“Just Culture”: A Key to Quality and Safety

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## Disclosures

The following faculty and planning committee staff have no financial disclosures:

<table>
<thead>
<tr>
<th>Name</th>
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<tr>
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<td>Western Wisconsin Health</td>
</tr>
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<td>Bette Braem, MSSW, CMQ/OE (ASQ)</td>
<td>NMDP/Be The Match</td>
</tr>
<tr>
<td>Ruth Bakken, RN, BSN, CHTC</td>
<td>NMDP/Be The Match</td>
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Goal for today
Learning objectives

At the conclusion of this session, attendees will be able to:

• Examine the philosophy and key elements of a Just Culture
• Describe how a Just Culture can impact quality and safety
• Differentiate between human error, at-risk behavior, and reckless behavior
• Identify appropriate organizational response to human error, at-risk behavior, and reckless behavior
How Hazardous Is Health Care?

- **DANGEROUS** (>1/1000)
  - Health Care

- **REGULATED**
  - Driving

- **ULTRA-SAFE** (<1/100K)
  - Bungee Jumping
  - Mountain Climbing
  - Chartered Flights
  - Scheduled Airlines
  - Chemical Manufacturing
  - European Railroads
  - Nuclear Power

Total lives lost per year vs. Number of encounters for each fatality.

Lucian Leape, 2/2001
We’ve all been there......
Medication error
Failure to check patient identification
Why did these accidents happen?

What can we do to prevent them from happening again?

How do we judge the clinicians involved?
Just Culture – It is about

• Creating a common philosophy
• Using a common language
• Resulting in a common experience for participants
The Problem Statement

• Accountability
  – Who is responsible for the system performance?
  – Who is responsible for individual performance?

• Punishment
  – Where does it work?
  – When is it needed?
Culture assessment: How would your organization deal with a surgeon who used an unauthorized piece of equipment?

Percentage of those who believe the organization would discipline the surgeon....if:

<table>
<thead>
<tr>
<th>NO harmful outcome</th>
<th>Harmful outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 19% of staff</td>
<td>- 29% of staff</td>
</tr>
<tr>
<td>- 0% of managers</td>
<td>- 50% of managers</td>
</tr>
<tr>
<td>- 11% of executives</td>
<td>- 14% of executives</td>
</tr>
<tr>
<td>- 0% of physicians</td>
<td>- 45% of physicians</td>
</tr>
</tbody>
</table>
NAVAL AVIATION MISHAP RATE

FY 50-96

- Angled Carrier Decks
- Naval Aviation Safety Center
- NAMP est. 1959
- RAG concept initiated
- NATOPS initiated 1961
- Squadron Safety program
- System Safety
- Designated Aircraft

Class A Mishaps/100,000 Flight Hours

776 aircraft destroyed in 1954
39 aircraft destroyed in 1996

2.39
We can do two things:

1. Design **systems** to accommodate human beings

2. Manage **human behavior** within the systems
Managing Systems
“Systems produce precisely the outcomes they are designed for.”

Don Berwick
Insulin, 40 units lente, 120 units regular q.a.m.
COUNCIL MEETING: Sharing Our Passion For Life
2000 Presidential Election

Florida Ballot

Point of controversy

(REPUBLICAN)
- GEORGE W. BUSH: PRESIDENT
- DICK CHENEY: VICE PRESIDENT

(DEMOCRATIC)
- AL GORE: PRESIDENT
- JOE LIEBERMAN: VICE PRESIDENT

(LIBERTARIAN)
- HARRY BROWNE: PRESIDENT
- ART OLIVIER: VICE PRESIDENT

(GREEN)
- RALPH NADER: PRESIDENT
- WINONA LA DUKE: VICE PRESIDENT

(SOCIALIST WORKERS)
- JAMES HARRIS: PRESIDENT
- MARGARET TROWE: VICE PRESIDENT

(NATURAL LAW)
- JOHN HAGELIN: PRESIDENT
- NAT GOLDHABER: VICE PRESIDENT

(REFORM)
- PAT BUCHANAN: PRESIDENT
- EZOLA FOSTER: VICE PRESIDENT

(SOCIALIST)
- DAVID McREYNOLDS: PRESIDENT
- MARY CAL HOLLIS: VICE PRESIDENT

(CONSTITUTION)
- HOWARD PHILLIPS: PRESIDENT
- J. CURTIS FRAZIER: VICE PRESIDENT

(WORKERS WORLD)
- MONICA MOOREHEAD: PRESIDENT
- GLORIA La RIVA: VICE PRESIDENT

WRITE IN CANDIDATE
To vote for a write-in candidate, follow the directions on the long stub of your ballot card.
COUNCIL MEETING: Sharing Our Passion For Life
Epinephrine
Ephedrine
Dopamine
Dobutamine
EPInephrine
EPHEDrine
DOPamine
DoBUTamine
Seven Organizational Strategies Important to Managing Risk

1. Knowledge
2. Skill
3. Performance Shaping Factors
4. Barriers
5. Redundancy
6. Recovery
7. Maintaining a Perception of High Risk
Strategies #1 and #2

• High level of Knowledge and Skill
  – Knowledge – what I know
  – Skill – the ability to apply the knowledge
Strategy #3

• Performance Shaping Factors
  – Factors that impact the rate of human error
  – Factors that influence the rate of at-risk behaviors

  • Stress
  • Fatigue
  • Vision
  • Hearing

  • Noise
  • Lighting
  • Distraction
  • Procedure design
Strategy #4

• Barriers
  – Prevents the error from occurring
  – Prevents hazard from touching target
  – Examples:
    • Personal protective equipment
    • Forcing functions
      • Connectors
      • Cars gears and brakes
Strategy #5

• Redundancy
  – Error may occur by one actor
  – A parallel system performs the same function and identifies the error before any action is taken
  – Examples:
    • Second person performing task – double check - blood
    • Backup supplies / Backup power
# Efficacy of Double-Checks

## # Double Checks Required

<table>
<thead>
<tr>
<th>Reliability rate of system</th>
<th>Reliability rate of single double-check</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25%</td>
</tr>
<tr>
<td>95%</td>
<td>10</td>
</tr>
<tr>
<td>99%</td>
<td>16</td>
</tr>
<tr>
<td>99.9%</td>
<td>24</td>
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</table>
Strategy #6

• Recovery
  – Allows the error to occur
  – The error is corrected by someone downstream before the critical undesired outcome occurs
  – Example:
    • Downstream checks (pharmacy dose checks)
Strategy #7

• **High Perception of Risk**
  – Acts to limit at-risk behaviors by making actors aware of the risk that surrounds them
  – Examples:
    • Posting error data, infection rates
    • Story telling
      • Stuff happens
      • Stuff can *and will* happen to you
      • Here is how you can prevent stuff from happening
The framework we start with: Reason’s ‘Swiss cheese’ model – our defences, barriers and safeguards are imperfect.

- Some holes due to active failures
- Other holes due to latent conditions

James Reason 1997
Managing human behavior is a bit harder. Why?
Because – to error is human
COUNCIL MEETING: Sharing Our Passion For Life
Paris in the spring
## Nominal Human Error Rates

<table>
<thead>
<tr>
<th>Activity</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error of commission (misreading a label)</td>
<td>0.003</td>
</tr>
<tr>
<td>Error of omission without reminders</td>
<td>0.01</td>
</tr>
<tr>
<td>Error of omission when items imbedded in a procedure</td>
<td>0.003</td>
</tr>
<tr>
<td>Simple math error with self-checking</td>
<td>0.03</td>
</tr>
<tr>
<td>Monitor or inspector fails to detect error</td>
<td>0.1</td>
</tr>
<tr>
<td>Personnel on different shifts fail to check hardware unless required by checklist</td>
<td>0.1</td>
</tr>
<tr>
<td>General error in high stress when dangerous activities occurring rapidly</td>
<td>0.25</td>
</tr>
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</table>

Aoccdrnig to rscheearch at Cmabrigde Uinervtisy, it deosn't mttaer inwaht oredr the ltteers in a wrod are, the olny iprmoetnt tihng is that the frist and lsat ltteer be at the rghit pclae. The rset can be a total mses and you can sitll raed it wouthit porbelm. Tihs is bcuseae the huamn mnid deos not raed ervey lteter by istlef, but the wrod as awlohe.
The human brain cannot have multiple simultaneous foci of interest. This lack of cognitive resource is the single limiting factor of human activity.

François Clergue
Lessons from Human Factors Research

• Errors are common
• The causes of errors are known
• Errors are byproducts of useful cognitive functions
“We can’t change the human condition, but we can change the conditions under which humans work”

James Reason
We know....to error is Human
But….To Drift is also Human
Why do we drift?

• To accomplish more

• Because we do not see the risk
Consequences of behavior

GO THE SPEED LIMIT
Desired behavior

• Satisfaction of being a law abiding citizen
• Reduce chance of accident

SPEED
Undesired behavior

• Save time now
However…. Humans **are** accountable for their behavioral choices.
Just Culture

David Marx, JD

https://www.outcome-eng.com/
Just Culture is about:

- Creating an open, fair, and just culture
- Creating a learning culture
- Designing safe **systems**
- Managing **behavioral choices**
A Model that Focuses on Three Duties balanced against Organizational and Individual Values

• The Three Duties
  – The duty to avoid causing unjustified risk or harm
  – The duty to produce an outcome
  – The duty to follow a procedural rule

• Organizational and Individual Values
  – Excellence
  – Integrity
  – Service
  – Teamwork
  – Safety
  – Stewardship
Two Specific Classes of Duty

- Meet me at 7:00 pm at Sally’s Bar
- Leave your apartment at 6:45 pm. Go south on Oak Street, turn right on Washington. Do not cross the river. It will be on your left.

The Duty to Produce an Outcome

The Duty to Follow a Procedural Rule
My Husband

• Father of many
• Dentist
• Nice guy
Managing Behavioral Choices: Everyone Takes Risks, Every Day
The Behaviors We Can Expect

• **Human error** - inadvertent action; inadvertently doing other that what should have been done; slip, lapse, mistake.

• **At-risk behavior** - behavior that increases risk where risk is not recognized, or is mistakenly believed to be justified.

• **Reckless behavior** - behavioral choice to consciously disregard a substantial and unjustifiable risk.
Examples

Failure to check the name band
Accountability for our Behavioral Choices

**Human Error**
*Product of our current system design*

- Manage through changes in:
  - System Design
  - Processes
  - Procedures
  - Environmental factors

**At-Risk Behavior**
*Unintentional Risk-Taking*

- Manage through:
  - Removing incentives for at-risk behaviors
  - Creating incentives for healthy behaviors
  - Increasing perception of risk

**Reckless Behavior**
*Intentional Risk-Taking*

- Manage through:
  - Remedial action
  - Disciplinary action

---

**Console**

**Coach**

**Punish**
Managing Human Error

• Two questions:
  – Did the employee make the correct behavioral choices in their task?
  – Is the employee effectively managing his/her own performance shaping factors?
• If yes, the only answer is to console the employee – the error happened to him / her
Managing Multiple Human Errors

What is the source of a pattern of human errors?

- The system? If yes, address the system.
- If no, can the repetitive errors be addressed through non-disciplinary means?
- If no, how will disciplinary sanction reduce the rate of human error?
Managing At-Risk Behaviors

• A behavioral choice
  – Driven by perception of consequences
    • Immediate and certain consequences are strong
    • Delayed and uncertain consequences are weak
    • Rules are generally weak
Managing At-Risk Behaviors

- A behavioral choice
  - Managed by adding forcing functions (barriers to prevent non-compliance)
  - Managed by changing perceptions of risk
  - Managed by changing consequences
  - Coaching
Why not punish “at-risk” behavior?

Because….

1. Somewhere along the line your organization has likely tacitly approved certain at-risk behaviors.

2. If you punish at-risk behavior people will likely not be honest about the at-risk behavior next time.
Often you did not fully recognize the at-risk behavior until an event occurs.
Who judges risk and behaviors?

- Risk = Severity of Possible Outcome × Likelihood
- Safety ~ Reasonableness of Risk
Managing Reckless Behavior

• Reckless Behavior
  – Conscious disregard of substantial and unjustifiable risk

• Manage through:
  – Disciplinary action
Managing Behavioral Choices

**Human Error**

Product of our current system design

Manage through changes in:
- System Design
- Processes
- Procedures
- Environmental factors

**At-Risk Behavior**

Unintentional Risk-Taking

Manage through:
- Removing incentives for at-risk behaviors
- Creating incentives for healthy behaviors
- Increasing perception of risk

**Reckless Behavior**

Intentional Risk-Taking

Manage through:
- Remedial action
- Disciplinary action

Console, Coach, Punish
Doves and Hawks
Questions?

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Evaluation Reminder

Please complete the Council Meeting 2017 evaluation in order to receive continuing education credits and to provide suggestions for future topics.

We appreciate your feedback!