Reliability Culture Implementation Guide

MHA Michigan Health & Hospital Association

IHA Illinois Health and Hospital Association

WHA Wisconsin Hospital Association
ADVOCATE. ADVANCE. LEAD.

Minnesota Hospital Association

Introduction

Purpose: The Reliability Culture Implementation Guide combines the five principles of high reliability organizations (HROs) with elements of safety culture.

Who is this implementation guide intended for?

This guide is broadly intended for executive level to frontline staff. Tools are available throughout this guide to support and advance the work done within high reliability. There are numerous resources listed, but it is not designed to be a comprehensive list of all the tools available. The Great Lakes Partners for Patients Hospital Improvement Innovation Network and Minnesota Hospital Association compiled resources and best practices to help guide and facilitate the work; however, the associations do not endorse any of the listed resources.

Why was this guide created?

The Reliability Culture Implementation Guide was created to provide resources for healthcare organizations, with an emphasis on safety culture, regardless of where they are in their high reliability journey. This guide is not a step-by-step process, but rather a guide that helps facilities after completing an initial assessment.

What is high reliability?

An HRO is defined as an organization that has maintained high levels of safety over an extended period. Common examples of HROs include nuclear power plants, commercial aviation and air traffic control systems, naval aircraft carriers, amusement parks and zoos. These organizations manage safety hazards extremely well in environments where normal accidents can be expected due to their complexities and risk factors. In healthcare, this translates to zero preventable harm across the organization with the goal of perfect patient care.

Hallmark Principles of HROs:

1. **Preoccupation with failure** – HROs take failure very seriously. Failures are addressed immediately and completely, regardless of size. HROs predict rather than react to failure. They are always aware of the potential for failure and are positioned to respond when they occur. Some failures may reach the patient and others may not. When a potential failure does not reach the patient, it is referred to as a near miss. Near misses are embraced within HROs and viewed as a learning opportunity to preempt future failures.
2. **Reluctance to simplify** – HROs are complex by definition and accept and embrace that complexity. They are reluctant to accept simple explanations for problems as they can be misleading. HROs do not explain away problems. They explore their root causes as a pathway to improvement.
3. **Sensitivity to operations** – HROs understand their systems and processes and are continuously aware of their performance. They remain mindful of what is and what is not working. HROs utilize data to make decisions and track outcomes.
4. **Commitment to resilience** – HROs are adaptable, learning organizations who react swiftly, even under unanticipated conditions. They improvise when unexpected events occur and do not let failures deter them. Leaders and staff within HROs recognize bad things will inevitably happen, but are trained to respond when system failures do occur.
5. **Deference to expertise** – Utilizing an organizational expert when implementing a new strategy is crucial to becoming an HRO. An expert is a person with the hands-on knowledge of the operation and is closest to the point-of-failure. Expertise, rather than authority, takes precedence within HROs. Leaders within HROs listen to experts, regardless of their role, title, status, credentials or seniority.

What is Safety Culture?

Safety culture is defined as group members sharing beliefs and attitudes toward safety practices. An advanced safety culture is one in which everyone is empowered to speak up with concerns and is expected to do so on a regular basis. Individuals working within an organization that has a strong safety culture can learn from mistakes and make improvements as part of a continuous improvement process that focuses on systemic issues. Executive leadership engagement is imperative to creating an environment referred to as a *Culture of Safety*. It's a culture that prioritizes learning from mistakes, engagement of appropriate staff and preventive thinking. Research has shown that improving an organization's safety culture leads to higher levels of staff job satisfaction[1], fewer staff injuries[2], lower staff burnout rates[3], higher patient-reported satisfaction[4], decreased length of stay[5] and lower mortality rates[5].

Purpose:

Safety culture must be fully understood to enact change. This is accomplished through regular administration of validated culture assessments such as the Agency for Healthcare Research and Quality Hospital Survey on Patient Safety Culture or the Safe & Reliable Healthcare Safety, Communication, Operational Reliability and Engagement survey. The results of the culture survey should be promptly debriefed by senior leadership, managers and staff. This process will identify and prioritize areas of opportunity, design interventions and test for change.

Where to start?

The process to become highly reliable and develop a robust safety culture begins by completing an assessment of the organization's culture and evaluate how the environment is viewed by employees, providers, leadership and volunteers. The assessment results are critical to understand what areas necessitate a practice change. A vital key to accomplishing a practice change is to ensure it has the support of the entire organization.

An executive assessment of the leadership team should be performed utilizing a focused tool and followed by a consensus meeting and action planning session. After the assessment is completed, a debrief should be held with assessment participants in a safe area that allows for open and honest conversation. A great deal can be learned through the debriefing process about areas that need immediate attention and can help to develop an action plan.

CULTURE ASSESSMENTS	
The Joint Commission (TJC) Center for Transforming Healthcare (CTH) Oro 2.0® Assessment	https://www.centerfortransforminghealthcare.org/oro.aspx
American College of Healthcare Executives (ACHE) - Leading a Culture of Safety: A Blue Print for Success	http://safety.ache.org/blueprint/
Press Ganey Safety Diagnostic Assessment	https://www.pressganey.com/solutions/safety/assess-and-diagnose-your-safety-culture
National Patient Safety Foundation (NPSF) Organization Self-Assessment	https://www.npsf.org/resource/resmgr/LLI/NPSF-LLI_Organiz_Assess_Tool.pdf
Agency for Healthcare Research and Quality (AHRQ) Survey on Patient Safety Culture (SOPS™)	https://www.ahrq.gov/sops/surveys/hospital/index.html
Safety, Communication, Operational Reliability and Engagement (SCORE)	https://www.safeandreliablecare.com/surveys/

Data

Purpose: Data is an important component of any improvement effort. It helps identify opportunities, assess progress and monitor system processes. The term 'data' does not only suggest the submission of information into a database, but the use of that information toward attaining a specific outcome. Data can be utilized in many ways. An organization should ensure there is a team in place to identify changes that the data points towards, implement changes and communicate all changes to all staff members.

One way to incorporate data into quality improvement work is to think of it in the following format: *Data Submission* → *Data Review* → *Interpretation and Trending* → *Developing a Corrective Action/Plan* → *Providing a Feedback Loop and Follow Up at all Levels.*

Examples of Data Utilization:

- Identify trends and areas of opportunity for improvement efforts
- Review events that have occurred
- Acknowledge good catches/near misses that have been documented to learn from and facilitate improvement
- Data can be obtained from internal staff and external members (i.e. patients, family members, etc.) to understand areas of opportunity (i.e. satisfaction surveys)

DATA	
How Can Data Drive Reliability?	http://www.ihi.org/education/IHIOpenSchool/resources/Pages/Activities/FrankReliability5.aspx
Near Misses and Their Importance for Improving Patient Safety	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4475608/
AHRQ PSNET: Adverse Events, Near Misses, and Errors	https://psnet.ahrq.gov/primer/adverse-events-near-misses-and-errors
AHRQ Learning from Defects	https://www.ahrq.gov/hai/cusp/toolkit/learn-defects.html
IHI: RCA2 -Improving Root Cause Analyses and Actions to Prevent Harm	http://www.ihi.org/resources/Pages/Tools/RCA2-Improving-Root-Cause-Analyses-and-Actions-to-Prevent-Harm.aspx
Press Ganey Employee Engagement	https://www.pressganey.com/docs/default-source/default-document-library/the-key-to-a-high-performing-workforce.pdf?sfvrsn=0

Education and Training

Purpose: High reliability and safety culture education and training at all levels of an organization is foundational. Frontline staff and leadership must understand the importance of high reliability and safety culture principles and how their improvement is imperative to attain a highly reliable state. Expectations regarding the importance of safety culture and moving toward becoming highly reliable must be communicated. There must be chief executive support and commitment and senior leadership understanding, as well as engagement and involvement of frontline staff. There should also be continued communication by executive leadership to various boards of directors.

EDUCATION AND TRAINING	
Defense Health Agency: Leadership Engagement Toolkit: Multidisciplinary Team Training & Skill Building	https://www.dvidshub.net/video/643341/leadership-engagement-toolkit-multidisciplinary-team-training-skill-building
Johns Hopkins Armstrong Institute: Comprehensive Unit-based Safety Program (CUSP) training	https://www.hopkinsmedicine.org/armstrong_institute/training_services/workshops/cusp_implementation_training/index.html

Implementation

Purpose: Implementation is the process to create change. Using tools such as a Driver Diagram, A3 or PDSA document allows the organization to better understand the process of how the change will occur and the impact it will have on the outcome. In this phase of improvement, the organization will determine the *who, what, when* and *why* of the practice to be changed. It will be difficult to ensure the change is made consistently across the organization and sustained after the project concludes without a proper implementation process.

IMPLEMENTATION	
IHI Joy in Work – How to Get Ready for "What Matters to You?" Conversations	https://www.youtube.com/watch?v=e2G39QcxGuQ
AHRQ Quality Indicators Toolkit	https://www.ahrq.gov/professionals/systems/hospital/qitoolkit/index.html
Patient Safety Tool: Leadership Guide to Implement Safety Practice	http://store.jcrinc.com/patient-safety-initiative-hospital-executive-and-physician-leadership-strategies/
Health Quality Ontario	http://www.hqontario.ca/Portals/0/Documents/qi/qi-driver-diagram-instruction-sheet-en.pdf
A3	https://www.lean.org/common/display/?o=1314
Specific, Measurable, Achievable, Relevant, Time Bound (SMART) Tools	https://www.mindtools.com/pages/article/smart-goals.htm
PDSA: IHI PDSA Worksheet	http://www.ihi.org/resources/Pages/Tools/PlanDoStudyActWorksheet.aspx
SBAR	https://community.mha.org/viewdocument/sbar-template?CommunityKey=bb5d29b6-96ee-4ec0-a661-ed913794d48f&tab=librarydocuments
Failure Modes Effects Analysis	https://asq.org/quality-resources/fmea

Performance Improvement

Purpose: Performance improvement is a continuous process change and foundational to an HRO. There are many performance improvement tools that can be utilized to implement change, such as the Plan, Do, Check, Act Method or the Define, Measure, Analyze, Improve and Control. One size does not fit all. Healthcare organizations will have their preferred tools and approaches that best fit their cultures, based on previous successes.

PERFORMANCE IMPROVEMENT	
IHI Model for Improvement	http://www.ihi.org/resources/Pages/HowtoImprove/default.aspx
Change Management	https://www.mindtools.com/pages/article/newPPM_87.htm https://www.prosci.com/resources/articles/change-management-process
Six Sigma	http://asq.org/learn-about-quality/six-sigma/overview/overview.html
Lean	https://www.lean.org/WhatsLean/
IHI/NPSF RCA2 Guide	https://c.ymcdn.com/sites/www.npsf.org/resource/resmgr/PDF/RCA2_first-online-pub_061615.pdf
Plan-Do-Study-Act Cycles	http://www.ihi.org/resources/Pages/HowtoImprove/ScienceofImprovementTestingChanges.aspx

Summary

It has been said that everyone's destiny is healthcare. Therefore, it is the duty of all those who work in the healthcare industry to create facilities that are highly reliable in their delivery of patient care. The tools and suggestions discussed above can be utilized to help on the path towards high reliability. At the end of the day, healthcare's product is caring for patients during their most vulnerable time, being responsible to the community and providing a safe place for employees, providers and volunteers to work. This requires a high reliability and safety culture mindset. Organizations need to anticipate failure and harm, practice resiliency and engage experts at every level. Furthermore, there needs to be a commitment to zero preventable harm from all staff levels. High reliability and safety culture encapsulate the optimal way care should be delivered for every patient, every time.

For additional help or questions, please contact your state hospital association:

Illinois Health & Hospital Association: ihainstitute@team-iha.org

Michigan Health & Hospital Association Keystone Center: keystone@mha.org

Minnesota Hospital Association: info@mnhospitals.org

Wisconsin Hospital Association: qualityteam@wha.org

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Checklist

The following checklist is available as a tool to determine what areas have been completed and what areas continue to require focus.

SECTION	NOT COMPLETED	COMPLETED
Cultural Assessments		
Staff assessments		
Executive leadership assessment		
Consensus meeting		
Debriefing		
Action Planning		
Data		
Review data submission		
Interpret trends		
Acknowledge near misses		
Correction/action plan		
Feedback loop at all levels		
Education/Training		
Frontline staff		
Middle management		
Senior leadership		
Executive leadership		
Board		
Implementation		
Determine process to change		
Determine 'who'		
Determine 'what'		
Determine 'when'		
Determine 'why'		
Performance Improvement		
Determine tool to use (Lean, Six Sigma, etc.)		