The Road to Zero Events of Harm:
High Reliability as the Chassis to Better Healthcare

South Carolina Organization of Nurse Leaders
5 October 2012

HPI – A Reliability Company

Methods based on science and facts
- Science of human performance in complex systems
- Practical experience in high reliability organizations including nuclear power and aviation

Experienced-based mentoring
- Entered healthcare in 2002
- Over 400 hospitals
- Consulting team with HRO experience and healthcare experience (clinicians, non-clinicians, and physicians)
Making a Dent – 400+ Hospitals
Changing the Culture of the Healthcare Industry

Teamwork
Leadership
Death By Numbers

44,000 to 98,000 patient deaths per year from medical errors

To Err is Human, Institute of Medicine (1999)

268 people per day..."a 747 a day"

1 death every 383 admissions (based on AHA Fast Facts on US Hospitals, 2010)

A Lot of Talk

Patient safety publications before and after the IOM report, To Err is Human

Quality & Safety in Health Care (2006)

"Based on our review of the scant evidence, we believe that preventable medical harm still accounts for more than 100,000 deaths a year... the Centers for Disease Control and Prevention (CDC) estimates that hospital-acquired conditions alone kill 99,000 each year..."

In this report, we give the country a failing grade on progress...”

Consumers Union (2009)

Recently in the News...

Hospitals hurt 18 percent of patients, study says

The New York Times
November 25, 2010

- Published in the NEJM
- 2,341 patients admitted to 10 hospitals
- 63.1 % of the injuries were preventable
- 2.4 % caused or contributed to a patient’s death

"Process changes, like a new computer system or the use of a checklist, may help a bit," he said, “but if they are not embedded in a system in which the providers are engaged in safety efforts, educated about how to identify safety hazards and fix them, and have a culture of strong communication and teamwork, progress may be painfully slow."

Medical mistakes plague Medicare patients

USA Today
November 16, 2010

- 780 randomly selected Medicare patients
- 1 in 7 (13.3%) experienced at least one serious instance of harm that prolonged hospital stay
- Less serious harm in additional 13.3% of patients

“Although hospitals have broadly embraced safety initiatives, the still-high rate of adverse events indicates that far more needs to be done. Hospitals must work faster to adopt evidence-based practices that reduce medical errors. “
Lauren Wargo

Lauren Wargo, a 19-year-old from Shaker Heights, Ohio, went to an outpatient surgical center where a plastic surgeon was going to remove a mole from her eyebrow.

The oxygen used during her surgery and an electrical device used to seal blood vessels combined to create a flash flame that left her face, neck and ear badly burned.

How could this have happened? As is too often the case when hospital errors occur, health care professionals weren’t communicating with each other.

The Swiss-Cheese Effect

*Multiple Barriers* - technology, processes, and people - designed to stop active errors (our “defense in depth”)

*Active Errors* by individuals result in initiating action(s)

*Latent Weaknesses* in barriers

**EVENTS of HARM**

**PREVENT** The Errors

**DETECT & CORRECT** The System Weaknesses

Adapted from James Reason, *Managing the Risks of Organizational Accidents* (1997)
Reliability Culture

Healing Without Harm
Don't Hurt Me, Heal Me, & Be Nice To Me

Reliability Science
Knowledge and understanding of human error and human performance in complex systems

Reliability Culture
Design of Culture
Behaviors for Error Prevention, Red Rules, CRM

Design of Policies
Focus & Simplify

Leadership
Reinforce & Build Accountability for performance expectations and Find & Fix system problems

Design of Technology & Environment
Electronic medical record, barcode technology, smart pumps

Design of Structure
Lean, Six Sigma

Design of Work
Processes

Behaviors of Individuals & Groups

Exceptional Outcomes
Healthcare That is Safe – Zero Events of Harm
Timely, Effective, Efficient, Equitable & Patient Centered

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High reliability organizations (HROs)
“operate under very trying conditions all the time and yet manage to have fewer than their fair share of accidents.”

Managing the Unexpected (Weick & Sutcliffe)

Risk is a function of probability and consequence.
By decreasing the probability of an accident, HRO’s recast a high-risk enterprise as merely a high-consequence enterprise.
HROs operate as to make systems ultra-safe.
The unplanned automatic scrams per 7,000 hrs critical indicator tracks the median scram (automatic shutdown) rate for approximately one year (7,000 hrs) of operation. Unplanned automatic scrams result in thermal and hydraulic transients that affect plant systems. The scram rate has been significantly reduced since 1980. In 2000, 59% of operating plants had zero automatic scrams.


Reliability – Commercial Aviation

Accident Rates and Onboard Fatalities by Year
Reliability – Naval Aviation

776 aircraft destroyed in 1954

15 aircraft destroyed in 2008

Source: www.safetycenter.navy.mil ORM Flight Mishap Data

Reliability Culture - Genius of the AND

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

RELIABILITY CULTURE
“Failure Prevention”
Five Principles of HROs

**Preoccupation with Failure**
- We regard small, inconsequential errors as a symptom something’s wrong
- We spend time identifying activities we do not want to go wrong
- We discuss what to look out for when giving report to an oncoming shift
- We take time to attend to important details

**Sensitivity to Operations**
Paying attention to what’s happening on the front-line – Ongoing interaction and information-sharing about the human and organizational factors that determine the safety of a system as a whole

**Reluctance to Simplify interpretations**
Taking deliberate steps to question assumptions and received wisdom to create a more complete and nuanced picture of ongoing operations

**Commitment to Resilience**
Developing capabilities to detect, contain, and bounce back from errors that have already occurred, before they worsen and cause more serious harm

**Deference to Expertise**
During high-tempo operations, decision-making authority migrates to the person or people with the most expertise with the problem at hand, regardless of rank

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Regarding small, inconsequential errors as a symptom that something’s wrong…
Serious Safety Event
- Reaches the patient
- Results in moderate to severe harm or death,

Precursor Safety Event
- Reaches the patient
- Results in minimal harm or no detectable harm

Near Miss Safety Event
- Does not reach the patient
- Error is caught by a detection barrier or by chance

Regarding small, inconsequential errors as a symptom that something’s wrong…

1000 Bed Midwest Hospital

SSER JAN 2005: 1.21
SSER JAN 2007: 0.34 71.9% reduction

Start of Safety Culture Engagement
We spend time identifying activities we do not want to go wrong…

Boeing Model 299
“Too Much Plane for One Man to Fly”

B-17 Flying Fortress
We spend time identifying activities we do not want to go wrong...

Preoccupation with Failure

High Reliability – 1 out of a Million
**Self-Check Using STAR**

- **Stop**: Pause for 1 to 2 seconds to focus our attention on the task at hand.
- **Think**: Consider the action you’re about to take.
- **Act**: Concentrate and carry out the task.
- **Review**: Check to make sure that the task was done correctly and that you got the correct result.

STOP is the most important step. It gives your brain a chance to catch up with what your hands are getting ready to do.

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**When giving report, we discuss what to look out for…**

- **Clear**
- **Complete**
- **Accurate**

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“**I am ready to relieve you Sir**”
“**I am ready to be relieved**”
- Base Course and Speed
- Engineering Data / Equipment Casualties
- Expected Weather / Navigation
- When to wake CO / XO

“**I relieve you Sir**”
“**I stand relieved**”
“This is ____, _____ has the Deck”
A Repeat-Back Failure

“The Same”

Five Principles of HROs

Preoccupation with Failure
Operating with a chronic wariness of the possibility of unexpected events that may jeopardize safety by engaging in proactive and preemptive analysis and discussion

Sensitivity to Operations
- Leaders get out and look for the holes in the Swiss Cheese
- We’re able to give real-time guidance and resource allocation
- We have a good “map” of each other’s talents and skills on the unit

Reluctance to Simplify interpretations
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Accountability

Building intrinsic motivation of the individual to meet performance expectations

NOT just about punishing the person

Leaders get out and look for the holes in the Swiss Cheese…

FOD Walkdown

Sensitivity to Operations
**Rounding to Influence**

It's not about being seen. It’s about what you see, what you ask and what you say.

**What It Is**
- A technique for reinforcing behaviors or performance expectations

**Why It Works**
- Connects expectations to core values
- Assesses knowledge of expectations
- Identify problems impacting the ability of people to follow expectations
- Engages commitment to practice expectations

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**The RTI Conversation…**

1. Connect to a core value
2. Assess knowledge and reinforce the specific behavior expectations
3. Identify problems impacting ability to follow the behavior expectations
4. Ask about commitment actions
# RTI Script – Prepare to Influence

**Greeting**

*Hello! Do you have a few minutes for a brief conversation about _________?*

<table>
<thead>
<tr>
<th>Core Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Relate to our core value of safety protecting patients and employees from harm</td>
</tr>
<tr>
<td>- Tell a story or share facts</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Can Do’s</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Review practice expectations and share facts</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Ask, “What makes this hard to do?”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Questions to foster commitment actions:</td>
</tr>
<tr>
<td>- What will you do to make this your habit?</td>
</tr>
<tr>
<td>- How will you help others do it?</td>
</tr>
<tr>
<td>- STOP if you see a safety risk.</td>
</tr>
</tbody>
</table>

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### RTI: Hand Washing for HAI Prevention

**Greeting**

*Hello! Do you have a few minutes for a brief conversation about hand washing?*

<table>
<thead>
<tr>
<th>Core Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand washing is very important to keeping our patients – and you – safe. It’s one of the most important things we can do to prevent the spread of MRSA and other hospital acquired infections. Did you know that there are nearly 19,000 deaths each year (CDC) from hospital acquired MRSA? In 2008, we had ___ cases of MRSA in our own hospital...</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Can Do’s</th>
</tr>
</thead>
<tbody>
<tr>
<td>In addition to washing in and out of every patient room, I’d like to ask you to help others build good hand washing habits, too. Give a thumbs up when you see them doing it, and remind when you see them forget.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there things that make this difficult in your department?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will you try it out today? Leave a message for me and let me know how it goes. Thanks!</td>
</tr>
</tbody>
</table>
### Greeting

**Hello! Do you have a few minutes for a brief conversation about service excellence?**

<table>
<thead>
<tr>
<th>Core Value</th>
<th>Delivering a remarkable patient experience to our customers is at the heart of everything we do. Our ultimate goal is to keep our patients safe while exceeding their expectations in the delivery of care.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can Do's</td>
<td>We have a number of Standards of Excellence that focus on customer service. In order to demonstrate a <strong>Willingness to Help</strong>, we</td>
</tr>
<tr>
<td></td>
<td>1. Conclude every conversation with an offer of further assistance, such as “What else may I do for you?”</td>
</tr>
<tr>
<td></td>
<td>2. Take personal ownership of the customer’s needs and take responsibility to follow up.</td>
</tr>
<tr>
<td>Concerns</td>
<td>What makes doing these things this difficult in your department?</td>
</tr>
<tr>
<td>Commitment</td>
<td>Can I count on you to meet these expectations relative to our Standards for Excellence? Please use them in your patient and family interactions every day and let me know how it goes by sending me an email with your feedback. Thanks!</td>
</tr>
</tbody>
</table>

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### Your Turn!

**Sample topics:**
- Kids using their manners
- Teenagers not drinking and driving
- Husband doing his honey-do's
- Reducing patient falls with injury

<table>
<thead>
<tr>
<th>Core Value</th>
<th>Why is this so important to us (me)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can Do's</td>
<td>What is the expectation?</td>
</tr>
<tr>
<td>Concerns</td>
<td>What makes it hard for you to do this?</td>
</tr>
<tr>
<td>Commitment</td>
<td>Can I count on you to do this? Here’s how I’m going to follow-up:</td>
</tr>
</tbody>
</table>
Admiral’s Daily Update
- 9:00-9:30 am, everyday at sea
- All department heads and warfare commanders
- Held via video tele-conference call
- 100% attendance expected
- Entire day’s schedule (Battle Rhythm) revolves around update

Daily Check-In at Community
- 9:00-9:15 AM, Monday-Friday
- All departments directors
- Held via conference call
- Facilitated by senior leader
- 90% attendance expectation – send a representative if you can’t participate

Daily Check-in is a huddle of the leader and direct reports at the start of the day to maintain awareness of operations and to give direction about priority and responsibility for problem resolution.
Daily Huddle at Baptist

What benefits of a Daily Safety Update do you hear?

Write them down as you watch the video.

Bernie Sherry
President & CEO, Baptist Hospital

Five Principles of HROs

Preoccupation with Failure
Operating with a chronic wariness of the possibility of unexpected events that may jeopardize safety by engaging in proactive and preemptive analysis and discussion

Sensitivity to Operations
Paying attention to what’s happening on the front-line – Ongoing interaction and information-sharing about the human and organizational factors that determine the safety of a system as a whole

Reluctance to Simplify interpretations
– We discuss alternatives on how to go about our normal work activities
– We’re not afraid to ask questions and voice safety concerns

Commitment to Resilience
Developing capabilities to detect, contain, and bounce back from errors that have already occurred, before they worsen and cause more serious harm

Deference to Expertise
During high-tempo operations, decision-making authority migrates to the person or people with the most expertise with the problem at hand, regardless of rank
We discuss alternatives on how to go about our normal work activities…
We’re not afraid to ask questions and voice safety concerns…

Power Distance

Geert Hofstede’s Power Distance
- Extent to which the less powerful expect and accept that power is distributed unequally
- Leads to strong Authority Gradients, which is the perception of authority as perceived by the subordinate

United States
- Moderate to low Power Distance (38th of 50 countries)

In Healthcare
- High between certain professional groups:
  - Some physicians and nurses
  - Some nurses and other clinical staff
  - Some leaders and staff

“Cultural differences are a nuisance at best and often a disaster.”
Geert Hofstede, Emeritus Professor, Maastricht University
Korean Airlines Flight 801

Cross-Checking in Health Care

Individual reliability is limited:
1 defect per 1000 opportunities

\[
\frac{1}{1000} (\text{my error probability}) \times \frac{1}{1000} (\text{your error probability}) = \frac{1}{1,000,000} (\text{our combined reliability!!})
\]

We are better together…
We’re not afraid to ask questions and voice safety concerns...

ARCC technique – a responsibility to protect in a manner of mutual respect – an assertion and escalation technique

Use the lightest touch possible…

Ask a question
Make a Request
Voice a Concern
Use Chain of Command

A Safety Phrase – “I have a Concern…”

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Commitment to Resilience
– We talk about mistakes and ways to learn from them
– When errors happen, we discuss how we could have prevented them

Deference to Expertise
During high-tempo operations, decision-making authority migrates to the person or people with the most expertise with the problem at hand, regardless of rank
Developing capabilities to detect, contain, and bounce back from errors that have already occurred, before they worsen and cause more serious harm.

Commitment to Resilience

We talk about mistakes and ways to learn from them…
When errors happen, we discuss how we could have prevented them…

- Cause analysis
- Transparency
- Story telling
Individual Human Failure Modes

1) Failures Modes of people

2) 20 Failure Modes in Five Categories:
   - Competency
   - Consciousness (Inattention to Detail)
   - Communication
   - Compliance
   - Critical Thinking

3) Internal Factors affecting Human Performance

Individual Failure Modes

**HOW** the individual experienced the error

<table>
<thead>
<tr>
<th>Competency</th>
<th>The person does not have the knowledge of how to perform the task or a well-developed skill in performing the task.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consciousness</td>
<td>The person knows exactly what to do and how to do it, yet they fail to carry out the task or they do it incorrectly because their thoughts are not on – or fully on – the task at hand.</td>
</tr>
<tr>
<td>Communication</td>
<td>The person receives information and hears it incorrectly or ascribes incorrect meaning to the information.</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>The person fails in the cognitive processing of information or in decision making based on information.</td>
</tr>
<tr>
<td>Compliance</td>
<td>The person knows the performance expectation, thinks about it at the time, and makes a choice to act differently.</td>
</tr>
</tbody>
</table>
System Failures Modes

1) Failure Modes of systems, programs and processes)

2) 26 Failure Modes in Five Categories:
   - Structure
   - Culture
   - Policy & Protocols
   - Processes & Procedures
   - Technology & Environment

3) External factors to human performance

<table>
<thead>
<tr>
<th></th>
<th>WHY the individual experienced the error</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Structure</strong></td>
<td>The organization did not provide the people, resources, or oversight to support the process or activity being performed.</td>
</tr>
<tr>
<td><strong>Culture</strong></td>
<td>The organization's values and behavior expectations for leaders, physicians, and staff serve as a counter-influence to safe, reliable individual and team performance.</td>
</tr>
<tr>
<td><strong>Process</strong></td>
<td>There are deficiencies in the design of the expectations or flow of the work process expectations</td>
</tr>
<tr>
<td><strong>Policy &amp; Protocol</strong></td>
<td>There are deficiencies in the documents – policies, procedures, and job aids – that are intended to support the work process and guide individual decision making.</td>
</tr>
<tr>
<td><strong>Technology &amp; Environment</strong></td>
<td>The design of the workplace, equipment, and information systems makes it difficult for the person to carry out the task at hand.</td>
</tr>
</tbody>
</table>
Anatomy of an Inappropriate Act

**WHY** did they experience the error (system failure mode) and…

**HOW** did they experience the error (individual failure mode)

What went wrong…

**WHO** did **WHAT** because…

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63 y/o F with history of DVT and on Coumadin. Bactrim was ordered for a UTI. The next day the patient’s INR was 5.2. Her Coumadin (Warfarin) was held for several days and she was monitored closely for bleeding. She had no further problems.
4) Why
No formal orientation for interns on high-risk drug interactions

3) How
Was rotating through medical unit and didn’t know about Warfarin/Bactrim interaction

2) What
Prescribes Bactrim despite Warfarin interaction potential

1) Who
Intern

The Inappropriate Act Statement
<table>
<thead>
<tr>
<th>1) Who</th>
<th>Pharmacy Tech</th>
</tr>
</thead>
<tbody>
<tr>
<td>2) What</td>
<td>Fills order despite noting the interaction alert</td>
</tr>
<tr>
<td>3) How</td>
<td>Saw Pharmacist had approved order and didn’t ask for verification because…</td>
</tr>
<tr>
<td>4) Why</td>
<td>Pharmacists in department “get aggravated” by questions, so Techs don’t bother to ask and…</td>
</tr>
</tbody>
</table>

**The Inappropriate Act Statement**

---

<table>
<thead>
<tr>
<th>1) Who</th>
<th>RN</th>
</tr>
</thead>
<tbody>
<tr>
<td>2) What</td>
<td>Gave the Bactrim to patient and didn’t question drug interaction because…</td>
</tr>
<tr>
<td>3) How</td>
<td>She was a new grad and didn’t know about the interaction between Bactrim and Warfarin</td>
</tr>
<tr>
<td>4) Why</td>
<td>Orientation program didn’t cover all drug interactions and medication documentation system doesn’t integrate all interactions. and…</td>
</tr>
</tbody>
</table>

**The Inappropriate Act Statement**
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**Deference to Expertise**
– We take advantage of the unique skills of our colleagues
– When a patient crisis occurs, we rapidly pool our collective expertise to resolve it

---

We take advantage of the unique skills of our colleagues…

- On the flight deck:
  - Rank has no privilege
  - Junior sailors can shut down the flight deck
  - Everyone “owns” the mission
We need to take advantage of the unique skills of our colleagues…

- Institute for Safe Medication Practices 2003 Survey
  - 2095 healthcare providers (1565 nurses, 354 pharmacists)
  - 88% condescending language or tone
  - 87% impatience with questions
  - 79% reluctance or refusal to answer questions or phone calls
  - 48% strong verbal abuse
  - 43% threatening body language

Denigrates Subordinates
Intimidating
Poor for morale
Atmosphere inhibits the flow of information
Impact on Individual and Team Behavior

- 34% felt the highly respected reputation of the prescriber was intimidating and avoided clarification
- 49% altered their handling of order clarifications or questions
- 75% used avoidance techniques to clarify orders

- 49% felt pressure to accept, dispense or administer a medication despite concerns
- 31% allowed physician to give medication despite reservations

Can We Function as a Team?

When a patient crisis occurs, we need to rapidly pool our collective expertise to resolve it…

- 75% of surgeons rated teamwork “High”
- Others on the team “not-so-much”
  - 39% of anesthesiologists
  - 28% of surgical nurses
  - 25% of anesthesia nurses
  - 10% of residents

50% of surgeons felt junior team members should not question the decisions of senior physicians

Source: Internal Bleeding, Whachter & Shojania, 2004
We MUST Function as a Team

I am very happy to know that, unlike at other appearances we’ve made, I don’t have to explain here what ‘crew’ means."

– Captain Chesley “Sulley” Sullenberger, in remarks after an emotional, 2-minute standing ovation at the ALPA 59th Air Safety Forum Awards Banquet in Washington, DC

The crew of US Airways Flight 1549 receiving ALPA’s first-ever Distinguished Safety Award in August of 2009
BREAK

Leadership Triple Threat for Performance Reliability

Set the set point

Define & Demonstrate Core Values at the “blunt end”

Find Problems & Fix Causes in systems and processes

Manage to prevent, detect, and manage drift

Reinforce & Build Accountability for behaviors at the “sharp end”
Just culture (Fair and Just Accountability)

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)

Human Error Classification
Based on the Skill/Rule/Knowledge classification of Jens Rasmussen and the Generic Error Modeling System of James Reason

<table>
<thead>
<tr>
<th>Activity Type</th>
<th>Skill Based</th>
<th>Rule Based</th>
<th>Knowledge Based</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error Types</td>
<td>Slip, Lapse, Fumble</td>
<td>Wrong rule, Misapplication of a rule, Non-compliance with rule</td>
<td>Formulation of incorrect response</td>
</tr>
<tr>
<td>Error Prevention Themes</td>
<td>Self checking – stop and think before acting</td>
<td>Educate if wrong rule, Think a second time if misapplication, Non-compliance – reduce burden, increase risk awareness, improve coaching culture</td>
<td>Stop and find an expert</td>
</tr>
<tr>
<td>Error Probability</td>
<td>1:1000</td>
<td>1:100</td>
<td>3:10 to 6:10</td>
</tr>
</tbody>
</table>
Non-Compliance

Person knew the rule, had the skill and ability to perform according to the rule, made a choice to disregard the rule

- Usually, a conscious decision, made after weighing the pros and cons, that it is better choice to not comply

- Also known as risk-taking

The Drivers of Non-Compliance

Non-Compliance = \( \frac{\text{Perceived Burden}}{\text{Perceived Risk}} + \text{Coworker Coaching} \)
Building Compliance

If burden to comply is high
- Reduce physical burden through work redesign
- Reduce mental/emotional burden

If positive coworker feedback is low
- Develop team commitment to observe and coach for compliance

If risk awareness is low
- Educate on risk to the patient or coworkers
- Educate on risk to self (physical or discipline)

Intuitive Work Processes

Our responsibility as leaders…
To design work processes that make it easy for our employees to do the right thing
Building Compliance

If burden to comply is high
- Reduce physical burden through work redesign
- Reduce mental/emotional burden

If positive coworker feedback is low
- Develop team commitment to observe and coach for compliance

If risk awareness is low
- Educate on risk to the patient or coworkers
- Educate on risk to self (physical or discipline)
Good Habits for Coaching – 5:1 Feedback

5 positive bits of feedback for every 1 bit of negative feedback

Why It Works:
• Positive is a more powerful influencer in managing resistance and building habits
• Builds a relationship of trust and respect
• Enables individuals to more effectively give and receive negative reinforcement for a behavior that needs to be changed –

It’s like “building money in the bank!”

Building Compliance

If burden to comply is high
- Reduce physical burden through work redesign
- Reduce mental/emotional burden

If positive coworker feedback is low
- Develop team commitment to observe and coach for compliance

If risk awareness is low
- Educate on risk to the patient or coworkers
- Educate on risk to self (physical or discipline)
Robin Rodgers
Died July 31, 2001

The New York Times
U.S. Inaction Lets Look-Alike Tubes Kill Patients
By GARDINER HARRIS
August 20, 2010

Died, with her unborn child, after a bag of tube feeding formula was mistakenly connected to an existing intravenous line

“The death of Robin and her unborn child were among hundreds of deaths or serious injuries that researchers have traced to tube mix-ups. But no one knows the real toll, because this kind of mistake, like medication errors in general, is rarely reported. A 2006 survey of hospitals found that 16 percent had experienced a feeding tube mix-up.”

Perceived Risk to Self

Risk = Probability x Consequence

- Probability of being observed – rounding, daily huddle, peer checking

- Consequence of actions – Rules of Conduct, progressive discipline, Red Rules, performance review
Unintended Human Error vs. Non-Compliance

- In a fair, or just, culture…
  - **No punishment** for unintended error or mistakes driven by system problems
  - **Fair consequence** for intended decisions to act against the rule

- It’s the leader’s responsibility to differentiate, and we can **differentiate**…

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**We Can Differentiate**


The United Kingdom’s National Health Service’s “Incident Decision Tree,” adapted from James Reason’s decision tree
It is important for employees to know that a leader will respond and treat an employee fairly when performance does not meet expectations.

**How Leaders Respond**

It is important for employees to know that a leader will respond and treat an employee fairly when performance does not meet expectations.

*If employees perceive that individuals are unfairly punished:*
- Reduced likelihood to report events, errors, and mistakes
- Missed opportunities to find and fix problems impacting performance and outcomes

*If employees see management tolerance when there is intentional, disregard for work rules:*
- Performance of other individuals and of the team as a whole will decline over time

_This is your management “moment of truth”_
Practical Case Studies

Case Study #1

In 2006, nurse Julie Thao mistook a bag of epidural painkiller for penicillin and hooked it up to an IV line that pumped the painkiller—meant to be injected into the spine later—into the bloodstream of Jasmine Gant, a 16-year-old who was about to deliver a baby at St. Mary's Hospital in Madison, Wis. The teen's heart collapsed. Her baby was delivered successfully by emergency Caesarean section, but Ms. Gant didn't survive.

Ms. Thao failed to put an identification bracelet on her patient or use the hospital's bar-coding system, designed to match the right medication to the right patient. But the bar-coding system had glitches, and nurses hadn't been adequately trained on it, so they often bypassed it.

Both medications—which looked alike—were brought into the patient's room before orders were given, a violation of policy. Fatigue increased Ms. Thao's likelihood of making a mistake. Ms Thao had worked two consecutive eight-hour shifts the day before and then slept in the hospital before coming on duty again the next morning, but there were no rules at the hospital to prevent her from being overworked.
A staff nurse working on an oncology unit reported to the charge nurse that she had called the Internal Medicine resident for an order of morphine for a terminally ill patient in severe pain. She reported that the physician had asked her to administer the drug, saying that he would be coming by in an hour to write the order.

The charge nurse thought this was odd since the patient had been getting pain medication all along and seemed to be doing OK. She didn’t ask any questions however and the patient was given the medication. An hour later, the patient was discovered non-responsive and expired.

The following day it was discovered that the staff nurse had not telephoned the doctor at all for an order. Initially she lied about this, but subsequently admitted she had not even tried to call because: “You can never get hold of him and this patient was in pain”.

The staff nurse said she did not regret her actions and had administered drugs without an order before. She was fully aware that she was breaching protocols. By contrast, the charge nurse was shocked by the incident and appalled that she had accepted the staff nurse’s explanation without asking any questions.
Case Study #3

It was a very busy evening shift in the hospital. The security guard in charge that night had been having some difficult family problems and had gotten very little sleep over the past few days.

As the charge officer working that shift, he had the master key that opened every door in the building. He was called to open an office off the main lobby. After he completed the task, he received a STAT call to the ED to help with a violent patient.

He left right away to go to the ED, but left the key in the door. When he realized 3 minutes later that he had done this, he went back to the lobby office, but the key was gone. As a result, they had to re-key the whole building.
Case Study #4

A clerk in the Registration Department was having problems with attendance. He had been working in the department for about two years, but in recent months had developed a pattern of tardiness, arriving late to work. The problem had started gradually, every couple of weeks and only a few minutes late.

Over the past two weeks, however, he was late by anywhere from 15 – 30 minutes at least twice a week. The manager had counseled him during the earlier episodes, but was now concerned that this employee could be headed toward termination.

This employee's performance other than the tardiness was good and he had been recognized recently in two different safety success stories. Problems with tardiness were not uncommon in this department, but the manager had tried to address each one as it had arisen.

A subsequent conversation with the employee brought out the information that he was going through some domestic issues and he was having to be the responsible adult to get his two children to day care.
A hospital, which had achieved remarkably low fall rates in all units, suddenly saw an increase in falls. Leadership re-emphasized the expectation of compliance with the normal fall prevention protocols – falls assessments, hourly rounding, side-rails up, pink armband identifiers, signs on the door and effective handoffs.

The next month there were 3 falls with injury:

1. A fall occurred when the nursing aide took the patient to the bathroom. The patient wanted privacy so the aide left her alone. The patient went to get up using the IV pole as a support, the pole slid and the 70 year old woman fell and split her head open from forehead to nose.

2. One patient came back from X-ray and told the transporter they wanted to sit in the chair, but no handoff was given to the nurse nor was a chair alarm set. Later he went to get up without assistance, fell and broke his hip.

3. Another patient had just returned from cardiac. The cardiac team put him in the bed, set the bed alarm, and handed off to the nurse. The nurse made hourly rounds for most of the day but wasn’t able to check on the patient for two hours when she got busy with an admission as well as a unit code. During that time the patient tried to get out of bed on their own and fell, breaking his arm.
Just Culture Challenges

- Leader epiphany – “We have found the enemy, and the enemy is us.”
- “But (s)he’s such a good employee…”
- “But there was no bad outcome…”
- Turn the learning for one into learning for all

“If everything ‘goes,’ then in the end no problem may be seen anymore as safety critical – and people will stop talking about them for that reason.”

Sidney Dekker, Just Culture:Balancing Safety & Accountability (2007)
Two Important Messages

- Employees have a responsibility to report events
- Leader's have a responsibility to
  - Identify and fix system problems
  - Handle the individual fairly while using opportunity to build accountability

Recommended Readings


(http://www.npsa.nhs.uk/site/media/documents/760_IDT%20Information%20and%20Advice%20on%20Use.pdf)
Georgia Tech vs Wake Forest

March 19, 2010

Low flyover lands two Oceana pilots in hot water

“I think one’s feelings waste themselves in words; they ought all to be distilled into actions which bring results.”

- Florence Nightingale
Contact Information

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