new world for health care. Medicaid is rolling out its Medicaid Integrity Contractor [MIC] program to audit Medicaid records, and commercial insurers are beginning to use the same model — and, in some cases, the same auditors — to review the records of their members,” he adds.

The Pennsylvania Department of Public Welfare’s Bureau of Program Integrity has been auditing fee-for-service Medicaid claims for the past three years, using one of the Centers for Medicare & Medicaid Services (CMS) contractors for the Recovery Audit Contractor (RAC) demonstration project, reports Charleeda Redman, RN, MSN, ACM, director of corporate case management for the University of Pittsburgh Medical Center, an integrated health system with 20 acute care hospitals.

The contractor has been auditing records retrospectively and recovering payment if there was a coding error or the patient didn’t meet medical necessity criteria, she adds.

CMS has contracted with a different auditor to handle its MIC audits in Pennsylvania, but it will use a similar process, Redman says.

“The MIC auditor will request charts and make determinations. We will appeal through the Department of Public Welfare,” she says.

The auditors may have different targets based on the contracts or scope of work they have with the state Medicaid office, Redman adds.

“Some quality issues have been identified as potential risks. In addition, the auditors are looking at the continuum of care, such as cases that are readmitted within a certain time frame,” she says.

In addition, a large commercial insurer has contracted with the same contractor used by the Department of Public Welfare to audit medical records in Pennsylvania with a focus on DRG validation. Another commercial health plan has a contract with another firm to review the records of its members for both medical necessity and coding, Redman says.

“The commercial insurers contract with vendors to audit specific areas where they have identified potential risk. So far, the contracts have varied from payer to payer,” she adds.

Thanks to the three-year pilot program, there’s a lot of information available on the RACs and what the auditors focused on during the pilot project, and hospitals can use that information to get ready for the permanent RACs.