



# High Reliability: The Path to Zero Harm

*It begins with a relentless commitment to improvement.*

The term *high reliability* refers to the ability of complex, high-risk industries—such as air travel, nuclear power and amusement parks—to go for long periods of time without accidents. Healthcare also is complex and high risk, yet it is not highly reliable. Far too many patients experience preventable harm; ineffective, inefficient, inaccessible care; or care that is not aligned with their goals and values. There has never been a greater urgency to bring high-reliability principles to the healthcare industry, as the complexity of care and care management continues to increase with the introduction of even more advanced pharmaceuticals and devices.

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## What Is High Reliability?

The high-reliability journey is a commitment to zero harm. High-reliability organizations create an environment of collective mindfulness, in which all workers look for and

report small problems or unsafe conditions at a point in time when they are easy to fix and before they pose a substantial risk. High-reliability organizations prize identification of errors and close calls for the lessons that can be extracted from a careful analysis of what occurred before these events. These lessons often point to specific weaknesses in safety protocols or procedures that can be remedied to reduce the risk of future failures. High-reliability organizations focus on prevention, not reaction; the further upstream the problem is, the more important it is to fix.

The five characteristics of a high-reliability organization, as described by Karl E. Weick, PhD, and Kathleen M. Sutcliffe, PhD, in their book *Managing the Unexpected: Resilient Performance in an Age of Uncertainty*, Second Edition, are the following:

- **Preoccupation with failure**—Never being satisfied there has not been an accident for many months or many years, and always being alert to the smallest signal that a new threat to safety may be developing
- **Reluctance to simplify their observations**—Being able to identify the often-subtle

differences among threats that may make the difference between early and late recognition

- **Sensitivity to operations**—Recognizing that the earliest indicators of threats to organizational performance typically appear in small changes in the organization's operations
- **Commitment to resilience**—Recognizing that despite all their best efforts and past safety successes, errors will occur and safety will be threatened
- **Deference to expertise**—When confronted by a new threat, having mechanisms in place to identify the individuals with the greatest expertise relevant to managing the new situation and to place decision-making authority in the hands of that person or group

## Starting the Journey

When it comes to patient safety, the starting point for many healthcare organizations is far from where we all hope it would be. Problems such as wrong-site surgeries and healthcare-associated infections continue, despite widespread attention to improvement in the years following the groundbreaking Institute of

Medicine reports *To Err Is Human* and *Crossing the Quality Chasm*. One recent study updated the estimated number of deaths from error-related injuries from the IOM's 1999 estimate of 98,000 per year to between 210,000 and 400,000 per year, with serious-harm events ranging from 10 to 20 times the number of deaths.

Still, what's important is not where an organization begins its patient-safety journey, but instead the degree to which it exhibits a relentless commitment to improvement. In health-care, the initial step on the patient-safety journey requires a leadership commitment to zero harm. It also requires leaders to demonstrate transparency with the board, managers, staff, patients and the public,

sharing both positive and negative news. This approach builds trust and credibility, which are key ingredients in a culture that embraces safety. Alignment of the leadership team comes through open dialogue and building consensus regarding the organization's current state across multiple domains. High-performing organizations continue to self-assess and reassess various aspects of their leadership, culture and approach to improvement.

A board-level commitment to a goal of zero preventable harm leads to changes in leadership behaviors, greater transparency and investment strategies for the organization. The goal of zero harm has a clear focus and resonates with the minds and hearts of healthcare

workers, and the expectation of patients and families. With the guiding principle of "First, do no harm," leaders—the board and CEO, senior management, nursing and physician leaders—will demonstrate respect for the work front-line workers are engaged in every day. Leaders' attitudes, beliefs and behaviors are central to making changes in organizational culture that support a commitment to zero preventable harm.

A culture of safety is the bedrock on which any high-reliability organization stands, but it's often where many find challenges. A culture of safety's three central imperatives—trust, reporting and improvement—are easy enough to understand, but they're more difficult to effectively put into practice. For example, we've all witnessed or heard of healthcare organizations that punish staff for blameless acts while failing to implement equitable disciplinary procedures across disciplines and departments. And we've seen the failure of workers to report unsafe conditions because they are afraid the errors will end up in their personnel files. Then there are the cases in which physicians misbehave and/or institute their own approach to patient care without accountability to the care team or system that supports the diagnosis and treatment plan.

In high-reliability organizations, front-line workers routinely recognize and report errors and unsafe conditions; they trust that their leaders want to know what is not working. Leaders then implement visible, meaningful improvements to further strengthen trust and reporting while creating a positive, reinforcing cycle. Most of all, everyone is held

accountable for consistent adherence to safe practices, from the boardroom to the hospital room. In healthcare today, intimidating behaviors continue to pervade the culture, which inhibits a trusting environment. To establish trust, desirable behaviors must be clearly defined and modeled, with managers and peers holding each other accountable for zero tolerance of unacceptable behaviors.

Are errors and harm still possible in this ideal culture of safety? Of course. Yet, when they occur, a high-reliability organization focuses on containing the errors and preventing harm when possible and ensures lessons learned are spread to all. The emphasis is not on who was involved but on asking questions to determine what happened: What were the systems that did not function properly in this situation? How can this be prevented?

High-reliability organizations compile the results of their investigations across many harm events and close calls to identify which of their safety systems or defenses are most in need of improvement. This analysis can lead to the development of proactive assessments of key safety systems (such as those that relate to medication administration, and infection prevention and control) so weaknesses can be identified and remedied before they pose any significant risk to patients.

With behaviors and attitudes aligned, a healthcare organization has a foundation that allows for the implementation of an approach to performance improvement so that it becomes the way the organization does its work.

The Joint Commission coined the term *robust process improvement* to encapsulate an approach that includes Lean Six Sigma and change management philosophies, methodologies and tools. This is critical in healthcare because it helps move the organization from low to high reliability, seeking to understand the voice of the customer, identifying factors critical to quality, eliminating waste and using data to learn and drive the development and implementation of solutions targeted to local environments. This systematic, data-driven set of strategies, methods and training programs has been used effectively to improve business processes in healthcare organizations as well as patient-centered processes and outcomes.

The road map to high reliability and zero harm is formed when there is a commitment on the part of leadership, a culture of safety and robust process improvement. Although every organization is unique and every road map will look different, the commitment to learning and creating an infrastructure for performance improvement provides a solid foundation on which to build a high-reliability organization. ▲



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