Nobody can prevent all patient falls, but hospitals are significantly reducing the ones they can

BY LOLA BUTCHER

As the federal government urges hospitals to double-down on patient-safety issues, the 12-bed cardiac telemetry unit at Essentia Health in Fargo, N.D., is doing its part.

Between January and September last year, the unit’s fall rate decreased from seven falls per 1,000 patient days to 2.4 falls. And the unit is working toward perfection. “Right now, as we speak, we are at our record number of days without a fall, which is 69 days,” house supervisor Tina Kraft, R.N., said earlier this spring.

While not every patient fall is preventable, hospitals around the country are proving that the right combination of technology, care processes and focus can reduce the number of falls significantly and, more importantly, the injuries to patients they often cause.

Androscoggin Valley Hospital in Berlin, N.H., a 25-bed critical access hospital, has not had a fall with serious injury in more than three years, and falls of any kind have become extremely rare. “We go months now where we have zero falls, which we just never, ever hoped could happen,” says Clare M. Vallee, R.N., vice president of nursing services.
The scope of the problem

That's saying something. Falls remain one of the most vexing patient-safety problems facing hospitals. While patient falls are rare events, they often cause injuries and even death, as well as additional costs.

Between 700,000 and 1 million patients fall in hospitals each year, according to the Agency for Healthcare Research and Quality. While the majority of patients who fall are not seriously injured, the toll of fall-related injuries is hefty. The Joint Commission reports that the average increase in a hospital's operational costs for a serious fall-related injury is more than $13,000, and the patient's length of stay increases by an average of 6.27 days.

The challenge of fall prevention is increasing as the inpatient population ages. Both the overall risk of falling and the likelihood of being injured from a fall increase as people age. Falls expert Pat Quigley, at the James A. Haley Veterans' Hospital in Tampa, Fla., points to Centers for Disease Control and Prevention data that show 22 percent of patients are now 74 years or older; people in that age range are at a high risk for repeat falls, fall-related injury and complications after a fall. Indeed, research shows that older patients do not even have to sustain an actual head strike for microvessels around the brain to tear, resulting in serious problems, she says. "Even if you think there is no injury or a minor injury, that patient can still have grave consequences," Quigley says.

Since 2008, patient falls with injury have been included in the Centers for Medicare & Medicaid Services' list of hospital-acquired conditions for which providers will not be reimbursed. The financial implications for hospitals increase in the federal fiscal year that begins Oct. 1, 2014, when hospitals with high rates of hospital-acquired conditions receive a 1 percent cut in Medicare payments for all discharges.

Four categories of falls

Falls expert Pat Quigley, from the James A. Haley Veterans' Hospital in Tampa, Fla., encourages hospital executives to categorize patient falls into four types. The first two types of falls are generally preventable; the second two are not.

- **ACCIDENTAL**: These falls occur when low-risk patients trip over an IV pole, fall out of bed when they reach to get something or encounter another environmental hazard.

- **ANTICIPATED PHYSIOLOGICAL**: The most common type of patient falls, these occur in patients who have risk factors that can be identified in advance, including abnormal gait, high-risk medication, urinary frequency or dementia.

- **UNANTICIPATED PHYSIOLOGICAL**: These falls occur in patients who have a low risk of falls in general but suffer an event — a seizure, stroke or fainting episode — that results in a fall that could not have been predicted.

- **BEHAVIORAL OR INTENTIONAL FALLS**: These occur when a patient acts out.
How to reduce injuries from fall

Although there is no evidence-based bundle of practices to prevent injury-inducing falls, the Institute for Healthcare Improvement has identified six promising changes to reduce them.

1. Screen risk for falling on admission.
2. Screen fall-related injury risk factors and history upon admission.
3. Assess risk of anticipated physiological falling and risk for serious injury from a fall.
4. Communicate and educate staff and patients about patients' fall and injury risks.
5. Standardize interventions for patients at risk for falling.
6. Customize interventions for patients at highest risk of fall-related injury.

Source: Institute for Healthcare Improvement, 2012

How to count falls

Veterans Administration researchers recently reported that the rate of falls in acute care hospitals ranges from 1.3 to 8.9 per 1,000 patient days. Viewed another way, the national rate is 0.562 falls per 1,000 discharges, according to CMS data reported on Hospital Compare.

While hospitals should track their total fall rate and work to keep reducing it, Quigley says an analysis with more precision is essential to a successful fall prevention program.

She encourages hospital executives to categorize falls into four types: accidental, anticipated physiological, unanticipated physiological, and behavioral or intentional [See Page 27].

The first two types of falls are generally preventable; the second two are not. "You can't prevent all falls. That's the bottom line," Quigley says. "That's the myth that we have to dispel."

By tracking falls in the two categories that can be prevented, hospitals can tailor their interventions appropriately. "If I'm leading a hospital and 80 percent of the falls that are occurring in my hospital are accidental falls, then I have an issue with the safety of my care environment, and I need to do something about that," she says.

Those interventions, however, are different and distinct from those needed to treat known risk factors to reduce anticipated physiological falls. Patients with intrinsic risk factors such as high-risk medications or weak muscles require an individualized plan in which all caregivers address those patient-specific challenges.

"Universal fall precautions and interventions based solely on an [assessment] scale score or level of risk are not effective," Quigley says.

How to stop falls

Unlike hospital-acquired infections, which can be addressed by adopting evidence-based protocols relevant to all hospitals, there is no bundle of prevention practices that has been proven to eliminate all falls. However, multifaceted fall prevention pro-
grams have been shown to reduce the relative risk for falls by as much as 30 percent.

In a review of fall prevention programs, Isomi Miake-Lye and her colleagues at the Veterans Affairs Greater Los Angeles Healthcare System found several themes associated with successful fall prevention programs: leadership support; front-line staff engaged in program design; a multidisciplinary committee to guide the program; pilot-testing interventions; use of information technology to provide data about falls; staff education and training; and convincing staff that falls can be prevented.

"Changing the prevailing nihilistic attitude that falls are 'inevitable' and that 'nothing can be done' is required to get buy-in to the goals of the intervention," the authors wrote.

That "nothing works" attitude is being challenged by several national initiatives targeting patient falls. Earlier this year, ARHQ issued "Preventing Falls in Hospitals: A Toolkit for Improving Quality of Care," which identifies best practices for preventing falls by high-risk patients and accidental falls.

Also new this year: The Institute of Healthcare Improvement updated its "Transforming Care at the Bedside: How-to Guide: Reducing Patient Injuries from Falls," which focuses on anticipated physiological falls.

Meanwhile, thousands of hospitals around the country are focusing renewed energy on fall prevention strategies through their participation in Healthcare Engagement Networks, or HENs. Hospitals participating in a HEN are focused on the national priorities set by the CMS Partnership for Patients campaign.

"Falls are one of those topics that are pertinent to almost every hospital, and one that most hospitals are seeking to work on actively," says Beverly Ranstrom, HEN project manager for the North Dakota Health Care Review Inc., the state's quality improvement organization.

North Dakota is one of 31 states participating in the American Hospital Association’s Health Research & Educational Trust HEN. Representatives from 30 North Dakota hospitals met last year to develop action plans for their patient-safety goals.

Most hospitals that are focusing on fall prevention looked first to see if patients were being assessed for their risk of falling and if the information from those assessments was being used.

"Are the assessments done on admission and then forgotten? Or is the assessment carried on from shift to shift?" Ranstrom says. "A lot of hospitals started out with that, but, as they got into it a little more, they looked at some of the other interventions that were being discussed by HRET and through Listserv, such as intentional rounding or providing interventions based on the risk assessment."

**Processes to the rescue**

When the nurses who work in Essentia Health’s cardiac telemetry unit learned of the unit’s high fall rate in the first quarter of 2012 — seven falls per 1,000 patient days — they came to a quick consensus that a staff shortage was the culprit. They believed falls were most common for confused patients who need sits, which were sometimes unavailable; that most falls occurred on nights and weekends when fewer staff were on duty; and that a higher nurse-to-patient ratio would reduce falls.

However, data presented by the hospital’s performance improvement staff shot that thinking down. It showed that more than 70 percent of falls occurred during the day shift and the majority of patients who fell were charted as "alert and oriented."

"It was a pretty big eye-opener for the staff," Kraft says. "They were ready to listen and make some changes and be accountable."

They launched a multifaceted attack on patient falls that started with transparency. Hourly "rounding with reason" — asking each patient specific questions to identify their needs at the moment — was already in place and nurses were supposed to report what they did on each round on a sheet in the patient’s room. But compliance was not good. "We started to keep track of the staff who were completing these [hourly rounding] sheets and posting them in our break room to show which staff were pulling their share," Kraft says. Very quickly, documented completion of hourly rounds doubled.

Meanwhile, a sign reporting the number of days since the last patient fall was posted in a common area to be seen by patients, families and anyone else on the unit. Although it was controversial among nurses at first, it has become a learning tool. "When we have to turn it back to zero, nurses start asking, 'What happened?' and 'What day did that happen?" Kraft says.

Other steps include:

**Expanding the huddles.** At the beginning of each shift, nurses huddle with unit secretaries, primary care physicians and ancillary staff to go over the fall risk for each patient on the unit.

**Color-coding.** Each patient’s risk of falling is written in color on the dry-erase board in his or her room so it stands out. The board also lists precautions pertinent to that patient, such as a bed alarm, chair alarm or the need for two people to move the patient. "If anybody walked into that room, they would know what that patient needed," Kraft says.

**Teaching back.** Recognizing that some patients did not...
patients suffer a fall in U.S. hospitals each year.

Between 700,000 and 1 million patients suffer a fall in U.S. hospitals each year.

After-fall protocols. After a patient falls, a staff huddle is convened to discuss what happened and identify possible causes. The nurse responsible for the patient also fills out a questionnaire so the unit continually gathers and analyzes data about patient falls. "We actually found that the majority of falls — at least 75 percent — were because a bed alarm or a chair alarm was not turned on," Kraft says. "That is something simple that can be done."

Technology to the rescue
The AHA/HRET HEN uses a collaborative model that encourages all participating hospitals to share their patient-safety learning, which is why a critical access hospital in New Hampshire has become a national poster child for fall prevention success.

Historically, Androscoggin Valley experienced about 15 to 20 patient falls each year, with one or two of those causing serious injury. Attempts to reduce falls had not worked. The turning point came in 2009 when the hospital replaced its old call bell system with newer technology that incorporates wireless staff phones and hallway monitor screens.

"When a call bell goes off, when a chair alarm goes off, when a bed pad alarm goes off, the alert immediately goes to the phones and to the wall screen," VaUee says. "If the staff member responsible for that patient is busy, the message is rejected, which sends it to another staff member until someone responds.

The system also reminds nurses to do hourly rounding and the display screens, which are visible throughout the unit, report on which rooms are overdue for rounds. "If the unit coordinator looks up and sees that a patient in Room 448 needed to be rounded on six minutes ago, she will get up and do the rounding," says Jean Wolf, director of quality and patient safety. "It allows more teamwork and delegation and sharing."

Most importantly, it means rounds get completed more frequently, and that extra contact with patients has eliminated injury-producing falls for more than three years.

Putting it all together
Although fall prevention is complicated, focused efforts do pay off: The HRET HEN reported a 6 percent relative risk reduction in falls for 325 participating hospitals in 2012.

That translated into an estimated $16 million in cost savings from avoided falls during the year.

Senior Director Charisse Coulombe expects the risk reduction and savings to be significantly higher by the end of this year. "We believe we are off to a good start," she said. "And we know the hospitals are really continuing to gear up to try different things to prevent the falls from occurring."

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