Psychological Safety: A Healthy Work Environment Characteristic in a High Reliability Organization Culture of Resilience

Creating Healthy Work Environments 2017
March 18, 2017
3:00 P.M. – 3:45 P.M.

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Conflict of Interest

• The presenters for this presentation have disclosed no conflict of interest related to this topic.
Objectives

• Describe how to use transformational leadership to facilitate work environment psychological safety in a culture of high reliability and organizational resilience.

• Discuss clinical outcomes in a resilient high reliability organization.
A faith-based, nonprofit health care organization formed in 1996 by Catholic Health Initiatives and Adventist Health System – now in two states

Colorado’s fourth largest private employer with nearly 16,000 associates and 5000 of those are RNs

The Centura system includes 25 operating entities:

- 17 hospitals
- 7 senior living communities
- Centura Health at Home, Hospice, Health Network
- Centura Health Physician Group
Background

• Psychological Safety
• High Reliability Science
• Healthy Work Environment
• Culture of Safety and Resilience
Psychological Safety

• Describes individuals’ perceptions about the consequences of interpersonal risks in the work environment

• Consists of taken-for-granted beliefs about how others will respond when one puts oneself on the line

Edmondson, 2002
High Reliability Science

• Study of “organizations in industries like commercial aviation and nuclear power that operate under hazardous conditions while maintaining safety levels that are better than in healthcare.”

Chassin and Loeb, 2013
High Reliability Organizations

- Organizations within high-risk industries that have adopted processes to detect and address failures before harm occurs.
  - View small errors and close calls as learning opportunities
  - Correct small errors
  - Share details across organization

Chassin, 2012; Shabot, 2015; Vogus & Iacobucci, 2016
High Reliability Organizations

• Create a **psychologically safe** mindful environment where employees are trained to look for and report small problems that could lead to big ones

Chassin, 2012; Shabot 2015
Healthy Work Environment

- Settings with policies, procedures, processes designed to empower nurses to meet organizational objectives and achieve personal satisfaction

- Place of physical, mental and social well-being supporting optimal health and safety

ANA, 2016; Huddleston and Gray, 2016a
Healthy Work Environment

Traditional Characteristics
• Appropriate staffing
• Authentic leadership
• Effective decision-making
• Meaningful recognition
• Skilled communication
• True collaboration

Expanded Characteristics
• Genuine teamwork
• Physical and psychological safety

AACN, 2005; Huddleston and Gray, 2016b
Healthy Work Environment

• Psychological Safety
  • No one penalized if ask for help or admit a mistake
  • Openly disagree without fear of ridicule or punishment

Edmondson, 2008; Edmondson, 2016
Culture of Safety and Resilience

- **Resilience** describes organizations that achieve very high levels of safety despite high risk, difficult tasks and constantly increasing pressures.
  - Proactive and adaptive
  - Do not wait for an adverse event to occur to make corrections

Woods, 2006
Culture of Safety and Resilience

- Culture Permeates Organization
  - Expressed in beliefs, attitudes and values
  - Present in workflows and patient care processes
  - Commitment to vigilance

Woods, 2006
A culture of safety and resilience imparts a sense of **psychological safety**, respect and empowerment to voice concerns without fear of retaliation.
Purpose

• Describe how psychological safety in the work environment at two acute care facilities contributes to the facilitation and sustainment of a culture of safety and organizational resilience driving clinical outcomes
Scope

• Porter Adventist Hospital
• Castle Rock Adventist Hospital
Porter Adventist Hospital

- Acute Care Hospital
  - Adult and Geriatric Psychiatric Services
  - Cancer Care Center
  - Cardiovascular Institute
  - Center for Joint Replacement
  - Centura Health Transplant Program
  - Complex Medicine
  - Craniofacial & Skull Base Disorders
  - Robotics Institute
  - Spine Institute
- 368 Licensed Beds
- Magnet® designation since January 12, 2009
- 500+ Registered Nurses
- 80.4% Bachelor’s or Higher
- 40.2% National Nursing Certification
Castle Rock Adventist Hospital

- Located in a rapidly growing community
- Opened in 2013
- 55 inpatient beds
- > 14,000 ED visits annually
- Specialties
  - Women’s Services
  - Orthopedic Services
  - Complex Medicine
- Magnet® Journey bound
Methodology

• Guiding Paradigm
  • Leadership Commitment to Psychological Safety

• Guiding Framework
  • High Reliability Organization
Guiding Paradigm
Leadership Commitment

• Transformational Leadership Style
  • **Motivates** employees to transcend their own self-interest to improve performance through organizational learning and innovation
  • **Essential** to facilitate psychological safety

Applebaum, et. al., 2016; Carmeli, et. al. 2014
Leadership Commitment

- Civility
  - For **ALL** interactions
  - Zero tolerance for intimidating or disruptive behaviors

- Respect
  - Bedrock of shared understanding
  - Communication style with greater team

- Support
  - Language matters

Blouin, 2013; Sutcliffe, 2011
Leadership Commitment

• Professionalism
  • Skill
  • Good judgement
  • Polite behavior

• Accountability
  • Clear what is acceptable and unacceptable behavior
  • Conduct expectations the same regardless of disciplines

Blouin, 2013
Guiding Framework
High Reliability

• High Reliability Organization
  • High reliability organizations (HROs) are those organizations that are high-risk, dynamic, turbulent, and potentially hazardous, yet operate nearly error-free.

Weick and Sutcliffe, 2007
HRO Characteristic: Sensitivity to Operations

Leaders and staff situationally aware of how processes and systems affect the organization.

Examples in Daily Processes

- Handoffs
- Standardized Communication
- Shift Huddles
- Daily Huddles
- Throughput Plans
- Briefs
- CPOE

Be aware of your “down stream” impact. How do my actions impact the whole?

Kemper, 2009; Melnyk, 2012
HRO Characteristic: Preoccupation with Failure

All associates are encouraged to think of ways their work processes might break down.

Examples in Daily Processes

• Speak Up
• Room set-up prior to admit
• Mock Codes
• Simulation
• Close call error reporting
• System focus of error processing

Think ahead!
If something would go wrong......
What would that be?
How would I act?

Kemper, 2009; Melnyk, 2012
HRO Characteristic: Deference to Expertise

Correctly migrated responsibility from formal executive authority to experiential competency-based decision-making.

Examples in Daily Processes

- Effective Structured Communication
- Shift Huddles
- Daily Huddles
- Frontline decision making
- RRT
- Evidence-based practice
- CNS availability

Am I the expert?
Who is the best person for this job?
Who knows this process best?

Kemper, 2009; Melnyk, 2012
Leaders and staff dig deeper into the solution of a situation or issue.

Examples in Daily Processes
- Developed diverse CNS-led checks and balances from multiple perspectives
- Process Improvement: LEAN, PDCA, Six-Sigma
- No work arounds
- Inter-professional input into system processes and solutions

Am I settling for an easy fix? Have I dug deeper?

Kemper, 2009; Melnyk, 2012
HRO Characteristic: Commitment to Resilience

Prepared in how to respond to failures and continually find new solutions.

Examples in Daily Processes

• Inter-professional team training
• Rewards and recognition promoting transparency
• Spirit of inquiry
• Reporting and managing errors
• Facility wide sharing of lessons learned

"Failure is only the opportunity to begin again, only this time more wisely."

~ Henry Ford

How can I learn from this experience?
How can I share my learning with others?

Kemper, 2009; Melnyk, 2012; Riley et.al., 2010
In Summary..........

• Psychologically safety in a healthy work environment is crucial for resilient high reliability organizations to create a culture of safety to achieve and sustain patient safety and quality clinical outcomes.
Outcomes

• **Culture of Psychological Safety**
  • Communication Openness
  • Nonpunitive Response to Error

• **Preventable Harm**
  • Case Mix Index (CMI)
  • Case Mix Index Adjusted Admissions (CMIAA)
  • Preventable Harm Incidents

• **Nurse Sensitive Indicators**
  • Injury Falls Rate
  • Hospital Acquired Pressure Ulcer Percent Stage II+(HAPU)
  • Catheter Associated Urinary Tract Infection Rate (CAUTI)
  • Central Line Associated Blood Stream Infection Rate (CLABSI)
Communication Openness

Communication Openness
Porter Adventist Hospital

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<tr>
<th>Year</th>
<th>Communication Composite</th>
<th>Freely Speak Up</th>
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<td>2017</td>
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Communication Openness
Castle Rock Adventist Hospital

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<tr>
<td>2015</td>
<td>64</td>
<td>77</td>
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<tr>
<td>2017</td>
<td>65</td>
<td>77</td>
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Communication Improvement

Centura Health
Nonpunitive Response to Error

Porter Adventist Hospital


Castle Rock Adventist Hospital

- Composite: 2015: 46, 2017: 54
- Written Up: 2015: 44, 2017: 54

Safety Culture Improvement
Preventable Harm – CMI

CMI increase FY13 to FY16

CMI increase FY15 to FY16
Preventable Harm – CMIAA

**Case Mix Index Adjusted Admissions (CMIAA)**

**Porter Adventist Hospital**

CMIAA increase FY14 to FY16

**Case Mix Index Adjusted Admission (CMIAA)**

**Castle Rock Adventist Hospital**

CMIAA increase FY15 to FY16
> 30% reduction preventable harm events
Nurse Sensitive Indicators

**CLABSI Rate**
- **Porter Adventist Hospital**
- **Castle Rock Adventist Hospital**

**CAUTI Rate**
- **Porter Adventist Hospital**
- **Castle Rock Adventist Hospital**

### Porter Adventist Hospital
- **CLABSI Rate**
  - 2014 Q4: 0.00
  - 2015 Q1: 0.00
  - 2015 Q2: 0.00
  - 2015 Q3: 0.00
  - 2015 Q4: 0.00
  - 2016 Q1: 0.00
  - 2016 Q2: 0.00
  - 2016 Q3: 0.00
- **Benchmark (Mean)**
  - 2014 Q4: 0.87
  - 2015 Q1: 1.00
  - 2015 Q2: 1.00
  - 2015 Q3: 1.13
  - 2015 Q4: 1.05
  - 2016 Q1: 0.85
  - 2016 Q2: 0.86
  - 2016 Q3: 0.87

### Castle Rock Adventist Hospital
- **CLABSI Rate**
  - 2014 Q4: 0.73
  - 2015 Q1: 0.37
  - 2015 Q2: 1.44
  - 2015 Q3: 0.96
  - 2015 Q4: 0.00
  - 2016 Q1: 1.69
  - 2016 Q2: 0.90
  - 2016 Q3: 0.90
- **Benchmark (Mean)**
  - 2014 Q4: 1.88
  - 2015 Q1: 1.15
  - 2015 Q2: 1.13
  - 2015 Q3: 1.33
  - 2015 Q4: 1.34
  - 2016 Q1: 1.20
  - 2016 Q2: 1.12
  - 2016 Q3: 1.17

### Porter Adventist Hospital
- **CAUTI Rate**
  - 2014 Q4: 0.73
  - 2015 Q1: 0.00
  - 2015 Q2: 0.00
  - 2015 Q3: 0.00
  - 2015 Q4: 4.59
  - 2016 Q1: 3.53
  - 2016 Q2: 0.00
  - 2016 Q3: 2.91
- **Benchmark (Mean)**
  - 2014 Q4: 0.00
  - 2015 Q1: 0.43
  - 2015 Q2: 0.60
  - 2015 Q3: 0.54
  - 2015 Q4: 0.73
  - 2016 Q1: 0.36
  - 2016 Q2: 0.46
  - 2016 Q3: 0.47

### Castle Rock Adventist Hospital
- **CAUTI Rate**
  - 2014 Q4: 0.73
  - 2015 Q1: 0.00
  - 2015 Q2: 0.00
  - 2015 Q3: 0.00
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  - 2016 Q3: 0.90

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**CLABSI/1000 Central Line Days**
- **Quarter**
- **CLABSI Rate**
- **Benchmark (Mean)**
- **CAUTI/1000 Catheter Days**
- **Quarter**
- **CAUTI Rate**
- **Benchmark (Mean)**

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**Centura Health**
Nurse Sensitive Indicators

Injury Falls Rate

Porter Adventist Hospital

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<td>Rate</td>
<td>0.88</td>
<td>1.58</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.38</td>
<td>0.52</td>
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<td>Benchmark (Mean)</td>
<td>0.72</td>
<td>0.82</td>
<td>0.70</td>
<td>0.71</td>
<td>0.75</td>
<td>0.71</td>
<td>0.77</td>
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Injury Falls Rate

Castle Rock Adventist Hospital

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Percent HAPU Stage II+

Porter Adventist Hospital

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<td>% Surveyed Patients with HAPU Stage II and Above</td>
<td>0.71</td>
<td>0.00</td>
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<td>4.44</td>
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<tr>
<td>Benchmark (Mean)</td>
<td>1.26</td>
<td>1.18</td>
<td>1.18</td>
<td>0.77</td>
<td>1.02</td>
<td>0.91</td>
<td>1.20</td>
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Percent HAPU Stage II+

Castle Rock Adventist Hospital

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<td>1.20</td>
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# Nursing Value

$1,606,502 ESTIMATED DIRECT COST AVOIDANCE

## Injury Falls Prevention

<table>
<thead>
<tr>
<th>FY Year</th>
<th>Actual</th>
<th>Avoided</th>
<th>Avg Cost per</th>
<th>Cost Avoidance</th>
<th>Actual Cost</th>
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<tbody>
<tr>
<td>FY13</td>
<td>37</td>
<td>0</td>
<td>$5000</td>
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<td>$185,000</td>
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<tr>
<td>FY14</td>
<td>25</td>
<td>12</td>
<td>$5000</td>
<td>$60,000</td>
<td>$125,000</td>
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<tr>
<td>FY15</td>
<td>29</td>
<td>8</td>
<td>$5000</td>
<td>$40,000</td>
<td>$245,000</td>
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<td>FY16</td>
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<td>17</td>
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<td>$85,000</td>
<td>$100,000</td>
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<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>$185,000</strong></td>
<td></td>
<td><strong>$555,000</strong></td>
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## Pressure Injury Prevention

<table>
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<tr>
<th>FY Year</th>
<th>Actual</th>
<th>Avoided</th>
<th>Cost per</th>
<th>Cost Avoidance</th>
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<tbody>
<tr>
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<td><strong>Total</strong></td>
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<td></td>
<td><strong>$134,952</strong></td>
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## CAUTI Prevention

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<th>Cost per</th>
<th>Cost Avoidance</th>
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<td>FY16</td>
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<td><strong>$732,550</strong></td>
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## CLABSI Prevention

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<th>Cost Avoidance</th>
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<td><strong>$554,000</strong></td>
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Pappas, 2013
Implications for Practice

• High Reliability Organization
  • Culture of safety
  • Patient-centered outcomes
  • Professional autonomy
  • Frontline staff accountability and engagement
  • Leadership accountability and engagement

Value-based care

Oster, 2016
Implications for Practice

• **Nurse leaders** play an important **role** in **creating** organizational **cultures** that are psychologically safe.

• **Resilient organizations** have high reliability, maintain a high level of performance and have a **psychologically safe** work environment.
Implications for Practice

- High reliability principles translate to point of care, apply to hospital environments of any size, and can be utilized effectively in every patient encounter driving nursing practice and quality outcomes.
Sustaining a High Reliability Safety Culture

- Theory, Practice and EBP/Research
  - Everyone accountable for outcomes
  - Partnership among patient safety, quality, nurse scientist, clinical staff and leadership

Healthy Work Environment
Exceptionally Safe
Consistently High Quality Care

Oster, 2016
Questions???
Contact Information

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References


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