

Rural Innovation Profile

Rural Hospital High Reliability

What: A rural Alaska hospital pursuing high reliability patient care, with the goal to eliminate all serious harm to patients and employees by 2020.

Why: Patient safety should be a fundamental expectation of the health care system, yet more than a quarter of a million people die each year from medical errors.

Who: Central Peninsula Hospital, Soldotna, Alaska.

How: Develop and integrate characteristics of a high reliability organization to improve patient safety.

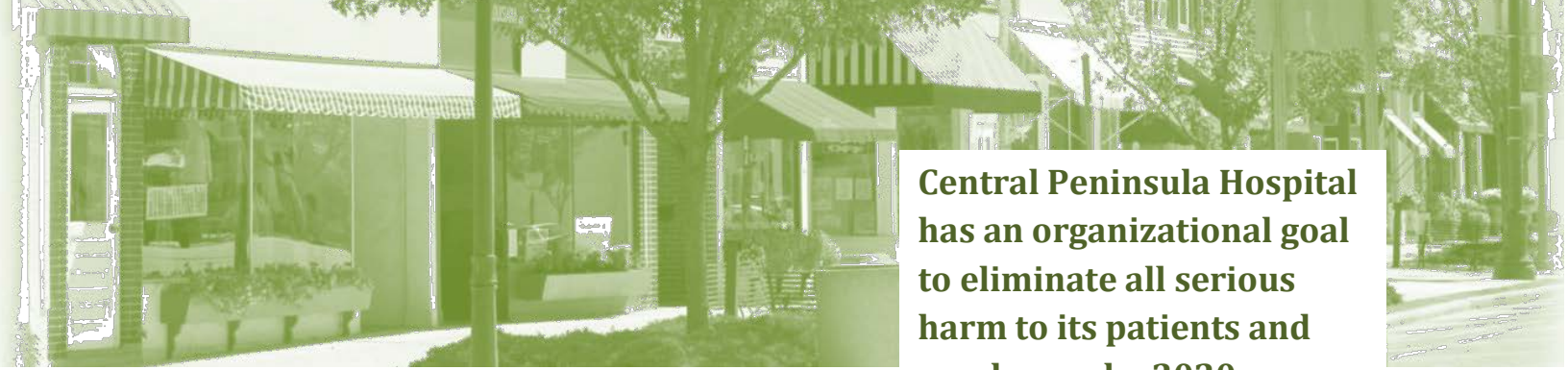
Key Points

- High reliability is a culture, a set of behaviors and beliefs, present in all operations. It is not a program or method.
- The concepts and characteristics of high reliability organizations have direct applicability to improving patient safety in rural health care organizations.
- High reliability health care organizations
 - acknowledge the significant risk for patient harm and death from medical errors,
 - start the journey to high reliability with unwavering and reiterated leadership commitment to safety, and
 - advance and sustain a culture of high reliability through simple messages, priority setting, measurement, education, communication, and celebration.

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Central Peninsula Hospital has an organizational goal to eliminate all serious harm to its patients and employees by 2020.

CENTRAL PENINSULA HOSPITAL

Central Peninsula Hospital (CPH) is a 49-bed, borough-owned, nonprofit rural hospital located in Soldotna, Alaska. People who live in CPH's service area on the Alaskan Kenai Peninsula have about a three-hour drive to Anchorage for tertiary care. As a regional hospital for the Kenai Peninsula, CPH offers inpatient care, obstetric care, emergency services with onsite helicopter medivac transport, outpatient services including oncology, and multiple surgical services. Interventional cardiology will be offered in 2020. CPH is accredited by Joint Commission and is a Planetree Designated Site, one of only 23 health care facilities in the U.S. to receive this distinction for its work advancing person-centered care. The hospital now aims to be a high reliability organization (HRO).

HIGH RELIABILITY ORGANIZATIONS

At more than 250,000 deaths per year, medical error is the third leading cause of death in the U.S., according to a Johns Hopkins study.¹ To address this issue, experts promote high reliability as a path to zero harm. An HRO operates in a complex and high-hazard environment yet has nearly error-free performance. Everyone in the organization anticipates—and detects—potential problems early to prevent catastrophes. They are persistently mindful of risks to safety. The characteristics of HROs compensate for the limits of human ability, since humans commit about 1 error in every 100 tries. HROs include aircraft carriers, nuclear power plants, and commercial airlines.

Health care is complex and high hazard. While other industries have achieved six sigma levels for variation and errors—3.4 errors in 1 million tries—no health care organization has achieved this low rate for serious harm. The journey to high reliability is not a program or method. Instead, it is a culture, a set of behaviors and beliefs, present in all operations. HROs reflect a commitment to safety in how resources are budgeted and allocated, operations are designed and managed, job descriptions are written, performance is evaluated, and people are paid, and to communication strategies that listen more than tell.

High reliability health care is currently promoted by influential health care groups, including the Agency for Healthcare Research and Quality, the Joint Commission, Planetree, and the Studer Group.

THE CENTRAL PENINSULA HOSPITAL JOURNEY TO HIGH RELIABILITY

CPH embarked on its HRO journey in fall 2015 when Rick Davis, CEO, and Gregg Motonaga, anesthesia department medical director, circulated articles describing safety culture and HROs in preparation for CPH's upcoming Joint Commission survey. A year later, Planetree presented to CPH on the safety huddle as one strategy for high reliability care. Energized by the opportunity to improve care through pursuit of high reliability, CPH leadership instituted daily safety huddles. Jill Blazier, quality improvement director, and Karen Scoggins, chief nursing officer, attended an Institute for Healthcare Improvement safety





development program and then began HRO presentations to CPH board and department directors. CPH has established an organizational goal to eliminate all serious harm to CPH patients and employees by 2020. In 2018, it will add safety as one of its core institutional values. Since HRO is a cultural phenomenon, not a program, CPH leadership understands the challenges of instilling the concepts of high reliability consistently and comprehensively across the organization, and of sustaining the journey with dedicated effort. CPH drives the cultural change of high reliability through simple messages, priority setting, measurement, education, communication, and celebration. Specifically, CPH leadership commits to high reliability through conducting safety discussions with staff and board, displaying safety performance information on CPH's internal web page, sending daily email blasts, highlighting a safety story periodically, implementing a "Speak Up" award, and adding safety to its yearly "value" awards. And to keep safety in the public spotlight, CPH reports safety measures to its board, the Joint Commission, Leap Frog, Hospital Compare, and the Alaska Hospital and Nursing Home Association.

Department directors are encouraged to ask front-line employees, "If you were a patient in your own department, what would you be most concerned about?"

Shifting its organizational culture to one that prioritizes high reliability and safety hasn't been without challenges for CPH. For example, daily safety huddle participants were not sure what to report. In response, department directors were encouraged to ask front-line employees, "If you were a patient in your own department, what would you be most concerned about?" To demonstrate improvement and to focus attention, CPH has debated how best to measure patient safety and high reliability. CPH directors wanted a more appropriate measure for the hospital's effort than "time from prior event," a traditional measure of safety. They preferred the concept of "a serious safety event that reaches the patient." To define a serious safety event, CPH considered Sentinel Events (Joint Commission definition) and Patient Safety Indicators (Centers for Medicare & Medicaid Services definition), but chose [Serious Safety Events](#) (American Society for Healthcare Risk Management definition). They are exploring how to define a rate, such as errors per a defined denominator, and need to identify a denominator that best reflects CPH care and is readily measurable. Adjusted Patient Days is under consideration as a patient safety denominator.

HIGH RELIABILITY ORGANIZATION CHARACTERISTICS

Organizations striving for high reliability exhibit a number of characteristics, noted by researchers and proponents of HROs, and affirmed by CPH.

1. **Preoccupation with failure.** HROs destigmatize failing—"failing is not failure." They encourage near-miss reporting. They identify what's working, then replicate it throughout the organization. CPH is making it "safe," and expected, to report errors and near misses. The only unforgivable error is not reporting an event from which all can learn.





2. **Reluctance to accept simple explanations.** HROs dig deep to identify root causes of errors and near misses, asking “Why, why, why?” HROs use data to challenge long-held beliefs. CPH sees these characteristics as an extension of exceptional quality improvement. Methods such as root cause analysis and failure and effects mode analysis support the broadly held belief that in complex environments, simple answers may be easier, but rarely reveal the full story.
3. **Sensitivity to operations.** When leaders and staff have situation awareness, they are always assessing how processes, systems, and actions support or threaten safety. HROs encourage everyone to continuously look for something not quite right. Leaders ask, “Do you know of anything here that could harm a patient?” CPH cultivates operational sensitivity through regular rounding in the workspace. For example, Mr. Davis often rounds in the emergency department three to four times a day. Leadership can plan daily “meeting-free times” to ensure that managers have time to round.
4. **Deference to expertise.** Front line staff are often more knowledgeable in particular subject areas than the individuals tasked to lead them. Therefore, HRO leaders and managers ask and listen carefully. HROs also look outside the organization for expertise. New employees are a ready source for fresh perspectives. Managers are encouraged to ask, “Based on your experience in previous organizations, how could we make ours safer and more reliable?” CPH taps into experts from Planetree and brings current literature and presentations to directors and staff.
5. **Commitment to resilience.** HROs assume the system is at risk for failing and respond accordingly. They use scorecards, action plans, and common goals to ensure safety. They help everyone understand their indispensable role in keeping patients safe, and their employees cross-monitor each other. CPH makes safety an organization-wide value, measuring progress toward high reliability and connecting high reliability processes to the shared goal to “eliminate all serious harm to patients and employees by 2020.”

HIGH RELIABILITY IN A RURAL HOSPITAL

Rural hospitals are complex, high-risk organizations in which patient harm does occur. With low patient numbers, small hospitals can find it easier to monitor and improve patient safety than larger hospitals. Rural hospitals can be nimble, capable of change quickly and confidently. CPH has embraced patient safety as a fundamental organizational goal. And with HRO strategies, CPH is on track to be the safest hospital in Alaska.

(December 2017)

¹ Makary MA, Daniel M. Medical error—the third leading cause of death in the U.S. *BMJ*. 2016;353.