VIEWPOINT

Patient Safety at the Crossroads

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With its estimate that between 44 000 and 98 000 patients die in hospitals each year as the result of medical errors, the National Academy of Medicine's (NAM's; formerly the Institute of Medicine's) report *To Err Is Human: Building a Safer Health System* propelled a wave of activity. Health care professionals, professional societies, large employer groups, patient advocacy organizations, and researchers voiced the need to reduce the estimated high toll of medical errors and adverse events.

Fifteen years later, those good intentions have yielded varying levels of improvement. A few individual patient safety projects—such as tool kits to prevent central line–associated bloodstream infections[1] and protocols to prevent venous thromboembolism—have been largely successful. Yet it remains unclear if other efforts, such as more widespread use of surgical checklists, have been effective. Moreover, it is now clear that medical errors and injuries have much broader effects than the NAM report addressed, causing morbidity as well as mortality and leading to harms in all health settings, not just hospitals.

As the attention of health leaders has shifted to the broader arena of quality and value-based care, patient safety is at a crossroads. The National Patient Safety Foundation (NPSF) recently brought together leading experts and stakeholders representing the medical community, patient advocacy, the research community, and academia to assess progress since the release of the NAM report and to chart a course for future patient safety work, in a report entitled *Free From Harm: Accelerating Patient Safety Improvement 15 Years After "To Err Is Human."*

The report makes 8 recommendations necessary to achieve total systems safety (**Box**). This Viewpoint focuses on the first recommendation: "Ensure that leaders establish and maintain a safety culture."

Total Systems Safety

The Agency for Healthcare Research and Quality's definition of patient safety reads, in part, "freedom from accidental or preventable injuries produced by medical care."[2] The report uses the definition of harm by Runciman et al as "an impairment of structure or function of the body and/or any deleterious effect arising there from including disease, injury, suffering, disability and death, and may be physical, social, or psychological."[3] The key point is that patient safety has shifted from focusing on errors to focusing on harm, and a broad definition of harm. This is important because many of the harms that were thought to be nonpreventable years ago (such as catheter-associated infections) are now deemed highly preventable, and some organizations are now assessing emotional and psychological harm with the same methods as they looked at physical harm in the past.

Members of the NPSF expert panel largely agreed that health care is safer now than it was 15 years ago because health professionals today have a greater appreciation for high reliability theory; standard safety practices; and efforts to improve culture, and there is also evidence that certain harms, such as health care–acquired infections, have been reduced.[4] Although the severity of such complications varies, recent analysis suggests 13% of harms occurring in hospitals are substantial, requiring prolonged hospital stays or life-sustaining treatment or involving permanent harm or death.[5] Moreover, harm during hospitalization likely only reflects a small proportion of harm because substantially more care is provided in the ambulatory environment.

The NPSF report calls for total systems safety to reduce harm. Such an approach must consider systems design, the inevitability of human failures, human factors engineering to mitigate those failures, a culture of safety, and robust error reporting and analysis. Embracing safety as a core value, as other industries have, can help induce effective cooperation and higher levels of safety.

Safety Culture: Fundamental to Total System Safety

Ensuring that leaders establish and sustain a safety culture is fundamental to total systems safety. A safety culture in health care is one in which human error is not punished, but individuals are held accountable for their actions (or failure to act); in which the expectation is that errors and near misses will be reported; and in which such reports will be reviewed and acted upon to prevent recurrence of harmful situations.

The report points out that knowledge often moves in 3 phases: first a superficial simplicity, followed by confusing complexity (as underlying, previously unidentified problems surface), and finally, profound simplicity.[6] The superficial simplicity in patient safety was the notion that health care could simply emulate tactics used in aviation and other high-risk industries, such as incident reporting, culture change, and attention to communication and teamwork. However, emulating these tactics is helpful but not sufficient for the complexity of the health care environment.

The current state is more characterized by confusing complexity—safety initiatives focused on a broad array of specific safety targets with interventions for each one: process standardization, checklists for surgery, bundles for central lines, electronic prescribing and order entry, and medication barcoding. In this phase, teamwork, communication, and culture have been considered the means to an end—successful implementation of a particular safety initiative. To truly advance to new levels of safety in health care, it is important to embrace the profound simplicity of the insight that im-

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Box. Eight Recommendations for Total Systems Safety in Health Care

1. Ensure that leaders establish and sustain a safety culture
2. Create centralized and coordinated oversight of patient safety
3. Create a common set of safety metrics that reflect meaningful outcomes
4. Increase funding for research in patient safety and implementation science
5. Address safety across the entire care continuum
6. Support the health care workforce
7. Partner with patients and families for the safest care
8. Ensure that technology is safe and optimized to improve patient safety

proved culture is not just a means to an end but an essential part of a system that can achieve safer care.

A safety culture encourages honesty, fosters learning, and balances individual and organizational accountability, and leadership is essential to creating and sustaining such a culture. Leaders of health care organizations—as well as board members—have extraordinary power to influence the behaviors, beliefs, and practices within organizations. Yet most have not yet found a road map to follow that leads to safety.

The NPSF report challenges key stakeholders to be involved in promoting safety culture throughout health care and suggests a number of tactics with which to begin.[7]

Board Members

Governing boards of health care organizations can guide leaders and management by holding them accountable for patient safety and by setting goals and refocusing priorities to keep patient safety at the top of the list. Board members can do this, for example, by asking to hear safety reports and stories of patient harm—as well as resolution—and they should routinely review both safety metrics and narrative reports, including measures of safety culture and workforce safety. Board membership should include patient and family members to represent the people served.

Leaders of Health Care Organizations

Effective leaders (including governing bodies as well as the executive leadership team) should establish safety culture as a priority. Doing so requires leadership commitment to a culture that focuses on system approaches to safety rather than personal blame, implements staff training in patient safety and quality principles, invests in training around disclosure and apology after an error, and provides professional and psychological support for staff when errors do occur. A safety culture encourages greater transparency around errors and harm, which in turn allows for open discussions to better understand what happened—and how to prevent recurrence of the event—as well as disclosure to patients. Leaders also should develop structured procedures for addressing disruptive and disrespectful behavior and burnout, which can undermine a culture of safety.

Development of the Culture Change Playbook

Leaders need practical, tactical strategies to bring about culture change, such as organizational compacts (formal agreements between an organization and staff members about roles and responsibilities), safety huddles (brief, multidisciplinary meetings to assess goals and challenges and to focus priorities), patient stories in board meetings, and methods for addressing disruptive behavior (such as strategies to identify, mitigate, and ultimately hold individuals accountable). Safety organizations, such as leadership organizations, and safety culture experts and researchers need to collaborate on identifying existing best practices and mapping the action steps to assist with implementation.

Education

Every hospital board member, health care leader, manager, and regulator should have foundational education in patient safety science to truly embed the values of a safety culture within organizations. Existing board education programs are variably implemented. There is a need for research and best practices from exemplary organizations on how to effectively educate board members about safety science, just culture, human factors, and systems thinking and design so they can more effectively oversee these efforts.

To accelerate progress in patient safety, health care leaders, researchers, and legislators need to see patient safety as what it really is: a serious public health concern that costs lives and causes harm to untold numbers of people every year in every kind of health setting, and they need to see it as a local problem, not "somebody else's." Talking about culture is not enough. Leaders need to identify strategies to effectively create a safety culture, and apply them broadly and systematically throughout the health care system.

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