How a Safety Culture Fosters High Reliability

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Sentara Healthcare

- Formed through a series of mergers of community hospitals
- 11 hospitals; 2,580 beds; 3,825 physicians on staff
- 13 long term care/assisted living centers
- 4 Medical Groups (750+ Providers)
- 450,000-member health plan
- $4.7B total operating revenues
- 26,000+ employees
- AA/Aa2 bond ratings
- Sentara Quality Care Network (SQCN)
- Sentara eCare® HIMSS Analytics Stage 7 and HIMSS Davies Award
- AHA Quest for Quality Award 2004, John M. Eisenberg Award 2005
HPI – A Reliability Company

Methods based on science and facts
- Science of human error and event prevention
- Practical experience in high-reliability industries including nuclear power and aviation

Experienced-based mentoring
- Over 500 hospitals
- Consulting team with HRO experience and healthcare experience (clinicians, non-clinicians, and physicians)

A Change in Course

- Looked outside of healthcare
  (experience from other risk-averse, technology based industries such as nuclear power and aviation)
- Belief that to improve our outcomes we have to change our behaviors

Culture = Shared Values & Beliefs
\[ \downarrow \]
Behaviors
\[ \downarrow \]
Outcomes
Journey to Reliability – Process + People

- **Optimized Outcomes**
- **Human Factors Integration**
  - Intuitive design
  - Obvious to do the right thing
  - Impossible to do the wrong thing
- **Reliability Culture**
  - Core values & vertical integration
  - Behavior expectations for all
  - Hire for fit
  - Fair, just, and 100% accountability
- **Process Design**
  - Evidence-based best practice
  - Focus & Simplify
  - Tactical improvements (e.g. process bundles)

Shaping Behaviors at the Sharp End

- **Behaviors of Individuals & Groups**
- **Outcomes**
- **Design of Work Processes**
- **Design of Culture**
- **Design of Policy & Protocol**
- **Design of Technology & Environment**

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Culture is not just one of the spaces. Culture is also the space between the other spaces.

High Reliability is the right mix of *Blunt End* behavior shaping factors.

Culture makes the other shaping factors work as intended.

Adapted from R. Cook and D. Woods, *Operating at the Sharp End: The Complexity of Human Error* (1994)

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**Safety Culture: An Overview**

- Built on an understanding of the limits of human performance in complex, adaptive systems
- **Key elements**
  - Psychological Safety
  - Organizational Fairness/ Just Culture
    - Encourage reporting and learning from errors
    - Balance with accountability
  - “Compliance culture”
- **Widespread use of Non-Technical Skills**
  - Teamwork
  - Communication
**Just Culture** creates an atmosphere of trust in which people are encouraged to provide, and even rewarded for providing, essential safety-related information but in which they are clear about where the line must be drawn between acceptable and unacceptable behavior.

**James Reason**  
*Managing the Risks of Organizational Accidents* (1997)

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**Culpability Assessment Tools**

**James Reason**  

**United Kingdom’s National Health Service**  
"Incident Decision Tree," adapted from James Reason’s decision tree (2003)

**P. Hudson**  
Refined Just Culture Model from the Shell Hearts & Minds Project (2004)

**David Marx**  
"Just Culture Algorithm" (2005)
"At the sharp end, there is almost always a discretionary space into which no system improvement can completely reach. Systems cannot substitute the responsibility borne by individuals within that space."

Sidney Dekker
Just Culture: Balancing Safety & Accountability (2007)

Non-Technical Skills

Non-technical skills describe how people interact with technology, environment, and other people. These skills are similar across a wide range of job functions.

These skills include attention, information processing, and cognition.

Generic non-technical skills:

- Situational awareness
- Teamwork
- Communication
  - repeatbacks
  - phonetic & numeric clarification
  - clarifying questions
  - inquiry, advocacy, assertion
- Coping with Fatigue
- Managing Stress
- Decision-making
- Leadership
How Do Serious Safety Events Occur?

High Risk Situation + High Risk Behavior = Safety Event

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Collegial Interactive Teams

Tools: to facilitate effective assertion and clear communication
Tone: to help manage power distance

Examples:
- **“You had me from Hello”**—include first names
  - Cordiality, openness
  - Eye contact and body language
- **Team goals** Use “we” and “us” vs. “I” and “you”
  - What’s best for the patient...
- **Invite a Questioning Attitude** Leaders set the tone for the flow of information

Improves Resiliency:
- Anticipatory thinking
- Cross-monitoring
- Thinking as a team

*The team senses they are off track and works together to back on track*
Actions to Create a Safety Culture

1. **Elevate safety – NO HARM – as the core value**
   that is reflected in the words and actions of leaders, medical staff, and employees.

2. **Adopt behaviors for error prevention**
   a “people bundle” for all (leaders, staff, and medical staff) and engrain the behaviors as individual and team work habits.

3. **Adopt a Daily Operating System for Leaders**
   for (1) reinforcing and building accountability for performance expectations and (2) detecting system problems and correcting causes.

**Organization’s Values & Beliefs**

**Individual & Team Behaviors**

**Our Outcomes**

- in SAFETY as well as in quality, satisfaction, and financial performance

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**A Rubric for Decision Making**

“There is no priority higher than patient safety. If there is a conflict between safe practice and speed, efficiency or volume, then **safety wins – hands down.**”

James M. Anderson
Past President & CEO
Cincinnati Children’s Hospital Medical Center

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# Culture Embedding Mechanisms

From *Organizational Culture & Leadership*, by Edgar Schein

<table>
<thead>
<tr>
<th>Primary Embedding Mechanisms</th>
<th>Secondary Articulation &amp; Reinforcement Mechanisms</th>
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<tbody>
<tr>
<td>• What leaders pay attention to, measure, and control on a regular basis</td>
<td>• Organizational design and structure</td>
</tr>
<tr>
<td>• How leaders react to critical incidents and organizational crises</td>
<td>• Organizational systems and procedures</td>
</tr>
<tr>
<td>• Observed criteria by which leaders allocate scarce resources</td>
<td>• Organizational rites and rituals</td>
</tr>
<tr>
<td>• Deliberate role modeling, teaching, and coaching</td>
<td>• Design of physical space, facades, and buildings</td>
</tr>
<tr>
<td>• Observed criteria by which leaders allocate rewards and status</td>
<td>• Stories, legends, and myths about people and events</td>
</tr>
<tr>
<td>• Observed criteria by which leaders recruit, select, promote, retire, and excommunicate organizational members</td>
<td>• Formal statements of organizational philosophy, values, and creed</td>
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</tbody>
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**“Talking about safety should not be an event.”**

Barbara Summers, President Community Hospital North

- 9:00-9:15 AM, Monday-Friday
- All departments directors
- 100% attendance expectation – “step out of meeting to attend”
- Facilitated by senior leader

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**Daily Check-In Agenda**

1. LOOK BACK – Significant safety or quality issues from the last 24 hours/last shift
2. LOOK AHEAD – Anticipated safety or quality issues in next 24 hours/next shift
3. Follow up on Start-the-Clock Safety Critical Issues
Benefits of Daily Check-In
a house-wide safety huddle

Leadership Awareness
- For the senior leader: awareness of what’s happening at the front line by staying in touch with your people
- For operational leaders: awareness of “what’s going on” in other areas and cross-department impact
- Mental organization – a chance to “plan your day”

Problem Identification & Resolution
- Early notification of issues
- Breaking down silos – all directors to pool ideas and resources in solving problems and potential problems

Accountability for Safety
- “Talking about perfect care has become easier” – more aggressive in leadership for Zero events
- Dialogue about how we are at risk, how we can reduce our risk, and how we can support each other
- Transparency – “A patient fell on my unit last night and broke an ankle”

Error Prevention Toolbox

1. Pay Attention to Detail
   - STAR (Stop/Think/Act/Review)

2. Communicate Clearly
   - Repeat Backs & Read Backs
   - Clarifying Questions
   - Phonetic & Numeric Clarifications
   - SBAR

3. Have a Questioning Attitude
   - Validate & Verification

4. Handoff Effectively
   - 5P’s (Patient/Project, Plan, Purpose, Problems, Precautions)

5. Never Leave Your Wingman
   - Peer Checking
   - Peer Coaching
Process Bundle + People Bundle

Central Line Infections

Codes Outside the ICU

Surgical Site Infections

Hand Hygiene

Culture

Sentara Serious Safety Event Rate

80% SSER Reduction
74% Reduction in Claims Frequency
Reliability Culture as a Chassis

Safety Focus + performed as intended consistently over time = No Harm

Evidence-Based Process Bundles + performed as intended consistently over time = Clinical Excellence

Patient Centered + performed as intended consistently over time = “Satisfaction”

Financial Focus + performed as intended consistently over time = Margin

*Also Impacts Morale, Employee Engagement, Physician Satisfaction

Thank you

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