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The Newsletter of Best Practices

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## IN THIS ISSUE



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# The Leapfrog Group: HAI prevention efforts still have a long way to go

*87% of hospitals surveyed do not yet meet its standards*

In a stark reminder of just how far some hospitals have to go in improving patient safety, The Leapfrog Group, a Washington, DC-based patient safety organization, reports that 87% of the 1,256 hospitals that participated in its annual Hospital Quality and Safety Survey do not have all of the requisite policies in place to prevent many of the most common hospital-acquired infections (HAIs).

A breakdown of the responses further illustrates how far short of the Leapfrog goals the participating hospitals fall. Leapfrog reports the following level of full compliance with its recommended standards for prevention:

| Infection type or preventive practice | % hospitals with full compliance |
|---|---|
| Aspiration and ventilator-associated pneumonia | 38.5% |
| Central venous catheter-related bloodstream infection | 35.4% |
| Surgical site infection | 32.3% |
| Influenza | 30.7% |
| Hand hygiene | 35.6% |

According to Leapfrog, 2 million people every year contract an infection during their care, and 90,000 of them die. HAIs, says the

## Key Points

- Hand washing is the foundation for success in all hospital infection prevention.
- Without a strong culture of safety, the most carefully crafted program will underachieve.
- Staff must be convinced that a 'zero' infection rate is not only desirable, but achievable.

organization, add, on average, more than $15,000 to a patient's hospital bill, amounting to more than $30 billion a year in avoidable costs.

These findings take on even greater significance in light of the Aug. 18, 2007, announcement by the Centers for Medicare & Medicaid Services that it will no longer reimburse the additional costs incurred by certain hospital-acquired conditions.

In addition to inquiring about the aforementioned infections, the survey also asked about hand washing hygiene, which many experts cite as a key to preventing all HAIs. Leapfrog specifically asked about issues such as tracking the frequency and severity of the infection in question, management accountability, its ability to reduce the preventable infection, investment in improvement, and whether it is taking further action to detect and prevent the infection.

## Safety culture is critical

A number of observers say the development of a safety culture is essential to reducing HAIs. In a Sept. 18 press conference reporting on the major findings of the survey (other findings may be found in the box following this story), Leapfrog CEO **Suzanne Delbanco**, PhD, told *HBQI*: "I think we are still dealing with working toward a broad cultural shift — getting a system in place that can institutionalize the processes we know [work]."

**Kathy Schumacher**, MSA, director of quality, safety, standards, and outcomes at William Beaumont Hospital in Royal Oak, MI, agrees. "I would say the hospital culture can be the biggest barrier," she asserts. "We have a strong patient safety culture here that lends to improvement efforts. There is a great deal of medical leadership support in addressing these issues."

That broad support, she continues, is an essential foundation for success. "You could put together and implement all the programs you want, but if you do not have the backing from leadership, you are almost spinning your wheels," she insists.

That culture change also requires a change in perception. "Historically, doctors have believed that complications are just part of health care," says Schumacher. "But we now know they are preventable, and can be reduced to zero."

**Patrice L. Spath**, of Brown-Spath & Associates in Forest Grove, OR, concurs. "I truly believe all hospitals are trying to reduce their rate of HAIs, so if we start from that premise, what are the challenges that still lie ahead? I guess the biggest is changing staff and physician perception that a zero percent infection rate is not achievable."

If people are satisfied with reducing infections to two or three a year, Spath says, "then they won't dig into their processes to see how they can eliminate those few that do occur."

Overcoming these attitudes is difficult, Spath concedes, but is not impossible. "You really must set quality goals in your organization," she asserts, again noting that the example must be set at the top. She cites the example of Thomas Royer, MD, president and CEO of Christus Health, a Texas-based not-for-profit system.

"He recently said that we can prevent HAIs," Spath shares. "This made me realize that unless leaders have the vision of 'zero,' then they can

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make excuses for not digging deeper. He is a physician, and he could easily have said that there are patients who will get infections no matter what we do. It's an attitude that really needs to permeate the organization."

### *News not all bad*

While the challenge is indeed a large one, **Maryanne McGuckin**, DrScED, head of McGuckin Methods International Inc., an Ardmore, PA-based consulting firm that provides education, research, and measurement services for infection control issues, sees light at the end of the tunnel.

"A lot has happened in the last couple of years to change what is happening with infection control," she insists. "The greatest driving force is public awareness."

Now there are more than 40 states that have mandatory reporting of HAIs, McGuckin notes. "Last December, we did a large telephone survey and asked patients what they felt were the most important things to look for in a hospital.

"The first thing they said was the hospital had to be physically clean. But second, with 85%, was a low infection rate."

Of the areas cited in the Leapfrog survey, McGuckin says, "we have improved by leaps and

## Highlights of Leapfrog Survey Results

In the annual Leapfrog Hospital Quality and Safety Survey, data are collected from hospitals on their progress toward implementing practices in four categories:

1. **Computerized Physician Order Entry** (CPOE): Do physicians enter patient prescriptions and other orders into computers linked to error prevention software?
2. **ICU Physician Staffing** (IPS): Are intensive care units staffed by trained ICU specialists (intensivists)?
3. **Evidence-Based Hospital Referral** (EBHR): How well do hospitals perform seven high-risk procedures and care for three high-risk neonatal conditions?
4. **Leapfrog Safe Practices Score** (SPS): How well are hospitals progressing on the other 27 National Quality Forum-endorsed Safe Practices?

According to Leapfrog, 74% of participating hospitals have fully implemented the practices in at least one of these four safety and quality categories. Here are other major findings:

- 96% of respondents participate in at least one other quality report transparency effort in addition to Leapfrog
- 29% report that their ICUs make use of intensivists — up 10% from 2002. Leapfrog estimates that over 20,000 lives are saved by these hospitals, but 54,000 would be saved if all ICUs implemented this practice.
- Only 10% of respondents have implemented Computerized Physician Order Entry. If all urban facilities did so, claims Leapfrog, it could prevent up to 900,000 medication errors each year.
- 25% of respondents fully meet the standard for the Leapfrog Safe Practices Score, which means that these hospitals have implemented the vast majority of each of the 27 National Quality Forum Safe Practices that comprise that score.
- 29% require pharmacist review of all medication orders.

For evidence-based hospital referral:

- 32% have neonatal intensive care units that meet Leapfrog's specifications for certain high-risk deliveries.
- 24% meet the standard for bariatric surgery (new to the survey this year).
- 7% meet the standard for pancreatic cancer resection.
- 5% meet the standard for esophageal cancer surgery.
- 3% meet the standard for percutaneous coronary interventions.
- 1% meet the standard for aortic valve replacement (new to the survey this year).

Top Hospitals fully meet Leapfrog's standard for ICU Physician Staffing (IPS) and the Safe Practices Score (SPS) and either of the following: (1) Two or more of the eight Evidence-Based Hospital Referral (EBHR) areas; or, (2) Computerized Physician Order Entry plus one of the eight EBHR areas. Thirty-three hospitals meet these criteria. Top Children's Hospitals fully meet the standard for IPS, SPS and the EBHR Neonatal ICU standard for high-risk and complicated newborns. Eight children's hospitals meet these criteria.

Only 25% fully meet the standard for the Leapfrog Safe Practices Score.

Source: www.leapfroggroup.org.

bounds" in the prevention of central venous catheter-related bloodstream infections. "There are hospitals out there documenting zero incidents."

How did they achieve that success? "People went back to 'Nursing 101' — basic techniques," she says. "For example, for central venous catheters, you have to make sure the right insertion techniques are in place."

## Wash those hands

While there are specific interventions that can be followed to prevent each of the HAIs addressed by Leapfrog, "the foundation of all of them is hand hygiene compliance," asserts McGuckin. "If you walk into any hospital in the U.S. you will see less than 50% compliance."

McGuckin says that one of the keys to improving compliance in this area is to empower the patient to remind health care workers to wash their hands. "We tell the workers that they need to go in to that patient and say, 'You need to remind me to wash,'" says McGuckin. "When we ask the workers, they say '[they are concerned about] skin irritation; I'd rather put on gloves.'" Since the patient is there "24/7," she says, patient empowerment is the key to improvement.

When a patient is admitted to one of her client hospitals, they are given either a brochure or a CD that says to them, "We want you to be part of our team; ask us to wash our hands."

"It's so simple, so cost-effective," McGuckin says. "In a 300-bed hospital it's less than the cost of one infection."

The next step "is that you have to measure what you do," she continues. "If you do not measure, you do not improve." Her company updates client hospitals on their performance every month. "I can tell you that when hospitals join us, their compliance rate is often under 20%, but we can increase that by over 50% in about five months."

After performance is measured, feedback is given to the health care worker. "We tell them, for example, that compliance on their unit was only 20%," McGuckin shares. "This is something concrete they can look at and react to."

## Launching a campaign

At Beaumont, Schumacher reports, an entire "campaign" is under way to improve hand washing compliance. "It really focuses around staff education, collecting observations and data, measuring our compliance, and putting in place interventions to increase compliance, then measuring again to see if we made improvements," she explains, adding that "standardization is the key, wherever you can achieve it."

The campaign also includes some "fun" things, she says. "For example, we have an annual 'zoo day' for all our employees," she relates. "We had a hand hygiene booth there, and gave out sample hand sanitizers. We asked employees to wash their hands, and we talked to them and their families about it." This event, she says, "created huge amounts of awareness; you have to take the message to the staff."

Speaking of the staff, in the education program, they also are taught why good hand hygiene is important for them and their families, as well as for the patients. "We need to look at how it impacts each and every one of us," she explains.

Other interventions included placing hand sanitizer stations around the hospital for visitors. "When they walk into the hospital they will see one," she notes. Schumacher also put on a patient safety "Town Hall" dedicated to hand hygiene.

The program is only six months old, so Schumacher has no hard data yet to demonstrate results. However, she continues to bring more people on board — not just nurses, but ancillary staff. "Everyone who comes in contact with that patient needs to be part of the campaign," she explains.

When it comes to broader improvement in nationwide compliance rates, McGuckin recommends getting the public involved. "If we have public disclosure of infection rates, we should also have [public disclosure] of hand hygiene," she insists. "After all, if a hospital has high infection rates, you should look at their hand hygiene."

Finally, she concludes, hand washing "is one of the techniques that has to be 100%."

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# Disaster brings new meaning to safety, quality

*Staff members perform non-medical services*

The recent flooding in America's heartland made lots of headlines, but in the health care facilities of the region much was going on behind the scenes that the public never got to see. And, despite having run disaster drills during the year, many quality professionals and their colleagues found themselves in situations or performing duties they would never have imagined.

For example, medical staff from Olmsted Medical Center in Rochester, MN, found themselves tearing out carpet and removing equipment from one of their system's clinics that had been flooded. In Blanchard Valley Hospital's Findlay (OH) Campus, some staff stayed on shift for 24 hours, while others set up a shelter in the local recreation center.

The disasters also shone light on unique patient safety strategies that will be spread to other facilities in the future. For example, when patients from a flooded Wisconsin nursing home arrived at Prairie du Chien Memorial Hospital, they were not only accompanied by their medical charts, but by photographs, to ensure proper identification. "It was part of their records," notes Prairie du Chien COO **Connie Achenbach**, MBA, who says that in the future her facility will do the same.

"This is good for any hospital that needs to transfer patients," she says, "And it's something that's easy to do in this day and age. When we bed patients, we should have a system in place to take their pictures."

## After the flood

When floods hit the area around Olmsted on Sunday, Aug. 19, its St. Charles clinic, flooded with two feet of water, was forced to close (it remains closed today). "We routed the patients to other locations and physicians to our other clinics," notes **Lois Till-Tarara**, MA, assistant administrator for Olmsted. A temporary clinic was set up outside the hospital in the parking lot, in trailers provided by Satellite Shelter of Minneapolis.

Some staff could not get in to work, as they had their own flooding problems and personal crises, but staffing was not a problem "because we shuffled physicians across [to other facilities]," says Tarara.

However, in the flooded St. Charles clinic, "we had to tear out carpet, vinyl tile, get the medical records, the equipment, which was all electronic, and pharmaceuticals out," she continues. "As soon as things got wet, we really had to move out fast."

In light of this "need for speed," she says, her medical staff worked alongside a construction company to remove records and equipment. "The best thing we did was to get the area cleaned out," says Tarara.

In order to preserve the paper records, the staff bagged them and turned them over to Thunder Restoration of Golden Valley, MN, which freeze-dried them and treated the bags with a preservative chemical.

## Helping the community

The floods hit Blanchard Valley on the morning of Aug. 21. "At about 6:30 a.m. they called a code yellow — a disaster," recalls **Nancy Proctor**, MeD, director of service excellence, whose role includes "measuring patient satisfaction and improving processes to create a better experience for patients."

But her role, and that of her colleagues, expanded that day to encompass the surrounding community. For example, a nursing home in nearby Cary had been flooded and about 16 residents were transported to Blanchard Valley. "We needed to make space for them, while at the same time we had associates calling in who couldn't get there," says Proctor. "So, with increased census and decreased staffing, we switched into disaster mode."

Some staff agreed to stay on for 12 and even 24 hours, she recalls. "We set up an incident commend center in our administration area, started communicating with the Red Cross, sent associ-

## Key Points

- Conduct 'satisfaction rounds' with anxious patients; help answer their questions about well-being of family members.
- Use local law enforcement, other agencies to get stranded staff members to work.
- Disaster drills pay off when 'the real thing' hits your community.

ates to EMA, and also sent a lot staff out to the 'Cube,' our local recreation center, where we set up a shelter."

Blanchard Valley pharmacists, nurses, and physicians stayed there around the clock until the following Monday. "The majority of those people were leadership staff," Proctor explains. "The docs took turns doing shifts."

The staff supplied residents with tetanus shots, medicine, and anything else they needed — including information about what was happening in the community, provided by the Red Cross. "It was a real community effort," says Proctor.

To help serve the patients and optimize satisfaction during the disaster, "we tried to round on the floors and talk with families who were anxious about what was going on at their homes or happening here — we tried to keep them completely informed and in the loop," says Proctor.

### Transportation an issue

"A lot of our requests dealt with transportation," adds **Kelly Shroll**, Blanchard Valley's support services and safety director, who actually called the "code yellow."

"I had received a call at 4 a.m. that the nursing home would be transferring 16 patients," she says. "I arrived at the hospital around 5."

Shroll worked in the incident command center, from where she coordinated the transfer. "The nursing home residents were admitted to our facility for food and shelter, and were there about eight hours. We used empty beds, and had enough to accommodate them."

Shroll had asked the nursing home to bring staff with them, as well as medicine carts and records. "They brought one LPN and two nurse's aides," she says.

In terms of making up for staffing shortages, says Shroll, buses were sent out to bring in stranded providers. "We also worked with law enforcement to get critical staff members to the hospital," she says.

At one point it appeared that the local water treatment center's water would not be safe, and Shroll was prepared. "We had bought supplies for a boil alert for potable water, but it actually did not become necessary," she says.

### Plan worked well

Shroll says the disaster preparations her hospital made during the year paid off when disaster struck. "The incident command center worked very well," she says. "Our strength was having the right people in the right spot — people who were well trained in the roles they needed to fulfill. There was not any hesitation or confusion about what to do; we made a request and they did it."

The team had purposely established a single phone number for external requests and that worked very well, too, she says. "We also had a pharmacist go out to the shelter and managed the meds; they contacted local pharmacies who provided seven-day supplies."

The hospital had conducted one disaster drill in 2007, and always does two per year, says Shroll. "This absolutely helped in terms of preparation," she asserts.

Still, she plans to tweak her disaster response plan. "We're still working on activation and deactivation; we still need to work on communication," she says. "Currently, we can notify via pager, but not by multiple ways. We will purchase a system, because we need to be able to get the message out in a 'mass' method."

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# Abbreviations formally linked to medication errors

*If anything, numbers probably understate the problem*

In one of the first formal studies linking the use of abbreviations to medication errors, researchers reporting their findings in the *Joint Commission Journal on Quality and Patient Safety* state that 4.7% of the 643,151 errors reported to the Medmarx program from 2004 through 2006

were attributable to abbreviation use.[1]

What's more, says lead author **Luigi Brunetti**, PharmD, clinical assistant professor, Ernest Mario School of Pharmacy Rutgers, The State University of New Jersey, and clinical specialist in internal medicine at Somerset Medical Center, those numbers may only scratch the surface in illustrating the extent of the problem.

"Even though only 0.3% of the errors ended up in patient harm, that's a huge underestimate," he asserts. "We looked specifically at what was reported as patient harm. We did not look at length of stay, or whether, for example, inappropriate doses had an effect on that. Then, there are antibiotics; did we actually help in the emergence of resistant organisms by [over]-dosing?"

## Key Points

- Study shows nearly 5% of the 643,151 errors reported to Medmarx were attributable to abbreviation use.
- Many of the 'problem' abbreviations were on The Joint Commission's 'do not use' list.
- Reporting often found to be inaccurate and/or incomplete.

### Making the issue real

Brunetti says that putting numbers to the issue is, in and of itself, significant. "No. 1, abbreviation errors do happen, and this is one of the first studies that puts numbers behind them; having 5% of errors associated with abbreviations — that's significant." In addition, he says, "when people see real numbers that means more than when someone simply says, 'Abbreviations may cause errors.'"

Also of interest were the abbreviations that most commonly resulted in error. They included:

- The use of "QD" in place of once "daily," which accounted for 43.1% of all errors;
- The use of "U" for units (13.1%);
- The use of "cc" for "ml" (12.6%);
- The use of "MS04" or "MS" for "morphine sulfate" (9.7%); and
- Decimal errors (3.7%).

"Many of the abbreviations we found problems with were on [The Joint Commission's] 'do not use' list," Brunetti observes, noting that this "definitely reaffirms" the importance of observing the list. In fact, only the use of "cc" instead of "ml" is not part of that list.

"Even though it has been out since 2004, we are still having problems with compliance," he notes. In fact, according to The Joint Commission, compliance dropped from 75.2% to 64.2% between 2004 and 2006. However, notes Brunetti, "compliance numbers may be down due to a reduction in reporting."

### Improving reporting

Reporting, he continues, is one of the major areas that must be addressed to more effectively reduce medication errors. "In looking at the Medmarx data, we learned that about 40% of errors that were reported have to do with abbreviations, but we do not have enough information to know which abbreviation," he explains. Improvement in reporting, he says, "starts with encouraging staff not only to report medication errors but to include as much information as they can." In order for a QI project in this area to have an impact, and to be significant, he explains, "you have to have a baseline to start at."

Engagement of leadership within each of the various health care professions is also critical, says Brunetti. "If the message comes, for example, from the medical director, it would carry more weight for physicians. If it comes from the director of pharmacy, it will carry more weight for pharmacists. Engaging leadership within each department is an excellent outlet for communicating what should and should not be done."

Accountability, says Brunetti, is another essential element in this overall strategy. "If you are a habitual offender, you should be held accountable for those actions," he asserts. "If you are a physician who keeps using the same abbreviations, the medical director should speak with you, and your privileges may be taken away or changed in some manner."

This does not mean, Brunetti emphasizes, abandoning a systems approach to errors. "In fact, ultimately it still is a system error," he says. "If you look at examples we highlighted in the paper, they started with an abbreviation error, but with each step it slipped farther through the cracks; all the 'holes in the swiss cheese' lined up."

If the error did not result in harm, he continues, that means it was caught somewhere in the process. "However, you still need to address the individual responsible," he insists.

And what of those staff members who eliminate errors? "Let people know they are doing a great job," Brunetti advises. "The term 'reward' does not necessarily mean monetary reward. Tell

them errors have gone down; people like to hear they have made a difference in patient care. If you are able to show your staff that by complying [with the do not use list] they have reduced errors, that is very valuable."

### Educate your staff

Finally, Brunetti says, you must educate your staff. "Education definitely isn't enough in and of itself," he says. "We can educate all we want, but we need accountability — we need to enforce that education. But education is important as well."

It's not enough, Brunetti points out, to simply tell your staff that abbreviations cause harm, or even to share the numbers behind studies like his. "That's fine and dandy, but it's really important to show case examples," he insists. "If you show specific instances where abbreviations caused errors that carries lot of weight — particularly if the example is institution-specific. If you have a doctor who's been used to doing something one way for 30 years and now you say he can't use that abbreviation, it will be hard to get buy-in, but if can you use a specific case example, they may think twice."

Besides collecting accurate data, the quality manager can play a major role in encouraging reporting, Brunetti suggests. "That's huge, because if things are not reported we won't know there's a problem," he says.

In addition, notes Brunetti, quality managers can encourage education programs that are specific to abbreviations and medication errors. "I don't see too much of this type of education going on," he laments. "When I go to a hospital, I see lot of [education about] treatment of MI, acidosis, and so forth. It would be nice to hold a meeting on patient safety and how variables affect medication errors into the mix."

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## Study: Temporary nurses not a threat to quality

*Negative perceptions unfounded*

Contrary to popular belief, negative perceptions of temporary nurses may be unfounded, say the authors of a new study in the *Journal of Nursing Administration*.[1] In fact, they argue, temporary nurses have qualifications similar to those of permanent staff nurses, and while hospitals employing more temporary nurses do have poorer quality, other factors such as work environment are more likely to be the main cause.

"Our research center [The Center for Health Outcomes and Policy Research] prides itself on taking a hard look at widely held assumptions in health care that have not been sufficiently tested," explains **Linda Aiken**, PhD, FAAN, FRCN, RN, director of the center at the University of Pennsylvania School of Nursing in Philadelphia and lead author of the paper. "And when we look at them more seriously, they turn out not to be right."

This, apparently, pertains to commonly held perceptions about supplemental nurses. "We had done some of the defining work showing that hospitals with more nurses have better outcomes," she continues. "We thought about that, and about the general assumption often found that the use of supplemental nurse staffing adversely affects quality — that the use of supplemental nurses becomes a proxy for poor quality. That did not really line up behind the empirical information that having more nurses is better for quality."

For supplemental nurses to be associated with an adverse affect on outcomes "would require some terrible mismanagement in deployment of these nurses, or the fact that they had so little orientation that they were dangerous," Aiken asserts.

### An objective look

In order to get a truly objective look at these hypotheses, Aiken and her team reviewed data from the 2000 National Sample Survey of Registered Nurses to determine whether the qualifications of supplemental nurses working in hospitals differed from those of permanent staff nurses. "This is the most comprehensive study of the national nursing labor force, conducted every four years by the federal government," Aiken

## Key Points

- Work environment is much more likely to be a cause of poor hospital quality.
- Poor deployment of supplemental nurses, inadequate orientation can also threaten quality.
- Get staff on your side by using supplemental nurses to reach a goal all staff value.

explains. "In looking at education, we found that supplemental nurses were more likely than nurses, in general, to have a baccalaureate degree, and were more likely to be within 10 years of graduation — a positive factor given the rapidly changing science of nursing." In addition, she says, supplemental nurses are more likely to work in ICU settings — which implies they have sophisticated clinical skills.

"After confirming they were just as qualified, we looked more closely at [outcomes at] hospitals that employ supplemental nurses," she continues, adding that most hospitals in the United States do hire temporary nursing help — "even the best hospitals in America, and even the so-called 'magnet' hospitals."

Hospitals were categorized by the percentage of all supplemental staff — travelers, floaters, and so forth. "We found that those hospitals that employed the largest number of supplemental nurses as a proportion of their staff did have some poor outcomes based on the overall assessment by permanent nurses, as well as adverse events like falls with injury, infections, frequent medical errors, and family complaints," Aiken notes. "The outcomes tended to look worse in hospitals that used a lot of supplemental nurses, and that's why I think the association has developed."

### *Digging deeper*

However, Aiken and her team moved on to the next step: "disentangling" the data.

"We were able to show in our paper that the outcomes in these hospitals were poor because they have a very deficient nurse worker environment, so they can't keep and attract enough of their own nurses," she explains. For example, she says, there is a maximum number of patients that a nurse feels comfortable taking care of, and once you go over that ratio you can't retain your staff. Other factors include poor relationships with top management, non-responsive management, the failure to invest in the education of the nursing workforce, and so on.

"In fact," says Aiken, "we concluded that by the very fact that they had temporary nurses, the outcomes at these hospitals were not as bad as they would have been."

### *Ensuring safety*

Since the use of temporary nurses in and of itself does not seem to affect patient safety, what can be done to optimize patient safety when temporary nurses are used?

"Obviously, orientation is very important," says Aiken. "We interviewed the leadership in a number of staffing companies, and they all invest tremendously themselves in orientating their nurses at the hospitals where they work. They also try to send the same nurses to the same hospitals."

Orientation, however, is a joint process between the staffing firm and the hospital, Aiken continues. "New supplemental nurses should be working jointly in some mentored relationship with a current permanent nurse," she says. The time period for this preparation varies "dramatically" from hospital to hospital, she continues, "but you probably need to have a minimum of a week where there is some mentored relationship with a staff member."

It's also critical, Aiken says, for staff to be open to the idea of supplemental nurses — "to know these are qualified individuals, and be more open on how to deploy them as colleagues." Staff nurses, she notes, can often be hostile about having supplemental nurses come into the facility. They perceive that they make more money, which may or may not be true once benefits are factored in. "Try to debunk these myths within the organization," she advises quality managers.

Finally, she says, "one of my major recommendations to hospitals on the quality side is to really think about how to use supplemental nurses more strategically, rather than as substitutes for missing permanent staff."

For example, she says, at her own facility it was determined that patient/nurse ratios needed to improve. "We made a commitment to that staff that in order to retain these ratios, we would bring on enough nurses to effectively reduce the ratio in 'med/surg,' and there was no way we could do that immediately unless we used supplemental nurses," she explains. "We used a strategic plan that included beginning to recruit our own permanent nurses at the same time, and as we got more permanent nurses, we used the supplemental nurses on a declining basis."

In other words, she says, "explain to your staff that you are gaining something that they all value — in this case, overall long-term improvement in ratios. Everyone understood this would lead to the achievement of a strategic goal that they all valued."

Another strategy, she suggests, might be involving supplemental nurses while in pursuit of magnet status. "Many hospitals are working on magnet status, and that involves a lot of additional work for the nurses," she notes. "So, you could bring on additional supplemental nurses and be explicit with your own nurses that this is a resources investment in the successful achievement of magnet status."

Finally, she says, if you find you have to constantly use supplemental nurses, "something within your HR policies and clinical care setting needs to be fixed." For your permanent staff's sake, other than for seasonal swings or short-term shortages, these nurses should be only used for a justifiable strategic reason. "If you have to use them in a non-strategic manner, I suggest there should be a focus on improving the work environment for your nurses," she concludes.

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# Hospitals still lag in developing safe practices

*Proactive processes are needed*

While hospitals are doing will in complying with a number of the National Quality Forum's (NQF) guidelines of 30 safe practices, there are some areas in which significant improvement is still needed, according to new research from the Emory Center on Health Outcomes, and Quality, Rollins School of Public Health.[1]

While most hospitals had adopted seven of the nine medication-related practices, lower adoption rates were seen for resource-intensive safe practices such as consultant pharmacists (52.0%) or computerized physician order entry or CPOE (2.7%). The "culture of safety" questions revealed wide adoption of non-punitive error reporting (83.7%), but more limited adoption of proactive processes to detect and prevent errors (44.9%).

The results were based on a retrospective review of annual self-assessment surveys from 2003 to 2004.

"We certainly know that all hospitals face the challenge of meeting an ever-growing number of standard national guidelines," notes lead author **Kimberly Rask**, MD, PhD, who is director of the Emory Center on Health Outcomes and Quality; associate professor of health policy and management in the Rollins School of Public Health at Emory University; and associate professor of medicine in the Emory School of Medicine, explaining the rationale for the study. "In Georgia, we have a unique opportunity with the Georgia Hospital Association [107 hospitals around the state] trying to proactively report regionally and nationally."

In addition to major hospitals in large urban areas such as Atlanta, the state has a large number of rural facilities; more than half the state's hospitals have fewer than 100 beds. This, thought Rask, provided a unique opportunity.

"What interested me was the opportunity to look at the whole range of facilities," she explains. "We know about early adopter hospitals, and how they have the experience and the resources to jump on [new initiatives], but what about those facilities that do not have large quality departments and still face the same requirements — where are they?"

### Surprising findings

Surprisingly, says Rask, the research showed that size did not matter nearly as much as one might suspect. "We expected that perhaps there

## Key Points

- Size of hospital not that significant in terms of successful compliance with NQF standards.
- Pilot-testing practices and important strategic approach in proactive safety improvement stance.
- Physician participation is essential if you want to get those compliance rates up.

might be a very big difference between what large urban hospitals and small rural hospitals did [in terms of compliance], but we found very little difference," she says. "What kind of hospital you were had very little impact on whether you hit the [compliance] target."

The most common barrier faced by all hospitals, she continues, is resources — which might, again, seem to put rural hospitals at a disadvantage.

Not so, Rask insists.

"What's interesting is that having senior administrators do floor rounds, for example, is easier and more feasible in more smaller hospitals so they might be more likely to perform more of the hands-on, proactive activities," she explains.

### Being proactive

Rask and her colleagues noted a distinct difference between how successful hospitals were in responding to quality issues, as opposed to anticipating them — thus, the emphasis on proactive processes. "Across the board, although we feel very good about [how hospitals are] setting processes in place, when you look at the difference between that and proactively identifying and preventing errors before they occur, that's where most hospitals struggle," she notes.

What are some of the proactive strategies Rask recommends to improve safety? "Pilot testing practices are important," she says, "and performing an FMEA [failure modes and effects analysis] proactively with that pilot program."

In other words, she says, look at what some of the key problems might be. "Ask questions such as, 'If we change this, what might happen?'" Rask suggests. Such a prospective FMEA, she notes, adds the opportunity to prevent errors, rather than just reacting to poor processes after something happens.

"It takes a different mindset, and it's tough to do in an environment where resources are already strained; you feel you've enough to do chasing after what has already happened," she concedes, "but you could see some benefits."

Such a proactive approach, says Rask, can also help you obtain valuable information without investing a fortune. "For example, we've talked about piloting processes before you put in new pieces of equipment," she suggests. "It could be done on a small scale, rolling out new technology or processes in one unit at time before going live on a wider scale. You can perfect it up front and do it right, avoiding those messy 're-dos.'"

### Don't forget the docs

The study also noted that hospitals were having difficulty with safe practices that involve hospital-based physicians, such as ensuring that new prescribers had access to all currently prescribed medications and minimizing distractions during order writing. In addition, they found lower adoption rates in areas that required direct physician participation, such as eliminating verbal orders and using standardized abbreviations.

"Some practices require a lot of physician input, such as using abbreviations and verbal orders, and we wanted to put out a call to hospital-based physicians that this is where you can make a difference," says Rask. This, the authors suggested, should entail physician involvement as clinical leaders and team builders.

"That can certainly be a challenge," Rask concedes. "But many hospitals have found that if they have hospitalist physicians, they are really interested in getting involved in QI. They spend a lot of time inside the hospital and can, therefore, spend some of it on QI interventions."

Finally, the researchers recommended, it is important to develop more robust error monitoring systems. "Many hospitals are limited to voluntary reporting of errors and adverse events," Rask notes, "and a lot of data out there tell us that a very small percentage of events are reported."

If you really want to know if your policies are making a difference, she continues, "you need to know what happens before, during, and after a program is put in place. Increasing automation in data flows in hospitals gives us an excellent opportunity to collect these data routinely."

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