Reliability, Resilience and Risk: Why a Just Culture is Critical to Quality and Safety Improvement

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Let’s start with a case...

- Ms. C: 68 year old woman with a past medical history of lymphoma who is admitted with shortness of breath – found to have pulmonary embolism
- Interested in starting rivaroxaban, but not sure affordable
- Intern sends prescription to pharmacy electronically
- Copay too large, so intern discontinues med in EMR and orders lovenox and Coumadin – discussed w Ms. C
- Ms. C goes to pharmacy where there are active orders for rivaroxaban, enoxaparin, and warfarin – all three filled and Ms. C takes all three...
Roadmap

• Our shared goals
• Some background concepts
  – Systems and behaviors
  – Just Culture concepts
  – Safety Culture
• Organizational capability overview
• Key reliability program elements
  – See and understand risk
  – Manage to optimal staff performance
  – Evolve resilient systems
  – Maintain organizational capabilities
Our shared goals

- Identify and fix vulnerabilities in systems
- Manage to optimal staff performance

Achieve balanced improvement across goals

- Clinical Quality
- Productivity
- Systems - People
- Patient Safety
- Patient Experience
- Finances
- Staff Experience
Systems and behaviors definitions

• Socio-technical systems:
  – Technology
  – Processes
  – Organizational rules and regulations
  – Human operators

• For our purposes:
  – System = design
  – Behaviors = human factors
Systems and behaviors

• Design systems to produce desired outcomes
• But sometimes our system fails
• Sometimes people make mistakes
• And sometimes we get undesired outcomes
Values and Incentives

• Choices are driven by values and incentives
• Values often compete
• It is human nature to “drift”
• Which values do we choose to prioritize over others?
Behaviors we see – Just Culture

**Behavior**

**Human Error**

*Inadvertent* Act

“Could happen to anyone”

(e.g., inadvertent pump programming error)

**At-Risk Behavior**

*Choice:* Risk Believed Insignificant/Justified

“Others might do the same”

(e.g., chose to skip med rec, used old chart list)

**Reckless Behavior**

*Choice:* Conscious Disregard of Substantial and Unjustifiable Risk

“Everyone agrees this is wrong”

(e.g., chose sell illegal drugs while at work)

**Response**

Support

Coach

Corrective Action
Outcome bias

• We tend to judge the quality of an individual’s choice based on the outcome
  – Good outcome = correct choice
  – Undesired outcome = wrong choice

• We tend to base punishment on the outcome
  – Punish when there is harm
  – Overlook mistakes where there is not (“no harm no foul”)

• We must be curious about the “why”
  – Understand the situations, circumstances, pressures that drive behavior
Just Culture means we evaluate the system + behavior, not the outcome

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<th>Ask: Was there deviation from process/best practice? Did the system/design contribute?</th>
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1. Did the employee know what they “should have” done and how to do it? *Expectation clear?*

2. If expectation, clear, why didn’t they do it? *Inadvertent or choice?*
   - What factors contributed to behavior?

3. What is the response?
   - **Human Error**
     - *Inadvertent Act*
       - “Could happen to anyone”
       - What ↑ chance of error?
         - Flawed system?
         - “KSAs,” fatigue, stress, distraction, etc?
         - Upstream choice?
   - **At-Risk Behavior**
     - *Choice: Risk Believed Insignificant/Justified*
       - “Others might do the same”
       - What drove the choice?
         - Competing priorities (which?)
         - Flawed system?
     - **Reckless Behavior**
       - *Choice: Conscious Disregard of Substantial and Unjustifiable Risk*
         - “Everyone agrees that this is wrong”
       - What drove the choice?
         - Outlier individual behavior?
         - Are we sure the behavior was reckless?

4. **Support** employee + address contributing factors
   - **Coach** employee + peers, fix system (reconcile competing priorities)

Corrective action
High-level take away

1. Just Culture informs our framework for evaluating our systems and behaviors to identify and fix vulnerabilities.

2. Just Culture guides us in how to respond to behaviors in a fair, just, and collaborative way.
   - Just Culture is not about finding fault, it is about managing risk. We want to move away from shame and blame and create a culture of continuous learning.
This approach reinforces our culture of safety

• A culture of safety is a culture where:
  – We are curious about why errors occur and where each of us feel a personal commitment to making our care safer
  – We are encouraged to be open about our errors and the system vulnerabilities we see
  – We feel comfortable speaking up, without fear of punishment
And a culture of safety is necessary for reliability

- We can only fix what we know about
- Front line staff have the most insight into what works, and what doesn’t
- We only see the errors that break the surface and result in harm
- But there is more risk lurking just below the surface, which the front line can help identify and manage...
Increasing recognition of the importance of safety culture

Our shared goals

- Identify and fix vulnerabilities in systems
- Manage to optimal staff performance

Achieve balanced improvement across goals
Organizational capabilities

- **See and understand risk**
  - Analyze systems and behaviors to identify vulnerabilities
  - Organize and prioritize risks
  - Track vulnerabilities over time

- **People management – HR skills**
  - Leadership/followership, team dynamics
  - Conflict management and critical communications
  - Performance management

- **Process improvement**
  - High reliability thinking
  - Methodologies (Lean, Six Sigma, etc)

- **Ongoing sustainment and resourcing**
Vulnerability/risk assessment

- Learn from adverse events
- Learn from errors before they lead to adverse events
- Prospectively identify vulnerabilities in systems and behaviors before the error or adverse event occurs
Vulnerability assessment

- Sometimes the vulnerability is in the *system*, sometimes the vulnerability is in the *behavior*, and very often the vulnerability is in *both*.

- Need a culture that encourages speaking up.

- Need tools that help us:
  - Identify where vulnerability may be present
  - Investigate to fully characterize the nature of the vulnerability
Tracking and prioritizing vulnerabilities

• Why is this important?
  – Understand where risk truly lies
  – Resource allocation
  – Feedback

• What is needed?
  – Common framework for describing vulnerabilities (shared taxonomy)
  – System (electronic) to categorize and track risks
  – “Owner” charged with maintaining system
Managing Vulnerability/Risk

1. Monitor Inputs
   (safety reports, walk rounds, etc.)

2. Identify and Assess Vulnerabilities
   (retrospective + prospective)
   – Retrospective: RCA, M&M
   – Prospective: Process reviews, Vulnerability Assessments

3. Organize + Prioritize Risks
   (Local → Risk Register)

4. Escalate, Resource, Mitigate high priority risks

5. Feedback and Tracking
Managing people

- Management training for front line managers
- Leadership development
- Central Human Resources support
- Behavior management pathways
  - Skill development / support
  - Corrective action
Quality improvement

1. Identify opportunities
2. Form team
3. Set aims
4. Establish measures
5. Select changes
6. Test changes
7. Implement changes
8. Spread changes

http://www.ihi.org/resources/Pages/HowtoImprove/default.aspx
Process improvement program considerations

• Local problem solving (identify, fix, track, escalate to central team)

• Central process improvement capability
  – Deployed for large systematic projects (complex problems with multiple departments/systems)
  – Team capabilities: process improvement, systems thinking, human factors, etc.
  – Linkage to organizational strategy, quality and safety priorities
**E.g., BWH Department of Nursing Leadership Development**

**Manager Core Competencies**

- **Safety Culture Concepts**
  - See and understand vulnerabilities and risk

- **Critical Communication Skills**
  - Having difficult conversations, accountability

- **Basic Front-Line Manager Skills**
  - HR skills, managing in Labor environment

- **Team Skills**
  - Leadership and followership skills

**Training Content**

- Safety, Reliability and Resilience Curriculum
- Management Essentials Training
- Managing in a Labor Environment Training

**Delivery**

- Online Core Content
- Live Sessions

**Partnership**

- Dept of Nursing
- Human Resources
- Labor Relations
- Org Development
- Dept of Q & S
- Others