PROBLEM

Health care practitioners are repeatedly challenged by unexpected problems they encounter due to both large and small work-system failures that hinder patient care. A medication needed for a patient is missing on a patient care unit; an order is never received in the pharmacy; access to the automated dispensing cabinet is crowded and time-consuming; the new bar-code scanner has a high rate of scanning failures; a critical drug is in short supply—the list of failures is varied and quite long, often making it difficult or impossible to execute tasks as designed.¹

These system failures stem from breakdowns in the environment, staffing, technology, information management, and supply of materials within the organization.¹² A study by Tucker found that nurses encounter almost one system failure every hour (6.5 per eight-hour shift), effectively removing one in every 12 nurses from patient-care duties just to deal with the failures each day.¹² Edmonds- son found that nurses spent 15% of their time (1.2 hours per eight-hour shift) coping with a tide of system failures of varying magnitudes.¹ As a result, health care practitioners tend to be very skilled and proficient at working around these failures to get the job done. They bend the rules just a bit; they cut a corner when needed; they fail to engage the patient, their colleagues, or available technology when helpful. They fail to carry out the tasks as designed because some aspects of the tasks fail to meet their patients’ needs. In fact, these workarounds are often considered to be signs of resourcefulness, resilience, and flexibility.¹⁻³⁻⁵

The ability to address unexpected problems is highly valued in health care, especially when a patient’s life may be at risk. We expect practitioners to use critical thinking skills to navigate around systems or processes when they don’t work well in the moment. We praise and reward practitioners so skilled in using their ingenuity to work around a deficient or faulty system and still carry out tasks. We emphasize individual vigilance and encourage health care professionals to take personal responsibility to solve problems as they arise—it’s often considered a weakness to seek help.¹⁻³

The problem with this thinking is that workarounds merely transfer the problem to another time, person, or place. Short-term workarounds patch problems temporarily so work can be accomplished. If the problem is not fundamentally solved, it will resurface. Long-term remedies are necessary to change the underlying system and process, thus preventing recurrence.

Workarounds and nonstandard processes often take the form of at-risk behaviors by practitioners. In such behaviors, practitioners knowingly break rules but have little or no perception of the risks they are taking, or they mistakenly believe the risks are insignificant or justified. Practitioners respond to dysfunctional processes with first-order problem solving, addressing only the immediate symptoms they encounter. They feel forced to improvise with what they have at hand to create a solution to a problem, often without seeking help from other busy practitioners.² Although at-risk behaviors are the greatest source of potential patient harm in health care, they may also benefit the patient whose care would have otherwise been interrupted, delayed, or omitted.¹⁻⁴ Thus, health care practitioners are often satisfied with, even proud of, their abilities to deliver patient care despite the obstacles, even when it means taking shortcuts, breaching procedures, or otherwise working around the system as designed.

In addition to the risks introduced from engaging in at-risk behaviors, there is another gaping flaw in first-order problem solving (addressing the immediate problem)—it works around the problem and does not truly solve it. While health care practitioners are often great at solving immediate problems, they rarely attempt to report them or alter their underlying causes (i.e., second-order problem solving).⁴ Or, they have reported the problem to no avail—it continues unchanged, so they continue to work around the problem. They are not necessarily trying to hide this information—they are simply pressed for time. They are often forced to patch problems quickly so they can carry out their immediate responsibilities.¹ We tend to encourage this aspect of independence, but it comes at the expense of system learning.

In 2015, Hewitt et al. described this experience as “fixing and forgetting,” meaning that practitioners faced with a problem often fix it in the moment and forget about it, rather than fixing it and then reporting it.⁵ The research team found that “fixing and forgetting” was the predominant choice made by physicians, pharmacists, nurses, and other health care practitioners when faced with problems they could resolve temporarily or work around, including recurring problems that threatened safety.

Likewise, a study involving nurses by Tucker et al. found that 92% responded to obstacles in their work with first-order problem solving, failing to report the problem for system-wide learning and resolution.⁴ The nurses in the study demonstrated a dependence on, and an addic-
MEDICATION ERRORS

Increase staff perception of risk. Coach health care practitioners to see the risk associated with behaviors that work around the problems they encounter, and that these workarounds must be reported for analysis, learning, and system-wide improvement.

Lessen autonomy. It’s an irony in health care that current management practices typically strive to make health care practitioners more autonomous in terms of problem solving so as not to overburden managers with smaller problems. However, in order to uncover the root causes and prevent recurrence of daily problems that can eventually lead to patient harm, health care practitioners need more management support, not less. Create a work environment where staff members feel empowered and safe to ask for help and to report all barriers to care. This is not to say that health care practitioners are not capable of creating temporary solutions to their daily problems, but rather that a failure to report these problems leads to rampant temporary solutions to problems that, if resolved, can help reduce the incentives to practice at-risk behaviors that can cause patient harm. On the other hand, the “adaptive conformer,” who adjusts and improvises without bothering others, inhibits organizational learning. Additional tips to improve reporting can be found in the January 2010 issue of P&T.

Make communicating risk easier. Encouraging people to report and creating a psychologically safe environment for reporting is not sufficient. There must be convenient opportunities in the course of the day for workers to give feedback. Managers and leaders should establish frequent opportunities for communicating about problems with front-line practitioners. One way to do this is for managers and other leaders to be physically present in work areas and responsive to practitioner messages. Leaders can also hold safety huddles or debriefings, where staff often feel safe to verbally mention the daily barriers to care, particularly if they sense the manager’s and/or leader’s demonstrated commitment to resolving the issues. Moreover, discussions about problems encountered are often less threatening than discussions of errors.

Examine problems sooner rather than later. Reporting of system problems by itself is also not enough to ensure improvement. Managers and leaders must create capacity for second-order problem solving by examining the specific problem as close as possible to where and when it occurred. Important information about underlying causes of problems can be lost over time; there-

SAFE PRACTICE RECOMMENDATIONS

Front-line health care practitioners are well positioned to help organizations learn, as they are only too aware of the problems they encounter daily that disrupt their work. Reporting of these problems is critical to second-order problem solving and organizational learning for lasting improvements. To encourage organizational learning, consider the following.

Promote resiliency and reporting. Health care practitioners should be encouraged to both handle the unexpected problem and then report it so steps can be taken to address its underlying causes. The challenge of workarounds is to capture their positive aspects—front-line resiliency and creativity—while simultaneously avoiding pitfalls from relying too heavily on these short-term fixes for long-standing problems. Thus, reporting of all workarounds and other temporary fixes to problems is crucial if we are to deliver care as efficiently and safely as possible. Furthermore, it is possible that some workarounds are superior to existing procedures, which may require changes.

Encourage the “noisy complainer.” Health care leaders should create an environment of psychological safety that fosters open reporting, active questioning, and frequent sharing of insights and concerns. As noted by Tucker and Edmondson, the ideal employee, at least from an improvement standpoint, is a “noisy complainer” who remedies immediate problems but also lets managers know when the system has failed. No problem is too small to report. Organizations must recognize that reporting the problem is a valid step in the direction of improvement; sometimes merely raising the issue is the best the health care practitioner can do. However, these employees can provide an often unexplored and rich source of information about problems that, if resolved, can help reduce the incentives to practice at-risk behaviors that can cause patient harm. On the other hand, the “adaptive conformer,” who adjusts and improvises without bothering others, inhibits organizational learning. Additional tips to improve reporting can be found in the January 2010 issue of P&T.
fore, an examination shortly after the problem occurs will likely be more productive than waiting to discuss the issue weeks or months later.

**Remedy problems.** Once a problem has been identified and the underlying causes examined, proper attention must be paid to reducing its recurrence. An action plan should be developed by working with health care practitioners who have intimate knowledge of the system's weak points, motivation to improve its reliability, and feasible solution ideas. Staff and leadership participation in this process and problem resolution should be an explicit part of their jobs, and enough time must be allocated for improvement efforts. The action plan should be communicated to staff and then implemented expeditiously—problems that are reported but continue for weeks or months will be viewed by staff as unimportant. Monitoring to ensure the action plan is working is also crucial. Publicizing successful efforts to solve daily system problems is vital to demonstrate that reported problems are taken seriously and acted upon. This in turn will provide ongoing motivation to continue reporting problems and will encourage others to recognize the benefits of reporting.

**REFERENCES**