A Jury of Our PEERS

As human error climbs to the top of the list of leading health care concerns, it is crucial that we who work in the field learn as much as possible about the nature, extent, and cause of these errors. Although U.S. health care has developed multiple strategies to pinpoint and prevent adverse events, many other incidents—the "near misses"—slip by almost unnoticed.

To learn from errors, the leaders of Trinity Health decided that they must become more transparent in sharing information about the problems. Often the apparent cause of an error is not the true cause. Most errors are due to multiple factors in a complex medical system, and most can't and shouldn't be blamed on a single person.

In one Trinity Health hospital, for example, nurses became increasingly frustrated with physicians who were allegedly not responding to pages. Concerned with what they perceived as the physicians' insensitivity, several nurses vented their concerns via Trinity Health's Potential Error/Event Reporting System—or PEERS for short. Their reports, which were filed anonymously and thus without fear of reprisal, initiated an investigation into the reasons why physicians were failing to answer their pages.

Data analysis showed that all the "guilty" physicians were in an area of the hospital that turned out to be a "dead zone" for their pagers. The hospital installed an antenna that boosted signal strength, which solved the problem immediately. But the nurses' reports called attention to the dilemma. If they hadn't made their reports, the dead zone would have continued to slow patient care delivery and erode physician-nurse relationships.

This is just one example of the way patient risk can be mitigated by tackling the source of the problem—not the perceived "culprit." Error reporting is a touchy subject—an activity often viewed as akin to "tattling" or airing dirty laundry in public. PEERS—an easy-to-use,
The PEERS program is based on NASA’s error-reporting system. An online, and anonymous error-reporting system—helps eliminate those concerns and enables Trinity Health’s hospitals to get at the root cause of medical mistakes and address risk factors that might otherwise lead to future errors.

Some of the most valuable features of PEERS are:

- The ability to capture more information than earlier databases
- The ability to spot trends
- The ability to share information among facilities and departments, thereby helping to prevent future mistakes

The PEERS program, developed in 2000, is based on the National Aeronautics and Space Administration’s successful aviation-error reporting system. Because PEERS enables staff members to catch and correct errors made in health care delivery, it has helped Trinity Health create a culture of learning.

**Anonymity Opens Window on Errors**

Employee participation in the detection and reporting of errors, injuries, and near misses will be a vital component of any health system’s ability to reduce the likelihood of errors. As has been noted, “all reporting systems, whether mandatory or voluntary, are perceived to suffer from underreporting.”

The reasons for this vast underreporting include fear of being shunned by co-workers, belief that nothing will change, and fear of reprisal (including job termination). But silence is even more damaging. The lack of information about the occurrence of errors and near misses makes it considerably more difficult to change the behaviors and processes that are likely to contribute to such events.

Recognizing the importance of free and honest communication across its network of 44,000 employees, Trinity Health created PEERS as a tool to gather data from the system’s own physicians, nurses, and staff members. PEERS is anonymous, voluntary, nonpunitive, and available to all through the system’s intranet. PEERS makes it possible for any person to alert management to a problem—a medication error, patient fall, inappropriate behavior, procedure, or other problem—that puts patients or caregivers at risk.

Since the implementation of PEERS, Trinity Health’s leaders have found that physicians, nurses, and other staff members are far more willing than formerly to share their experiences for the benefit of the greater good. For instance, a batch of defective peripherally inserted central catheter lines was identified as a result of about a half-dozen PEERS reports. When the information was shared with other Trinity Health hospitals, staff members at those facilities discovered and removed more defective catheters. In another case, PEERS reports revealed a potential risk in dosage errors for patients with multiple IV lines. The hospital created a “grab and trace” policy (in which, before a medication is added to an IV line, the caregiver “grabs” and “traces” the tube back to the source bag) to ensure that the appropriate line is used when more than one IV is being used.

PEERS information has been the key to helping target hospital areas in which process improvements can have the greatest impact on

**SUMMARY**

Recognizing the importance of free and honest communication across its network of 44,000 employees, Trinity Health, Novi, MI, created what it calls the “Potential Error/Event Reporting System” (PEERS) as a tool to gather data from the system’s own physicians, nurses, and staff members. PEERS is anonymous, voluntary, nonpunitive, and available to all through the system’s intranet. PEERS makes it possible for any person to alert management to a problem—a medication error, patient fall, inappropriate behavior, procedure, or other problem—that puts patients or caregivers at risk.

Since the implementation of PEERS, Trinity Health’s leaders have found that physicians, nurses, and other staff members are far more willing than formerly to share their experiences for the benefit of the greater good. Ninety percent of Trinity Health facilities, including home-health sites, have adopted PEERS as part of their regular error-reporting data set.
patient safety. And because Trinity Health has promoted an attitude of learning through an honest assessment of current practices—an assessment that does not generate a fear of reprisal—staff members have become increasingly likely to use PEERS data to suggest process improvements. The following are some examples:

- A local radiology department developed a new procedure to prevent patients from falling during transports. The department developed a method to improve communication between transporters and the patient units, and trained staff members in its use.

- Trinity Health’s fall-prevention program has revised the system’s risk assessment process following an analysis of patient falls. Patient care plans have been developed for patients who have previously been treated in the system’s facilities and have histories of falls.

- Trinity Health has developed a Professional Practice Committee to review all reports of inappropriate provider behavior and follow up with the providers involved. The committee analyzes these reports, looking for patterns and trends and the implementation of appropriate interventions.

- The system has made improvements in the use of epidural anesthesia, inpatient-controlled analgesia policies, and ordering/monitoring practices.

**IMPLEMENTATION TEAM**

PEERS was developed and tested by Trinity Health nurses, physicians, risk managers, pharmacists, quality-improvement managers, information systems personnel, attorneys, and administrative professionals.

PEERS enables staff members to report actual or potential errors via a confidential online form. The software catalogues the data for more detailed analysis, tracking both close calls and actual events. Data is analyzed both locally and systemwide.

At each site, a risk-management/performance-improvement group studies monthly reports concerning data from both the facility and the system as a whole to identify areas of concern. When patterns or trends are observed, the group initiates further in-depth analysis in order to determine the trend’s cause, the potential risk involved, and a solution. The group takes both close calls and actual adverse events into consideration when it proposes changes to reduce the error recurrence. Using the data, the group identifies, tests, and recommends changes to the site’s clinical leaders. Those leaders then determine an implementation strategy.

Trinity Health organizations have improved patient safety in a variety of ways. Within 18 months, the system’s Clinical Operations Improvement department recorded 455 systemwide process changes (with another 142 processes undergoing revision), 78 policy changes, 32 facility changes, 18 computer software upgrades, and 47 root-cause analyses.*

Since 2001, 90 percent of Trinity Health facilities, including home-health sites, have adopted PEERS as part of their regular error-reporting data set. The remainder use previously installed error-reporting systems that are being interfaced with the PEERS database. Leaders of the system’s hospitals and home care organizations have found that, once PEERS is activated, error reporting becomes from two to four times more frequent than before, and the management of information therefore becomes more effective.

To be successful, an error-reporting system must be easy to operate. Trinity Health facilities are issued a PEERS starter kit, checklist, and training resources to ease the implementation process. The system’s Clinical Operations Improvement and Information Systems departments (both located in the corporate offices) provide coaching and technical support.

The system makes training available so that personnel from local facilities can develop their data-analysis skills. The systemwide risk-management/performance-improvement group meets monthly via phone conference. The group, which spent the past four years enhancing PEERS’s technical aspects, is now using the information PEERS provides to improve systems and process-

---

*The change in patient transport described above is an example of “process change” at Trinity Health. The “grab and trace” mentioned was a “policy change.” A “facility change” is one made at a particular facility. The analysis of patient falls sought “root causes.”
QUALITY & SAFETY

es of care, thereby making Trinity Health a safer place for staff, physicians, patients, and patients’ families.

KEYS TO SUCCESS
Trinity Health learned through survey feedback that employees overwhelmingly prefer to use the system’s intranet as their method of reporting adverse events, as opposed to filing paper reports or calling an 800 number. The system’s leaders realize that a successful voluntary reporting system requires five components:

- A visibly committed senior and middle-management staff
- The right equipment in easy-to-access areas
- A well-managed, clear, and consistent plan for education and communication about PEERS and about the process change it facilitates
- The ability and willingness to use the data to improve systems, processes, safety, and quality

As PEERS continues to evolve—thereby improving the quality of its data and its functionality for users, self-reporters, and analysts—Trinity Health is also determining methods to be used in disseminating information in a way that will expand the program to support providers outside the system.

A CULTURE OF TRUST
Health care professionals are passionate about their work, and they want to do everything in their power to make their workplace safe for colleagues, patients, and families. By fostering free-flowing communication in a blame-free and non-punitive environment, the system gives employees and physicians the confidence needed to self-report errors and near misses before they become risks.

PEERS has become a “culture change” tool that supports an atmosphere of learning. It’s interesting to note that, even though PEERS enables Trinity Health employees to make their reports anonymously, nearly two-thirds choose to identify themselves when doing so, showing that they trust the program.

NOTE