# What is High Reliability, and Why Does Health Care Need It?

Mark R. Chassin, MD, FACP, MPP, MPH President and CEO, The Joint Commission

Oklahoma Hospital Association
Annual Convention
Oklahoma City, OK
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## **The Joint Commission Today**

- 1. Strong focus on enhancing customer value: improving accreditation, engaging physicians
- 2. Effective advocate with CMS: modernizing the most outdated COPs (2012 LSC, finally)
- 3. High reliability is gaining momentum
- 4. We are an improvement company, creating and delivering effective quality solutions: Center for Transforming Healthcare (CTH)



## Reframing the Mission of The Joint Commission

- Board refocused our mission in 2009
- Key part of effort to improve customer value
- Mission:
- "To improve health care for the public by evaluating health care organizations and inspiring them to excel..."
- Reoriented surveyors to the central need to conduct educational, collaborative surveys

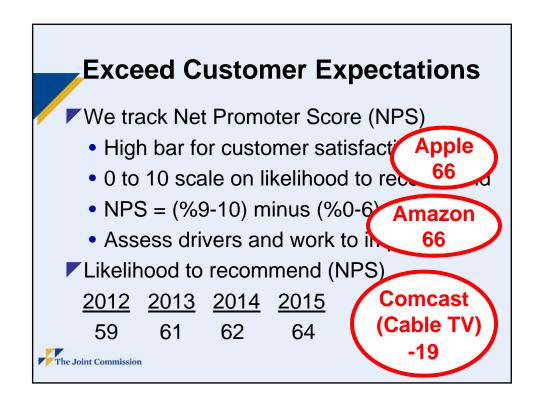


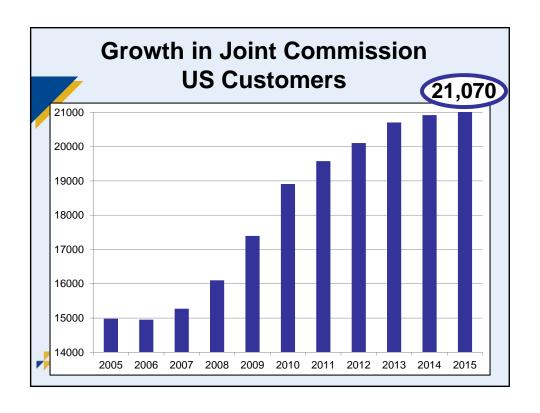
## Representative Customer Comment

"I'm just getting caught up after last week; 30 surveyor days is exhausting. The survey team was highly collaborative while not yielding an inch on standards. I know---just the balance you're looking for. There were over a dozen systemic opportunities for improvement that we had not recognized on our own. I've never seen as experienced and effective a team as this group."



Bill Conway, MD, Henry Ford Health System





#### **Joint Commission US Customers**

	<u>Program</u>	<u>2015</u>
	Ambulatory Care	2106
	Behavioral Health	2288
	Certification	3982
	Home Care	5791
	Hospitals	4393
	Laboratory	1502
	Long Term Care	1008
The Joint C	Total	21,070

## Payer Initiatives: Swiss Re

- One of world's largest reinsurers
- Preferential underwriting terms to liability insurance clients for using CTH tools:
  - Oro<sup>™</sup> 2.0 (high reliability self-assessment)
  - Targeted Solutions Tools (TSTs) to improve hand hygiene, reduce falls, etc.
- ▼1st direct financial incentive for CTH adoption
- ✓ Exploring other incentives: ↓ premiums



## **Payer Initiatives: Anthem Blue Cross**

- Nation's 2nd largest private insurer
- Quality incentive program for 800 hospitals
  - Will include bonus payments for our integrated care certification and for antimicrobial stewardship standard
  - Incentive should offset certification fee
  - Joint promotional activities underway
- Exploring similar incentives for hospitalbased palliative care, among others











## **Current State of Quality**

Routine safety processes fail routinely

- Hand hygiene
- Medication administration
- Patient identification
- · Communication in transitions of care
- Uncommon, preventable adverse events
  - Surgery on wrong patient or body part
  - Fires in ORs, retained foreign objects
  - Infant abductions, inpatient suicides

## **Current State of Improvement**

We have made some progress

- Project by project: leads to "project fatigue"
- Satisfied with modest improvement
- Current approach is not good enough
  - Improvement difficult to sustain/spread
  - Getting to zero, staying there is very rare
- ▼High reliability offers a different approach
  - The goal is much more ambitious
- High reliability is not a project

## **High Reliability Healthcare**

- Our team has worked for 7 years with academics and experts from HROs (nuclear, aviation, military, amusement parks)
- We have created a model for healthcare:
  - Leadership committed to goal of zero harm
  - Safety culture embedded throughout
  - RPI (lean, six sigma, change management)
- Many resources, tools, and programs





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.

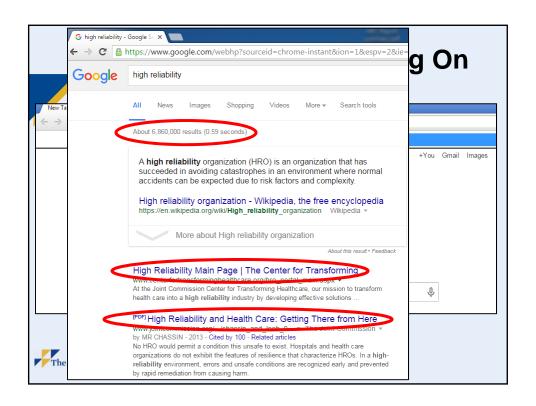


Milbank Q 2013;91(3):459-90

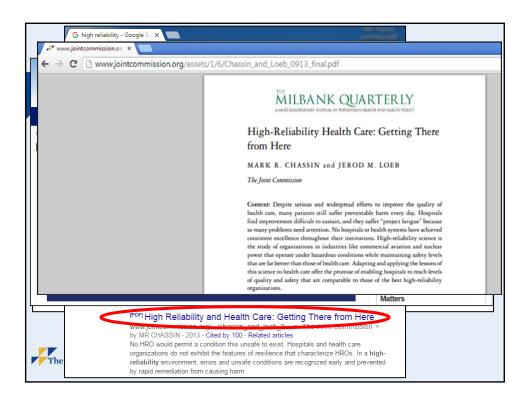
## Joint Commission High Reliability Initiatives

- High Reliability Resource Center
- Self Assessment Tool for hospitals (Oro™ 2.0) extensively tested, available now
- Partnering in South Carolina, Michigan, and Illinois with state hospital associations
- Using high reliability framework on survey
- Tools for getting to zero: Center for Transforming Healthcare and TST









## Leadership

- All components of leadership must commit to the ultimate goal of high reliability (zero harm): Board, management, MD and RN leaders
- Quality is the number one strategic priority
- Physicians lead and participate in QI
- Quality program goes beyond requirements
- Improvement efforts directed at most important causes of harm in your patients
- Quality measures widely published

## **Safety Culture**

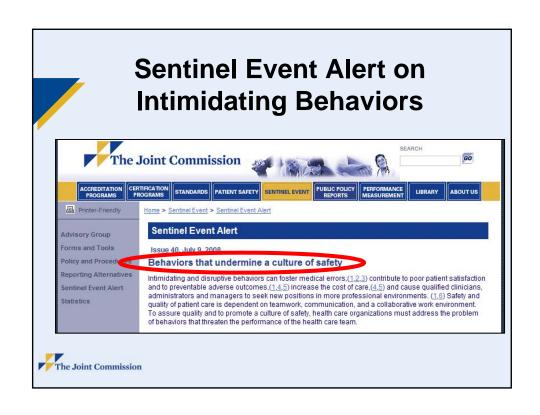
- Aim is not a "blame-free" culture
- HROs separate <u>blameless</u> errors (for learning) from <u>blameworthy</u> ones (for discipline, equitably applied to all groups)
- Prerequisites for safety culture in health care
  - Eliminate intimidating behaviors
  - Hold everyone accountable for consistent adherence to safe practices
- HROs balance learning and accountability



## What Behaviors are Intimidating?

- Wide range: impatience to physical abuse
- Most common?
- Refusal to answer questions or to return phone calls or pages; condescending tone or language; impatience with questions
- **▶**2013 ISMP survey:
  - 11-15% personally experienced these from MDs and non-MDs >10 times in past year
  - 63%: constant nit-picking, fault-finding





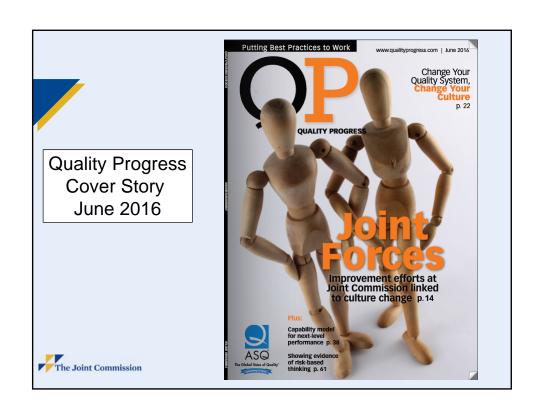


Results from ISMP	2095	4884
"At least once" in past year (%)	2003	<u>2013</u>
1. Assumed order correct to avoid contact	39	33
2. Asked colleague to talk to prescriber	39	38
3. Pressured to act, despite safety concern	49	39
4. Assumed order safe due to reputation	34	30
	2003	2013
Past disrespectful behavior altered handling of order clarification or questions (% YES)	49	44
My organization deals effectively with disrespectful behavior (% NO)	61	56
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## **Robust Process Improvement**

- Systematic approach to problem solving (lean, six sigma, and change management)
- The Joint Commission has fully adopted RPI
  - Improve processes and transform culture
  - Focus on our customers, increase value
- The Joint Commission is adopting all components of safety culture
- We measure RPI and safety culture and report on strategic metrics to Board







## Lean and Six Sigma

- Lean empowers employees to identify and act on opportunities to improve processes
- Lean tools increase value by eliminating steps in processes that represent pure waste
- Six sigma improves outcomes of processes by identifying and targeting causes of failure
- Together they are a systematic, highly effective toolkit for process improvement

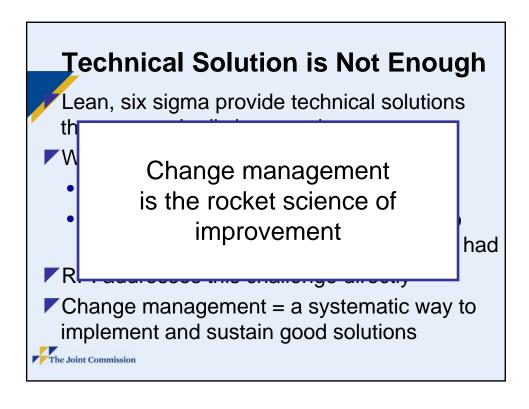


Lean and six sigma routinely produce 50%+ improvement

## Technical Solution is Not Enough

- Lean, six sigma provide technical solutions that can markedly improved processes
- 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. <u>Plan</u>: engage all stakeholders, identify sponsor, champion and process owner
- 2. <u>Inspire</u>: paint a convincing picture of how beneficial the change will be
- 3. <u>Launch</u>: initiate the change, intensify communication to stakeholders
- 4. <u>Support</u>: sustain the improvement; empower process owner
- Change management is not linear

## **Resistance to Change**

- Managing resistance is critical to success
- "Resistance Analysis" is a vital tool
- Who is likely to resist and why?
- Sources of resistance
  - Technical
  - Political
  - Cultural
- ▼Each requires a different strategy to overcome



## **RPI in Health Care Today**

- Only a small percentage of hospitals or systems use RPI in any form or fashion
- **PRPI** is used differently by different hospitals
  - Most use only some of the parts; change management is most often left out
  - Most limit training to small group
  - Most do not use it to transform
- ▼Compelling business case for RPI



#### The Business Case

- Administrative processes in health care are often just as broken as clinical processes
- Billing, supply chain, throughput
- RPI can improve margins directly
- Learning RPI allows organizations to solve their own problems, eliminate consultants
- Quality improvements often don't save \$\$
- Generate positive ROI now while learning how to redesign care processes for future
- Mayo program ROI = 5:1

J Patient Safety 2013;9(1):44-52

## **Training and Deployment**

We have a large group of experts in lean, six sigma, and change management (RPI)

- Studied experience of major corporations (for example, GE, Lilly, BD, Cardinal)
- Extensive experience with 27 hospitals and systems applying RPI tools
- We are training hospitals and systems to:
  - Get the most out of RPI tools and methods
  - Embed RPI throughout their organizations







- Using RPI together with leading US hospitals and health systems to solve most difficult quality and safety problems
- Project topics:
- 2011: safety culture, preventable HF hospitalizations, and falls with injury
- ▼2012: sepsis mortality, insulin safety
- 2013-4: C. difficile prevention, VTE

### **Participating Hospitals**



Barnes-Jewish

**▼**Baylor

▼Cedars-Sinai

**▼**Cleveland Clinic

Exempla

Fairview

Floyd Medical Center

Froedtert

Intermountain

**▼**Johns Hopkins

▼Kaiser-Permanente

Mayo Clinic
The Joint Commission

Memorial Hermann

New York-Presbyterian

North Shore-LIJ

Northwestern

**POSF** 

▼ Partners HealthCare

▼Sharp Healthcare

▼ Stanford Hospital

▼Texas Health Resources

Trinity Health

▼VA Healthcare System-CT

**Virtua** ✓

✓ Wake Forest Baptist

Wentworth-Douglass

## **Health Facilities Management Magazine**



## **RPI Improves Housekeeping**

- New wing added in 2012: 130,000 SF
- Challenge to ES staff:
  - Add this building to existing 364,000 SF
  - No new staff, same high quality cleaning
- ▼Used RPI to redesign workflow
- Met the challenge
- Saved the hospital about \$440,000

Wentworth-Douglass RPI program = 3:1 ROI (only 60% of projects aim at financial goals)

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#### **RPI Delivers Results**

- "One-size-fits-all" best practice is inadequate
- Complex processes require more sophisticated problem-solving methods (RPI)
- Three crucial and consistent findings:
  - Many causes of the same problem
  - Each cause requires a different strategy
  - Key causes differ from place to place
- <u>RPI</u>: producing next generation best practices; solutions customized to your causes

## Some Important Causes of Hand Hygiene Failures

- 1. Faulty data on performance
- 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

Main Causes of Failure to Clean Hands	Each letter = one hospital							
(across all participating hospitals)	A	В	C	D	E	F	G	Н
Ineffective placement of dispensers or sinks	C	ж		x	x		x	2
Hand hygiene compliance data are not collected or reported accurately or frequently	х	x		х	x			1
Lack of accountability and just-in-time coaching	C	×	×	x	x		x	2
Safety culture does not stress hand hygiene at all levels	Č	)	х	x	x	х		,
Ineffective or insufficient education		х	х	х	ж		х	
Hands full	х	х	х	х	х		х	
Wearing gloves interferes with process	×	x	x	x			ж	
Perception that hand hygiene is not needed if wearing gloves	×		x	х	х		х	)
Health care workers forget	ж	х		ж			х	
Distractions	ж	ж				ж	х	

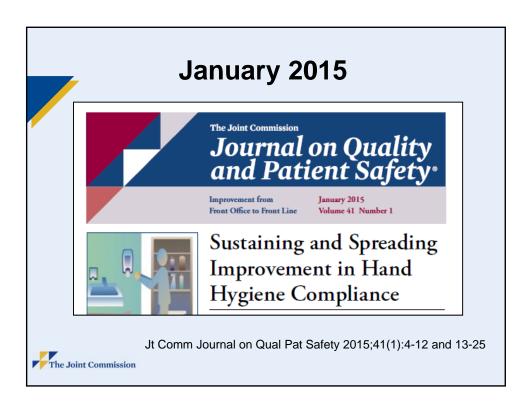
RPI Drives Major Improvements						
Center Projects	Results(%)					
Hand hygiene	71 <b>↑</b>					
Hand-off communication failures 56+						
Wrong site surgery risks						
<ul> <li>Scheduling</li> </ul>	46 <b>↓</b>					
• Pre-op	63 <b>↓</b>					
<ul> <li>Operating Room</li> </ul>	51 <b>↓</b>					
Colorectal SSIs	32 <b>↓</b>					
Falls with injury	62 <b>↓</b>					
The Joint Commission Milbank Q 2013;91:459-90; J Nurs	Care Qual 2014;29:99-102					



## **Targeted Solutions Tool (TST)**

- Web-based tools: secure extranet channel
- Available to all accredited customers now
- No added cost, voluntary confidential
- Educational, no jargon, no special training
- Coaches available to guide users to solutions
- Targeting only <u>your</u> causes means you don't use resources where they aren't needed
- Z010: hand hygiene; 2012: safe surgery and hand-off communication; 2015: falls





## Impact of Hand Hygiene TST

TST improves HH: 55% to 85%, Reduces HAIs by 35%

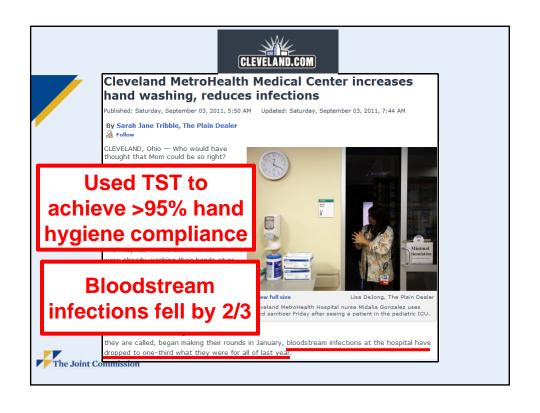
#### 200 Beds

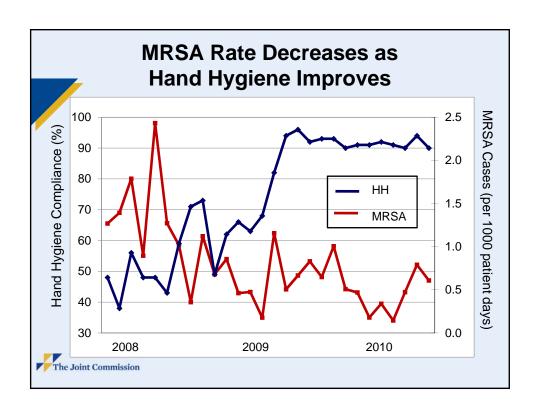
- Expect 370 HAIs/yr
- Annual impact:
  - 129 fewer HAIs
  - 8 lives saved
  - \$2.5M cost avoided

#### 400 Beds

- Expect 730 HAIs/yr
- Annual impact:
  - 260 fewer HAIs
  - 16 lives saved
  - \$5M cost avoided







## **Memorial Hermann: Getting to Zero**

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

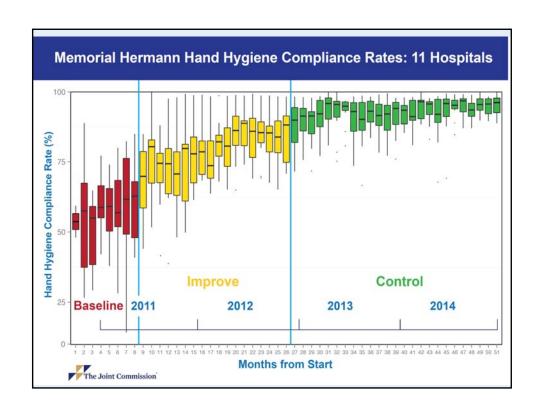
#### Article-at-a-Glance

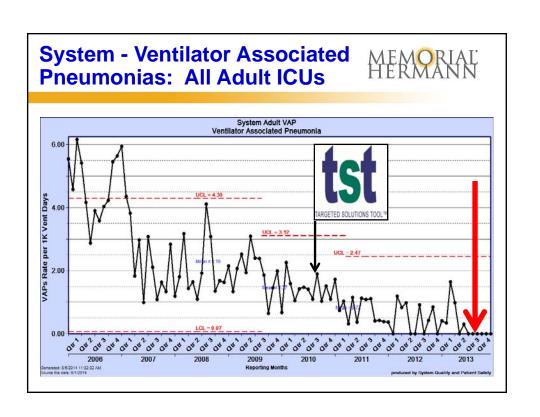
Background: In 2006 the Memorial Hermann Health System (MHHS), which includes 12 hospitals, began applying principles embraced by high reliability organizations (HROs). Three factors support its HRO journey: (1) aligned organizational structure with transparent management systems and compressed reporting processes; (2) Robust Process Improvement<sup>TM</sup> (RPI) with high-reliability interventions; and (3) cultural establishment, sustainment, and evolution.

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Jt Comm J 2013;39(6):253-57







## HAI Hospital Scorecard HERNAN



Sugar Land Hospital HAI Scorecard										
ICU	Floor	ICU	Floo	or Total			Perf Std	NHSN		
CLABSI	CLABSI	CAUTI	CAUTI		SSI		SSI	SSI		
	_	_								_
0	0	0		)	0		Ü	0		
Hip	Knee	ORIF	3	MRSA		Clostridium				
						air	ficile			
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Number of HAIs in one month

## Michael Shabot, MD **Memorial Hermann System EVP**

"We fully attribute to the Center for Transforming Healthcare's hand hygiene TST the final drop in HAI rates to zero or near-zero system-wide. After implementing the hand hygiene TST, our hospitals began to report zeros as their most common monthly CLABSI and VAP result. Our mothers were right after all! Feel free to quote me. This actually saves lives."



## Joint Commission and High Reliability

- We must have much more ambitious goals for healthcare improvement: zero harm
- Current methods are inadequate
- Culture change is difficult, takes time
- Lean, six sigma, and change management (RPI) are delivering impressive results
- ▼ROI of at least 4:1 is readily achievable
- ▼Some hospitals/systems approaching zero
- Joint Commission has tools to help