

Introducing a High-Reliability Communication Series, Just for Virtua Clinicians

Virtua Health has been on a journey to become a high-reliability organization or HRO, and that would not be possible without the deep commitment of our clinicians. To support this effort, we are initiating a series of communications dedicated to your role in Virtua's journey to become a HRO. Some of our initial messaging may be familiar to some of you. For others, these may be new concepts. Everyone is at a different level of knowledge and experience. To create a level playing field, we'll start with the basics.

First, what is an HRO? If you are unfamiliar with an HRO, they are organizations that operate in highly complex hazardous domains (e.g. airlines, nuclear power plants, amusement parks, aircraft carriers etc.), while going for extended periods of time without serious accidents or catastrophic failures.

An excellent example that parallels with the complexity of health care is that of a military aircraft carrier. On an aircraft carrier, Aircraft take off and land every 48 to 60 seconds. They operate under significant production pressures; they have constantly changing conditions, yet they manage to avoid catastrophic failures. Aircraft carriers are able to do this because all personnel **consistently prioritize** safety over everything else, and they have the authority and responsibility to make real-time operational adjustments to maintain safe operations.

Health care is similar! We face production pressures every day. Providers see multiple patients, each with different and unique medical and personal needs. At the same time, society is ever-changing and the health care landscape and environment is dynamic. In essence, we are operating under constantly changing conditions. In order for us to achieve a safety record of an HRO, or similar to the team on the aircraft carrier we must embody the HRO principles outlined here.

HROs operate under the following **five fundamental principles**; and Virtua is committed to do the same:

- 1) **Preoccupation with failure.** Everyone is aware of and thinking about the potential for failure. People understand that new threats emerge regularly from situations that no one imagined could occur, so all personnel actively think about what could go wrong and are alert to small signs of potential problems. The absence of errors or accidents leads not to complacency, but to a heightened sense of vigilance for the next possible failure. Near misses are viewed as opportunities to learn about systems issues and potential improvements, rather than as evidence of safety.
- 2) **Reluctance to simplify.** People resist simplifying their understanding of work processes and how and why things succeed or fail in their environment. People in HROs understand that the work is complex and dynamic. They seek underlying, rather than surface explanations. While HROs recognize the value of standardization of workflows to reduce variation, they also appreciate the complexity inherent in the number of teams, processes, and relationships involved in conducting daily operations.
- 3) **Sensitivity to operations.** Based on their understanding of operational complexity, people in HROs strive to maintain a high awareness of operational conditions. This sensitivity is often referred to as "big picture understanding" or "situation awareness." It means that people cultivate an understanding of the context of the current state of their work in relation to the unit or organizational state—i.e., what is going on around them—and how the current state might support or threaten safety.
- 4) **Deference to expertise.** People in HROs appreciate that the people closest to the work are the most knowledgeable about the work. Thus, people in HROs know that in a crisis or emergency the person with greatest knowledge of the situation might not be the person with the highest status and seniority. Deference to local and situation expertise results in a spirit of inquiry and

de-emphasis on hierarchy in favor of learning as much as possible about potential safety threats. In an HRO, everyone is expected to share concerns with others and the organizational climate is such that all staff members are comfortable speaking up about potential safety problems.”

- 5) **Commitment to resilience.** Commitment to resilience is rooted in the fundamental understanding of the frequently unpredictable nature of system failures. People in HROs assume the system is at risk for failure, and they practice performing rapid assessments of and responses to challenging situations. Teams cultivate situation assessment and cross monitoring so they may identify potential safety threats quickly and either respond before safety problems cause harm or mitigate the seriousness of the safety event.

Self-assessment.

After reviewing the five principles, ask yourself the following questions:

- 1) Do you consider yourself preoccupied with failure? Are you looking for ways that systems and processes could fail and reporting your concerns so that they can be addressed?
- 2) Are you reluctant to simplify? Are you accepting of a surface-level answer to an issue, or are you expecting and participating in a deeper dive to find the root of the issue, followed by implementation of a real solution?
- 3) Are you sensitive to operations and do you have situational awareness?
- 4) Do you defer to expertise recognizing that the people closest to the work hold the answers to improving the process and reducing the threat of harm?
- 5) Are you committed to resilience?

In our communications series, we will build upon these fundamental principles and we are **interested in your feedback** as you are the experts in your work. We need you to be preoccupied with failure to identify flaws in the system that we can improve upon to help reduce opportunity for human failure. We promise to be reluctant to simplify. We will push the organization to identify the root cause and optimize real solutions through deferring to expertise.

Resource: [High Reliability | PSNet \(ahrq.gov\)](https://www.ahrq.gov/psnet)