High Reliability Healthcare
AHA 85th Annual Meeting
Leadership Workshop
October 7, 2015

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Objectives

- Discuss the importance of leaders as agents of change on the journey toward high reliability
- Describe why leadership commitment, culture of safety, and performance improvement are important elements in the high reliability journey
- Identify the various components that contribute to establishing high reliability within a healthcare organization
- Describe benefits of and barriers to beginning a high reliability journey within their own organization
- Articulate specific actions they can take within their organizations to make progress toward high reliability
What is the purpose, cause, or belief that inspires you to do what you do
Operating-Room Fire at Hospital Burns Patient, Prompts Changes

Posted: Friday, August 9, 2013 11:45 am | Updated: 12:17 pm, Mon Aug 12, 2013.

Ted M. Natt Jr., staff writer | 26 comments

FirstHealth of the Carolinas officials should know by the end of the month whether they have taken adequate corrective steps to prevent operating room fires like the one recently that burned the neck and shoulders of a patient during an emergency surgery at Moore Regional Hospital.

The N.C. Division of Health Service Regulation placed Moore Regional on “immediate jeopardy” status following an
Wrong-site surgery leads to more surgeries for patient and more problems for Florida hospital

August 16, 2013 3:42 am by Jameson, Marni | 0 Comments

A patient woke up from surgery at Halifax Hospital Medical Center last month to find her surgeon had operated on the wrong leg.

But, that's not how the cardiovascular surgeon explained it to her, according to a report from Florida's Agency for Health Care Administration, which investigated the July 3 incident. Instead, the surgeon told the patient that her other leg needed to be done anyway. Then he asked her to sign a consent after the fact, according to the report.

Patient 34, as she is referred to in the agency's report, was admitted to the Daytona Beach hospital for vascular disease, which was causing pain in her left leg. She gave her consent to have vascular graft surgery on her left leg. But the surgical staff scheduled the procedure for her right leg.
NEWBORN GIVEN TO WRONG MOM AT ALTA BATES HOSPITAL

"...a misunderstanding because the surnames are similar..."
How Safe is Healthcare?

- **Dangerous** (>1/1,000)
  - Health Care (1 of ~600)
- **Ultra Safe** (<1/1M)
  - Scheduled Commercial Airlines
  - European Railroads
  - Nuclear Power
  - Theme Parks
  - Chartered Flights
  - Chemical Manufacturing
  - Driving in US
  - Mountaineering
  - Bungee Jumping

**Number of Encounters for Each Fatality**

**Total Lives Lost per Year**
State of Health Care

Health care used to be:
- Simple
- Cheap
- Safe
- Ineffective

Today, it is extremely complex, exceedingly expensive, often highly effective, and very dangerous
Is Complexity Bad?

- Lots of things are complicated
  - Building jet engines
  - Putting animation in a slide

- Complex processes are vulnerable to error
  - Getting a medication to a patient: 30 steps
  - If each step is done correctly 98% of the time, what’s the likelihood of an error? **45%**

- How do others do better?
Perception of Quality

Added cost?

OR

Essential to overall performance of the organization

Companies that embrace quality as a way of running day-to-day operations tend to be more successful in process performance and delivering customer satisfaction in comparison to those who merely seek having a quality management system because they “have to.”
Current Approach to “Improvement”

- Performance Improvement staff hired without expertise
- “Learning on the job” is customary
- Benchmarking for PI staffing levels does not exist.
- No investment in improvement science training
- Facility in PI methodology and tools is not an expectation for everyone
You Get What You Pay For

<table>
<thead>
<tr>
<th>Minimal investment</th>
<th>Minimal improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project fatigue</td>
<td>Lack of sustainability</td>
</tr>
<tr>
<td>Reactive approach to improvement</td>
<td>Whack-a-mole (lack of prevention)</td>
</tr>
<tr>
<td>PDCA/PDSA is the only methodology</td>
<td>A basic algorithm for learning</td>
</tr>
<tr>
<td>Adoption of best practices</td>
<td>Wasteful adoption of ill-fitted solutions</td>
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</tbody>
</table>
How Have Others Done It?

“High reliability organizations” manage very serious hazards extremely well.

What do they all have in common?
- Highly effective process improvement
- Fully functional safety culture

Discover and fix unsafe conditions early.

In health care, we typically react only after patients are harmed.
How Safe are US Airlines?

1990-2001
- 129 deaths per year
- 9.3 million flights per year
- Rate = 13.9 deaths per million flights

2002-2013
- 14.6 deaths per year
- 10.2 million flights per year
- Rate = 1.43 deaths per million flights

= 90% ↓
Safety: Airlines vs. Health Care

- IOM “To Err is Human” estimate
  - 44,000-98,000 deaths in hospitals due to errors in care
  - 34.4 million hospitalizations per year
  - Rate = 1,279-2,849 deaths per million hospitalizations

- US Airlines: 2002-2013
  - Rate = 1.43 deaths per million flights

- Hospital care is 894-1,992 times less safe
Table Discussion

At your tables, within your individual organization or as a group, discuss the following.

What does high reliability mean to you and your organization?
What is “High Reliability” in Health Care?

- Achieving and maintaining **consistently high levels of safety and quality**
  - Over time
  - Across all health care services and settings

- Exists for specific measures or in particular services at individual health care facilities

- Significant variation in performance within hospitals and across the delivery system
Excellence in patient care for every patient, every time
Five Principles of High Reliability Organizations

Anticipation – “Stay Out of Trouble”
1. Preoccupation with failure
2. Reluctance to simplify
3. Sensitivity to operations

Containment – “Get Out of Trouble”
4. Commitment to resilience
5. Deference to expertise
3rd Edition now available: thoroughly revised, broader range of cases
High Reliability Model:

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 often “saturate” because so many problems need attention. No hospitals or health systems have achieved consistent excellence throughout their institutions. High-reliability science is
High Reliability Maturity Model: Components

Leadership Commitment
- Board
- CEO/Management
- Physicians
- Quality Strategy
- Quality Measures
- Safe Adoption of IT

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

Robust Process Improvement®
- Methods
- Training
- Spread

Stages of maturity
Beginning ➔ Developing ➔ Advancing ➔ Approaching
Why

- Improves organizational effectiveness
- Improves organizational efficiency
- Improves customer satisfaction
- Improves compliance
- Improves organizational culture
- Improves documentation
Table Discussion

At your tables, within your individual organization or as a group, discuss the following.

What is your vision of the future around high reliability in 1 year?

In 3 years?
LEADERSHIP:

COMMITMENT TO ZERO PATIENT HARM
The Joint Commission Journal on Quality and Patient Safety

2012 John M. Eisenberg Patient Safety and Quality Awards

Memorial Hermann: High Reliability from Board to Bedside

Innovation in Patient Safety and Quality at the National Level

M. Michael Shabot, MD, FACS; Douglas Monroe, MD, MBA; Juan Inurria, MBA, FACHE, FABC, CPHQ; Debbi Garbade, RN, MSN, CPHRM, CPHQ, CPSO; Anne-Claire France, PhD, CPHQ, MBB, FACHE

From left: Dr. John M. Butler, Physician Epidemiologist; Dr. M. Michael Shabot, Senior Vice President and Chief Medical Officer; Dan Wolberman,

Article-at-a-Glance

Background: In 2006 the Memorial Hermann Health System (MHHS), which includes 12 hospitals, began applying principles embraced by high reliability organizations (HROs). Three factors support its HRO journey: (1) aligned organizational structure with transparent management systems and compressed reporting processes; (2) Robust Process Improvement™ (RPI) with high-reliability interventions; and (3) cultural establishment, sustainment, and evolution.
“Ensuring patient safety is our core value, and it’s our only core value.”

Dan Wolterman, CEO, Memorial Hermann Health System
Essentials for High Reliability

- Aligned agreement of all senior leaders, sharing vision of eventual elimination of harm to patients.
  - Governing body, senior, physician and nursing leaders

- The goal of zero
  - Not satisfied with whatever the current level of safety is - always looking for ways to improve it
“The beauty of the business case for quality is that it starts and ends with the best interests of the patient.”

Swensen, et.al The Business Case for Health-Care Quality Improvement

Quality Improvement Beneficiaries

Build strategy on:
1. Patient needs
2. Organization reputation
3. Esprit de corps
4. Financial return to maintain state-of-the-art medical practices

Overuse Care
Defective Care
Inefficient Care
Underuse Care

Patient Centered Care

Business Case
(financial benefit for providers)

Financial benefit to employers, patients, providers or insurers.
Leadership Commitment to ZERO Patient Harm

- Board
- CEO/Management
- Physicians
- Quality Strategy
- Quality Measures
- Safe Adoption of IT
Board or Governing Body

- The Board plays a prominent role in quality and safety
- Goes beyond the regulatory requirements and listening to reports
- Engages in the development of quality planning and goals
- Review adverse events and puts a story/face to patient harm
Getting Boards on Board
5 Million Lives Campaign 2008

1. Set **specific aims** to reduce harm
2. Get data and **hear stories** — put a “human face” on harm data
3. Establish and monitor **system-level measures** — transparent to organization and its customers
4. Change the **environment, policies and culture** — establish an environment that is respectful, fair and just
5. **Learning** - Develop capability and learn about how the best-in-the-world boards work with leadership to reduce harm
6. Establish **executive accountability** to reduce harm
CEO & Senior Leadership

- **Stated commitment to zero patient harm**
  - Goes beyond regulatory requirements and communicated relentlessly

- The CEO leads the development and implementation of a proactive quality agenda
  - Aims for and achieves zero patient harm for vital clinical processes
CEO/Management Tactics

Daily Safety Briefings

- **Look back** – significant safety or quality issues from the last 24 hours.
- **Look ahead** – anticipated safety or quality issues in the next 24 hours
- **Follow up** – status reports on issues identified today or days before.

*Situational awareness & heightened risk awareness*
Cincinnati Children's Knowledge Sharing

2015 Knowledge Sharing Opportunities

QUARTERLY OPEN HOUSES
Registration Fee: $500.00/individual
Visit us in Cincinnati to learn about the theory and operations in place to support Cincinnati Children's journey toward becoming the leader in improving child health. This event is designed for senior leaders and managers responsible for developing a culture within their institution that values a commitment to quality and safety. Key insights, lessons learned and best practices will be shared through engaging presentations, discussions, observations, and tours.
March 18 | May 7 | August 11 | October 21

WEBINAR PRESENTATIONS
Engage in a series of one-hour interactive webinars presented by leaders within Cincinnati Children’s. Additional webinars will be scheduled throughout the year. Visit the publications and presentations page of our website to view past webinars at: cincinnatichildrens.org/andersoncenter.

The Power of Learning Networks
September 30 @ 3:15 PM ET
Carole Lannon, Professor & Director, Learning Networks

Breakthrough Analytics: Utilizing Advanced Analytics for Improvement
November 18 @ 11:30 AM ET
Denise White, Assistant Professor & Director, Quality & Transformation Analytics

FOR MORE INFORMATION OR TO REGISTER:

Open House/Webinar:
Lindsay Ibold
513.636.0161
lindsay.ibold@cchmc.org

DOB Call/DOB Deep Dive Call:
Beth Marx
513.803.9161
elizabeth.marx@cchmc.org

These knowledge sharing opportunities have been developed to share knowledge openly, broadly, efficiently and impactfully for the purpose of improving global child health.
CEO/Management Tactics

- Safety Culture Assessment
- Safety Leadership Rounds
- Teamwork Training and Skill building
- Senior executive adopt-a-work unit
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Physicians

Physicians are engaged and involved in quality and safety

- Broad involvement of several physicians
- Champion & lead improvement projects
- Accept the leadership of other appropriate clinicians
Physicians

Impact of physician engagement:
- Improved clinical outcomes
- Reduced malpractice risk
- Improved patient satisfaction
- Improved physician satisfaction and decreased physician burnout
Quality Strategy

What priority is given to improving quality and safety?

- Quality is one of the top three or four strategic priorities OR the highest-priority strategic goal
- Improvement efforts directed at the most important causes of harm in the organization’s patient population
- Stated goal – Zero harm
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Quality Measurement

What is the organization’s approach to measuring quality and safety?

- Measurement goes beyond the regulatory requirements
- **Transparency** of Information
  - Who can access & How often?
- Align incentive systems based on results
Safe Adoption of IT

- Level of support from IT for quality/safety improvement programs
- IT solutions are integral to sustained improvement
- Commitment to safety
Resources for “Safe IT”

SAFER Guides

- High Priority Practice
- Contingency Planning
- System Interfaces
- Computerized Provider Order Entry with Decision Support
- Clinician Communication
- Organizational Responsibilities
- System Configuration
- Patient Identification
- Test Results Reporting and Follow Up

Issue 42: Safely implementing health information and Converging technologies

Issue 50: Medical device alarm safety in hospitals

Issue 54: Safe use of health information technology

Sentinel Alert Event

Safe Health IT SAVES LIVES

View Infographic
The High Reliability Journey Begins with Leadership

Leadership Commitment to ZERO Patient Harm

- Board
- CEO/Management
- Physicians
- Quality Strategy
- Quality Measures
- Safe Adoption of IT
Table Discussion: Leadership

At your tables, within your individual organization or as a group, discuss the following.

- What do you see as the biggest obstacle to obtaining alignment around the goal of zero harm?
- Do you see yourself as a Change Agent for high reliability?
  - If YES: Identify strategies that you can use to obtain alignment around the goal of zero harm.
  - If NO: Why not?
Why Focus on Safety Culture?

- Improving safety culture is the only way to fully empower staff to find unknown risks
- HROs depend critically on safety culture
US Safety Board Determines Death in Train Crash Was Failure of Both Track and Safety Culture

By Robert Charette
Posted 29 Jul 2010 | 16:07 GMT

Metro-North railroad has 'deficient safety culture' government says after fatal derailment

BP Oil Spill: Engineering Experts Attack Industry Safety Culture

By SETH BORENSTEIN | 12/14/11 01:35 PM ET | AP
Components of Safety Culture

Trust:

– Coordinated and focused effort to eradicate intimidating behaviors and establish trusting environment

– Is trust measured? Are codes of behavior self-policing?
Components of Safety Culture

**Accountability:**
- Balance between blameless errors and blameworthy acts (e.g. honest mistake versus poor choice)
- Equitable and transparent disciplinary procedures
Accountability

Health care also fails to apply disciplinary procedures equitably and uniformly

- Lack of uniform accountability also erodes trust, stifles reporting of unsafe conditions

- Belief in a completely “blame-free culture” further impairs progress toward accountability

Striking the balance is critical:
- Learning from blameless errors
- Accountability for adhering to safe practices
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Components of Safety Culture

Identifying Unsafe Conditions:
– Are near miss/close call events reported with same frequency as actual harm events?
– Are unsafe conditions recognized? Routinely? Or is activity largely retrospective?
Tactics to Increase Reporting

- Make sure staff know what you want to hear about and…

- Make sure you tell staff what you did with the information they reported.
Prerequisite for Reporting

- What inhibits reporting even before intimidating behavior comes into play?
  - Failure to recognize unsafe conditions
  - Distractions during medication prep
  - Poor participation in timeouts
  - Language barrier preventing full protection of two-person check on blood products

- Requires education on known hazards

- Where are your unrecognized risks?
Components of Safety Culture

Strengthening Systems:
- What efforts are in place to recognize patterns of causal factors across the organization?
- Efforts to catalog and prioritize system weaknesses--proactively

Reactive
- Responding to events that have already happened

Proactive
- Active identification of unsafe conditions through analysis of processes

Predictive
- Ability to accurately foresee potential problems based on system analysis
Evolution of Safety Culture

- Today, we mostly react to adverse events

- **Close calls** are “free lessons” that can lead to risk reduction --- if they are recognized, reported, and acted on

- **Unsafe conditions** are further upstream from harm than close calls

- Ultimately, proactive, routine assessment of safety systems to identify and repair weaknesses gets closer to high reliability
Components of Safety Culture

Assessment:

- Safety culture is measured—how often? Who is included?
- Results used to plan efforts to improve
- Metrics around improvement efforts reported to senior leadership; systematic improvement initiatives are in place
Tactics around Measuring/Acting

- If you already measure safety culture: develop a plan with built in accountability to review the results and work to improve

- All units/departments routinely report on progress (which won’t be immediate or fast in many cases)

- Discuss these results with the Board
Culture Change is Difficult

AHRQ Safety Culture Survey  2007  2012
1. Staff feel mistakes are held  (%)YES  50  50
   against them.

2. When event is reported, it feels  (%)YES  57  54
   like the person is being written
   up, not the problem

3. Staff worry mistakes are kept in  (%)YES  65  65
   their personnel files

2007 (n= 382)  2012 (n=1128)
What Behaviors are Intimidating?

Wide range: from hanging up the phone instead of answering a question to verbal abuse (cursing, yelling) or physical abuse

Most common?

– Refusal to answer questions or to return phone calls or pages; condescending tone or language; impatience with questions

– 2003: about ¼ of nurses and pharmacists personally experienced these from MDs more than 10 times in past year
**Assessing Errors Systematically**

**Deliberate harm test**
- Were the actions intended?
  - No → Incapacity test
  - Yes → Substitution test

**Incapacity test**
- Does there appear to be evidence of ill health or substance abuse?
  - No → Foresight test
  - Yes → Substitution test

**Foresight test**
- Did the individual depart from agreed protocols or safe procedures?
  - No → Substitution test
  - Yes → Substitution test

**Substitution test**
- Would another individual coming from the same professional group, possessing comparable qualifications & experience, behave in the same way in similar circumstances?
  - Yes → System failure
  - No → Foresight test

- Were the protocols and safe procedures available, workable, intelligible, correct and in routine use?
  - No → Foresight test
  - Yes → Foresight test

- Were there any deficiencies in training, experience or supervision?
  - No → Foresight test
  - Yes → Substitution test

- Is there evidence that the individual took an unacceptable risk?
  - No → Substitution test
  - Yes → System failure

- Were there significant mitigating circumstances?
  - No → Foresight test
  - Yes → System failure

**Consider**
- • Discipline
- • Potential adjustment to clinical duties
- • Corrective training/education
- • Improved supervision
- • Refer to Employee Assistance Program

**Identify**
- • System failures

**System failure**
- • Summarily suspend/terminate
- • Police
- • Report to state quality investigation office
- • Report to National Practitioner Databank (NPDB)

---

**MD**

**Start here**
Summary

- Fully functional safety culture is essential to achieving high reliability in healthcare.
- Will take time and consistent effort on the part of all leaders and the Board.
  - No guaranteed or foolproof methods.
  - Expect setbacks, non-linear progress.
- Measure trust, intimidating behavior, culture.
- Set goals, use RPI to drive improvement.
- No challenge is more important.
Table Discussion: Safety Culture

At your tables, within your individual organization or as a group, discuss the following.

What are the barriers to recognizing, reporting and responding to unsafe conditions?

– Develop one or two strategies to try next week.
ROBUST PROCESS IMPROVEMENT®
Reliability is failure free operation over time from the viewpoint of the patient.

-R Resar, Institute for Healthcare Improvement
Current State of Improvement

- We have made some progress

- Improvement difficult to sustain/spread

- Getting to zero, staying there is very rare
Semmelweis’ Original Data

Monthly Death Rates

Handwashing Program

1841 1842 1843 1844 1845 1846 1847 1848
Current State of Quality

- Routine safety processes fail routinely
  - Hand hygiene
  - Medication administration
  - Patient identification
  - Communication in transitions of care

- Preventable adverse events
  - Surgery on wrong patient or body part
  - Fires in ORs, retained foreign objects
  - Infant abductions, inpatient suicides
RPI® and High Reliability

How did HROs achieve zero harm?

- How to get from low to high reliability?
- How do we address safety processes that fail 40-60% of the time?
- How to get major improvement quickly?

Answer?

RPI® = Lean, Six Sigma, and change management
RPI in Health Care Today

Only a small percentage of hospitals or systems use RPI in any form or fashion

- RPI is used differently by different hospitals
  - Most use only some of the parts; change management is most often left out
  - Most do not use it to transform
  - Most do not have a plan for spread or for linking RPI training to staff development

- Compelling business case for RPI
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What is Robust Process Improvement?

RPI® is a **blended** set of strategies, tools, methods, and training programs—including **Lean, Six Sigma, and Change Management**—that is used to improve business processes and clinical outcomes.
What is Lean?

- **Philosophy**: continuous improvement of processes through employee empowerment
- Teaches us to view our processes from the customer’s perspective—in value streams
- **Tools**: to increase value and improve flow by eliminating steps in processes that represent pure waste
- Waste increases cost, produces no value
- All unexamined processes have waste; often as much as 50% of time and effort is waste
Six Sigma Philosophy

- Philosophy underlying six sigma helps us to think about quality differently
- Six sigma = accuracy and variation
- Six sigma measures bad outcomes as “defects per million opportunities”
- 1% rate of bad outcomes = 10,000 defects per million
- It gives us tools and a way to think about getting to zero harm: the high reliability goal
Six Sigma

A Methodology for Improving Processes

Define
Who are the customers and what are their priorities?
How is the process performing and how is it measured?

Measure
What are the most important causes of the defects?

Analyze

Improve
How do we remove the causes of the defects?

Control
How can we maintain the improvements?
The Way We Do Improvement

**Usual approach:** best practices, toolkits, protocols, checklists, “bundles”
- Typical best practice is “one-size-fits-all”
- Can produce modest improvement
- Difficult to sustain
- Cannot get to zero this way

The “one-size-fits-all” approach works well only for simple problems that do not vary

Toughest problems are not simple
### Main Causes of Failure to Clean Hands

(through all participating hospitals)

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ineffective placement of dispensers or sinks</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Hand hygiene compliance data are not collected or reported accurately or frequently</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
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<tr>
<td>Lack of accountability and just-in-time coaching</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
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<td>X</td>
<td>X</td>
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<tr>
<td>Safety culture does not stress hand hygiene at all levels</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Ineffective or insufficient education</td>
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<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hands full</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Wearing gloves interferes with process</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Perception that hand hygiene is not needed if wearing gloves</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health care workers forget</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distractions</td>
<td></td>
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<td>X</td>
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Note that not all of the main causes of failure appear in every hospital. The chart above represents the validation of the root causes across hospitals. This underscores the importance of understanding hospital-specific root causes so that appropriate solutions can be targeted.

Each letter = one hospital
Some Important Causes of Hand Hygiene Failures

1. Faulty data on performance
2. Inconvenient location of sinks or hand gel dispensers
3. Hands full
4. Ineffective education of caregivers
5. Lack of accountability

➤ Each requires a very different strategy to eliminate
The Technical Solution Is Not Enough

- Lean, Six Sigma provide technical solutions

- Why does improvement fail so often?
  - Not for lack of a good technical solution
  - Failures occur when organization fails to accept and implement a good solution it had

- RPI addresses this challenge directly

- Change management = a systematic way to implement and sustain good solutions
Facilitating Change

Key components of managing change

1. **Plan**: engage all stakeholders, identify sponsor, champion and process owner

2. **Inspire**: paint a convincing picture of how beneficial the change will be

3. **Launch**: initiate the change, intensify communication to stakeholders

4. **Support**: sustain the improvement; empower process owner

Change management is not linear
Studies show that between 50% and 75% of improvement efforts fail due to a lack of focus on facilitating change.

Adapted from General Electric Co.’s Change Acceleration Process © 2008.
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Why RPI? The Business Case

- Administrative processes in health care are just as broken as clinical processes
  - Billing, supply chain, throughput
  - RPI can directly improve margins

- Learning RPI allows organizations to solve their own problems

- Generate positive ROI now while learning how to redesign care processes for future

- Mayo program ROI = 5:1
## Why RPI? Major Improvements

<table>
<thead>
<tr>
<th>Center Projects</th>
<th>Results(%)</th>
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<tbody>
<tr>
<td>Hand hygiene</td>
<td>71↑</td>
</tr>
<tr>
<td>Hand-off communication failures</td>
<td>56↓</td>
</tr>
<tr>
<td>Wrong site surgery risks</td>
<td></td>
</tr>
<tr>
<td>- Scheduling</td>
<td>46↓</td>
</tr>
<tr>
<td>- Pre-op</td>
<td>63↓</td>
</tr>
<tr>
<td>- Operating Room</td>
<td>51↓</td>
</tr>
<tr>
<td>Colorectal SSIs</td>
<td>32↓</td>
</tr>
<tr>
<td>Falls with injury</td>
<td>62↓</td>
</tr>
</tbody>
</table>
## HAI Hospital Scorecard

### Sugar Land Hospital HAI Scorecard

<table>
<thead>
<tr>
<th>ICU CLABSI</th>
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<th>ICU CAUTI</th>
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<th>Total SSI</th>
<th>Perf Std SSI</th>
<th>NHSN SSI</th>
</tr>
</thead>
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<tr>
<th>Hip</th>
<th>Knee</th>
<th>ORIF</th>
<th>MRSA</th>
<th>Clostridium difficile</th>
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**Number of HAIs in one month**
### HAI Hospital Scorecard

**Sugar Land Hospital HAI Scorecard**

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**Number of HAIs in one month**
Performance Improvement for High Reliability

**Methods:**
- What methods/tools are used for adoption of Robust Process Improvement® tools?
- Commitment to adopting these tools throughout the organization?

**Training:**
- Is training limited to the quality department?
- Is there a plan to broaden training?

**Spread:**
- Used in many areas? Clinical as well as operational?
- Proficiency in these tools tied to career advancement?
Table Discussion: RPI®

At your tables, within your individual organization or as a group, discuss the following.

What strategies have you used to build your performance improvement program?

– Who were your key stakeholders?
– What resistance did you find?
– Were you successful in managing the resistance?
High reliability is catching on

Google search conducted September 29, 2015
Patient Safety Systems Chapter

http://www.jointcommission.org/accreditation/hospitals.aspx
South Carolina Safe Care Commitment: What is Possible?
Zero Harm Awards?

Categories:
- Hip replacement-hospital wide
- Knee replacement-hospital wide
- CLABSI-ICU only or special non-ICU Hematology/Oncology or Renal Dialysis units

Twelve months or greater without incidence

2014: 77 awards across 3 categories, statewide

2015: 69 awards across 3 categories, statewide
In order to drastically improve safety levels and advance towards high reliability must have:

- Strong leadership support
- Commitment to building a safety culture
- Evidenced-based performance improvement methodology
Transformation to High Reliability

- We must have much more ambitious goals for healthcare improvement: zero harm
- Current methods will not get us there
- Lean, six sigma, and change management (RPI®) have far greater promise
- Culture change is difficult, takes time
- Some hospitals and systems making real progress; showing that zero is achievable
Launch

- High reliability is achievable
- Striving for high reliability is not a project
  - Leadership commitment to goal of zero
  - Fully functioning culture of safety
  - Highly effective improvement capacity
- Enables better organizational performance in many different areas in addition to safety
What can you do next week?
QUESTIONS OR COMMENTS?