

The Pursuit of Zero Harm – Introducing High Reliability Concepts to Community Health Centers

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Speaker Information



- Dr. David Grazman joined the Center for Transforming Healthcare leadership team in 2016 to oversee broad adoption of the Center's High Reliability offerings including the Oro™ 2.0 assessment, as well as Robust Process Improvement® (RPI®) program building and training.
- 20+ years focused on healthcare systems strategy, provider management and clinical operations across a variety of care settings (hospitals, behavioral health, home care, FQHCs) as an administrator, a consultant, and an academic researcher.

Today's Objectives

1. Introduce you to Joint Commission Center for Transforming Healthcare and how it can inspire FQHCs to think about and prepare for Zero Harm for their patients and clients.
2. Explain the basic concepts of high reliability and high reliability *healthcare* – leadership commitment, safety culture and robust process improvement (RPI®).
3. Explore the components of RPI and how they start to drive an improvement culture within an organization
4. An Introduction to the Center's free "Targeted Solutions Tools" -- and how they can help you get to Zero Harm.

One Shared Vision



***All people always
experience the safest,
highest quality, best-
value health care
across all settings***

Leading
the Way
to **Zero**[™]

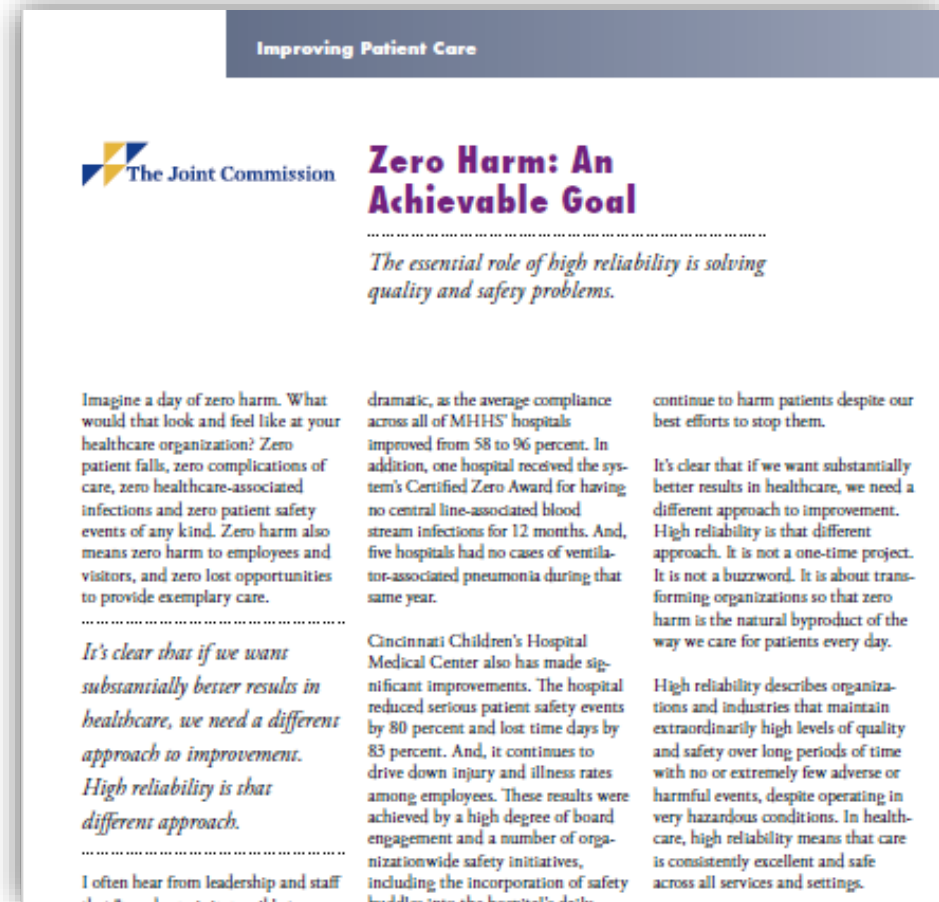
Disclaimers




What does it look like?

LEADING the way to ZERO™

- Zero patient falls
- Zero complications of care
- Zero hospital-associated infections
- Zero patient safety events of any kind
- Zero harm to employees and visitors
- Zero lost opportunities to provide exemplary care



Improving Patient Care

 The Joint Commission

Zero Harm: An Achievable Goal

The essential role of high reliability is solving quality and safety problems.

Imagine a day of zero harm. What would that look and feel like at your healthcare organization? Zero patient falls, zero complications of care, zero healthcare-associated infections and zero patient safety events of any kind. Zero harm also means zero harm to employees and visitors, and zero lost opportunities to provide exemplary care.

It's clear that if we want substantially better results in healthcare, we need a different approach to improvement. High reliability is that different approach.

I often hear from leadership and staff

dramatic, as the average compliance across all of MHHS' hospitals improved from 58 to 96 percent. In addition, one hospital received the system's Certified Zero Award for having no central line-associated blood stream infections for 12 months. And, five hospitals had no cases of ventilator-associated pneumonia during that same year.

Cincinnati Children's Hospital Medical Center also has made significant improvements. The hospital reduced serious patient safety events by 80 percent and lost time days by 83 percent. And, it continues to drive down injury and illness rates among employees. These results were achieved by a high degree of board engagement and a number of organizationwide safety initiatives, including the incorporation of safety

continue to harm patients despite our best efforts to stop them.

It's clear that if we want substantially better results in healthcare, we need a different approach to improvement. High reliability is that different approach. It is not a one-time project. It is about transforming organizations so that zero harm is the natural byproduct of the way we care for patients every day.

High reliability describes organizations and industries that maintain extraordinarily high levels of quality and safety over long periods of time with no or extremely few adverse or harmful events, despite operating in very hazardous conditions. In healthcare, high reliability means that care is consistently excellent and safe across all services and settings.

What does it look like at an FQHC?

- Zero i
- Zero n
- Zero c
- care
- Zero i
- hando
- Zero s
- Zero h
- Zero n

Harm at an FQHC is really not all that different from harm to patients in any other type of care setting.

.....
is solving

due to harm patients despite our efforts to stop them.

ear that if we want substantially results in healthcare, we need a ent approach to improvement. reliability is that different ach. It is not a one-time project. ot a buzzword. It is about tran- ing organizations so that zero is the natural byproduct of the ve care for patients every day.

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I often hear from leadership and staff

nizationwide safety initiatives, including the incorporation of safety

is consistently excellent and safe across all services and settings.

LEADING *the way to* ZERO™

Typical Healthcare Improvement

- **Usual approach: best practices, toolkits, protocols, checklists, “bundles”**
 - Typical best practice is “one-size-fits-all”
 - Can produce modest improvement
 - Difficult to sustain, harder to spread
- **The “one-size-fits-all” approach works well only for simple problems that do not vary**
- **Toughest problems are not simple**

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**
 - Gains hard to achieve, difficult to sustain
 - They are even harder to duplicate (spread)
- **High reliability offers a different approach**
 - The goal is much more ambitious
 - High reliability is not a project

Why embark on a high reliability journey?



What is High Reliability?

How does this impact FQHCs?

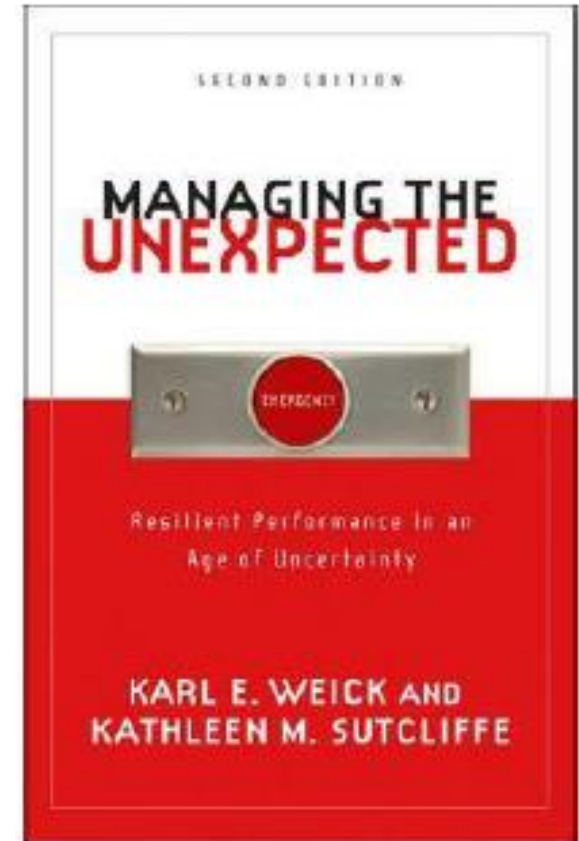
5 Principles of High Reliability Organizations

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



High Reliability Industries



Transform health care
into a **high-reliability
industry**

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How Have Others Done It?

- “High reliability organizations” manage very serious hazards extremely well
 - Excellent at process improvement
 - Have created and maintained fully functional, self-regulating safety cultures
 - Discover and fix unsafe conditions early
- In health care, we most commonly react after patients are harmed. We find it hard to commit to a process improvement methodology that isn’t quick and easy. We still feel that making a mistake warrants discipline.

Translating High Reliability Into a Health Care Setting



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

Key Points:

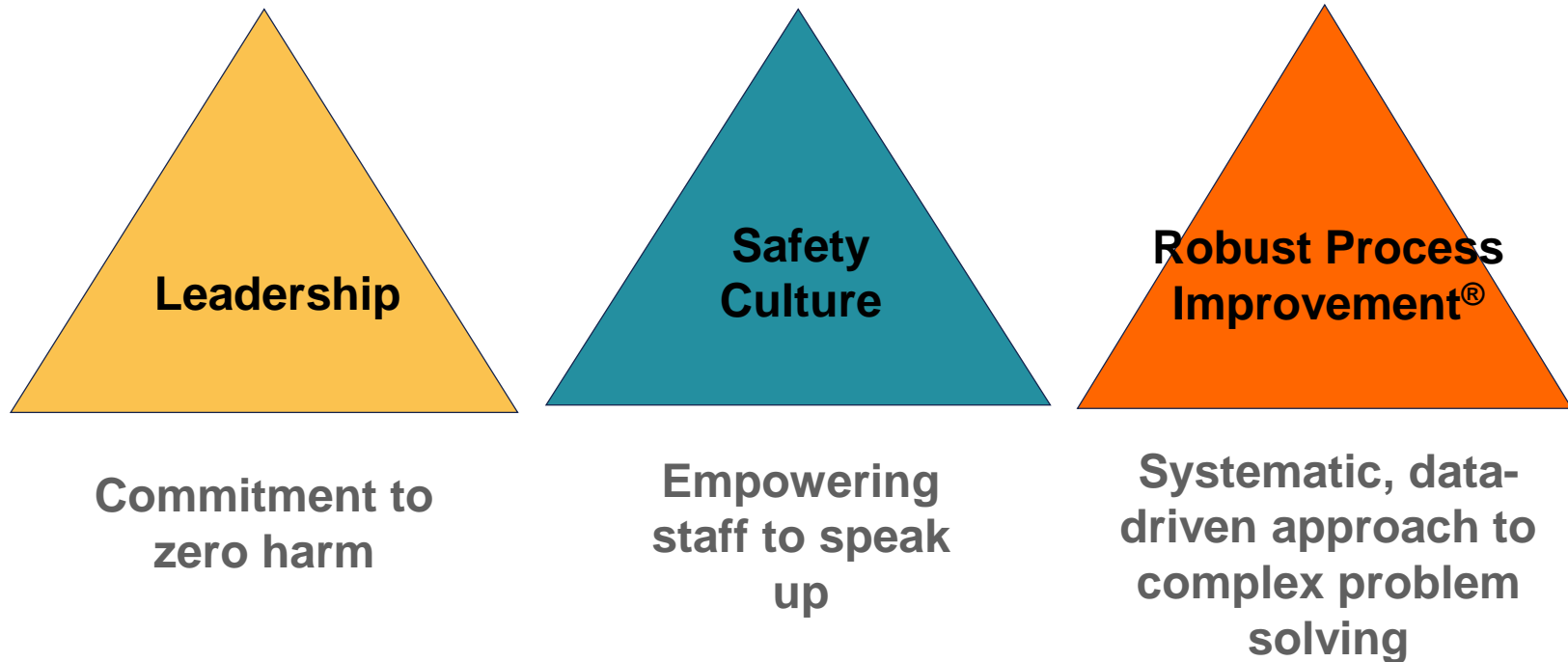
- Despite efforts to improve the quality of care, patients still are suffering harm.
- Improvement is hard to sustain or spread, and “project fatigue” is rampant.
- Consistent excellence is still evasive.
- High-reliability science offers insights from other industries.
- Those insights can be adapted and applied to health care to enable hospitals to reach comparable levels of safety and quality.

LEADING *the way to* ZERO™

*High reliability in healthcare is
“maintaining consistently high
levels of safety and quality over
time and across all health care
services and settings”*

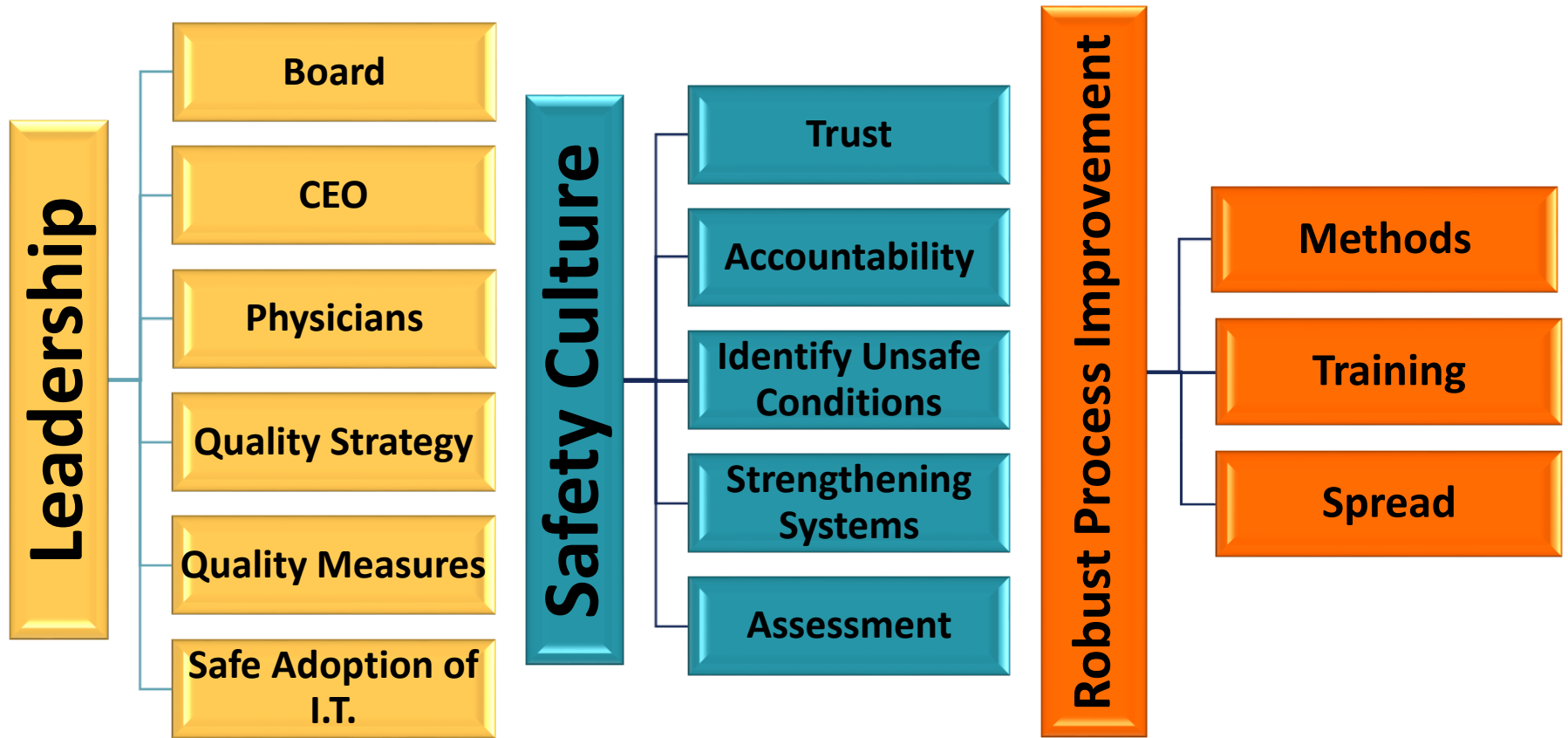
Chassin & Loeb (2013)

High Reliability Health Care Model



Chassin MR, Loeb JM. High-Reliability Health Care: Getting There from Here. *Milb Q* 2013;91(3):459-90

Areas of Performance



Stages of Maturity: Beginning → Developing → Advancing → Approaching

Characteristics of “Leadership”

Leadership

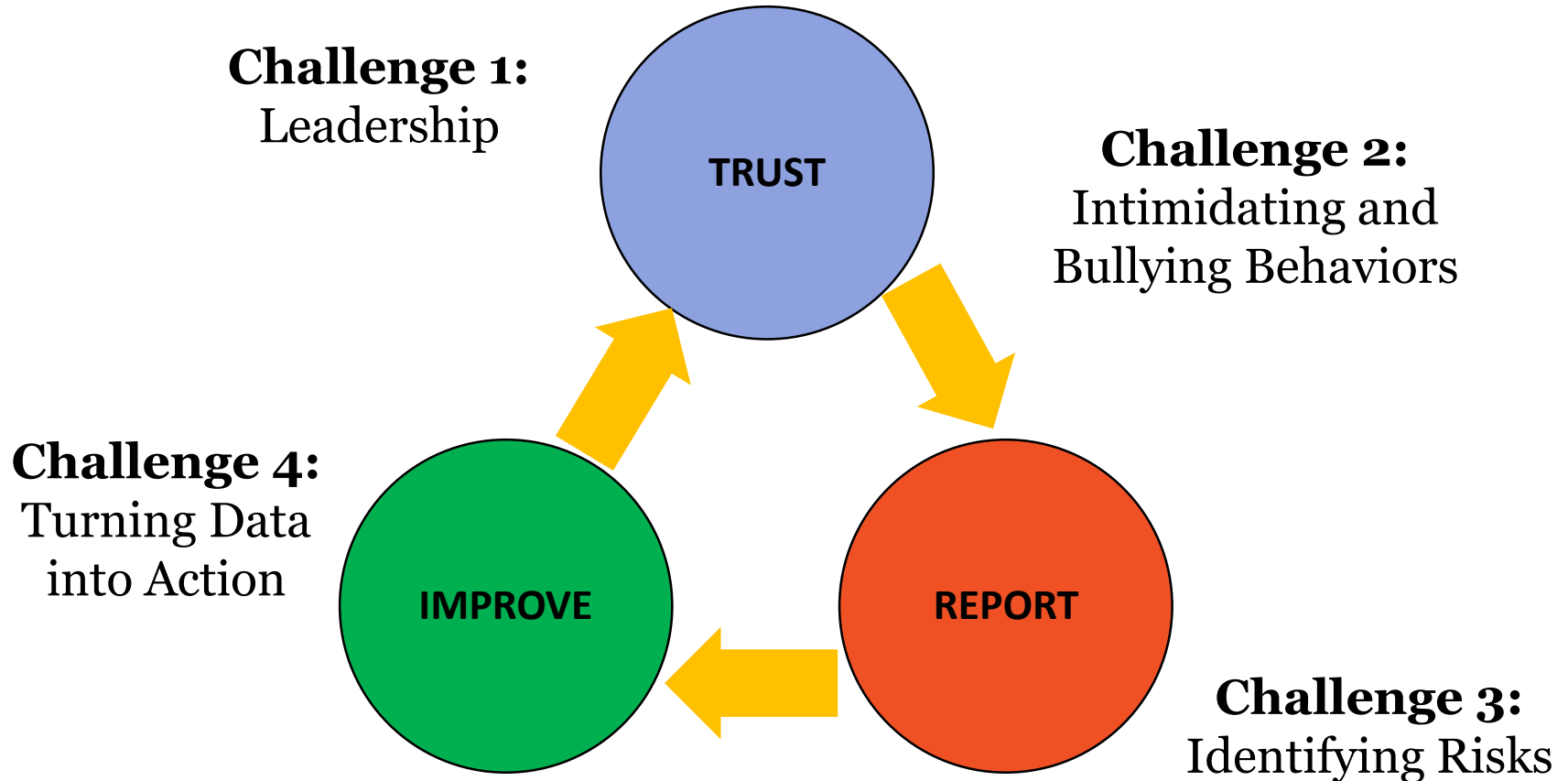
- Board commitment to goal of high reliability for all clinical services, with management aligned
- Management aims for **zero patient harm** for all clinical processes over long periods of time
- Quality (and therefore safety) is the **highest priority strategic goal** in the organization
- Clinicians routinely lead process improvement activities in and participate in incident reporting
- Key **quality indicators understood widely** and shared internally and displayed publicly

Characteristics of “Safety Culture”

Safety Culture

- High levels of (measured) **trust** exist in all clinical areas and self-policing of codes of behavior are in place
- All staff recognize and act on their **personal accountability** for maintaining a culture of safety.
- Full adoption of equitable and transparent disciplinary procedures – **“just culture”**
- Close calls and unsafe conditions are **routinely reported**, leading to early problem resolutions
- System defenses are **proactively assessed** and weaknesses are **proactively repaired**

Exploring Safety Culture



Adapted from: Reason J and Hobbs A. *Managing Maintenance*

Error: A Practical Guide. Ashgate. 2003.

Robust Process Improvement[®] or RPI[®] **Growing Your Capacity for Improvement**

Why RPI®?

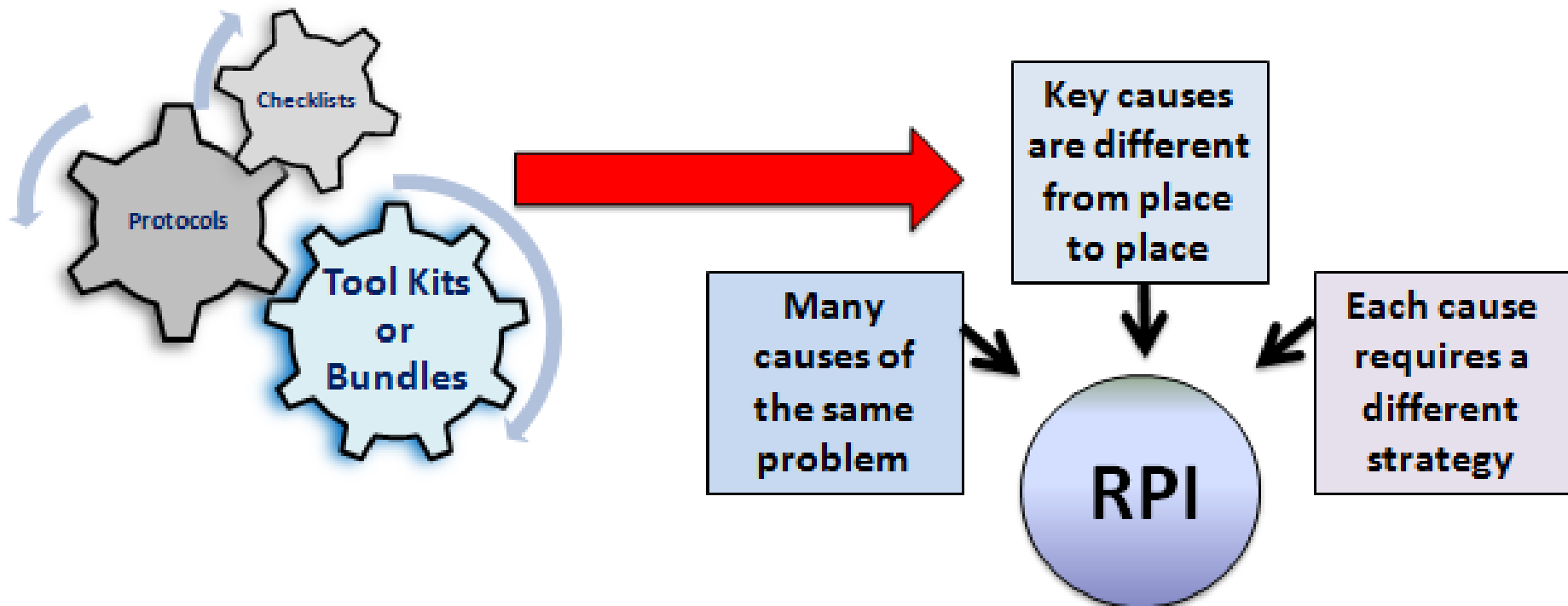
Usual Approaches

One-size-fits-all works well only in limited circumstances

- Process varies little from place to place
- Causes of failure are few and common

New Generation of Best Practices

Complex processes require RPI to produce solutions that are customized to an organization's most important causes.

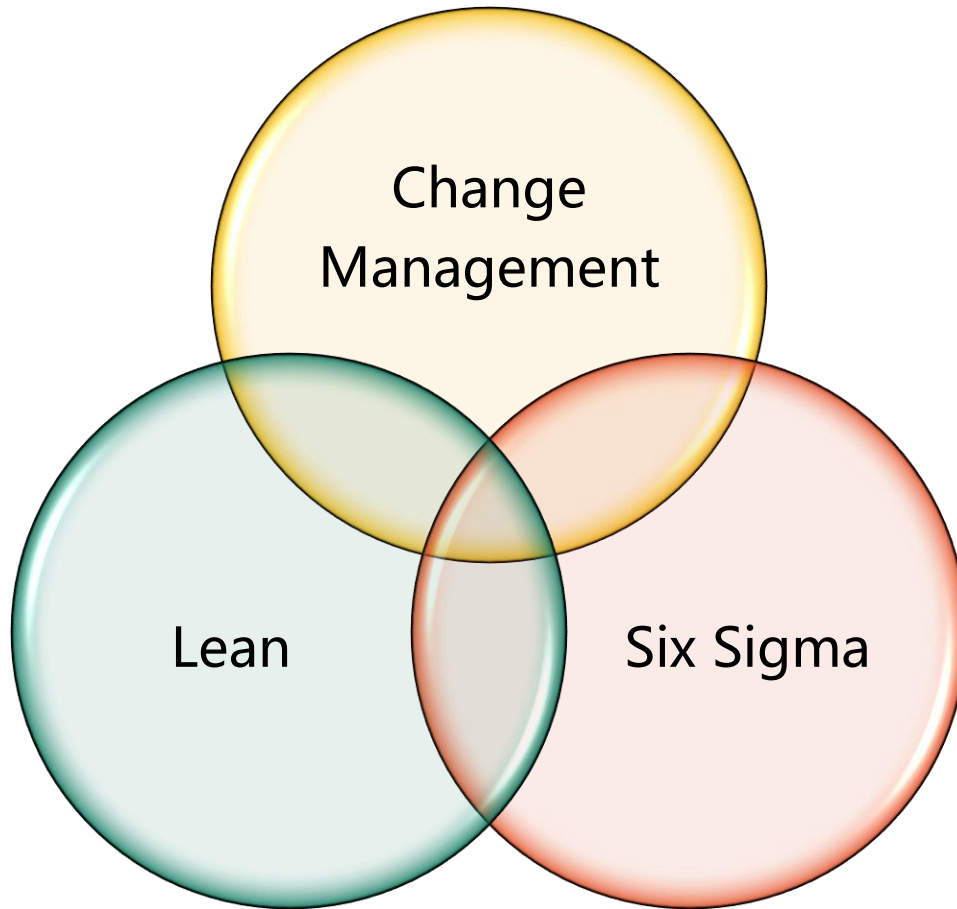


Causes Differ by Site

Main Causes of Failure to Clean Hands (across all participating hospitals)								
	A	B	C	D	E	F	G	H
Ineffective placement of dispensers or sinks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hand hygiene compliance data are not collected or reported accurately or frequently	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Lack of accountability and just-in-time coaching	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Safety culture does not stress hand hygiene at all levels	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ineffective or insufficient education	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hands full	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wearing gloves interferes with process	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Perception that hand hygiene is not needed if wearing gloves	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Health care workers forget	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Distractions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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.

What is Robust Process Improvement[®]?

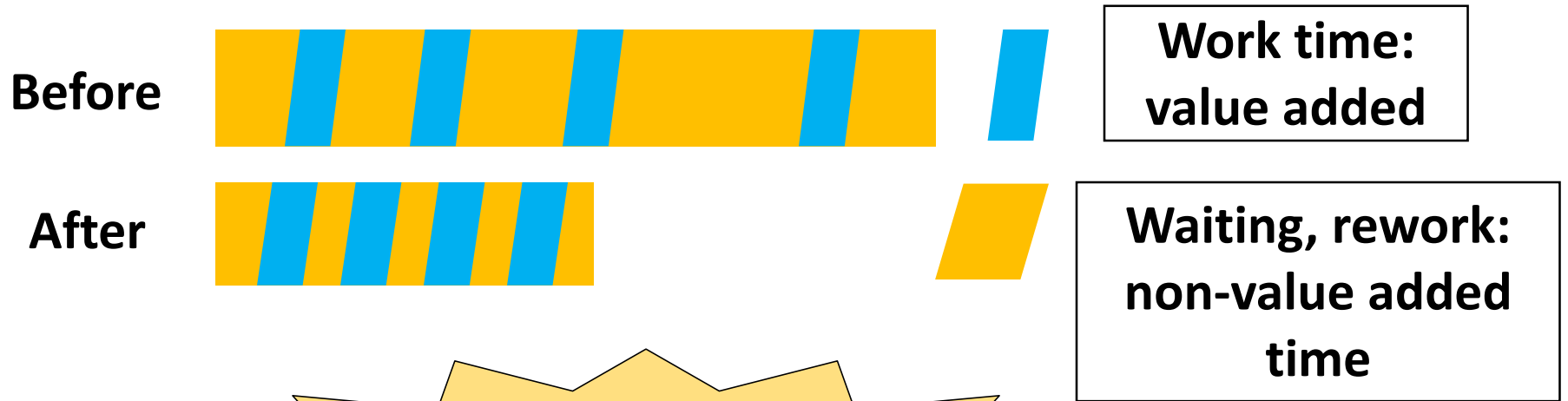


RPI[®] is a **blended** set of strategies, tools, methods, and training programs—including **Lean, Six Sigma, and Change Management**—that is used to improve business processes and clinical outcomes.

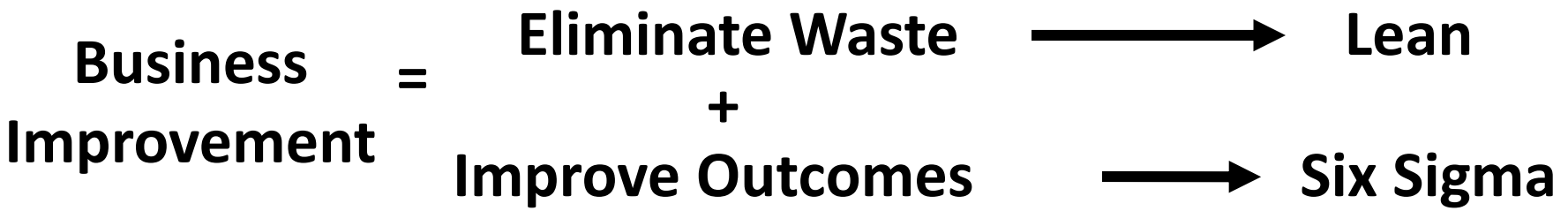
What is Lean?

- 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

Lean Process Improvement



**Same value,
Less time, lower cost**

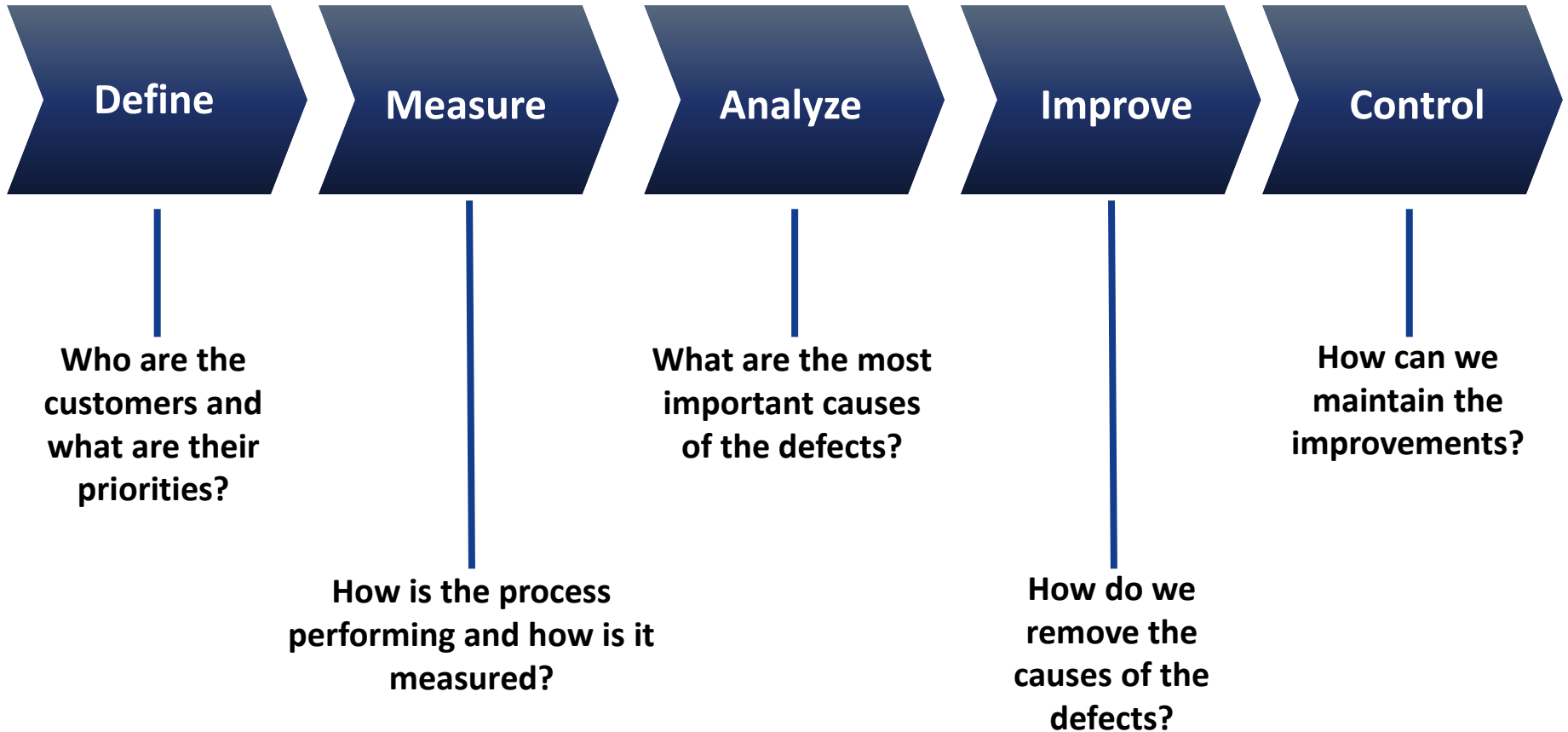


What is Six Sigma?

- 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



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

But, then, why do improvement efforts fail so often?

Failures occur when people don't easily accept, or even resist, good solutions - regardless of their intentions.



RPI[®] addresses this challenge directly using Change Management

Technical Solution is Not Enough

- Lean, six sigma provide technical solutions that can

**Change management
is the rocket science of
improvement**

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

Changing Behavior is *Hard*

“Process improvement in healthcare isn’t rocket science. It’s actually much more difficult than that because rocket science involves getting machines to behave as you want them to. With process improvement, you have to change the behavior of people.”



Dr. Chassin
President, The Joint Commission

Change Management: Facilitating Change™



RPI® in Health Care Today

- An increasing number of health care organizations and systems use one or more of the RPI toolsets
- RPI is used differently by different organizations:
 - 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 (though it's often missed)

Best Practice: Building an RPI® Program

- Commitment to widespread use of the full Robust Process Improvement methodology and tools – common language and methods for improvement
- Training a significant proportion (if not all) of employees
- Experts “seeded” throughout the organization
- Leadership fully engaged
- Building Improvement Capacity/Culture



Guided Robust Process Improvement

Accessing the Targeted Solutions Tools

Targeted Solutions Tools (TST)

- Web-based tools: secure extranet channel
 - Available to all accredited customers now
 - No added cost, voluntary, confidential
 - Available to non-accredited organizations for fee
- Accessible through JC Connect or the Center's Website
- Educational, no jargon, no special training
- Coaches available to guide users to solutions
- Targeting only your causes means you don't use resources where they aren't needed



TARGETED SOLUTIONS TOOL®

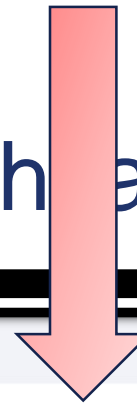


In Development




Confidential * Separate from Accreditation * Complimentary

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Changing Health Care

Founded in 2008, as a non-profit affiliate of The Joint Commission, the Center for Transforming Healthcare offers a new approach to help healthcare organizations achieve zero harm through high reliability.



Setting Up a TST[®] Project

tst
TARGETED SOLUTIONS TOOL™

Welcome, **Karam, Ziad**
[Exit](#)

Mock Test-General Hospital
123 Test
Villa Park, IL 60181
HCO ID: 337843

Projects

My Projects My Organization's Projects Dashboard

Hand Hygiene Tutorial Page Help ?

The following information provides an overview of the tabs in the Projects section:

My Projects: Lists all of the hand hygiene projects within your organization to which you have access. It also gives an “at a glance” look into each project and allows you to quickly access specific areas like observation forms and charts. [\[read more\]](#)

To access an existing hand hygiene project, click on the **Area Name**. To create a new hand hygiene project, click on the **New Project** button.

New Project

Area Name	Unit Name	Observation	Charts	Baseline Sample Size	Improve Sample Size	Baseline Begin	Improve Begin	Baseline Compliance	Improve Compliance	Stage	Edit
3 North	Emergency Department	<input checked="" type="checkbox"/>		484	659	5/3/2010	6/15/2010	32%	60.4%	Improve	
5B	Adult Medical-Surgical	<input checked="" type="checkbox"/>		15	0	10/12/2010		26.7%	0%	Baseline	
chastest	Ambulatory Care	<input checked="" type="checkbox"/>		1	0	6/20/2012		0%	0%	Baseline	

TST[®]: Measurement

Projects Start **Baseline** Improve Sustain

Overview Data Collection HAI Data Analyze

Hand Hygiene 3 North Tutorial Page He

Baseline Observation Form - Add Update Baseline Observations

Attention: Enter up to 10 observations and then submit your data before you start a new sheet. [Download Data Collection](#)

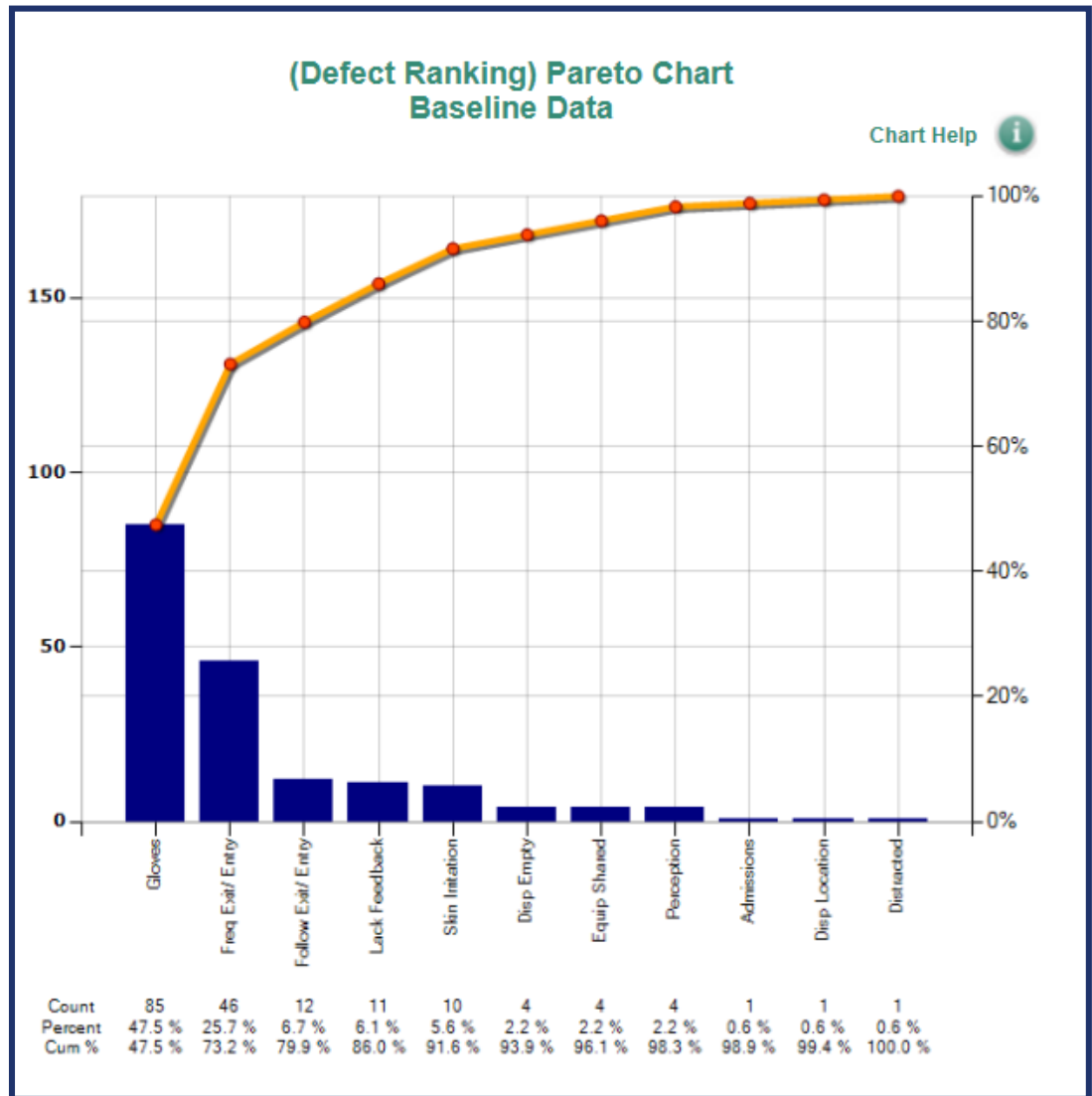
Number of observations: Collected by: Observer/Coach:

																	Observable				Non Observable			
																							Comments	
Observed during rounds	Time of observation	Role of HCP observed	Entry or Exit?	Did the person wash?	Dispenser location	Dispenser empty	Dispenser broken	Equipment shared	Hands full of supplies	Hands full of meds	Improper use of gloves	Follow person entry or exit	Frequent entry or exit	Admissions of discharges process	Isolation area (gown + gloves)	Distracted or forgot	Perception HH not required	Perception of skin irritation	Other contributing factor					
2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22				
<input type="text"/>	<input type="text"/>	<input checked="" type="radio"/> EN <input type="radio"/> EX	<input checked="" type="radio"/> Yes <input type="radio"/> No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>		

Please add your observations.

Save and Clear F

TST[®] Analysis



TST[®] Solutions

The interface shows a navigation bar with 'Projects', 'Start', 'Baseline', 'Improve', and 'Sustain'. Under 'Improve', there are sub-tabs: 'Overview', 'Solutions', 'Data Collection', 'HAI Data', and 'Analyze'. The current view is for 'Hand Hygiene 4 Tele' with 'Tutorial' and 'Page Help' buttons.

The main content area contains text about top causes of non-compliance and a 'Select Defects to Improve' section. A callout bubble points to this section, stating: "Provides targeted solutions to each specific cause".

Percentage	Defect
48%	Improper use of gloves
6%	Perception of skin irritation
1%	Admissions / discharges
0%	Hands full supplies
7%	Follow person entering or exit
2%	Perception HH not required
1%	Dispenser location
0%	Hands full meds
2%	Dispenser empty
1%	Distracted or forgot
0%	Dispenser broken

Downloadable implementation guides

The guide includes an 'Implementation Guide Checklist' and a table with the following structure:

Step #	Implementation step description	Responsible Party	Goal Date for Implementation	Completed Date	Cost	Comments
1	Engage Area Leadership					
2	Perform environmental rounds with fire marshal, facilities maintenance, and area subject matter experts to determine placement of glove and hand hygiene dispensers					
3	Determine cost (if any) and gain approval					
4	Schedule installation or moving of dispenser placement (staff meetings, email, flyers)					
5	Schedule go-live date					
6	Educate all staff on the change of dispenser placement (staff meetings, email, flyers)					
7	Prepare JIT Coaches for changes and go-live date					
8						

Below the table are signature lines for 'Responsible Party Signature:' and 'D The Joint Commission'.

Implementation Guide

TST Results

Publication: January 2015



- Of the 769 projects at 174 organizations
- Average compliance improved from 57.9% to 83.5%
- Including ambulatory, long term care, inpatient pediatrics, critical care, and adult medical/surgical units



Jt Comm Journal on Qual Pat Safety 2015;41(1):13-25

Questions?

For Information on the Center and its High Reliability Tools & Services:

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