Promoting high reliability on the front line

Create a safety culture by recognizing and reporting unsafe conditions, behaviors, and practices.

By Coleen A. Smith, MBA, RN, CPHQ, CPPS

"It may seem a strange principle to enunciate as the very first requirement in a Hospital that it should do the sick no harm." —Florence Nightingale, Notes on Hospitals, *1859*

In 2000, the Institute of Medicine published the report "To Err is Human." Since then, patient safety has emerged as a priority for healthcare organizations. Although some notable advances in patient safety have been made (such as an average 17% reduction across a set of hospital-acquired conditions in the United States between 2010 and 2015), patient harm still occurs in unacceptably high numbers. The estimates of patient harm, including death, range from 98,000 per year to as much as five times that number.

To substantially impact this trend, practitioners, scholars, and accrediting bodies have advocated adapting and adopting the practices of high-reliability organizations (HROs) among frontline healthcare staff. HROs—such as nuclear power plant control rooms, aircraft-carrier flight decks, and commercial aviation—deliver consistently error-free performance despite operating in extremely complex, dynamic, and error-intolerant conditions.

High reliability

High-reliability healthcare is consistently excellent and safe for long

When the Swiss cheese holes line up

James Reason's Swiss cheese model illustrates how bad events happen. Harm can occur when weaknesses (akin to holes in a block of Swiss cheese) line up to allow hazards to reach a patient. These weaknesses, or gaps, happen for two reasons: active failures (unsafe acts) and latent conditions (unsafe conditions).

Active failures are errors or procedural violations. Everyone makes errors. The most common procedural violation in healthcare is known as a routine or corner-cutting violation (workaround). This is frequently seen when policies or procedures aren't well understood or are too difficult to follow. Active failures also occur when staff are feeling time pressure and safety is sacrificed to production.

Latent conditions, on the other hand, may not be related to a specific failure. Humans can't foresee all possible event scenarios, so when processes or systems are designed, they can't account for every possible type of outcome.

As nurses, we're often the last people able to thwart an accident sequence before it affects a patient. We do this by recognizing active failures and latent conditions.

periods across all services and settings. In 2013, The Joint Commission created a high-reliability model for healthcare that consists of 14 components and outlines three major changes healthcare organizations must make to ensure substantial progress toward high reliability (jointcommission.org/assets/1/6/Chassin_and_Loeb_0913_final.pdf):

1. leadership commitment to the ultimate goal of zero patient harm
2. development of a fully functional culture of safety throughout the organization
3. widespread deployment of highly effective process-improvement tools and methods.

Although many components in the model apply to a wide range of healthcare settings, it was specifically created for hospitals, where the most serious problems are found.

Safety culture

A strong safety culture is key to high reliability. It exists when an organization recognizes that most errors are caused by systemic defects in processes, not blameworthy individuals. A safety culture drives the recognition of unsafe conditions, behaviors, and practices, and it supports bringing these problems to managers' attention. Three attributes support these practices: trust, report, and improve. Staff exhibit enough trust in peers and leaders to routinely recognize and report errors and unsafe conditions. Trust is established when leadership eliminates intimidating behaviors that prevent reporting and acts quickly to address issues. Improvements are then communicated to the reporting individual and those who benefit from the improvements.

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Many studies have shown a link between recognizing and preventing errors and a culture of safety. Although root cause analysis (retrospective review of patient-safety incidents with planned actions to prevent recurrence) is vital, of equal or greater importance is a proactive approach to harm prevention.

Some unique features of healthcare make creating and sustaining a safety culture difficult. Healthcare has developed a culture of low expectations—failure is an expectation rather than an exception. Routine operational failures, such as missing equipment and supplies, are common and result in caregivers spending time on workarounds instead of providing care. In addition, healthcare has a history of individual accountability. Staff have traditionally been "blamed and shamed" for errors that result from system deficiencies. This fosters silence when unsafe conditions are recognized. (See *When the Swiss cheese holes line up.*)

High reliability on the front lines

HROs encourage early recognition by creating an environment of collective mindfulness or mindful organizing. As Weick and Sutcliffe describe, one of the five principles of mindful organizing is preoccupation with failure—being alert to small signals that something could go wrong. Nurses and other frontline staff are perfectly positioned to aid in creating an HRO by recognizing and reporting small problems (unsafe conditions) before they become big problems (close calls or no-harm events) or cause harm (adverse events).

What should frontline staff report?

In a culture of low expectations, the issues seen in a typical day aren't recognized as "unsafe conditions" but rather as "everyday annoyances." For example, staff may have to spend additional time and attention obtaining a piece of equipment. This is common in many hospitals, and staff on some units may even hide or hoard equipment. Both the absence of equipment and the workaround to stash it are unsafe. Workarounds enable care delivery, but they reinforce a weak system. Substantial research suggests that frontline workers tend to compensate for failures rather than treat them as learning opportunities. But when frontline staff take issues to leadership, they and the organization can reduce errors and improve outcomes.

Tips for creating a safety culture

These measures can help create a culture of safety in your organization.

Share your story. Frontline staff can learn a great deal from hearing colleagues' experiences. Whether it's sharing everyday safety risks (such as missing equipment) or a recent error recognition, including these issues in change-of-shift reports or shift huddles enhances teamwork and safety. And telling a story is far more powerful than simply relating a sequence of events; describe what went wrong and what went right.

Support standard work and hold colleagues accountable. Customize care based on important patient differences, not staff preference. Normalized deviance occurs when staff become so used to departure from procedure or expectation that it's no longer noticed. Failure to follow recommended hand hygiene practices and use of two patient identifiers are examples of areas where staff may turn a blind eye to a colleague's actions. Hold each other accountable using a code word or phrase (such as CHIPs for Clean Hands = Infection Prevention) that indicates you noticed a lapse. This allows behavior correction that's nonthreatening and respectful.

For more sensitive situations where failure to speak up could result in immediate harm, consider using the CUS tool, one of many team tools in the TeamSTEPPS® framework. Staff use the following phrases to "stop the line": I am Concerned, I am Uncomfortable, this is a Safety issue.

Take a second. A 1-second stop has been shown to reduce errors by 90%. Called STAR for Stop, Think, Act, and Review, this action gives you time to stop and focus on the task or the patient and allows you to plan your actions, complete the task, and then review the results. Use STAR when you're feeling rushed, distracted, or tired. It takes only a moment, especially once it becomes a habit, but it can decrease the chance of an error by tenfold.

Don't interrupt. Your work environment (including workflow, space design, and organizational culture) can contribute to interruptions and distractions that threaten patient safety. Distractions can stem from lack of space to work, high noise levels, and tolerance of interruptions during critical tasks. In commercial aviation, pilots maintain a "sterile cockpit": during specified times, they don't engage in extraneous discussion or activities not related to flying the airplane. For nurses, such activities might include medication administration, I.V. pump programming, patient order review, and blood transfusion. Some organizations have spaces at the nurse's station or in the medication room that clearly limit interruptions and conversation. Staff need to honor these spaces and help communicate to physicians, therapists, and other staff that interruptions aren't tolerated.

Close calls are events or situations that didn't cause harm because they didn't reach the patient. They're valuable because their evaluation identifies points of failure and, because they're more common than adverse events, provide more learning. In addition, close calls provide the opportunity to understand what stopped an error or enabled the staff to recover from it. Examples include a prescription dosing error caught by the pharmacy, recognition of specimen mislabeling before sending it to the lab, and a patient alerting staff before a wrong procedure is performed.

Another way that frontline staff can be particularly helpful is by reporting the extra work spent locating and obtaining supplies, looking for personnel, compensating for poor communication systems, and completing redundant documentation.

To sustain this valuable input from frontline staff, leadership must analyze the information from these reports to design solutions. Communicating the solutions is crucial and can easily be integrated into a unit safety huddle. (See *Tips for creating a safety culture.*)

Goal: Zero harm

Healthcare organizations and frontline staff have many competing priorities, but everyone can support preventing harm. The pursuit of high reliability requires focus on specific areas of performance to move toward the goal of zero harm. Frontline staff have an invaluable role in this pursuit. Recognizing and reporting safety risks and role modeling safe behaviors are all tied to harm reduction. ★

Coleen A. Smith is the director of High Reliability Initiatives at the Joint Commission Center for Transforming Healthcare in Oakbrook Terrace, Illinois.

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Everyone is responsible for a culture of safety

Whether you're a direct-care nurse or a leader, you're responsible for speaking up and taking action to keep patients safe.

By Linda Paradiso, DNP, RN, NPP, NEA-BC

Leaders are essential to developing a safety environment, but all healthcare staff are responsible to practice safely. In a country where medical errors are the third leading cause of death, we can learn to decrease those deaths by improving our systems through voluntary reporting of errors and near misses. Nurses, because of their closeness to patients, can easily identify and report errors and unsafe conditions.

High-reliability organizations want to know what's working and what's broken so that improvements can be made. (For more about high-reliability organizations, see page 30.) Ideally, organizations are accountable for the systems they design, and nurses are accountable for the quality of their choices as they practice within those systems. In this perfect world, discipline is based on the behavioral choice an employee makes, not the injury to a patient. (See *The choices we make.*)

Error identification

Direct-care nurses are well positioned to identify errors. However, when they work in chronically understaffed and stressful conditions, the quality of their choices will suffer. Of course, direct-care nurses (and leaders) need to appreciate the acceptable reasons for violating a patient safety policy or procedure. For example, you wouldn't expect a pediatric nurse to stop for hand hygiene before rescuing a child climbing over the crib rail. High-reliability organizations understand this and develop as many system improvements as possible to keep justifiable risks to a minimum.

Accountability as a root cause

Almost every hospital identifies nonpunitive discipline in their quality-review processes, but many direct-care nurses report punitive discipline and negative responses from supervisors when incidents occur. Healthcare organizations tend to identify individual incompetence as a root cause, or in addition to, a systemic process error. Nursing quality performance committees rarely close incident review cases without monitoring or retraining the nurse involved, even if they identify a contributing system issue.

Nurses may end up as second victims of an error. The Center for Patient Safety defines second victims as "healthcare providers who are involved in an unanticipated adverse patient event, medical error and/or a patient-related injury and become victimized in the sense that the provider is traumatized by the event." This definition can be interpreted to include not just the event

The choices we make

Outcome Engenuity, a workplace accountability and reliability training organization, defines three types of behaviors: human error, at-risk, and reckless. Nurses who work directly at the bedside must recognize the behavioral choices they make every day and how those choices affect accountability of practice and liability.

Human error
Human error is another way of describing a slip or mistake. These behaviors (for example, a medication error) usually are made unwittingly and often identified by someone other than the person who made the mistake.

At-risk behaviors
At-risk behaviors are choices made consciously but the risk is either not recognized or is rationalized. One example of an at-risk choice is giving a discharged patient's unused meal tray to a newly admitted patient. This common practice has a low incidence of bad outcome; a nurse justifies that the newly admitted patient is hungry and that getting a tray from the kitchen takes too long. This type of choice—also called a work-around—is common and often becomes normal practice.

Reckless behavior
A reckless behavior is a choice taken with the understanding that the outcome could be substantially detrimental. For example, during medication administration a nurse overrides a bar-code system when alerted to an identification mismatch. The likelihood of a harmful outcome is high.

itself, but also colleagues' and the organization's response to it. Faulty systems should be redesigned; individuals working within the faulty system shouldn't be punished unless, of course, they engage in reckless behavior.

Patient safety teamwork

Direct-care nurses must actively participate in the peer-review and performance-improvement process, and nurse leaders must provide an environment where nurses feel safe to speak up. When leaders create an atmosphere of teaching rather than preaching, they destigmatize incident management and normalize patient safety events. The result is that nurses share the knowledge and rationale for a behavioral choice that supports a nonpunitive response by leaders and focuses improvement on the system instead of the individual.

Solutions developed by bedside nurses can be very meaningful. Through active direct-care nurse involvement and nurse leader system redesign, the organization can drive performance improvement from the bedside upward. Some facilities understand and bind employees and leaders through the creation of shared patient safety outcomes. Erin Bashaw noted that "Nurses in Magnet® facilities are more likely to report errors and participate in error-related problem solving because they feel empowered by the organizational culture and have supportive relationships with senior administrators."

A nurse leader who personally responds to an event and participates in a debriefing has a better understanding of the system in which the event occurred. Supporting the direct-care nurse by helping to identify and understand the behavioral choice can assist in identifying the opportunity for system redesign. Debriefing also should include stress management for the nurse involved.

Error identification is critical to process improvement but is often difficult. Leaders should reward nurses for this effort by offering them support. An algorithm can help leaders maintain objectivity so they can focus on the behavioral choices made with the knowledge the nurse had at the time. And although it takes courage for nurses to speak up, it also takes courage for nurse leaders to refrain from discipline when they're pressured to hold an individual accountable.

Make it safe to share

The quality of nurse leader response is critical to a safety culture where nurses feel safe to speak up. Nurses who trust their supervisors to listen, support, and console when they make human errors or risky choices will be more likely to escalate patient safety issues and speak up when participating in process improvement.

Human error is certain. Every nurse will find him- or herself in a situation that goes (or could have gone) wrong. Risky behaviors are frequently the result of faulty systems, so how we analyze the system in which the nurse is working will make the most impact on outcomes. Collaborative process improvement is fundamental to a patient safety culture. We all have to make it safe to share. ★

Linda Paradiso is an assistant professor at the New York City College of Technology – CUNY in Brooklyn.

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