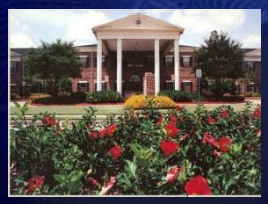










# Establishing a Culture of High Reliability: Memorial Hermann's 11-Year Journey

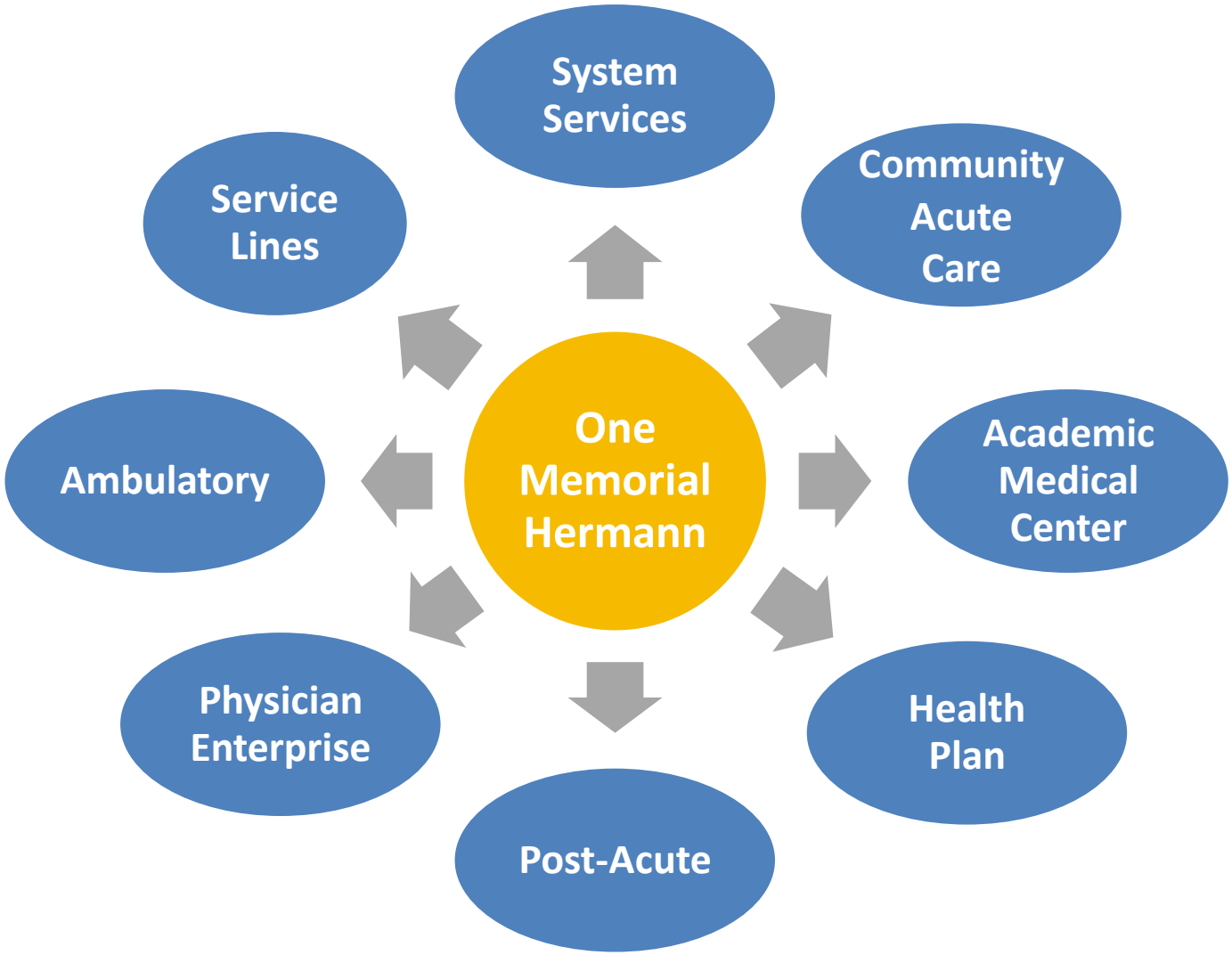
**Becker's CEO + CFO Roundtable**
**November 12, 2019**


**Chuck Stokes**
**President and Chief Executive Officer**
**Memorial Hermann Health System**


MEMORIAL HERMANN

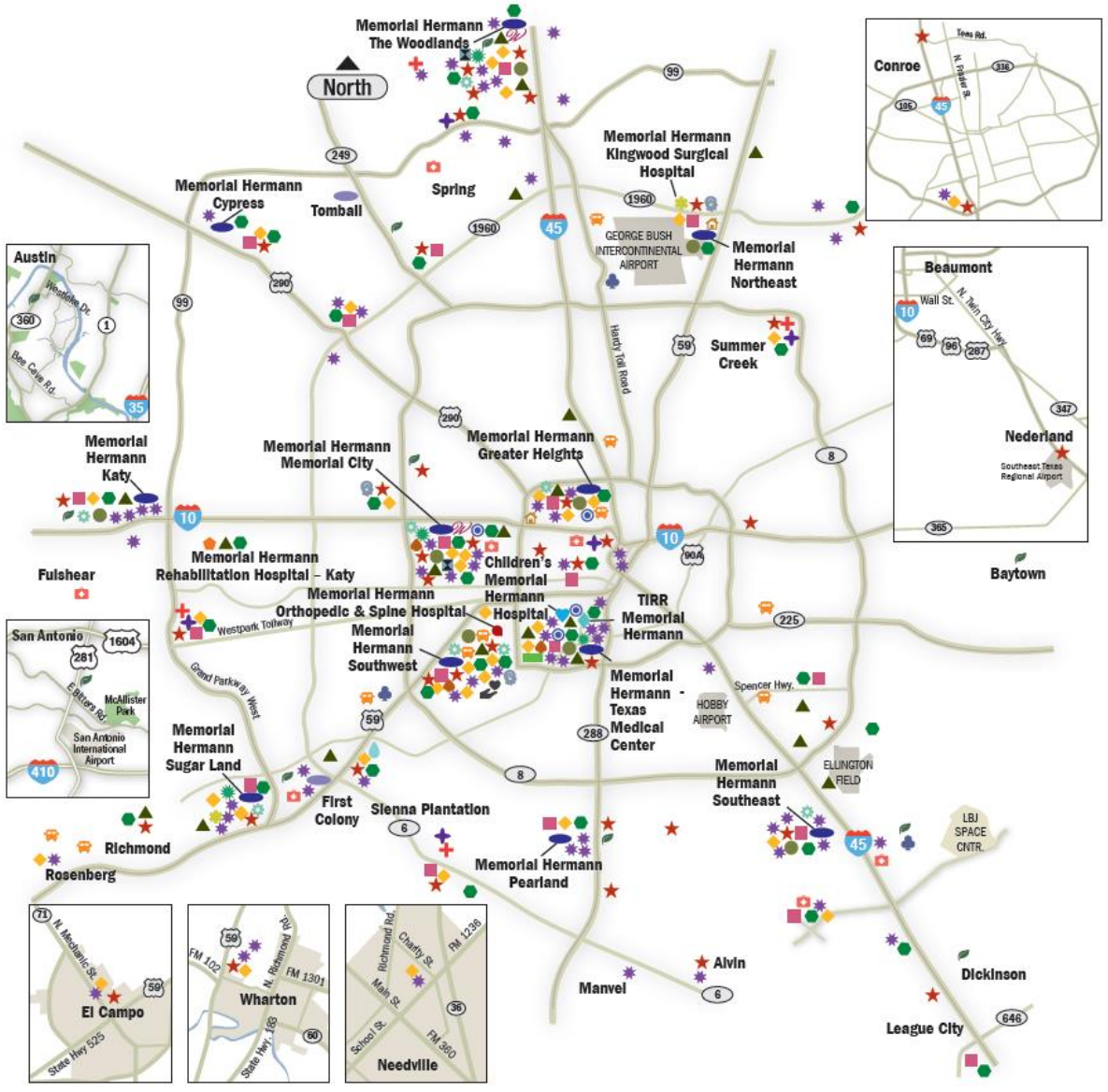
# MEMORIAL HERMANN OVERVIEW

# One Memorial Hermann



# Memorial Hermann Health System

*Current as of December 2017*




## 320 Care Delivery Sites

- 11 Acute-Care Hospitals
- 19 Breast Care Locations
- 8 Cancer Centers
- 1 Children's Memorial Hermann Hospital
- 5 Convenient Care Centers
- 36 Diagnostic Laboratories
- 2 Executive Health Centers
- 4 Freestanding Emergency Centers
- 3 Heart & Vascular Institutes
- 3 Home Care
- 32 Imaging Centers
- 4 IRONMAN Sports Medicine Institutes
- 8 Joint Centers
- 70 Memorial Hermann Medical Group
- 1 Memorial Hermann Orthopedic & Spine Hospital
- 1 Memorial Hermann Rehabilitation Hospital – Katy
- 3 Mental Health Crisis Clinics
- 2 Micro Hospitals
- 1 Mischer Neuroscience Institute
- 2 Neighborhood Health Centers
- 1 Physicians at Sugar Creek
- 11 Prevention & Recovery Centers (PaRC)
- 10 School-Based Health Centers
- 45 Sports Medicine & Rehabilitation
- 20 Surgery Centers
- 2 Surgical Hospitals
- 1 University Place
- 7 Urgent Care Centers
- 1 TIRR Memorial Hermann
- 4 TIRR Memorial Hermann Outpatient Rehabilitation
- 2 Women's Memorial Hermann Hospitals

# FY19 By the Numbers

MEMORIAL HERMANN

**112**
Years Serving the Community

**25,303**
Babies Delivered

**2.3 million**
Patient Encounters

**3,300+**
Life Flight Missions

**180,633**
Surgeries

**4,164**
Licensed Beds

**1.5 million**
Diagnostic & Therapeutic Visits

**174,649**
Inpatient Admissions

**26,000+**
Employees

**700,134**
Emergency Room Visits

**6,700+**
Active Medical Staff

**300+**
Care Delivery Sites

**$584 million**
Community Contribution
(total amount provided in FY18)

**2,800+**
Research Studies

# Physician Structure

MEMORIAL HERMANN
Accountable Care Organization

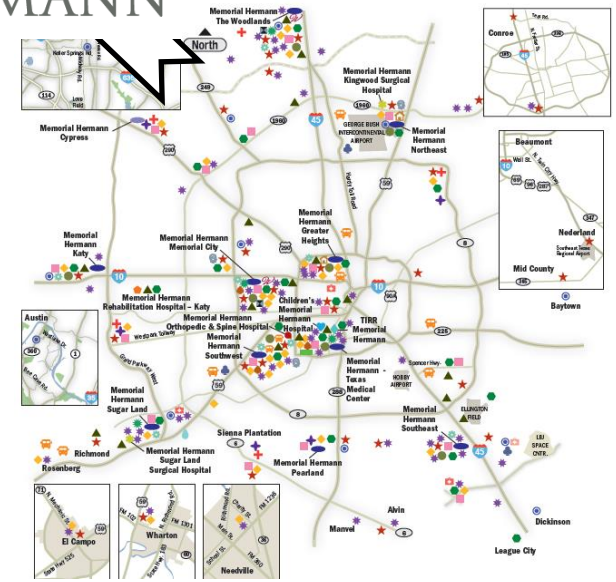
Commercial

Medicare

MHMD
Memorial Hermann Physician Network

MEMORIAL HERMANN

**4,000+** MHMD Physicians, **3500+** CIN
Clinically Integrated Network
Private, Employed & Faculty Integration




**3 DISTINCT PRACTICE MODELS**

**Employment**

MEMORIAL HERMANN
Medical Group

**Private**

**Faculty**

UTHealth
The University of Texas
Health Science Center at Houston

Population Health Infrastructure

# JOURNEY TO HIGH RELIABILITY

# High Reliability Organizations

Memorial Hermann Health System

Nuclear Aircraft Carriers


Commercial Aviation

Air Traffic Control

OPERATION BREAKTHROUGH
PATIENT SAFETY
BEST OF THE BEST

# Hospital Patient Harm

MEMORIAL HERMANN

**Question:** How many avoidable deaths occur in U.S. hospitals each year?

BMJ 2016

British Medical Journal

ANALYSIS

## Medical error

The third leading cause of death in the US

Martin A Makary *professor*, Michael Daniel *research fellow*

Department of Surgery, Johns Hopkins University School of Medicine, Baltimore, MD 21287, USA

**251,454**

Source: James JT. A New, Evidence-based Estimate of Patient Harms Associated with Hospital Care. *Jol Patient Safety* 2013;9:122-128.

**737 crash every 5.5 hours**

# Hospital Patient Harm

MEMORIAL HERMANN

**Question:** How many avoidable deaths occur in U.S. hospitals each year?

# Memorial Hermann's Goal

# 0 (Zero)

BMJ 2016

ANALYSIS

Medical error—the third leading cause of death in the US

Medical errors are excluded as death certificates in the ranking of causes of death. Martin Makary and Michael Daniel assess its contribution to mortality and call for better reporting

Martin A Makary *professor*, Michael Daniel *research fellow*

Department of Surgery, Johns Hopkins University School of Medicine, Baltimore, MD 21287, USA

251,454

737 crash every 5.5 hours

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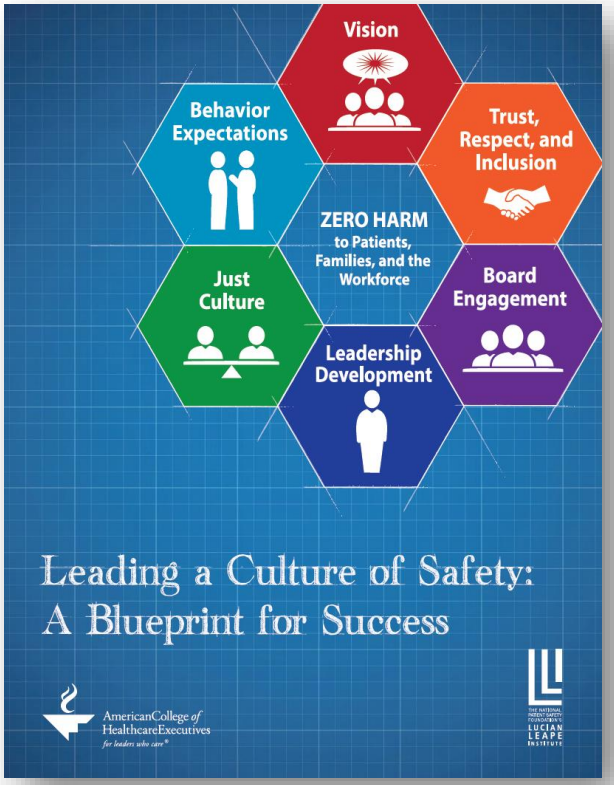
# LEADING A CULTURE OF SAFETY



# A Culture of Safety: The Six Domains

# Safety as the Core Value

MEMORIAL HERMANN

**Moving the Memorial Hermann Health System from Safety as a Priority to**

# Safety is our Core Value

**….**

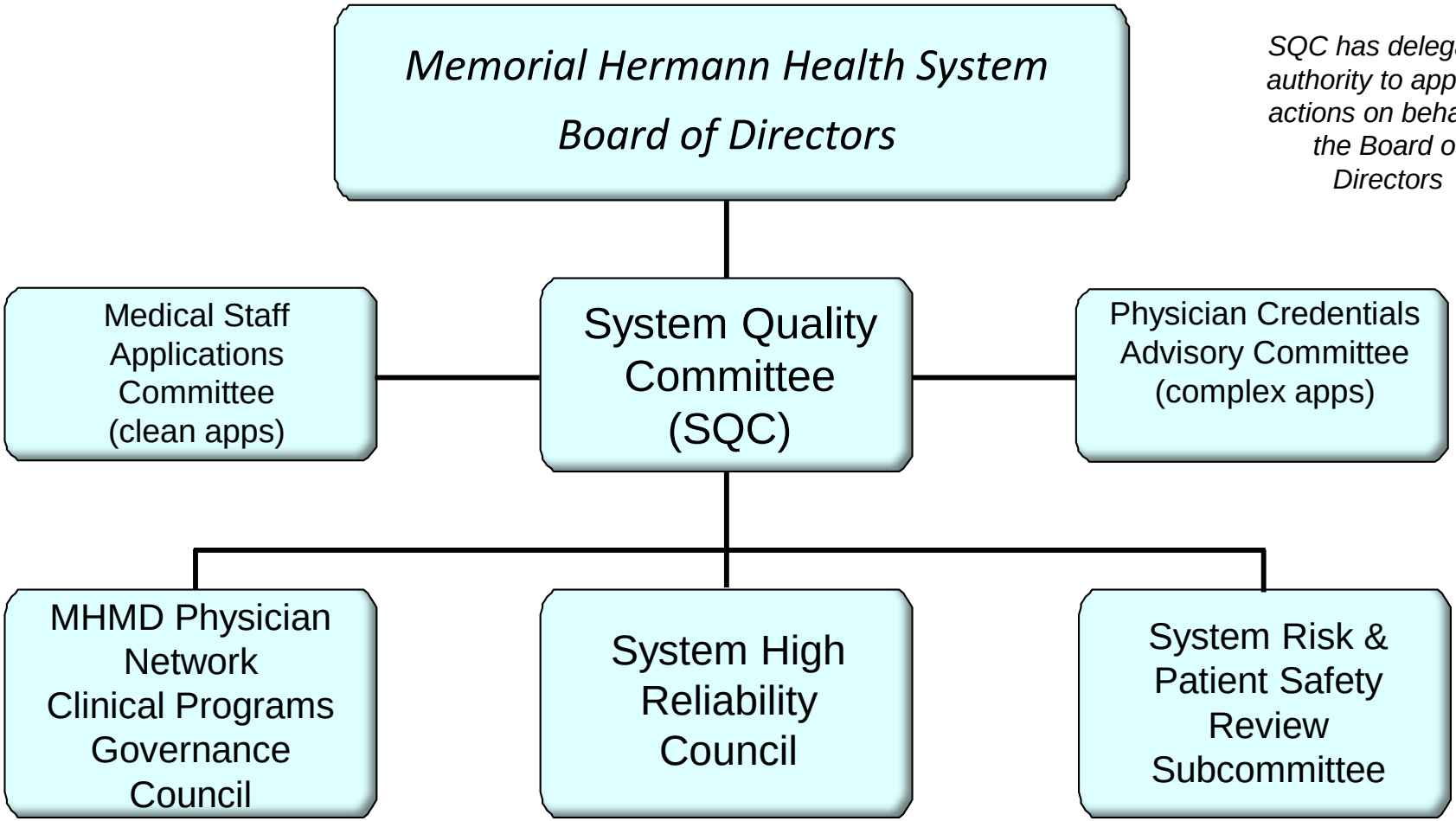
***Leadership behavioral expectations change when safety is the core value***

# Role of Governance and Memorial Hermann

- Connecting quality and safety to the credentialing process
- Connecting executive compensation to quality and safety
- Commitment to resource allocation for the journey to high reliability
- Board's opportunity to meet directly with medical staff to obtain feedback on hospital/system quality and safety concerns
- Total transparency of system/hospital quality and safety data

# Memorial Hermann Health System

## Board Safety, Quality & Credentialing Reporting Structure




*SQC has delegated authority to approve actions on behalf of the Board of Directors*

Feb 2017

# 2015 MH "From the Top"

## The Role of the Board and Medical Staff in Quality & Safety


James E. (Jamie) Orlikoff


James L. Reinertsen, MD

February 20, 2015 - 7:30am-5:00pm
Houston, Texas

55 Memorial Hermann Board members and 100 MEC members & hospital execs trained

OPERATION BREAKTHROUGH
PATIENT SAFETY
BEST OF THE BEST

MEMORIAL HERMANN

# Safety Culture Training

- Step 1: **Set Behavior Expectations**

  Define Safety Behaviors & Error Prevention Tools proven to help reduce human error

- Step 2: **Educate**

  Educate our staff and medical staff about the Safety Behaviors and Error Prevention Tools

- Step 3: **Reinforce & Build Accountability**

  Practice the Safety Behaviors and make them our personal work habits

# Robust Process Improvement: Path to Quality Outcomes

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## Lean

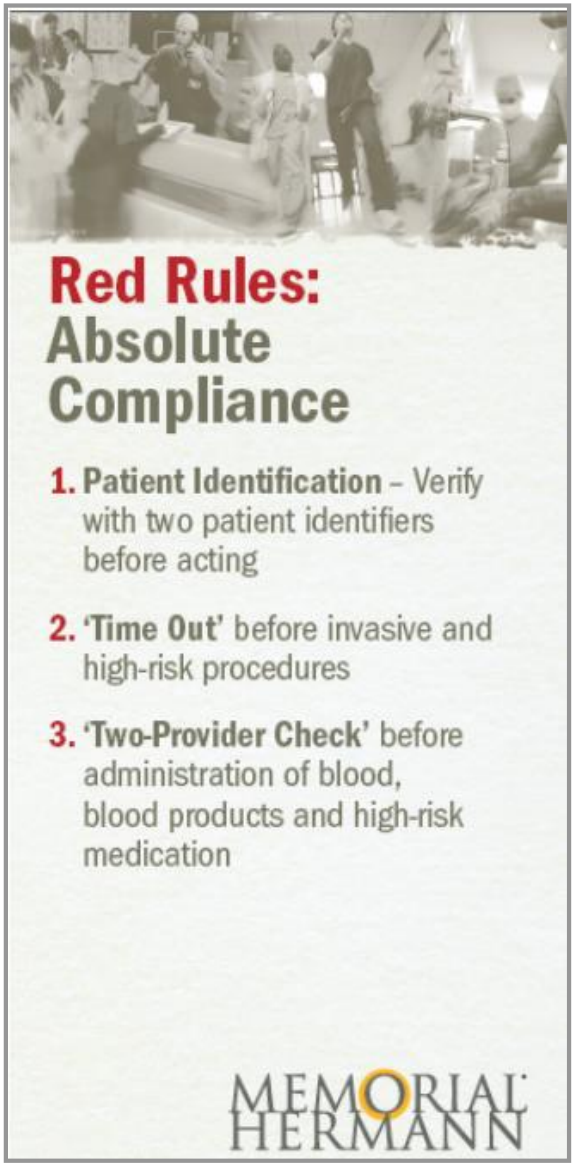

## Six Sigma


## Change Management


Joint Commission Center for Transforming Healthcare

OPERATION BREAKTHROUGH
PATIENT SAFETY
BEST OF THE BEST

MEMORIAL HERMANN




# Red Rules
## *Absolute Compliance*

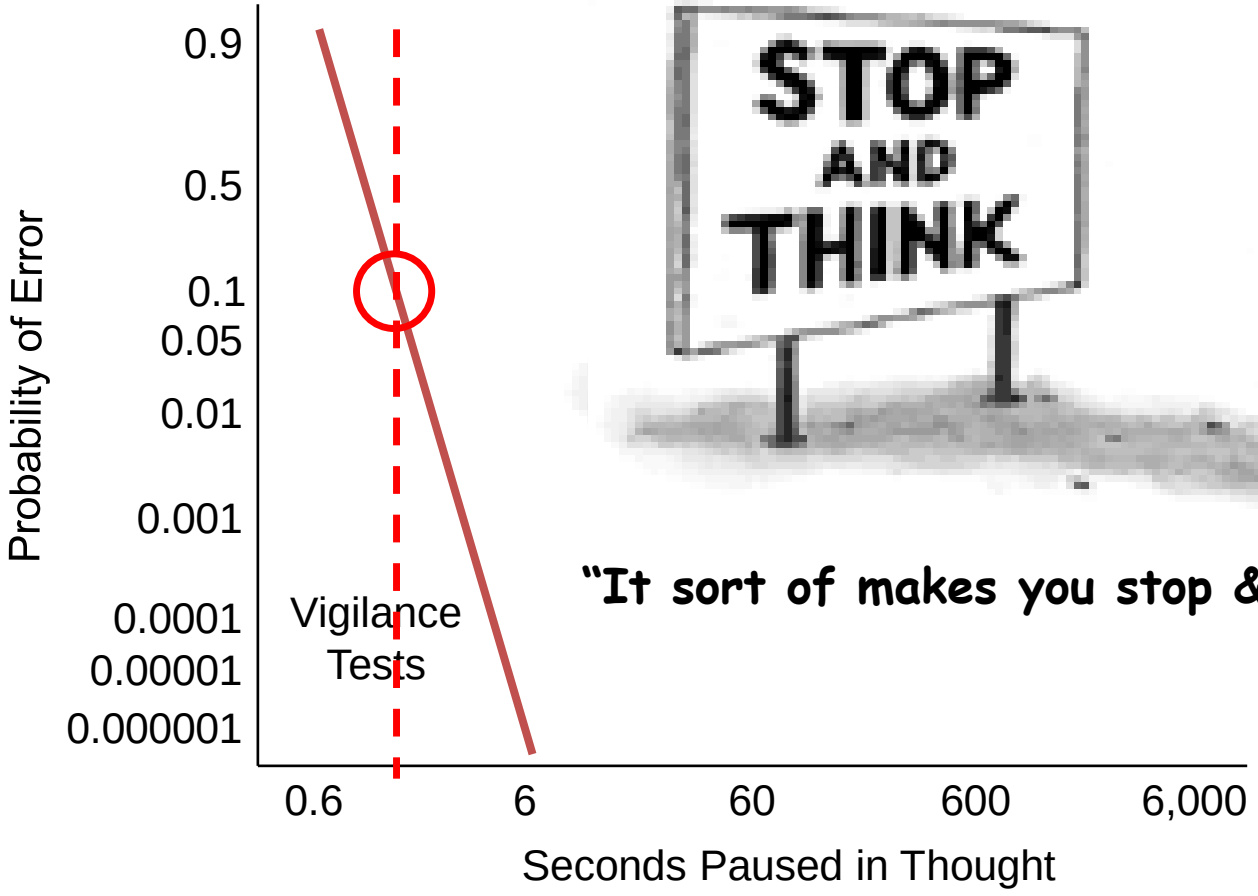
1. Patient Identification
2. Time Out
3. Two Provider Check

# Support Each Other:
## CUSS Words

- I am *Concerned*
- I am *Uncomfortable*
- This is for *Safety*
- *Stand* up and *Stand* Together

MH Southwest Hospital
Central Line Standoff

# Self-Checking with STAR*:
# (Stop, Think, Act & Review)







"It sort of makes you stop & think, doesn't it?"

* Jefferson Center for Character Education

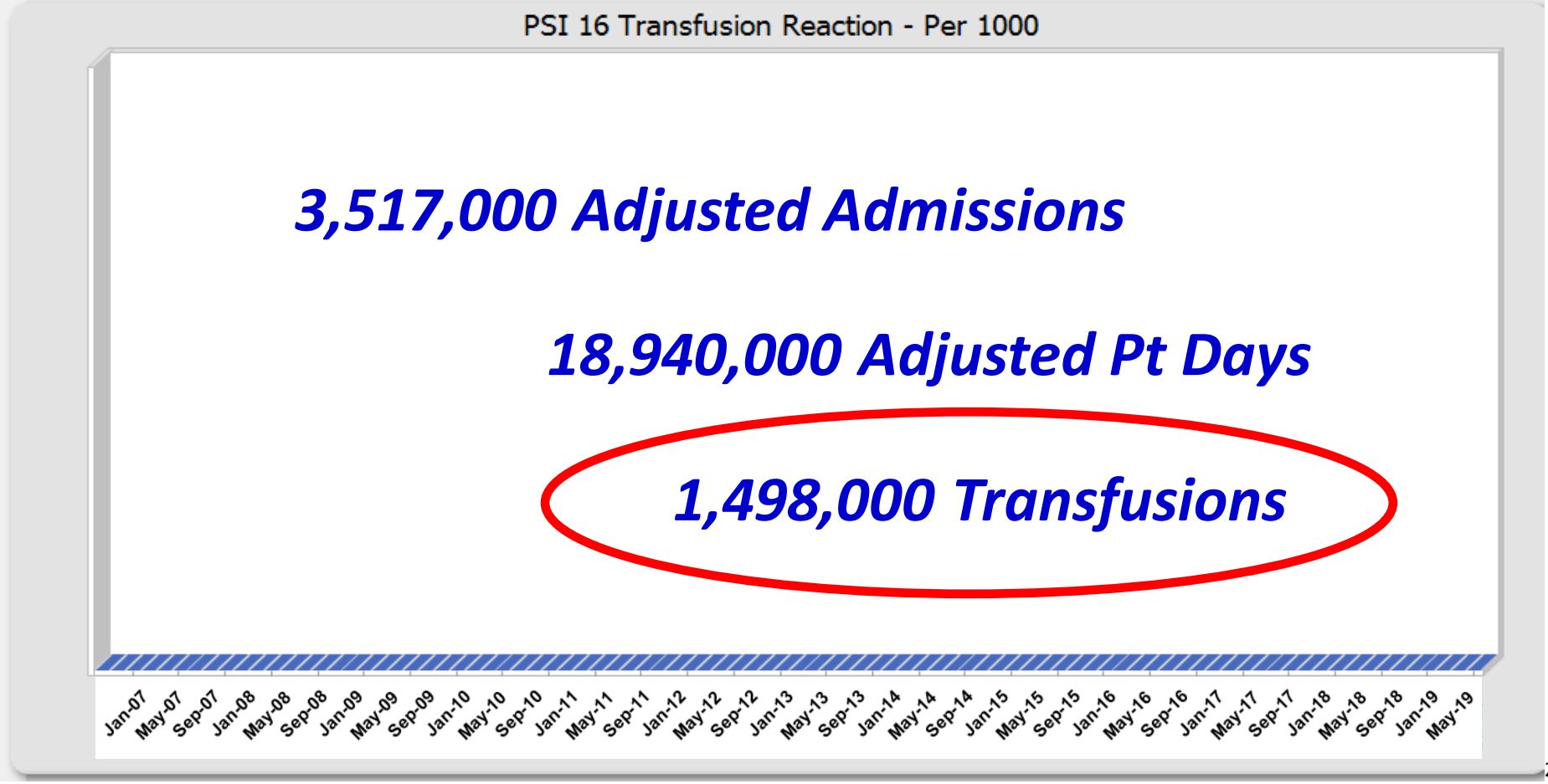
OPERATION BREAKTHROUGH
PATIENT SAFETY
BEST OF THE BEST

# Hospital Acquired Conditions
## "Never Events"

MEMORIAL HERMANN

# Acute Hemolytic Transfusion Reactions

## Transfusion Events Jan 2007 – Jul 2019



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MEMORIAL HERMANN

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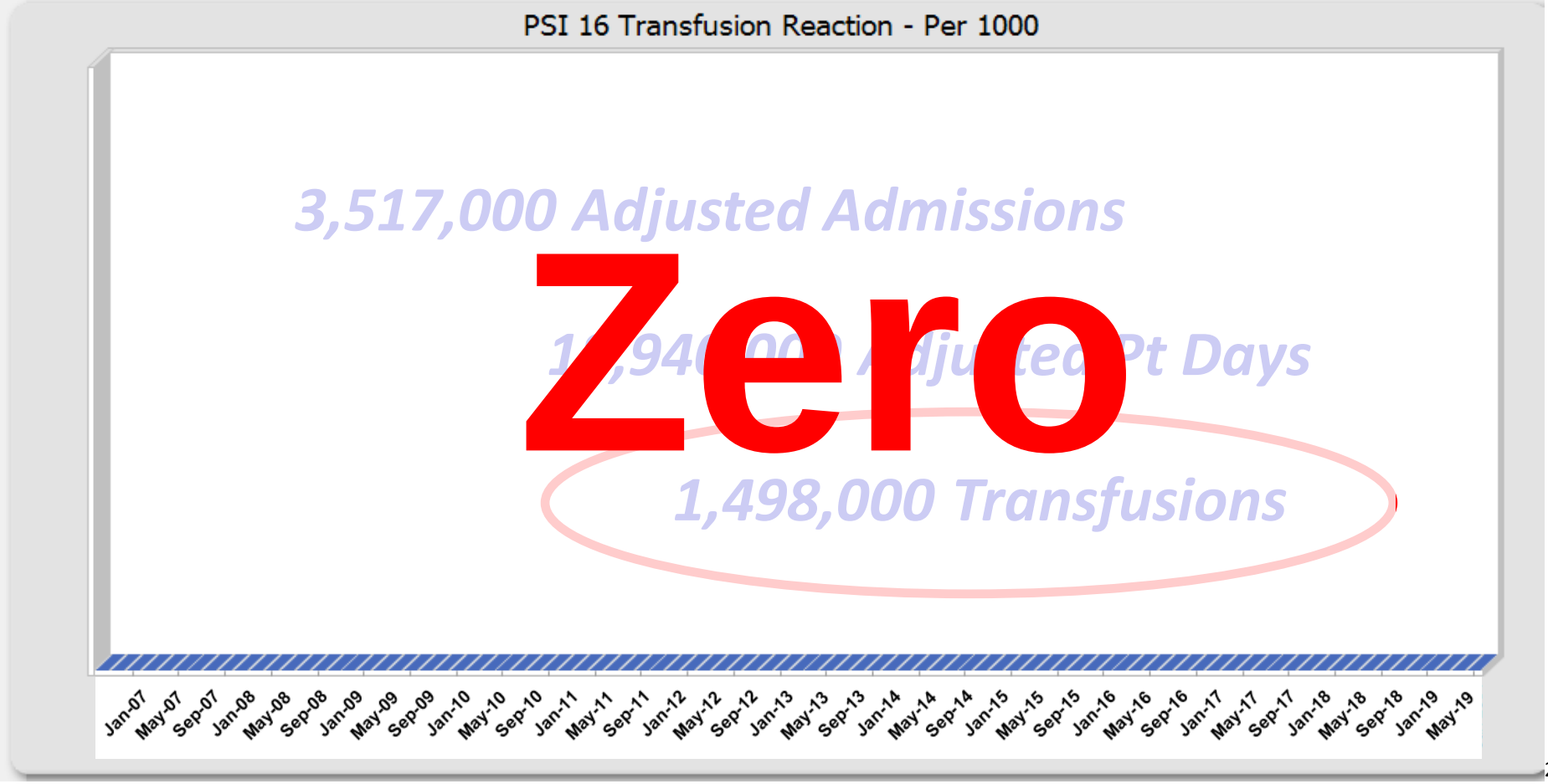


OPERATION BREAKTHROUGH
PATIENT SAFETY
BEST OF THE BEST

MEMORIAL HERMANN

# MHHS Safety Culture Training
## Completed in 2007

**Hospital Training Complete**

***>20,000 Employees Trained***

***>4,000 Physicians Trained***

***>540 Safety Coaches Trained***

***>$18M Expense***

# High Reliability

## *Certified Zero Award*

MEMORIAL HERMANN

1. Zero Events


2. 12 Consecutive Months

3. Certified Zero Category

# High Reliability 2011-2019
# *Certified Zero Awards*

MEMORIAL HERMANN

*Certified Zero Awards FY 2011 thru May 2019*

**395**

ICU Central Line Associated Bloodstream Infections (20)
ICU Catheter Associated Urinary Tract Infections (27)
Hospital-Wide Central Line Associated Bloodstream Infections (7)
Hospital-Wide Catheter Associated Urinary Tract Infections (11)
Ventilator Associated Pneumonias (23)
NHSN Hip Arthroplasty Surgical Site Infections (6)
NHSN Knee Arthroplasty Surgical Site Infections (7)
Retained Foreign Bodies (59)
Iatrogenic Pneumothorax (30)
Accidental Punctures and Lacerations (13)
Pressure Ulcers Stages III & IV (41)
Hospital Associated Injuries (14)
Deep Vein Thrombosis and/or Pulmonary Embolism (5)
Deaths Among Surgical Inpatients with Serious Treatable Complications (2)
Birth Traumas (23)
Obstetric Trauma in Natural Deliveries with Instrumentation (14)
Serious Safety Events 1&2 (38)
Serious Safety Events 1 & 2 for 1000 Days (2)
All Serious Safety Events (1)
Early Elective Deliveries (20)
Manifestations of Poor Glycemic Control (32)


2014
MEMORIAL HERMANN
High Reliability
Certified Zero Award
To: Memorial Hermann Northeast Hospital
Zero Early Elective Deliveries for 12 months
January 2013 to December 2013
BREAKTHROUGHS IN PATIENT SAFETY

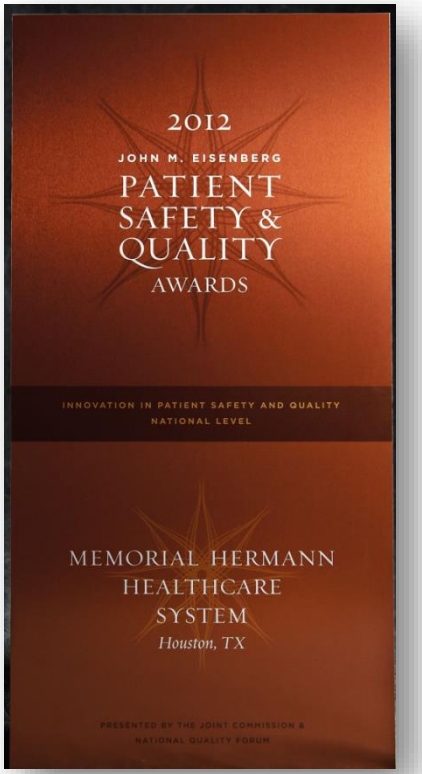
# John M. Eisenberg Patient Safety and Quality Award

MEMORIAL HERMANN

## March 8, 2013 | Washington, DC

The Joint Commission

NATIONAL QUALITY FORUM





# Memorial Hermann
# Sugar Land Hospital

MEMORIAL HERMANN

Malcolm Baldrige
National Quality Award

2016 Award Recipient

# Accolades

MEMORIAL HERMANN

## Earning history through safe, high-quality care

National Quality Forum National Quality Healthcare Award (2009)


Texas Hospital Association Bill Aston Quality Award (2011)

TEXAS 2012 HEALTH CARE QUALITY IMPROVEMENT AWARD

Texas Healthcare Foundation Quality Improvement Awards (2011)

JOHN M. EISENBERG PATIENT SAFETY & QUALITY AWARDS

John M. Eisenberg National Patient Safety & Quality Award (2012)

TRUVEN HEALTH ANALYTICS 15 TOP HEALTH SYSTEMS 2013

15 Top Health Systems; Top 5 Large Health Systems (2012 & 2013)

Ranked Among the Nation's TOP 5 LARGE HEALTH SYSTEMS

HealthCare's most wired

One of health care's "Most Wired" for the 13th consecutive year

NATIONALLY RECOGNIZED LEAPFROG HOSPITAL SAFETY GRADE A FALL 2017

8 Memorial Hermann Hospitals earned an "A" for their commitment to patient safety

BEST U.S.News & WORLD REPORT RANKINGS

TIRR Memorial Hermann No. 2 in rehabilitation hospitals

American Hospital Association Quest for Quality Prize® Hospitals in Pursuit of Excellence

Memorial Herman Greater Heights is finalist for Quest for Quality

Mobile Dental Van earns AHA NOVA Award

Supportive Medicine earns AHA Circle of Life Citation

HOUSTON BUSINESS JOUNAL BPtW BEST PLACES TO WORK

TOP WORK PLACES 2017 HOUSTON CHRONICLE

No. 4 Best Places to Work (HBJ)

No. 19 Top Workplace (Houston Chronicle

MEMORIAL HERMANN

# APPENDIX

# Establishing a Compelling Vision for Safety


**GOAL: COMMIT TO DEVELOP, COMMUNICATE, AND EXECUTE ON AN ORGANIZATIONAL VISION OF ZERO HARM TO PATIENTS, FAMILIES, AND THE WORKFORCE.**

**Role of the CEO:**

- ✓ Develops a clear safety vision and sets clear expectations for a culture of safety
- ✓ Communicates and models a shared vision of zero harm to everyone
- ✓ Prioritizes measurement, gap analysis, and improvement of culture of safety as foundational for organizational vision
- ✓ Actively participates in full harm investigations, including disclosures, apologies, and root cause analysis events

# Value Trust, Respect and Inclusion


**GOAL: ESTABLISH ORGANIZATIONAL BEHAVIORS THAT LEAD TO TRUST IN LEADERSHIP AND RESPECT AND INCLUSION THROUGHOUT THE ORGANIZATION REGARDLESS OF RANK, ROLE, OR DISCIPLINE.**

**Role of Leadership:**

- ✓ Recognizes the critical importance of trust, respect, and inclusion in shaping organizational culture and role models throughout the organization
- ✓ Holds the leadership team accountable for modeling trust, respect and inclusion
- ✓ Creates an environment that empowers the workforce to act within the guidelines of trust, respect, and inclusion when making decisions
- ✓ Actively supports a culture where learning from failures and improvement is a part of daily organizational activity

# Select, Develop and Engage Your Board


**GOAL: SELECT AND DEVELOP YOUR BOARD SO THAT IT HAS CLEAR COMPETENCIES, FOCUS, AND ACCOUNTABILITY REGARDING SAFETY CULTURE.**

**Role of the CEO:**

- ✓ Educates Board on importance of safety, quality, metrics, and safety culture principles and behaviors
- ✓ Ensures Board membership includes clinical, safety, and patient/ family representation
- ✓ Ensures Board agenda includes a quality and safety review using a performance dashboard
- ✓ Sets up quality and safety committee(s) with Board representation
- ✓ Ensures each Board agenda includes time designated for Chief Medical Officer or Chair of Quality and Safety Committee to present safety and quality data

# Prioritize Safety in Selection and Development of Leaders


**GOAL: EDUCATE AND DEVELOP LEADERS AT ALL LEVELS OF THE ORGANIZATION WHO EMBODY ORGANIZATIONAL PRINCIPLES AND VALUES OF SAFETY CULTURE.**

**Role of CEO:**

- ✓ Sets expectations and accountability for the design and delivery of the organization's leadership development strategy
- ✓ Ensures all levels of the organization receive the necessary and appropriate level of safety education
- ✓ Identifies physicians, nurses, and other clinical leaders
- ✓ Serves as a mentor for other C-Suite executives
- ✓ Establishes expectation that quality and safety performance and competence are required elements for promotion and succession planning

# Lead and Reward a Just Culture


**GOAL: BUILD A CULTURE IN WHICH ALL LEADERS AND THE WORKFORCE UNDERSTAND BASIC PRINCIPLES OF PATIENT SAFETY SCIENCE, AND RECOGNIZE ONE SET OF DEFINED AND ENFORCED BEHAVIORAL SANDARDS FOR ALL INDIVIDUALS IN THE ORGANIZATION.**

**Role of CEO and Leadership:**

- ✓ Encourages commitment to just culture framework as an essential business philosophy
- ✓ Communicates and models the use of just culture principles in all decisions and actions across the organization and with the Board
- ✓ Sets expectations for just culture principles throughout organization and communicates that rules apply to all, regardless of rank, role and discipline
- ✓ Sets expectations for accountability for anyone interacting with the healthcare organization to commit to utilizing just culture principles in every day practice and decisions

# Just Culture

## Just Culture Principles

**Human behaviors within a just culture can be described as follows:**

- **HUMAN ERROR** = An inadvertent slip or lapse. Human error is expected, so systems should be designed to help people do the right thing and avoid doing the wrong thing.

  **Response:** Support the person who made the error. Investigate how the system can be altered to prevent the error from happening again.

- **AT-RISK BEHAVIOR** = Consciously choosing an action without realizing the level of risk of an unintended outcome.

  **Response:** Counsel the person as to why the behavior is risky; investigate the reasons they chose this behavior, and enact system improvements if necessary.

- **RECKLESS BEHAVIOR (NEGLIGENCE)** = Choosing an action with knowledge and conscious disregard of the risk of harm.

  **Response:** Disciplinary action.

(PSNet Safety Primer 2016)

# Establish Organizational Behavior Expectations


**GOAL: CREATE ONE SET OF BEHAVIOR EXPECTATIONS THAT APPLY TO EVERY INDIVIDUAL IN THE ORGANIZATION AND ENCOMPASS THE MISSION, VISION, AND VALUES OF THE ORGANIZATION.**

**CEO and Leadership Role:**

- ✓ Creates, communicates, and models an organizational climate of personal and professional accountability for behavior
- ✓ Establishes systems to recognize and reward desirable behaviors
- ✓ Activates organization and resources to develop, implement, and evaluate programs that address and improve personal, professional, and organizational behavior and accountability
- ✓ Engages Board by sharing metrics and dashboards related to organizational behavior
- ✓ Engages and holds all leaders and workforce accountable for defined behaviors