Effective Leadership for High-Reliability Health Care

AHA Leadership Summit

Steve Kreiser, CDR, USN Ret., MBA, MS

Gary Yates, MD

Thursday, July 27, 2017
HPI – A Press Ganey Solution

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 consulting and coaching

- Entered healthcare in 2002
- Comprehensive safety and reliability culture transformation in over 800 hospitals
- Consulting team with HRO experience and healthcare experience (clinicians, non-clinicians, and physicians)
Learning Objectives

1. Identify effective approaches to improve patient safety and reduce human errors

2. Describe approaches from HROs to drive safety improvements

3. Describe the critical role of senior leadership in creating a high reliability culture
Introduction to High Reliability
Reliability:

The probability that a system, structure, component, process or person will successfully perform the intended function(s).
Reliability From Our Patient’s Perspective

**Critical Components of the Patient Experience:**

Don’t harm me  
Heal me  
Be nice to me  
...in that order
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 = Patient Engagement

Financial Focus + performed as intended consistently over time = Margin

HIGH RELIABILITY
Complementary Strategies

Central Line Infections

Codes Outside the ICU

Surgical Site Infections

Hand Hygiene

Culture

…and on, and on, and on…

© 2006 Healthcare Performance Improvement, LLC. ALL RIGHTS RESERVED.
Harm in Healthcare

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

*To Err is Human*, Institute of Medicine (1999)

210,000 to 440,000 patients per year suffer from preventable harm that contributes to their death.

*James, John, A New Evidence-based Estimate of Patient Harms…*

*Journal of Patient Safety, September 2013, Volume 9, Issue 3*

Medical error—the third leading cause of death in the U.S.

251,000 preventable deaths per year

*Makary, M. and Daniel, M. (2016), Johns Hopkins University School of Medicine*
Hospitals are Dangerous Places…

Died after receiving organs that did not match her blood type.

Jesica Santillan
...So are Outpatient Practices

Darrie Eason – Misdiagnosis

Sebastian Ferrero – Medication Error

Patrick Sheridan – Misdiagnosis
So are Ambulatory Surgical Centers…

Sunday, May 23, 2010

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.
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, HROs recast a high-risk enterprise as merely a high-consequence enterprise. HROs operate as to make systems ultra-safe.
Reliability – U.S. Nuclear Power

Significant Events per Plant
Annual Industry Average, Fiscal Year 1988-2013

INPO Principles for a Strong Nuclear Safety Culture
1. Everyone is personally responsible for safety
2. Leaders demonstrate a commitment to safety
3. Trust permeates the organization
4. Decision making reflects safety first
5. Nuclear technology is recognized as special and unique
6. A questioning attitude is cultivated
7. Organizational learning is embraced
8. Safety undergoes constant examination

Source: Nuclear Energy Institute
Naval Aviation Mishap Rate

- 776 aircraft destroyed in 1954
- 13 aircraft destroyed and 5 Fatalities in 2014

Source: Naval Safety Center 30 September, 2014
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
Regarding small, inconsequential errors as a symptom that something’s wrong…

Preoccupation with Failure
A deviation from generally accepted performance standards (GAPS) that...

**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
Typical Improvement Curve

- **Start of Culture Change**
- **Time**

**Serious Safety Event Rate**

- **Apparent increase due to healthier event/problem reporting culture**
- **Significant performance improvement as a result of prevention activities**
- **Actual increase due to complacency or reverting to old habits**
- **Long-term improvement through sustained prevention**

© 2006 Healthcare Performance Improvement, LLC. ALL RIGHTS RESERVED.
Example: Serious Safety Event Rate January 2008-March 2014

88% reduction as a system
3 hospitals with sustained zero for >365 days
1 hospital with zero for 1,023 days

Example used blinded with permission of HPI client organization
AHRQ COS Hospital Percentile Rankings by Composite *
All hospitals to AHRQ Comparative; 2010 to 2015

Feedback & comm about error: 2015 - 90, 2010 - 68
Communication openness: 2015 - 84, 2010 - 40
Freq of events reported: 2015 - 82, 2010 - 72
Organizational learning: 2015 - 82, 2010 - 72
Non-punitive response to error: 2015 - 80, 2010 - 34
Handoffs and transitions: 2015 - 76, 2010 - 54
Suprv/mgr expectations re safety: 2015 - 75, 2010 - 46
Teamwork across units: 2015 - 73, 2010 - 46
Management support for safety: 2015 - 70, 2010 - 57
Teamwork within units: 2015 - 66, 2010 - 60
Overall perceptions of safety: 2015 - 62, 2010 - 61
Staffing: 2015 - 58, 2010 - 39
OVERALL PERCENTILE RANK: 2015 - 73, 2010 - 57

*12 hospital system plus 500 office medical group and home care division
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

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

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
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

We’re able to give real-time guidance and resource allocation…

Sensitivity to Operations
Rounding on the Flight Deck
Influencing Behaviors during FOD Walkdown
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
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
– We discuss alternatives on how to go about our normal work activities
– We’re not afraid to ask questions and voice safety concerns

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
Power Distance

Large Distance
• Relations are autocratic and paternalistic
• Power acknowledged based on formal, hierarchical positions

The *perceived* distance – not necessarily the real difference – as seen by the *subordinate*

Small Distance
• Relations are consultative and democratic
• Relate as equals regardless of formal positions

Korean Airlines Flight 801

- Fatigue
- Bad Weather
- Minor Technical Failure
- High Power Distance

Flight path

- Crash site
- Airport Runway
- General flight direction
- Nimitz Hill, Asan
- Dededo

Outliers

The Story of Success

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

**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.

American College of Healthcare Executives
Early Warning Systems

“Patients don’t suddenly deteriorate. Healthcare professionals suddenly notice.”

Clinical status

Anticipated Recovery

Systematic identification & Mitigation

Early Warning Score

Medical Emergency Team

Effort needed to return to recovery

Time

Source: Cincinnati Children’s Hospital Medical Center

American College of Healthcare Executives
Learning from Events

...so we don’t repeat them

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…
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.

- *We take advantage of the unique skills of our colleagues*
- *When a patient crisis occurs, we rapidly pool our collective expertise to resolve it*

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.
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
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
Miracle on the Hudson
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 55th 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
Anatomy of a Safety Event

**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


American College of Healthcare Executives
Common Cause Analysis

A collective examination of past events for “common causes” (not common outcomes)

Event (E): a condition that results from a deviation from practice expectations or standard of care

Inappropriate Act (IA): a human error that violates performance expectations or takes a task outside acceptable limits

Analyse by:
- Profession, Organization,
- Key Process, Key Activity,
- System Failure Mode,
- Individual Failure Mode,
- Human Error Type

Common Causes
<table>
<thead>
<tr>
<th><strong>People Causes</strong></th>
<th>( \text{HPICompare} ) (%)</th>
<th><strong>Systems Causes</strong></th>
<th>( \text{HPICompare} ) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge &amp; Skill</td>
<td>12.8</td>
<td>Structure (job design)</td>
<td>12.2</td>
</tr>
<tr>
<td>Attention on task</td>
<td>14.5</td>
<td>Culture (people &amp; people interaction)</td>
<td>57.7</td>
</tr>
<tr>
<td>Information processing</td>
<td>6.1</td>
<td>Process</td>
<td>18.0</td>
</tr>
<tr>
<td>Critical Thinking</td>
<td>34.3</td>
<td>Policy &amp; Protocol</td>
<td>6.6</td>
</tr>
<tr>
<td>Non-Compliance</td>
<td>26.5</td>
<td>Technology &amp; Environment</td>
<td>5.6</td>
</tr>
<tr>
<td>Normalized Deviance</td>
<td>5.7</td>
<td>Acts coded for system cause</td>
<td>3,045 of 4,203 (72.4%)</td>
</tr>
<tr>
<td>Acts coded for human error</td>
<td>2,329 of 4,203 (55.4%)</td>
<td>\textbf{Culture Preventable = 76.1}</td>
<td></td>
</tr>
</tbody>
</table>

Comparison based on 4,204 inappropriate acts from 84 sites in HPI CCA Database
Culture & Safety

Culture
Shared values and beliefs of individuals in a group or organization

\[\text{Culture} = \text{Shared Values & Beliefs} \rightarrow \text{Our Behaviors} \rightarrow \text{Outcomes}\]
Influencing Behaviors at the Sharp End

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

"You have to manage a system. The system doesn't manage itself."
W. Edwards Deming

"A bad system will DEFEAT a good person every time."
W. Edwards Deming

Design of Policy & Protocol
Design of Culture
Design of Work Processes
Design of Technology & Environment

Behaviors of Individuals & Groups

Outcomes

© 2006 Healthcare Performance Improvement, LLC. ALL RIGHTS RESERVED.
Journey to Reliability – Process + People

Optimized Outcomes

Reliability

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 200% accountability

Process Design
- Evidence-based best practice
- Focus & Simplify
- Tactical improvements (e.g. process bundles)

© 2010 Healthcare Performance Improvement, LLC. ALL RIGHTS RESERVED.
Growing Focus on Culture of Safety

Six Leadership Domains

• Establish a compelling vision for safety
• Build trust, respect, and inclusion
• Select, develop, and engage your Board
• Prioritize safety in the selection and development of leaders
• Lead and reward a just culture
• Establish organizational behavior expectations

www.npsf.org/cultureofsafty
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
- Attention
- Communication
  - repeat backs
  - call outs
  - phonetic & numeric clarification
  - clarifying questions
  - inquiry, advocacy, assertion
- Critical thinking
- Protocol use
- Decision-making
**Practice & Accept A Questioning Attitude**
We think critically about the things we see and hear during our work day.
- Stop, Reflect and Resolve
- Report Problems, Errors and Events

**Communicate Clearly**
We're responsible for professional, clear, and complete verbal and written communications.
- ISBAR-Q to transfer information
- 3-way Repeat Backs/Read Backs
- Clarifying Questions
- Phonetic and Numeric Clarifications
  (ISBAR-Q = Introduction, Situation, Background, Assess)

**Handoff Effectively**
We provide effective handoffs of patients, tasks and materials to ensure understanding and ownership.
- Use the 5-P Handoff tool
  (Patient/Project, Plan, Purpose, Problem, Precautions)

**Pay Attention To Details**
We take the time to carefully attend to important details.
- Self-check using STAR
  (STAR = Stop, Think, Act, Review)

**Be Accountable**
We look out for each other by being accountable to ourselves, our teammates and our patients.
- Cross check each other
- Encourage safe behavior using 5.1
- Speak up for Safety using CUS
  (CUS = Concerned, Uncomfortable, Stop!)
Changing Culture = Changing Behaviors

Set Expectations

Educate & Build Skill

Reinforce & Build Accountability

MIND THE GAP
Three Roles of HRO Leaders

Message on Mission at the “blunt end”

Build Accountability for behaviors at the “sharp end”

Ensure Safe Operations by finding and fixing causes

Set the set point

Manage to prevent, detect, and manage drift
Safety as an *Explicit* Core Value

"Safety is not a priority at Alcoa, it is a precondition."

Paul O’Neill
Former ALCOA CEO, US Treasury Secretary

“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

American College of Healthcare Executives
Messaging the Mission

• Measure safety – accident numbers and rates

• Make harm visible
  – Transparency – share great catches and lessons learned

• Be good role models for safety
  – Put it first in decisions

• Talk about safety everyday
  – Encourage event reporting (while making it safe to report)
  – *Start meetings with safety – tell safety stories*
Ensuring Safe Operations:

What can leaders do to find and fix system problems that make it difficult for their people to perform safely and effectively?

• Meet with fellow leaders on a daily basis to discuss problems that have occurred in the past and problems that could occur in the future

• Encourage error, problem and event reporting
  – Thank people for reporting, protect them if needed
  – Ensure staff knows the organization is committed to NOT punishing unintentional errors
    • At the same time, conscious disregard of policies or reckless behaviors will not be tolerated

• When a serious event happens, ensure operational leaders are intimately involved in the investigation process

• Prioritize problems based on safety criticality and urgency, assign problem owners and build an action plan to track problem resolution
Daily Safety Huddle at Advocate

- 8:30 am at most hospitals
- All departments directors and managers
- Most held in person, some by phone
- All led by hospital president or VP by exception
- 100% attendance expectation – send a representative if you can’t participate

“The Daily Safety Huddle is the best thing we’ve done – I can’t imagine not having it each and every day.”

Susan Nordstrom-Lopez, Advocate Illinois Masonic Hospital
Building and Reinforcing Accountability:

• Get out and talk to people at the “sharp end” on a regular basis to ensure they know operational expectations (Rounding to Influence)

• Give staff instant and continuous feedback
  – In the proper ratio – 5 positives for every 1 negative

• Ensure staff knows the organization is committed to NOT punishing unintentional errors (Fair and Just)
  • At the same time, conscious disregard of policies or reckless behaviors will not be tolerated

• Cultivate front line staff to be positive influencers of their peers (Coaches)
  – Around safety, quality AND satisfaction
Rounding to Influence – Employee Safety

1. **Connect to Core** – I’m Rounding today on the importance of Employee Safety. We value staff safety here as much as patient safety and have a goal of zero events of preventable harm to our staff. Did you know that ____ of our employees suffered lifting injuries last year?

2. **Check for Can-Do’s** – Can you tell me how you can help reduce your risk of a lifting? Expect the following:
   - Don’t lift with your back.
   - If available, use a mechanical lift for any lifting that exceeds 35 pounds.
   - Ask for help when lifting heavy objects
   - Offer help to co-workers when you see them lifting heavy objects.

3. **Collect Concerns** - What are the things that make it difficult to follow safe lifting procedures in this department?

4. **Call for Commitment** - Can I get your commitment to ask for help when lifting heavy objects or use a mechanical lift device? I do not want you to feel pressured to cut corners on this in the interest of time – your safety is too important.
Fair and Just Culture

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 a management “moment of truth”
Link PI and High Reliability

PROCESS TOOLS

LEAN Thinking + High Reliability Organizing

Human Behavior Tools
1. **Message on mission**
   - Start meetings with a safety message
   - Safety first in every decision
   - Protect those who ask the safety question
   - Rapid chain-of-command

2. **Build reliable systems**
   - Safety Huddle
   - Balanced Score Card
   - Visual Display
   - Daily Huddles (tiers I, II, III)
   - Gemba time
   - Top problems - problem solving sheets
   - Master plan
   - Leader standard work (LSW)

3. **Build accountability**
   - 3:1 feedback
   - Just culture
   - Round to influence
   - Red Rules
Using the High Reliability Chassis

1. Create and articulate a shared vision for the patient experience
   - Avoid initiative competition

2. Design leadership method and staff/physician behaviors with this vision in mind

3. Identify high-leverage structures/tactics
   - Try to “shrink the change” to minimize initiative fatigue
   - Look for opportunities to use a single structure to improve all three
   - Examples:
     - Starting meetings with a message,
     - Daily huddle
     - Leadership rounding
     - Teamwork skills
     - Hourly rounding
FIVES SAVE LIVES: Tools & Tones for High Reliability

As members of the Sentara team, we are committed to your well-being and creating an extraordinary healthcare experience. We are committed to improving health every day.

Sentara Commitments
- Always keep you safe
- Always treat you with dignity, respect and compassion
- Always listen and respond to you
- Always keep you informed and involved
- Always work together as a team to provide you quality healthcare

Tools
- Pay Attention to Detail
  - Self-checking with STAR
- Communicate Clearly
  - Repeat Backs & Read Backs
  - Clarifying Questions
  - Phonetic & Numeric Clarification
  - SBARr
- Have a Questioning Attitude
  - Validate & Verify
  - Know Why & Comply
- Handoff Effectively
  - SBARr
- Practice the Power of We
  - Peer Checking + Speak-Up with ARCC
  - Peer Coaching Using 5:1 Feedback

Tones
- Respect at ALL times
  - Smile and greet others - say hello!
  - Refer to others by name (usually first) - introduce team members and explain roles.
  - Listen with empathy and with an intent to understand.
  - Communicate the positive intent of your actions.
  - Provide opportunities for others to ask questions.

ARCC
- Ask a question
- Request a change
- Voice a Concern
- Chain of command

STAR
- Situation
- Background
- Assessment
- Recommendation
- Resolution

SBARr
- Situation
- Background
- Assessment
- Recommendation

American College of Healthcare Executives
1. Safety is a core value and fundamental to the patient experience.

2. Serious harm events are preventable and a continuous journey towards ZERO is the only acceptable goal.

3. We improve reliability and safety by the right mix of process, people and system design. This chassis can improve multiple dimensions of performance.

4. Clear and concrete – not abstract – behaviors should be adopted by all.

5. Structured methods for high reliability leadership should be put into place to ensure long term sustainability.

6. It will take everyone: Board, senior leaders, operational leaders, staff and physicians.
"Good ideas are not adopted automatically. They must be driven into practice with courageous impatience. Once implemented they can be easily overturned or subverted through apathy or lack of follow-up, so a continuous effort is required."

Admiral Hyman G. Rickover
1900-1986
Steve Kreiser is a Director, Strategic Consulting with HPI / Press Ganey. HPI / Press Ganey specializes in improving human performance in complex systems using evidence-based methods derived from high-risk industries. Steve is a former FA-18 pilot with over 21 years of leadership and management experience in the U.S. Navy. He has over 3500 flight hours and 720 carrier arrested landings, including combat missions in Iraq, Bosnia and Afghanistan. During his military career he served in numerous positions designed to improve reliability and safety in Naval Aviation. He has served on numerous aircraft mishap investigation boards and human factors councils tasked with discovering root causes for aviation mishaps and associated human errors. Since his retirement from the Navy he has participated in multiple root cause analysis cases while working on safety culture transformation efforts in dozens of healthcare organizations across the country. Additionally, Steve has a unique background and perspective on team training and integration from his commercial airline experience as a first officer for a major airline where he worked extensively in the area of Crew Resource Management. He can be reached at steven.kreiser@pressganey.com.
Gary Yates, MD

Gary Yates, MD is a Partner, Strategic Consulting at HPI / Press Ganey. HPI / Press Ganey specializes in improving human performance in complex systems using evidence based methods derived from high risk industries. He is the former Senior Vice President and Chief Medical Officer for Sentara Healthcare. He provided leadership for the quality and patient safety initiatives leading to Sentara Norfolk General Hospital being recognized as the 2004 recipient of the American Hospital Association- McKesson Quest for Quality Prize and Sentara Healthcare being recognized as the 2005 recipient of the John M Eisenberg Award for Patient Safety and Quality from the Joint Commission and the National Quality Forum. He served as co-chair of IHI's ninth annual National Forum on Quality Improvement in Health Care. In 2005, Dr. Yates was awarded the Physician Executive Award of Excellence from Modern Physician and the American College of Physician Executives (ACPE). He currently serves on the Board of Stewardship Trustees for Catholic Health Initiatives (CHI) and as a member of the American Hospital Association- McKesson Quest for Quality Prize Selection Committee. He can be reached at gary.yates@pressganey.com.