Creating a Highly Reliable Health System: the Leadership Challenge

CSR Fall Conference
Rick Foster, MD
Coleen Smith, RN
November 13, 2014
Redesigning Health Systems

“The American healthcare delivery system is in need of fundamental change.... Healthcare today too frequently harms and routinely fails to deliver its potential benefit.... Between the healthcare we have and the care we should receive lies not just a gap, but a chasm.”
**Vision:** That all SC hospitals and providers deliver safe, high quality healthcare in a caring and compassionate manner to each patient, every time.

**Mission:** To establish a culture of continuous improvement in the quality, efficacy and safety of patient care across all healthcare organizations and providers statewide.
Every Patient Counts: System-Level Aims

• Create an organizational culture of safety with engaged leadership.
• Actively improve the quality & outcomes of evidence-based care for key patient populations.
• Eliminate preventable serious adverse events and unintended patient harm.
• Establish a patient-centered environment of care with open and transparent communication.
State Performance: Overall Score

Process Quality + Readmissions + Mortality + HCAHPS

- Blue = Top Quartile (83.6%-84.5%)
- Green = Second Quartile (82.8%-83.5%)
- Yellow = Third Quartile (82.4%-82.8%)
- Red = Bottom Quartile (79.8%-82.4%)
HHS Quality Strategy

• **Better care:** increase the overall quality, by making care more patient-centered, **reliable**, accessible and safe.
  
  • Making care safer by reducing harm
  
  • Ensuring that each person and family are engaged as active care partners
  
  • Promoting effective communication and coordination of care
National Priorities Partnership: Overarching Objectives

• Improve the safety and **reliability** of America’s health care system.

• Engage patients and families in managing health and making decisions about care.

• Ensure patients receive well-coordinated care across all providers, settings, and levels of care.

• Guarantee appropriate and compassionate care for patients with life-limiting illnesses.

• Improve the health of the population.

• Eliminate waste while ensuring the delivery of appropriate care.
National Priorities Partnership
Safety Goals

• All healthcare organizations and their staff will strive to ensure a culture of safety while driving to lower the incidence of healthcare-induced harm, disability or death toward zero.

• They will focus relentlessly on continually reducing and seeking to eliminate all HAIs and serious adverse events.

• All hospitals will reduce preventable and premature hospital-level mortality to best in class.

• All hospitals and their community partners will improve 30-day mortality rates following hospitalization for select conditions to best in class.
The Flight to High Reliability
High Reliability Definitions

• **Reliability** – A probability that a system will yield a specified result.

• **HRO** – An organization that is involved in a complex and high risk environment that delivers exceptionally safe and consistently high quality service/care over time.
  – Nuclear Power Plant, Aircraft Carrier, Airline Flight, Amusement Park, Hospitals??
Zero Harm in Perspective

- **US Airlines: 2002-2010**
  - 18 deaths per year
  - 10.6 million flights
  - Rate: 1.70 deaths per million flights
Zero Harm in Perspective

- **US Amusement Parks: 2010**
  - 59 serious injuries in 2010
  - 2 billion rides per year
  - Rate: 29.5 serious injuries per billion rides (that’s less than one injury per million rides)
Zero Harm in Perspective

- **US Healthcare: 2008**
  - 210,000 – 400,000 deaths per year
  - 34.4 million hospitalizations
  - Rate: 6,104 – 11,628 deaths per million hospitalizations
High Reliability Organizations: Collective Mindfulness

• A mental orientation that enables continuous learning and continuous evaluation of the environment for the expected and unexpected.

• Leaders at all levels constantly think in terms of how the organization can become better and avoid error.

• Anticipation for events that may produce harm combined with containment once an unexpected event has occurred to prevent or minimize harm.
High Reliability—Five Key Concepts

• **Sensitivity to Operations** *(situational awareness)*
  – Focus on systems and processes and how they affect patient care.

• **Reluctance to Simplify**
  – Systems are made simple, but the explanation for failure is rigorously pursued and understood. *(Take nothing for granted.)*

• **Preoccupation with Failure**
  – Relentless pursuit of perfection and a constant search for what might go wrong. *(Focus on timely notification and evaluation of near misses.)*

• **Deference to Expertise**
  – Information is freely shared and staff are engaged at all levels.
  – In a crisis, the person with the most expertise leads.

• **Resilience**
  – The organization quickly contains and mitigates errors.
High Reliability

Reliability: Not By Process Design Alone

Behavior Accountability
- Behavior Expectations
- Knowledge & Skills
- Reinforce & Build Accountability

Integrated With

Process Design
- Evidence-Based Best Practices
- Technology Enablers
- Intuitive Work Environment
- Resource Allocation
- Continuous Quality Improvement

Optimized Outcomes
Safe Care

South Carolina

creating highly reliable healthcare — every patient, every time!
SC Safe Care Commitment

• Partnership between SCHA and the Joint Commission Center for Transforming Healthcare
• One of the first statewide efforts to promote the adoption of high reliability practices in hospitals.
• Ultimate goal is significant improvement in patient safety and quality, resulting in a dramatic reduction in events causing preventable harm.
SC systems already on this journey?

South Carolina Safe Care Commitment

AnMed Health
We're in this together.
AnMed Health Medical Center
AnMed Health Rehabilitation Hospital
AnMed Health Women's and Children's Hospital

Baptist Easley Hospital
caring is our calling

Beaufort Memorial Hospital

Bon Secours St. Francis Health System
St. Francis downtown
St. Francis eastside
St. Francis millenium
Bon Secours St. Francis Surgery Center

Georgetown Hospital System
Georgetown Memorial Hospital
Waccamaw Community Hospital

+rmc
the Regional Medical Center
Orangeburg, SC

MUSC Health
MUSC Children's Hospital
MUSC Medical Center

GHS
Greenville Memorial Hospital
Greer Memorial Hospital
Hillcrest Memorial Hospital
Laurens County Memorial Hospital
North Greenville Hospital
Fayetteville Memorial Hospital

Roper St. Francis
Bon Secours St. Francis Hospital
Roper Hospital
RSP Mount Pleasant Hospital

Palmetto Health
Palmetto Health Baptist
Palmetto Health Baptist Parkridge
Palmetto Health Children's Hospital
Palmetto Health Heart Hospital
Palmetto Health Richland

South Carolina Hospital Association

Joint Commission Center for Transforming Healthcare
Scope of the Commitment

• The achievable imperative – **ZERO** preventable harm to patients

• Learning in the first two years has focused on:
  – How to lead a health care system toward high reliability
  – The leadership requirement to drive a system to being highly reliable
  – The practical attributes and behaviors reflective of a safe and just culture
SC Just Culture Community

• Just Culture
  – An atmosphere of TRUST in which people are encouraged, even rewarded, for providing essential safety-related information, but in which they are also CLEAR about where the line must be drawn between acceptable and unacceptable behavior. (Reason 1997)

• Benefits of a just culture/standards of behavior
  – Increasing safety reporting/self reporting
  – Trust building/Retention of high performers
  – More effective safety and operational management
A “Just Culture”: Balancing Culpability and Blamelessness

**DUTY TO AVOID CAUSING UNJUSTIFIABLE RISK OR HARM**

- Did the employee put an organizational interest or value in harm’s way?
  - potential or actual harm to persons
  - potential or actual harm to property

**DUTY TO FOLLOW A PROCEDURAL RULE**

- Did the employee breach a duty to follow a procedural rule in a system designed by the employer?
  - rule specifies how to perform the job
  - system largely controlled by employee

**DUTY TO PRODUCE AN OUTCOME**

- Did the employee breach a duty to produce an outcome?*
  - rule specifies the outcome to be achieved
  - system largely controlled by employee

**DEFINITIONS**

- **Human Error** occurred during the time and in the realm of the employee’s actions.
- **Impaired** condition is due to an external influence on an employee’s reasoning or behavior.
- **Cognitive Error** occurred during the time and in the realm of the employee’s actions.
- **Perceived Error** occurred during the time and in the realm of the employee’s actions.
- **Organizational Error** occurred during the time and in the realm of the employee’s actions.

**ACTIONS**

- **System**
  - identify system factors
  - recommend changes

**REPETITIVE HUMAN ERRORS**

- Are there behavioral choices that are causing the repetitive errors?
  - identify repetitive human errors
  - recommend changes

**REPETITIVE AT-RISK BEHAVIORS**

- Are there system performance shaping factors that are causing the repetitive at-risk behavior?
  - identify at-risk behaviors
  - recommend changes

**EXAMPLES**

- **Avoiding or delaying**: Not following the procedure when the employee is not the person responsible for following it.
- **Following the procedure**: Following the procedure when the employee is the person responsible for following it.
- **Breaking the procedure**: Breaking the procedure when the employee is the person responsible for following it.

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*To answer, check if the duty to follow a procedural rule is met.
Culture of Safety

- Use of safety huddles
  - Maintain situational awareness
- Give priority and responsibility for problem resolution
- Build safety culture and teamwork between departments
• Common definitions for classifying events

• Volume-adjusted measure of events resulting in moderate to severe harm or death
• Intended to be used initially as an internal metric of preventable harm and measure of safety performance
80% Reduction Since 2003
High Reliability Certified Zero Award

To: Memorial Hermann Southeast Hospital
Zero iatrogenic Pneumothorax for 12 Months

February 1, 2010 to January 31, 2011

Dan Wolterman
President & Chief Executive Officer

M. Michael Shabot, M.D.
System Chief Medical Officer

Robert G. Croyle
Chair, Health System Board
Certified ZERO HARM Award

creating mindful, sustainable & highly reliable health care in sc

Your Hospital
Certified Zero Harm Awards

• Beginning in 2014, SCHA is recognizing sustained zero harm our hospitals and organizations demonstrate.
  – Must go at least twelve months without demonstrating harm in certain categories
  – Rolling time frame

• Presented each year.
  – Public recognition
  – Presented at SCHA-SCMA Annual TAP Conference (September)
Patient & Family Engagement

- When patients are engaged in their health care, it can lead to measurable improvements in safety and quality.

- Healthcare is different from other industries in that the patient/family is not a passive participant in the service.
  - Monthly Patient & Family Engagement Workgroup calls
How Will We Measure Progress?

- Sustained leadership commitment at all levels to achieving high reliability
- Annual re-assessment of progression toward high reliability using the HRST
- Improved hospital-specific safety culture survey results
- Increased rate of near miss/close call reporting
- Decreased rate of serious safety events
- Documented improvements in levels of patient & family engagement
High reliability industries such as aviation, nuclear power, amusement parks and even zoos have zero room for error.

Mission

Transform health care into a high-reliability industry
High-Reliability Health Care: Getting There from Here

MARK R. CHASSIN and JEROD M. LOEB

The Joint Commission

Context: Despite serious and widespread efforts to improve the quality of health care, many patients still suffer preventable harm every day. Hospitals find improvement difficult to sustain, and they suffer “project fatigue” because so many problems need attention. No hospitals or health systems have achieved consistent excellence throughout their institutions. Hig
High Reliability Health Care

Our team has learned a lot by working with experts from academia and HROs:
- Aviation, military, amusement parks
- Nuclear power, wild land firefighting

We have created a model for healthcare

Some hospitals and systems are beginning to commit to the goal
A High Reliability Model for Health Care

Leadership
Commitment to Zero Harm to patients

Safety Culture
Empowering staff to speak up about patient risks

Robust Process Improvement®
Systematic data-driven approach to solving complex problems
### Components of Maturity Model

<table>
<thead>
<tr>
<th>Leadership</th>
<th>Safety Culture</th>
<th>Process Improvement</th>
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</thead>
<tbody>
<tr>
<td>Board</td>
<td>Trust</td>
<td>Methods</td>
</tr>
<tr>
<td>CEO/ Management</td>
<td>Accountability</td>
<td>Training</td>
</tr>
<tr>
<td>Physicians</td>
<td>Identifying unsafe conditions</td>
<td>Spread</td>
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<tr>
<td>Quality Strategy</td>
<td>Strengthening Systems</td>
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<tr>
<td>Quality Measures</td>
<td>Assessment of Safety Culture</td>
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<tr>
<td>Information Technology</td>
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**STAGES:** Beginning, Developing, Advancing, Approaching
The High Reliability Self-Assessment Tool™

The HRST bridges the gap between the goal of high reliability health care and the path to achieve it.
High Reliability Self-assessment Tool™

A web-based tool for senior leadership to determine the “maturity” of their organization in adoption of practices that lead to High Reliability within the three domains.
Leadership Sample Question

Compared to all the strategic goals your organization pursues, which of the following best describes the priority your organization gives to improving quality and safety? (choose one)

a) Quality is important but not among the top strategic priorities

b) Quality is one of many several priorities competing for attention and resources

c) Quality is one of our organization’s top 3 or 4 strategic priorities (e.g., volume growth, financial performance)

d) Quality is the highest priority strategic goal for our organization
Safety Culture Sample Question

Which of the following best describes your organization’s approach to close calls or near misses? (choose one)

a) We rarely get reports of close calls
b) We receive sporadic reports of close calls
c) Staff in some areas regularly report close calls
d) Close calls are routinely reported
Performance Improvement
Sample Question

How does your organization use lean, six sigma, or change management? (Choose the one answer that best describes your organization)

a) We have not adopted any particular method or combination of methods for use throughout our organization.

b) We have adopted one or two of these methods (but not all three)

c) We have adopted all three of these methods
## Leadership Domain

<table>
<thead>
<tr>
<th>Component</th>
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<th>Developing</th>
<th>Advancing</th>
<th>Approaching</th>
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</thead>
<tbody>
<tr>
<td>Board</td>
<td>3/0</td>
<td>13/11</td>
<td>1/2</td>
<td>0/4</td>
</tr>
<tr>
<td>CEO/Mgmt.</td>
<td>3/0</td>
<td>6/6</td>
<td>2/1</td>
<td>6/10</td>
</tr>
<tr>
<td>Physicians</td>
<td>2/0</td>
<td>6/5</td>
<td>9/10</td>
<td>0/2</td>
</tr>
<tr>
<td>Quality Strategy</td>
<td>0/0</td>
<td>2/0</td>
<td>14/15</td>
<td>1/2</td>
</tr>
<tr>
<td>Quality Measures</td>
<td>8/4</td>
<td>6/10</td>
<td>1/3</td>
<td>2/0</td>
</tr>
<tr>
<td>IT</td>
<td>2/3</td>
<td>15/14</td>
<td>0/0</td>
<td>0/0</td>
</tr>
</tbody>
</table>

N= 17 for 2013      N = 17 for 2014
### HRST Results: 2013 vs. 2014

#### Safety Culture Domain

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</thead>
<tbody>
<tr>
<td>Trust</td>
<td>1/0</td>
<td>1/0</td>
<td>7/2</td>
<td>8/15</td>
</tr>
<tr>
<td>Accountability</td>
<td>0/1</td>
<td>1/1</td>
<td>11/8</td>
<td>5/7</td>
</tr>
<tr>
<td>Identifying unsafe conditions</td>
<td>3/3</td>
<td>4/1</td>
<td>10/12</td>
<td>0/1</td>
</tr>
<tr>
<td>Strengthening Systems</td>
<td>1/0</td>
<td>16/16</td>
<td>0/0</td>
<td>0/1</td>
</tr>
<tr>
<td>Assessment</td>
<td>0/0</td>
<td>0/1</td>
<td>16/10</td>
<td>1/6</td>
</tr>
</tbody>
</table>

N= 17 for 2013  N = 17 for 2014
## HRST Results: 2013 vs. 2014

<table>
<thead>
<tr>
<th>RPI Domain</th>
<th>Component</th>
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<th>Advancing</th>
<th>Approaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methods</td>
<td>1/1</td>
<td>11/11</td>
<td>3/2</td>
<td>1/3</td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td>1/0</td>
<td>13/13</td>
<td>3/4</td>
<td>0/0</td>
<td></td>
</tr>
<tr>
<td>Spread</td>
<td>1/0</td>
<td>15/14</td>
<td>1/3</td>
<td>0/0</td>
<td></td>
</tr>
</tbody>
</table>

N = 17 for 2013

N = 17 for 2014
HRST Summary 2013 to 2014

• Least movement:
  – **Board** (majority in Developing both years)
  – **Quality Strategy** (majority in Advancing both years)
  – **IT** (majority in Developing both years)
  – **Strengthening Systems** (majority in Developing both years)
  – **All 3 RPI categories** (majority in Developing both years)
HRST Summary 2013 to 2014

• Areas with increased maturity:
  – CEO (% in Approaching increased from 35% to 59%)
  – Trust (% in Approaching increased from 47% to 88%)
  – Assessment (% in Approaching increased from 6% to 35%)
New!

- Revised Sentinel Event Chapter
- Patient Safety Chapter
- Physician Engagement
Are we on the same journey?

The Joint Commission
- Strong leadership support
- Commitment to building a safety culture
- Evidenced based performance improvement methodology

High Reliability

High Reliability Journey

Safety Culture
- Assessment
- Identifying Unsafe Conditions
- Strengthening Systems
- Trust
- Accountability

Leadership
- Quality & Safety Strategy
- Quality & Safety Measures
- Governing Body
- Commitment
- CEO/Senior
- Leadership Commitment
- Physician Leadership
- Information Technology

RPI
- Widespread Adoption of RPI
- Process Improvement Training
- Process Improvement Methods

Commitment to Zero Harm
# Sentinel Event Policy: Elements that have not changed

<table>
<thead>
<tr>
<th>Elements</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retains the term “Sentinel Events”</td>
<td>“Branded” by TJC and well understood</td>
</tr>
<tr>
<td>Reporting of Sentinel Events to TJC is not required</td>
<td>2/3 of the reviews are voluntarily reported</td>
</tr>
<tr>
<td>Continues to require a review when an event is reported to TJC through other sources (media, complaint unit, CMS)</td>
<td>TJC has a responsibility in assuring public confidence and CMS requires an evaluation</td>
</tr>
<tr>
<td>The potential impact to accreditation is unchanged</td>
<td>Organizations have shown to participate</td>
</tr>
<tr>
<td>Documents continued to be managed in the same confidential manner.</td>
<td>Successful track record in protecting confidential materials despite challenges</td>
</tr>
</tbody>
</table>
# Sentinel Event Policy: Elements that have changed

<table>
<thead>
<tr>
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</thead>
</table>
| The definition of “Sentinel Events” is now tied to a “reviewable” list. The list has been modified | -Elimination of confusing terms such as “the risk thereof”  
-Added other serious event types |
| The approach to follow-up activities is more collaboration | Organizations want more flexibility other than “SEMOS” |
| Introduces “comprehensive systematic analysis”. RCA is one type | Organizations want flexibility to use tools other than RCA |
| Expands follow-up activities | Sentinel Event Measures of Success do not guarantee sustainability |
| In some instances, calendar dates expanded to business days | Gives organizations more time to drill down |
## Sentinel Event Policy: Elements that have changed

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Name change to the Office of Quality and Patient Safety</td>
<td>Now reflects the full scope of work and purpose</td>
</tr>
<tr>
<td>An Appendix of Accreditation Requirements is added</td>
<td>Improves access to information</td>
</tr>
<tr>
<td>Tables of have been deleted</td>
<td>Tables limited the scope of the review</td>
</tr>
</tbody>
</table>
Elements that **have** changed

<table>
<thead>
<tr>
<th>Elements</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>The chapter is reorganized to improve comprehension</td>
<td>Clarifies expectations</td>
</tr>
<tr>
<td>Root cause analysis and other tools are introduced</td>
<td>Organizations use other tools beyond RCA</td>
</tr>
<tr>
<td>A more comprehensive taxonomy of Patient Safety Events is explained, of</td>
<td>Taxonomy is introduced for the purpose of standardized usage of terms in</td>
</tr>
<tr>
<td>which one category is Sentinel Events</td>
<td>the Sentinel Event Policy and consistent with the new chapter on Patient</td>
</tr>
<tr>
<td></td>
<td>Safety Systems</td>
</tr>
</tbody>
</table>
New for 2015
Patient Safety Systems
Chapter
Overview

- Informs and educates hospital leaders on the importance and the structure of an integrated patient safety system.
- There are no new chapter requirements.
- The chapter serves as a road map for hospital leaders to use existing requirements to improve patient safety.
- The chapter will only be included in the 2015 Comprehensive Accreditation Manual for Hospitals.
The chapter...

- Defines the framework of an integrated patient safety system
- Discusses the importance of hospitals becoming learning organizations
- Focuses on prevention through proactive risk reduction activities
- Identifies all standards and requirements that support a patient safety system
Role of Hospital Leaders

- Motivate staff to uphold a fair and just safety culture
- Provide a transparent environment in which patient safety events are honestly reported
- Model professional behavior
- Remove intimidating behavior that might inhibit a culture of safety
- Provide the resources and training necessary to take on improvement initiatives
Learning Organizations

- People continuously learn, and thereby enhance their capabilities to create and innovate
- Transparent, non-punitive approach to error reporting so that the organization can *report to learn*
- Fair and just safety culture enriched by sharing lessons learned
- Data driven improvement
Data Use and Analytics

- Data use and reporting systems
- Proactive risk reduction strategies
- Statistical tools
- Resources and references
Standards and High Reliability

- **LD.03.01.01**: Leaders create and maintain a culture of safety and quality throughout the hospital.

- **LD.03.02.01**: The hospital uses data and information to guide decisions and to understand variation in the performance of processes supporting safety and quality.

- **LD.03.03.01**: Leaders use hospital-wide planning to establish structures and processes that focus on safety and quality.

- **LD.04.04.05**: The hospital has an organization-wide, integrated patient safety program within its performance improvement activities.
Aspiring Higher: Organizations will need to achieve optimal physician engagement
The Joint Commission’s Physician Engagement Goal

Help physician leaders in our accredited organizations to meet or preferably exceed their patient safety and performance improvement goals.
CMO as a Change Agent

CMO High Reliability Journey

Board of Directors
- Create a burning platform
- Use data to drive change
- Use patient testimonials

CEO & C-suite
- Create a burning platform
- Educate by using data and patient stories
- Offer a vision for the future
- Set Quality and Safety as number one agenda item for the full board

CMO as change agent

Medical Executive Committee and Chairs
- Create a shared need
- Engage physician leaders in initiatives in their clinical units
- Support teams by providing resources
- Partner with local leaders that are positive and have influence
- Build the case for the need to change and keep it fresh
- Teach an improvement tool at every meeting
- Have local teams gather patient stories and testimonials

Medical Directors, Nursing Directors and Managers
- Communicate and inspire often
- Identify and reward early adopters
- Celebrate quick wins and share your success stories
- Devote time to mentor; it will pay dividends

Front-line Staff (Physicians, Nurses, Technicians, etc.)

Plan
Build the need for change
Paint the future state
Test the plan
Lead the change

Inspire
Make it personal

Launch
Align operations
Communicate, communicate, communicate

Support Change
Monitor Progress
Be a visible proponent of the change

Always express gratitude for participation

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In Summary...
Keys Steps on the Climb to High Reliability

• The Board establishes patient safety as the core value and zero preventable harm as a primary system goal.

• Senior leaders embrace and actively promote a just and safe organizational culture.

• Patients and families are actively engaged at the strategic, operational, and clinical levels.
Keys Steps on the Climb to High Reliability

• An objective system for evaluating near miss and harm events is actively utilized at all levels of the organization.

• A common platform for robust process improvement is implemented and fully supported (training and funding).

• Highly reliable performance is recognized, celebrated and rewarded throughout the organization.
“Aiming for zero harm is the first step toward achieving it.”

Chassin and Loeb, 2013