High Reliability - Creating a Culture of Safety at Your Organization

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The Joint Commission

Center for Transforming Healthcare Webinar
Objectives

- Understand the importance of leadership behavior and trust in building a High Reliability Patient Safety System

- Be able to describe the importance of culture in establishing a sustainable Patient Safety System.

- Understand how critical error reporting and analysis is in building a High Reliability Patient Safety System.
• First codes of behavior adopted in some clinical departments
• Beginning to recognize importance of equitable disciplinary procedures
• Pilot “close call” reporting
• RCAs begin to identify some weaknesses in system defenses
• Some measures of safety culture undertaken but not widespread

• CEO and clinical leaders establish a trusting environment
• Managers at all levels accord high priority to all elements of safety culture
• Staff in many areas begin to recognize and report unsafe conditions
• System weakness catalogued and prioritized for improvement
• Measures of safety cultured adopted and deployed organization wide; beginning efforts to improve

• High levels of measured trust exist in all clinical areas; self-policing of codes of behavior in place
• All staff recognize and act on personal accountability for maintaining safety culture
• Close calls and unsafe conditions routinely reported, leading to early resolution before patients are harmed
• Safety culture measures part of strategic metrics reported to Board; systematic improvement initiatives underway to achieve fully functioning safety culture

* For Illustration purposes only

Source: DuPont Sustainable Solutions
Current State of Patient Safety

TO ERR IS HUMAN FRAMED PATIENT SAFETY AS A SERIOUS PUBLIC HEALTH ISSUE (1999 ESTIMATES)

- 44,000 - 98,000: Annual deaths from medical error among hospitalized patients.\(^{(a)}\)
- 43,458: Annual deaths from car crashes.\(^{(a)}\)
- 42,297: Annual deaths from breast cancer.\(^{(a)}\)
- 16,516: Annual deaths from AIDS.\(^{(a)}\)

BY SOME MEASURES, HEALTH CARE HAS GOTTEN SAFER SINCE TO ERR IS HUMAN

1.3 Million
Estimated reduction in hospital-acquired conditions (2011-2013) as a result of the federal Partnership for Patients initiative.\(^{(b)}\)

TO UNDERSTAND THE FULL IMPACT OF PATIENT SAFETY PROBLEMS, WE MUST LOOK AT BOTH MORTALITY AND MORBIDITY

1 in 10 patients develops a health care acquired condition (such as infection, pressure ulcer, fall, adverse drug event) during hospitalization.\(^{(b)}\)

BUT WE MUST LOOK BEYOND HOSPITALS TO THE FULL CARE CONTINUUM

1 Billion
Roughly 1 billion ambulatory visits occur in the US each year.\(^{(c)}\)

About 35 million hospital admissions occur annually.\(^{(c)}\)
Current State of Patient Safety

- Patient safety problems exist throughout the USA as with every other health care system in the world.
- Caregivers are not to blame – in the vast majority of cases it is the systems, procedures, conditions, environment and constraints they face that lead to patient safety problems.
- Incorrect priorities do damage: central focus must always be on patients.
- Warning signals are seen as anomalies.
- When responsibility is not clearly owned harm occurs.
- Improvement requires a system of support and accountability
- Fear is toxic to both safety and improvement.
A High Reliability Patient Safety System

Leadership

- Culture of Safety
- Event Reporting
- Learning Organization
- Patient Activation
- Data driven improvement
- Proactive risk reduction
Anywhere Hospital USA: 2-3 Sigma
Five Principles of High Reliability Organizations

Anticipation – “Stay Out of Trouble”
1. Preoccupation with failure
2. Sensitivity to operations
3. Reluctance to simplify

Containment – “Get Out of Trouble”
4. Commitment to resilience
5. Deference to expertise

Collective Mindfulness
## Behaviors that increase risk and make healthcare less safe:

<table>
<thead>
<tr>
<th>Mindless Behaviors</th>
<th>HRO Framework</th>
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</thead>
<tbody>
<tr>
<td>Make bad news unwelcome (too often silencing it)</td>
<td>Deferece to expertise; pre-occupation with failure</td>
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<tr>
<td>Blame staff (even when they haven’t been given the conditions for success)</td>
<td>Deference to expertise; sensitivity to operations</td>
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<tr>
<td>Ignoring or over simplifying signals and warnings as anomalies</td>
<td>Sensitivity to operations; reluctance to simplify</td>
</tr>
<tr>
<td>Fail to listen to care teams</td>
<td>Deference to expertise; reluctance to simplify</td>
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<tr>
<td>Diffuse responsibility and disguise who is in charge</td>
<td>Deference to expertise; reluctance to simplify</td>
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<tr>
<td>Lead by rules and procedures alone in a disengaged way</td>
<td>Commitment to resilience; deference to expertise</td>
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<tr>
<td>Apply punishment to errors</td>
<td>Sensitivity to operations; deference to expertise</td>
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<tr>
<td>Game data and goals</td>
<td>Pre-occupation with failure; sensitivity to operations</td>
</tr>
<tr>
<td>Suppress the voice of the patient</td>
<td>Pre-occupation with failure; sensitivity to operations</td>
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<tr>
<td>Treat all problems as though they can be “fixed” with existing technologies or procedures or writing clearer procedures</td>
<td>Pre-occupation with failure; commitment to resilience</td>
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FIVE QUESTIONS TO ASK OURSELVES

1. Has patient care been safe in the past?
2. Are our clinical systems and processes reliable?
3. Is care safe today?
4. Will care be safe in the future?
5. Are we responding and improving?
Mix-up leads to surgical procedure on wrong baby

LEBANON, Tenn. - The happiness of their son's birth was marred for a couple in Tennessee after they learned doctors mixed up their baby with another and mistakenly performed a surgical procedure on their healthy newborn.

"The baby was perfect, healthy and beautiful," new mom Jennifer Melton told CBS Nashville affiliate WTVF. Little Nate was delivered at University Medical Center in Lebanon, Tennessee.

Not long after the birth, her newborn went for what Melton thought would be a routine physical. A couple of hours later, he was brought back.

"At that point the nurse started to mention the procedure they had done that they had clipped his tongue," said Melton.

Somehow, a doctor without the parents' signed consent performed a surgical procedure on Nate that apparently was meant for another child.
Safe Surgery

- The rate of death was 1.5% before the checklist was introduced and declined to 0.8% afterward (P=0.003). Inpatient complications occurred in 11.0% of patients at baseline and in 7.0% after introduction of the checklist (P<0.001).

- **CONCLUSIONS**
- Implementation of the checklist was associated with concomitant reductions in the rates of death and complications among patients at least 16 years of age who were undergoing noncardiac surgery in a diverse group of hospitals.
Leading Sentinel Events 2015

Common causes: Human Factors, Communication, Leadership
Psychological safety and an unwavering intolerance for deliberate unsafe acts are fundamental characteristics of a safety culture.

Successful health care organizations are learning organizations that model professionalism, collaborative behavior, and transparency.
To find joy & meaning in your daily work, you must be able to answer “YES” each day:

- Am I treated with dignity & respect by everyone?
- Do I have what I need so I can make a contribution that gives meaning to my life?
- Am I recognized and thanked for what I do?

- Paul O’Neill former CEO of Alcoa
Role of Hospital Leaders

- Motivate staff to uphold a fair and just safety culture
- Provide a transparent environment in which patient safety events are honestly reported
- Model professional behavior
- Remove intimidating behavior that might inhibit a culture of safety
- Provide the resources and training necessary to take on improvement initiatives
Role of Hospital Leaders in Building a Culture of Safety

- Motivate care teams to uphold a fair and just safety culture.
- Provide a transparent environment in which patient safety events are honestly reported.
- Model professional behavior.
- Remove intimidating behavior that might inhibit a culture of safety.
- Provide the resources and training necessary to take on improvement initiatives.
Organizational Culture

“A pattern of basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think and feel in relation to those problems.”

Edgar Schein, 1992
High Reliability Organizations have Adaptable Cultures

Adaptable defined as the ability to manage the complexity (variety) of situations well.

Adaptability relates to behavior and decision making.

Adaptability equates to collective viability--the ability to overcome the pathologies that limit an organization’s capacity to perform operations and operational processes effectively.
<table>
<thead>
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<th>Safety Culture Principle</th>
<th>Trait</th>
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<tbody>
<tr>
<td>Everyone is personally responsible for safety</td>
<td>Personal accountability</td>
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<td>Leaders demonstrate a commitment to safety</td>
<td>Leadership safety values and actions</td>
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<td>Trust permeates the organization</td>
<td>• Effective safety communications</td>
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<td>• Respectful work environment</td>
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<td>• Environment for raising concerns</td>
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<td>Decision-making reflects safety first</td>
<td>Decision-making</td>
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<tr>
<td>Health care technology recognized as special and unique</td>
<td>Work processes</td>
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<td>A questioning attitude is cultivated</td>
<td>Questioning attitude</td>
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<td>Organizational learning is embraced</td>
<td>• Continuous learning</td>
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<td></td>
<td>• Problem identification and resolution</td>
</tr>
<tr>
<td>Patient safety undergoes constant evaluation</td>
<td>• Continuous learning</td>
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Operational Culture Change & HRO

Practical Application

- Develop processes that result in the ability to act on the subtle symptoms quickly.
- Cultivate and reward sensitivity and attentiveness.
- Create effective feedback loops.
- Implement efficient communication mechanisms between employees.
- Focus on standardization and process improvement.
Trust, Report, Improve
Sometimes the silence gets so loud, the only thing left to do is hope your heart is strong enough to beat it out.

Author: Rachel Wolchlin
Drive out fear and create trust

- W. Edward Deming
Trust is...

1. **Financial**—
   --has *Economic Impact*, not just social

2. **“Currency”** of New Economy—
   --#1 *Leadership competency*
   --one thing that *changes Everything*

3. **Learnable Skill and Measureable**
   --can *learn* trust *behaviors*

Source: CoveyLink
“Above all, success in organizations requires two things: a winning competitive strategy and superb organizational execution. Distrust is the enemy of both.”

Robert Shaw, Trust in the Balance
(Strategy x Execution)^Trust = Results

(S x E)^T = R

Source: CoveyLink
The 13 Behaviors of High-Trust Leaders

1. Talk Straight
2. Demonstrate Respect
3. Create Transparency
4. Right Wrongs
5. Show Loyalty
6. Deliver Results
7. Get Better
8. Confront Reality
9. Clarify Expectations
10. Practice Accountability
11. Listen First
12. Keep Commitments
13. Extend Trust

Relationship Trust

Source: CoveyLink
Domains of Quality

- Safety
- Effectiveness
- Patient centeredness
- Efficiency
- Timeliness
- Equitable
Primary Dimensions of Diversity
Secondary Dimensions of Diversity
Assessing the Quality of Care (Donabedian)

Structure \(\rightarrow\) Process \(\rightarrow\) Outcome

CONTEXT = SAFETY CULTURE
“Quality”

quality addresses the intended results of the healthcare system

“the degree to which a system of production meets (or exceeds) the needs and desires of the people it serves”

- An effective quality management system includes quality control (to keep sound processes reliable on a daily basis),
- quality improvement (to decrease variation within and among organizations so that the best becomes the norm) and
- quality planning (especially fostering innovative care models that can deliver better outcomes at lower cost).

See Darzi, A. Quality and the NHS Next Stage Review, Lancet
Defining safety

‘The avoidance, prevention and amelioration of adverse outcomes or injuries stemming from the process of healthcare.’

Vincent C. Patient safety. 2nd ed. Chichester: John Wiley and Sons; 2010.
The core value of quality must be that:

1. We do no **harm** to patients

2. Ensure the **environment** is safe and clean ("Clean care is safer care")

3. Reducing avoidable harm (the goal is Zero)

Darzi, A. *Quality and the NHS Next Stage Review*, Lancet

- Hospital: 8
- Office based Surgery: 8
- Ambulatory Clinic: 4
- Homecare: 3

SUPERBUG SCOPE
Reporting Safety Events

Adverse Event and Close Call reporting:
This is the reporting, review, or analysis of incidents involving patients that cause harm or have the potential for causing harm.

- Signals a “Just” Safety Culture
- Creates Transparency
- Reporting and conducting analysis on errors helps to identify system and process vulnerabilities
- Reducing errors to achieve “zero” harm moves the organization toward High Reliability
Safety Measures

- Harm (process and outcome)
- Appropriate care (process, explicit operational definitions)
- Adaptive Culture
- Safety culture
The Anatomy of a Patient Safety Event

Active Failure: Human Factors, Leadership, Communications

Domain of Medicine: FPPE/OPPE

Problem Type

Medical Outcome

Level of Harm
- Unsafe Conditions
- Near miss
- Harm
- Adverse event
- Severe Temporary
- Permanent
- Death

Patient Specific Factors

Latent Conditions:
- Organizational systems
- Organizational culture
- Organizational structures
- Environment of care

Source: Donna Woods, EdM, PhD
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Source: Donna Woods, EdM, PhD
Comprehensive Systematic Analysis: Quality Improvement
Review and Analysis of Safety Events

When an incident occurs, staff will use the organization's local method to notify the facility Patient Safety or Risk Manager and begin the organization's review of the event.

1. First determine if it is a harm event, close call or unsafe condition.
2. Take immediate actions which may include:
   - Taking appropriate care of the patient
   - Making the situation safe
   - Preventing immediate recurrence ("stop the line")
   - Preserving evidence and relevant information
   - Removing damaged or unsafe equipment
   - Providing care team support
Review and analysis continued…

3. The Patient Safety Team after any required immediate action will determine appropriate action(s) to take.

4. Incident will be documented in the local reporting system.

5. An RCA, Aggregate review or Common Cause Analysis may be required or no further action needed.
Corrective Actions

Goal, to increase system **resilience** by:

- Eliminating the hazard or risk point altogether (occurrence)
- Mitigating the risk by reducing the severity of affect on the process or to the patient (severity)
- Increasing the ability to recognize when a risk is present or an error has occurred (detectability)
- Increasing recovery/rescue from an error or event once it has occurred
National Center for Patient Safety’s “Hierarchy of Actions” classifies corrective actions as:

- **Weaker**: actions that depend on team(s) to remember their training or remember what is written in the policy

- **Intermediate**: actions are somewhat dependent on team members remembering to do the right thing, but they provide tools to help teams to remember or to promote clear communication

- **Strong**: actions that do not depend on teams to remember to do the right thing; the action may not totally eliminate the vulnerability but provide very strong controls
Hierarchy of actions: weaker

- Double checks (risk for human error)
- Posters or signs on the new requirement
- New procedure, policy, memo
- Training alone
- Additional study/analysis

Hierarchy of actions: intermediate

- Redundancy—everyone entering room looks for “x”
- Eliminate/reduce distractions
- Checklists, cognitive aids
- Eliminate look-alikes and sound-a-likes
- Read back—verbal orders
- Software enhancements/modifications
- Increase staffing; decrease workload
- Enhanced documentation/communication
Hierarchy of actions: stronger

- Physical plant changes—e.g., moving a grab bar
- Simplify the process—remove unnecessary steps or steps that no longer make sense
- Standardize equipment or process to reduce variation
- Conduct usability testing before purchasing new devices—will it really do what you need?
Hierarchy of actions: stronger

Engineering controls (forcing functions):
- Edits on electronic medical record that won’t let you exit until a field is filled
- IV tubing that will not allow you to connect certain types of piggy backs

Tangible involvement/action by leadership in support of patient and carer safety
- Leadership checks in with care teams during rounds on how a new process is going, and follows up if issues are identified
Measures in Quality Improvement

Measurement is an essential part of implementing changes. Measures tell a team whether the changes they are making actually lead to improvement.

- **Outcome Measures** How does the system impact the patients, their health and wellbeing? What are impacts on other stakeholders. Was the action effective?

- **Process Measures** Are the steps in the system performing as planned? Are we on track in our efforts to improve the system? Has the action been completed?

- **Balancing Measures** Look at a system from different directions. Are changes designed to improve one part of the system causing new problems in other parts of the system?

Institute for Healthcare Improvement
http://www.ihi.org/resources/Pages/OtherWebsites/default.aspx
Measures of Success

**Process Measures**
- Amount of antibiotic in defined daily doses/100 bed days
- Compliance rate with empiric guidance
- Compliance rate with surgical prophylaxis
- Compliance rates with other “bundles” (VAP, CAUTI, CAP etc.)
- De-escalation

**Outcomes Measures**
- Compliance with TJC NPSG
- CDI rates
- SSI rates
- HSMR
- Surveillance of resistance

**Balancing Measures**
- Mortality
- SSIs
- Readmissions
- Admissions to higher level of care
- Complication rates
- Treatment related to antibiotic toxicity
“Free From Harm”

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
Thank-You

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