CREATING A CULTURE OF SAFETY

AHA Team Training Monthly Webinar

April 10, 2019

RULES OF ENGAGEMENT

- Audio for the webinar can be accessed in two ways:
  - Through the phone (*Please mute your computer speakers)
  - Through your computer
- A Q&A session will be held at the end of the presentation
- Written questions are encouraged throughout the presentation and will be answered during the Q&A session
  - To submit a question, type it into the Chat Area and send it at any time during the presentation

UPCOMING TEAM TRAINING EVENTS

Courses

Registration for 2019 TeamSTEPPS Master Training Courses are now open. View our course schedule to learn more and register. ***Spring courses are filling up!***

New! TeamSTEPPS Next Steps

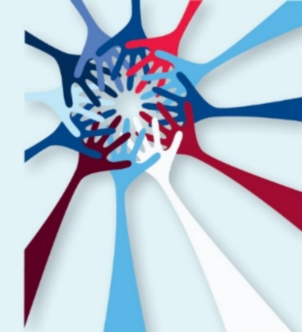
Become a TeamSTEPPS Influencer! Attend our exclusive 1.5-day immersive workshop to take a deeper dive into implementation planning. June 11-12 in San Antonio. Learn more and register.

Monthly Webinars

- May 8: Building a Culture of Respect to Improve Patient Safety, Medical Team Performance and Patient and Staff Satisfaction
- Register for our free webinar

2019 AHA Team Training National Conference

June 12-14 ✪ San Antonio aha.org/teamtraining



- Pre-conference workshops
  - TeamSTEPPS Next Steps June 11-12
  - Master Training Course June 11-12
  - 4-hour sessions on June 12
    - Driving Change - The Power of Activating and Engaging the Frontline Voice
    - Fostering Resilience to Cultivate Change
    - Lights - Cameras - Activities: TeamSTEPPS via Active and Immersive Learning
- Learn more and register

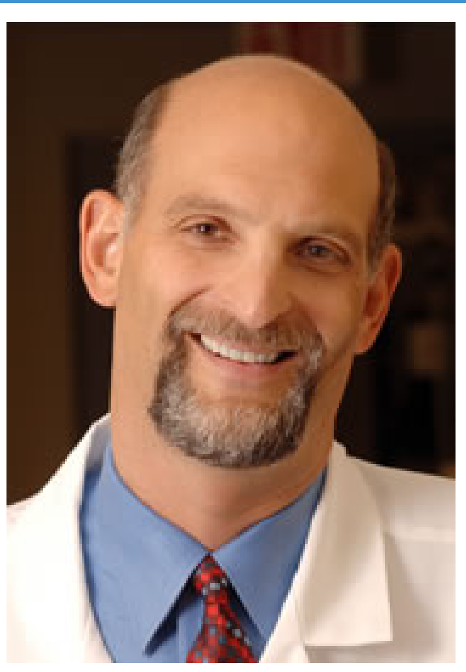
CONTACT INFORMATION

Web: www.aha.org/teamtraining

Email: TeamTraining@aha.org

Phone: 312-422-2609

TODAY'S PRESENTER



David L Feldman, MD MBA CPE FAAPL FACS

Chief Medical Officer & Senior Vice-President
Hospitals Insurance Company/FOJP

WEBINAR OBJECTIVES

- Understand the role of respectfulness in creating a safety culture
- Identify advanced techniques that can be used to improve teamwork
- Recognize how human factors engineering can be applied to reduce adverse events
- Understand how principles of Just Culture can be used to promote a culture of safety

AGENDA

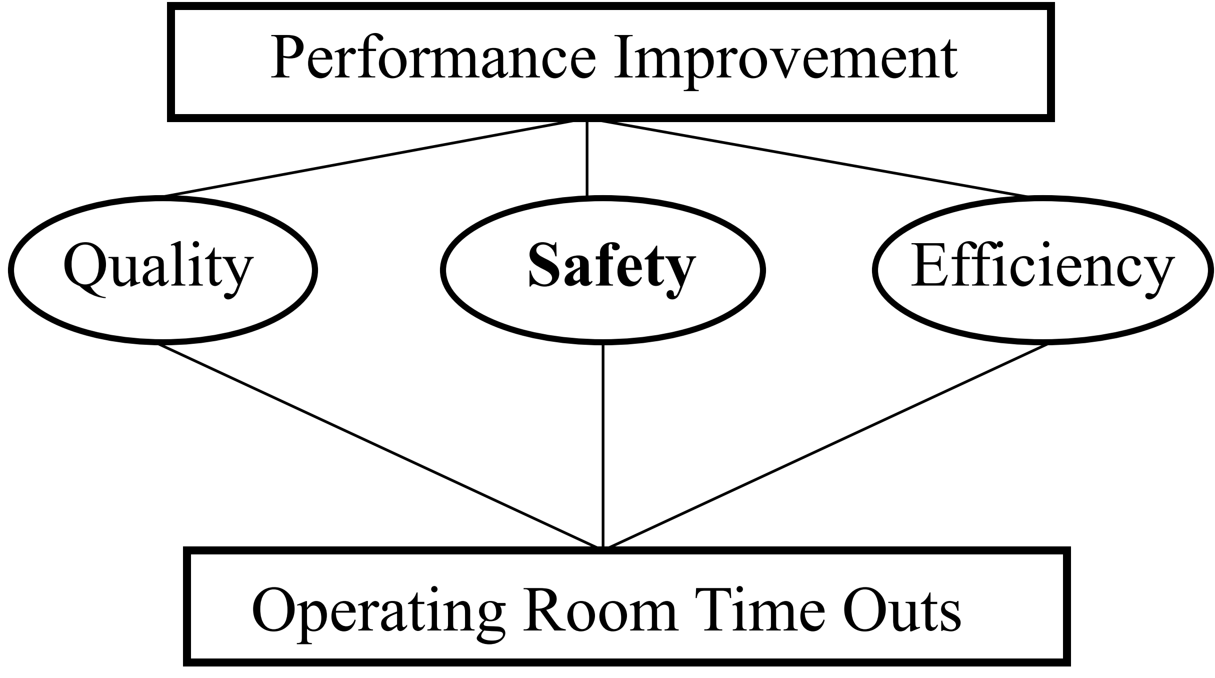
- Background - Respect
- Reliable teams
  - TeamSTEPPS
  - Time-outs & Checklists
  - Advanced teamwork tools
- Reliable processes
  - System Design
  - Human factors
- Just Culture
  - Reporting and accountability

MOST FREQUENTLY REVIEWED SENTINEL EVENTS BY YEAR

2011	2012	2013	2014	2015	2016	2017
Retained surgical item	Retained surgical item	Delay in treatment	Retained Surgical item	Wrong Surgery	Retained Surgical Item	Retained surgical item
Wrong Surgery	Wrong Surgery	Wrong Surgery	Fall	Retained Surgical Item	Wrong Surgery	Fall
Delay in treatment	Delay in treatment	Retained Surgical item	Suicide	Suicide	Fall	Wrong Surgery
Op/Postop complication	Suicide	Suicide	Other unanticipated event	Fall	Suicide	Suicide
Suicide	Op/Postop complication	Fall	Delay in treatment	Delay in treatment	Delay in treatment	Delay in treatment
Fall	Fall	Other unanticipated event	Wrong Surgery	Op/Postop Complication	Other unanticipated event	Other unanticipated event
Other unanticipated event	Other unanticipated event	Op/Postop Complication	Op/Postop Complication	Other unanticipated event	Op/Postop Complication	Criminal event
Criminal event	Criminal event	Criminal event	Criminal event	Criminal event	Medication Error	Medication error
Medication error	Medication error	Medication error	Perinatal death/injury	Perinatal death/injury	Criminal event	Op/Postop complication
Medical equipment related	Perinatal death/injury	Perinatal death/injury	Medication Error	Medication Error	Perinatal death/injury	Self-inflicted injury

From The Joint Commission
Summary Data of Sentinel Events 1995 through 2017, 2018

QUALITY V. SAFETY V. EFFICIENCY



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PATIENT SAFETY & RESPECT

"...the key success factors in a safety effort are teamwork and respect, two basic ideas that are too often lacking in medicine. People have to be trained to work in teams and to respect others on the team."

Interview with Lucian Leape, MD. *Journal of Healthcare Management*. Volume 53, Number 2. March/April 2008.

AUDIENCE POLLING QUESTION

Question:

I have been treated disrespectfully at work in the last week

Answer choices:

Yes

No

AUDIENCE POLLING QUESTION

Question:

I have seen others being treated disrespectfully at work in the last week

Answer choices:

Yes

No

NHS STUDY OF RDA – 2013-2015

N=606

(a)

Frequency	%
Daily	9
Few times per week	22
Few times per month	28
Few times per year	34
Never	7
DNA	0

Specialty	%
Mean of all other specialties name (total 27)	1
Cardiology	17
Neurosurgeons	18
General surgery and surgical specialties	20
Radiology	27

“One of my registrars rang…to get a [specialty] opinion at 4 o’clock in the morning and spent 10 minutes listening to the [specialty] registrar telling her that she was, um, sorry excuse my language: ‘ f***ing useless, and was a f***ing waste of space. What are you doing ringing me at this f***ing time in the morning?’”

Bradley, *Clin Med*, 2015, 541-545.

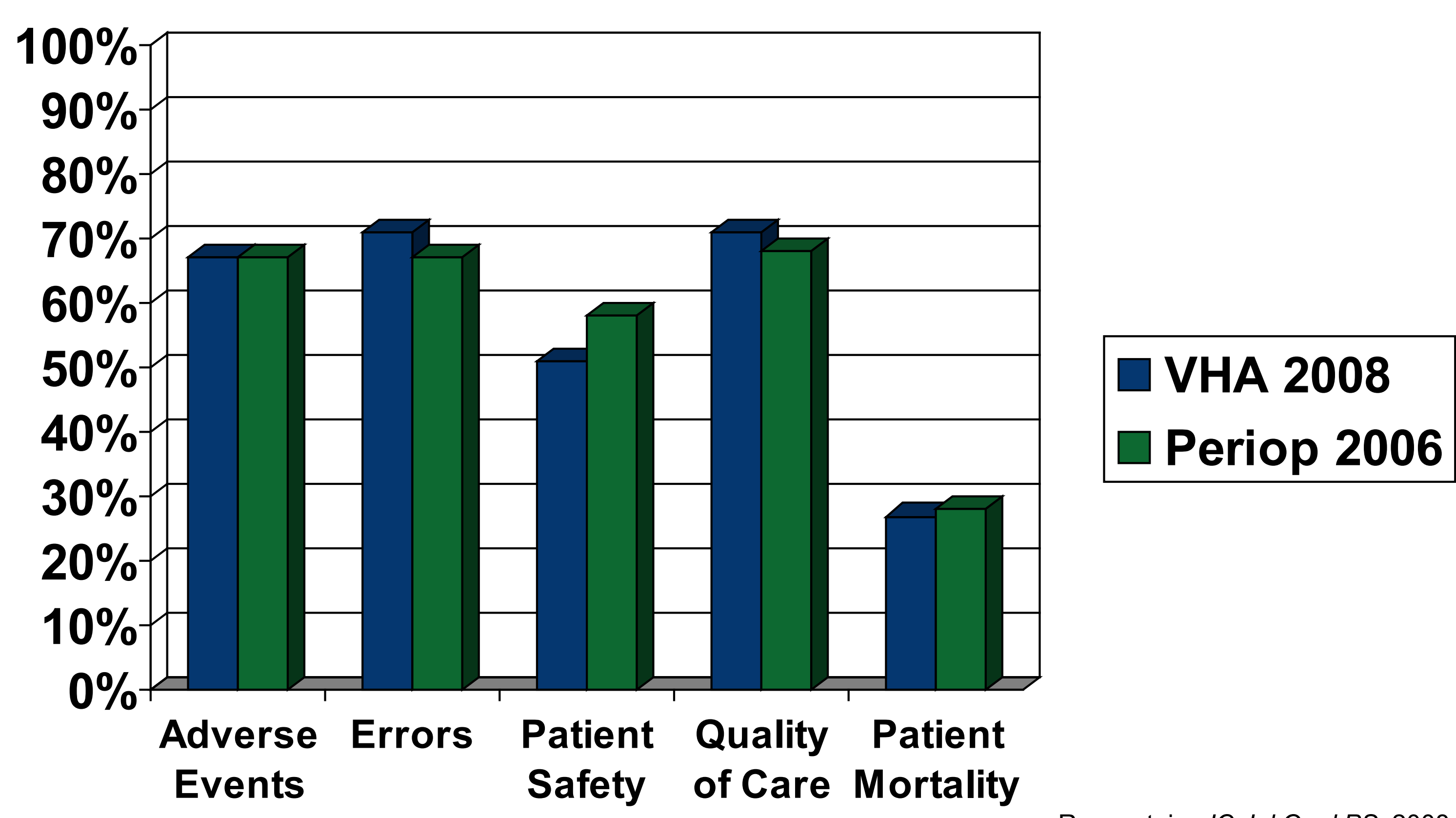
RANGE OF DISRESPECTFUL BEHAVIOR

- Disruptive behavior
- Humiliating, demeaning treatment of nurses, residents, and students
- Passive-aggressive behavior
- Passive disrespect
- Dismissive treatment of patients
- Systemic disrespect

Leape, *Acad Med*, 2012, 845-852.

DISRUPTIVE BEHAVIOR & ADVERSE EVENTS

How often do you think there is a link between disruptive behavior and the following clinical outcomes at your hospital?



Rosenstein, *JC Jnl Qual PS,* 2008, 464-471.
Rosenstein, *JACS*, 2006, 96-105.

CHARACTERISTICS OF EFFECTIVE DISRESPECTFUL BEHAVIOR POLICIES

- Fairness
- Consistency
- Graded response
- Restorative process
- Surveillance mechanisms

Leape, *Acad Med*, 2012, 853-858.

VANDERBILT UNIVERSITY MEDICAL CENTER
CENTER FOR PATIENT AND PROFESSIONAL ADVOCACY

- Professional Conduct Policy
- Training for faculty in
  - Commitment to *Credo behaviors*
  - Feedback to students & residents
  - Behavior policy
- Patient Advocacy Reporting System (PARS℠)
  - Patient Complaint Monitoring Committee

VANDERBILT UNIVERSITY MEDICAL CENTER

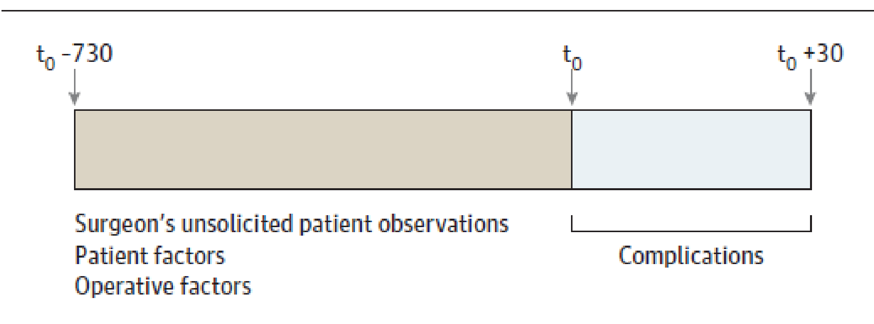
Four graduated interventions

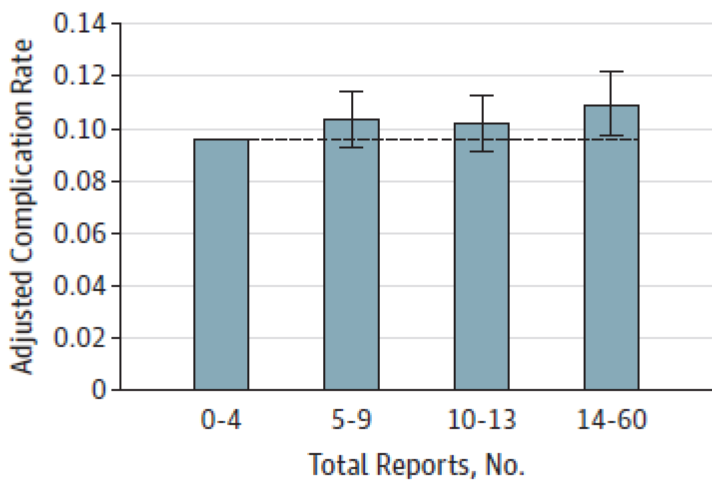
- Informal conversations for single incidents
- Nonpunitive “awareness” interventions when data reveal patterns
- Leader-developed action plans if patterns persist
- Imposition of disciplinary processes if the plans fail

PATIENT COMPLAINTS & OUTCOMES

PARS & NSQIP data from Emory, Stanford, UCLA, UNC, UPenn, Wake, Vanderbilt

"I asked Dr. Y how long he thought the operation would take. He said, 'Look, your wife will die without this procedure. If you want to ask questions instead of allowing me to do my job, I can just go home and not do it.'"





Patients whose surgeons have large numbers of unsolicited patient observations in the 24 months prior to the patient's operation are at increased risk of surgical and medical complications.

Cooper, *JAMA Surgery*, 2017, 522-529.

VANDERBILT UNIVERSITY MEDICAL CENTER
CENTER FOR PATIENT AND PROFESSIONAL ADVOCACY

Domain Codes	Domain Subcategories	Prevalence
Competent Medical Care		
	Poor or unsafe care	26
	Scope of Practice	1
	Impairment	1
Clear & Respectful Communication		
	Disrespectful/offensive	60
	Poor	15
	Aggressive/physically intimidating	3

Martinez, et.al., *Jnl Pat Saf*, 2018, 1-7.

VANDERBILT UNIVERSITY MEDICAL CENTER
CENTER FOR PATIENT AND PROFESSIONAL ADVOCACY

Domain Codes	Domain Subcategories	Prevalence
Responsibility		
	Access/availability	20
	Failure/reluctance/refusal to complete role-related tasks	15
	Failure to accept feedback	3
Integrity		
	Violation of stated organizational values	12
	Breach of patient/family confidentiality	4
	Conflict of interests	1
	False documentation	1

Martinez, et.al., *Jnl Pat Saf*, 2018, 1-7.

MAIMONIDES MEDICAL CENTER

- Code of Mutual Respect (https://www.maimonidesmed.org/about-us/core-principles/code-of-mutual-respect)
  - Clear expectations of respectful behavior that applies equally to everyone
  - Recognition of and mechanisms to address systems issues that cause frustrations
  - Investigations conducted by unbiased peers from other departments
  - Progressive discipline that is similar in concept for physicians and other employees
- Skills training program
- Mediated conversations
- Respect survey

Kaplan, *AORN J*, 2010, 495-510.

MAIMONIDES MEDICAL CENTER
RESPECT SURVEY RESULTS – PERIOPERATIVE SVC

100
90
80
70
60
50
40
30
20
10
0

Clear understanding
Positively enhance
Physicians & Staff same standard
Leaders
I speak up
I'm treated with respect by others
I treat others with respect

2005
2006
2007
2008

Kaplan, *AORN J*, 2010, 495-510.

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AUDIENCE POLLING QUESTION

Question:

An effective team should have:

Answer choices:

The same people working together for each task

Team members with similar backgrounds and training

A chance to practice before the “real thing”

Members that hold a shared mental model

WHAT IS A TEAM?

- Two or more people who achieve a mutual goal through *interdependent* and *adaptive* actions
- Not a "group" which achieves its goal through *independent, individual* contributions

Going from a team of experts to……

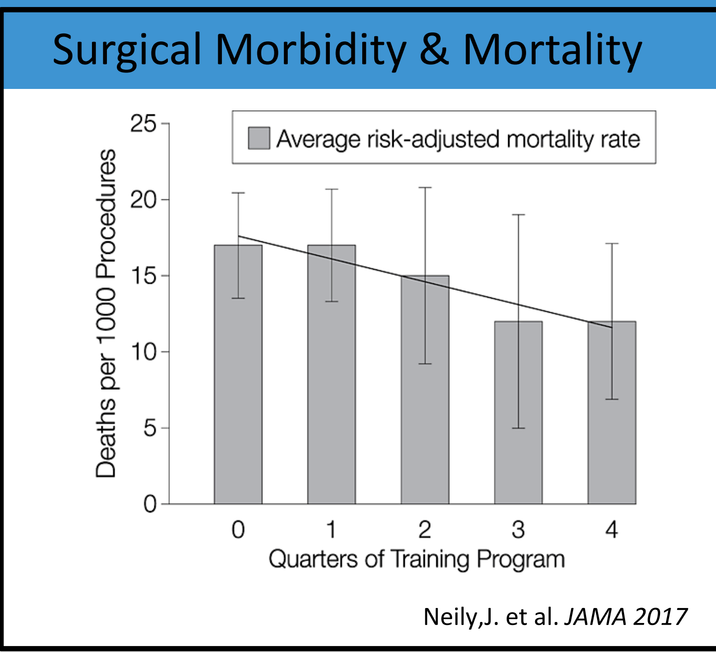
An expert team!

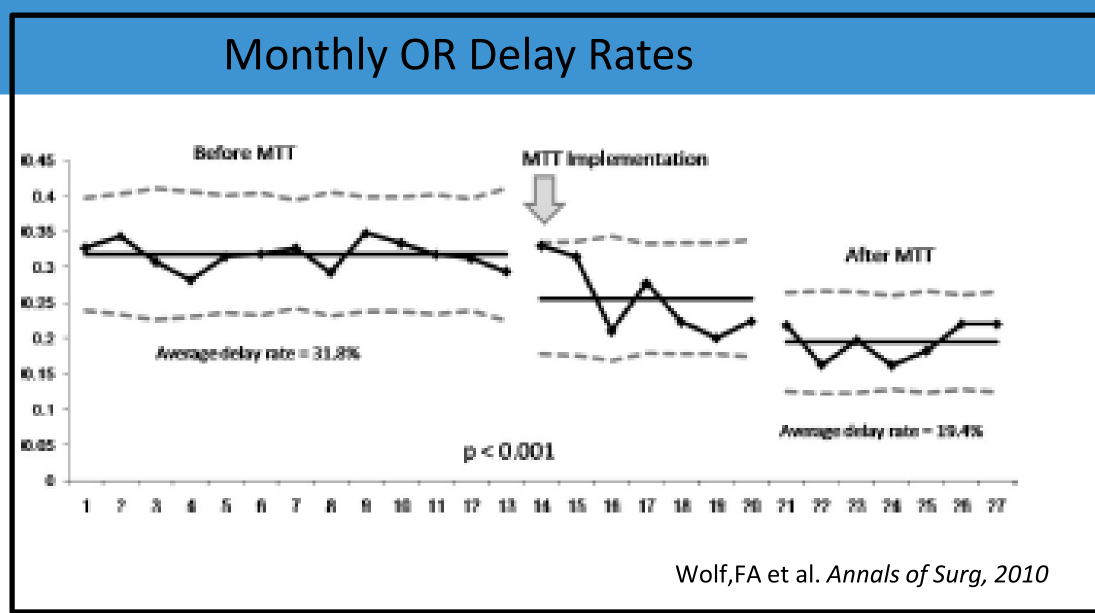
TEAMSTEPPS

Team
Strategies & Tools to Enhance Performance & Patient Safety

"Initiative based on evidence derived from team performance…leveraging more than 25 years of research in military, aviation, nuclear power, business and industry…to acquire team competencies"

TEAMSTEPPS BENEFITS





Improvement in OB Outcomes

	Pre	Post	% change
Deliveries	14,271	19,380	
Adverse Outcome Index	5.9%	4.6%	-23%
Weighted Adverse Outcome Score	1.15	.782	-33.2%
Severity Index	19.59	17	-13.2%

Pratt, S. et al. *Jt Comm Jnl Saf & Qual 2007*

TEAMWORK – STILL A PROBLEM

The NEW ENGLAND JOURNAL of MEDICINE

MEDICINE AND SOCIETY

TEAMWORK — PART 1
Debra Malina, Ph.D., *Editor*

Divided We Fall

The NEW ENGLAND JOURNAL of MEDICINE

MEDICINE AND SOCIETY

TEAMWORK — PART 2
Debra Malina, Ph.D., *Editor*

Cursed by Knowledge — Building a Culture of Psychological Safety

The NEW ENGLAND JOURNAL of MEDICINE

MEDICINE AND SOCIETY

TEAMWORK — PART 3
Debra Malina, Ph.D., *Editor*

The Not-My-Problem Problem

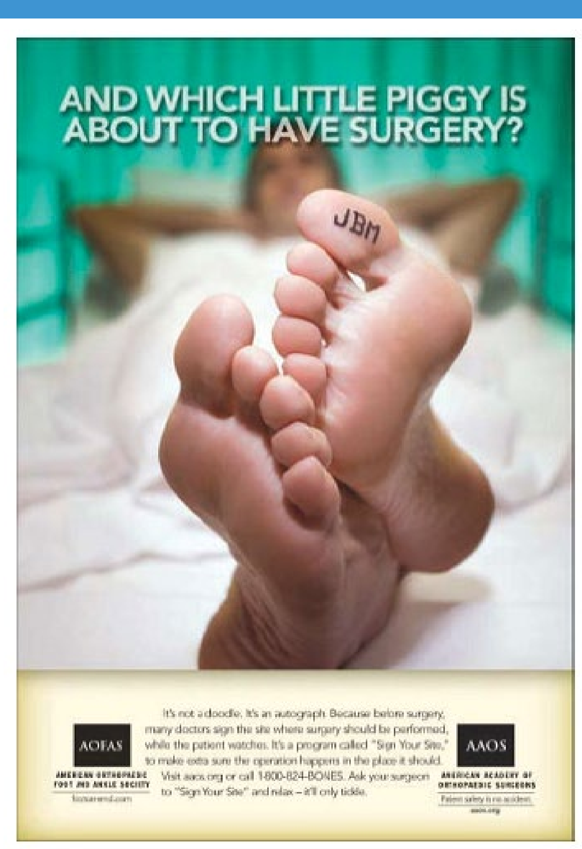
Lisa Rosenbaum, M.D.

Rosenbaum, *NEJM*, 2019.

THE JOINT COMMISSION UNIVERSAL PROTOCOL

BEST PRACTICES

- Pre-procedure verification process
  - A conversation between Attending Anesthesiologist and Attending Surgeon
- Site Marking
  - Surgeon marking site, must be present for time-out and perform procedure
- Time-Out
  - Immediately prior to incision
  - Best practice requires:
    - Attending Surgeon
    - Attending Anesthesiologist
    - Circulating RN



WHO SURGICAL CHECKLIST - 2009
"SAFE SURGERY SAVES LIVES"

World Health Organization

SURGICAL SAFETY CHECKLIST (FIRST EDITION)

Before induction of anaesthesia ▸▸▸ SIGN IN

- ☐ PATIENT HAS CONFIRMED
  - IDENTITY
  - SITE
  - PROCEDURE
  - CONSENT
- ☐ SITE MARKED/NOT APPLICABLE
- ☐ ANAESTHESIA SAFETY CHECK COMPLETED
- ☐ PULSE OXIMETER ON PATIENT AND FUNCTIONING

DOES PATIENT HAVE A:

KNOWN ALLERGY?
- ☐ NO
- ☐ YES

DIFFICULT AIRWAY/ASPIRATION RISK?
- ☐ NO
- ☐ YES, AND EQUIPMENT/ASSISTANCE AVAILABLE

RISK OF >500ML BLOOD LOSS (7ML/KG IN CHILDREN)?
- ☐ NO
- ☐ YES, AND ADEQUATE INTRAVENOUS ACCESS AND FLUIDS PLANNED

Before skin incision ▸▸▸ TIME OUT

- ☐ CONFIRM ALL TEAM MEMBERS HAVE INTRODUCED THEMSELVES BY NAME AND ROLE
- ☐ SURGEON, ANAESTHESIA PROFESSIONAL AND NURSE VERBALLY CONFIRM
  - PATIENT
  - SITE
  - PROCEDURE

ANTICIPATED CRITICAL EVENTS
- ☐ SURGEON REVIEWS: WHAT ARE THE CRITICAL OR UNEXPECTED STEPS, OPERATIVE DURATION, ANTICIPATED BLOOD LOSS?
- ☐ ANAESTHESIA TEAM REVIEWS: ARE THERE ANY PATIENT-SPECIFIC CONCERNS?
- ☐ NURSING TEAM REVIEWS: HAS STERILITY (INCLUDING INDICATOR RESULTS) BEEN CONFIRMED? ARE THERE EQUIPMENT ISSUES OR ANY CONCERNS?

HAS ANTIBIOTIC PROPHYLAXIS BEEN GIVEN WITHIN THE LAST 60 MINUTES?
- ☐ YES
- ☐ NOT APPLICABLE

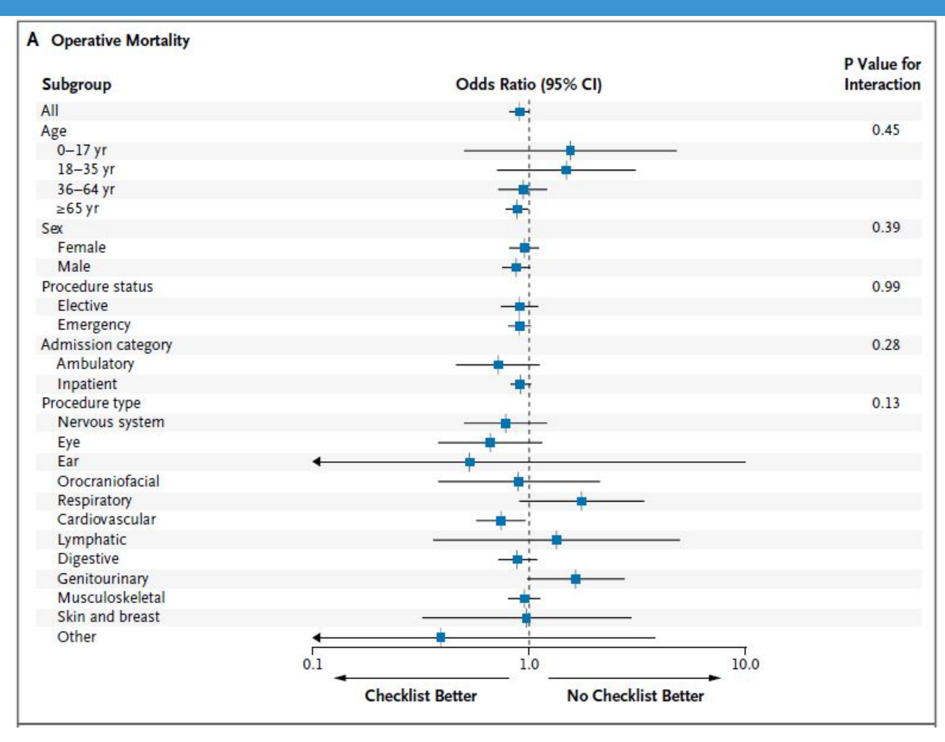
IS ESSENTIAL IMAGING DISPLAYED?
- ☐ YES
- ☐ NOT APPLICABLE

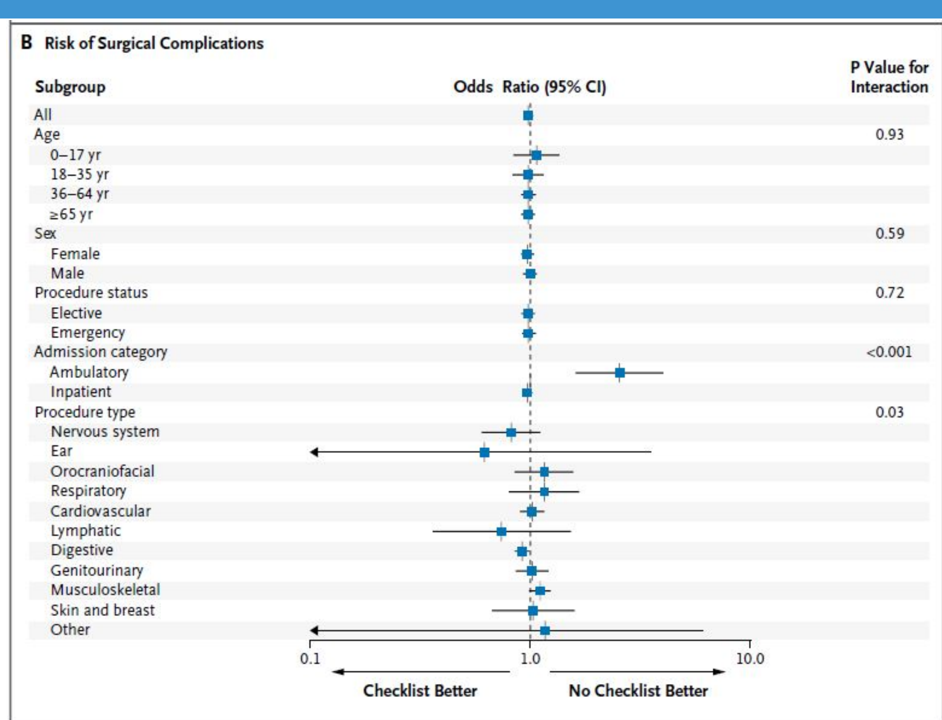
Before patient leaves operating room — SIGN OUT

NURSE VERBALLY CONFIRMS WITH THE TEAM:
- ☐ THE NAME OF THE PROCEDURE RECORDED
- ☐ THAT INSTRUMENT, SPONGE AND NEEDLE COUNTS ARE CORRECT (OR NOT APPLICABLE)
- ☐ HOW THE SPECIMEN IS LABELLED (INCLUDING PATIENT NAME)
- ☐ WHETHER THERE ARE ANY EQUIPMENT PROBLEMS TO BE ADDRESSED
- ☐ SURGEON, ANAESTHESIA PROFESSIONAL AND NURSE REVIEW THE KEY CONCERNS FOR RECOVERY AND MANAGEMENT OF THIS PATIENT

THIS CHECKLIST IS NOT INTENDED TO BE COMPREHENSIVE. ADDITIONS AND MODIFICATIONS TO FIT LOCAL PRACTICE ARE ENCOURAGED.

CHECKLISTS IN A VACUUM





Urbach, *NEJM* 2014, 1029-1038.

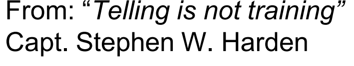
"Ninety-two of the 101 study hospitals provided copies of their checklist; of these, 90% used an unmodified World Health Organization (WHO) or Canadian Patient Safety Institute checklist. Educational materials were made available to hospitals, but no team training or other support was provided."

Leape, *NEJM* 2014, 1063-1064.

TELLING IS NOT TRAINING

Training requires four steps:

- Provide information
- Demonstrate how to apply the information
- Provide the learner an opportunity to practice
- Provide feedback relative to a standard



TIME OUT/SIGN OUT OBSERVATION

Customized observation tool

Developed by 25-30 surgeons, anesthesiologists and nurses

Time Out & Sign Out as proxies for teamwork events

Database collection of observations - Checkbox

Training of observers/ Install video cameras

Feedback to surgical teams

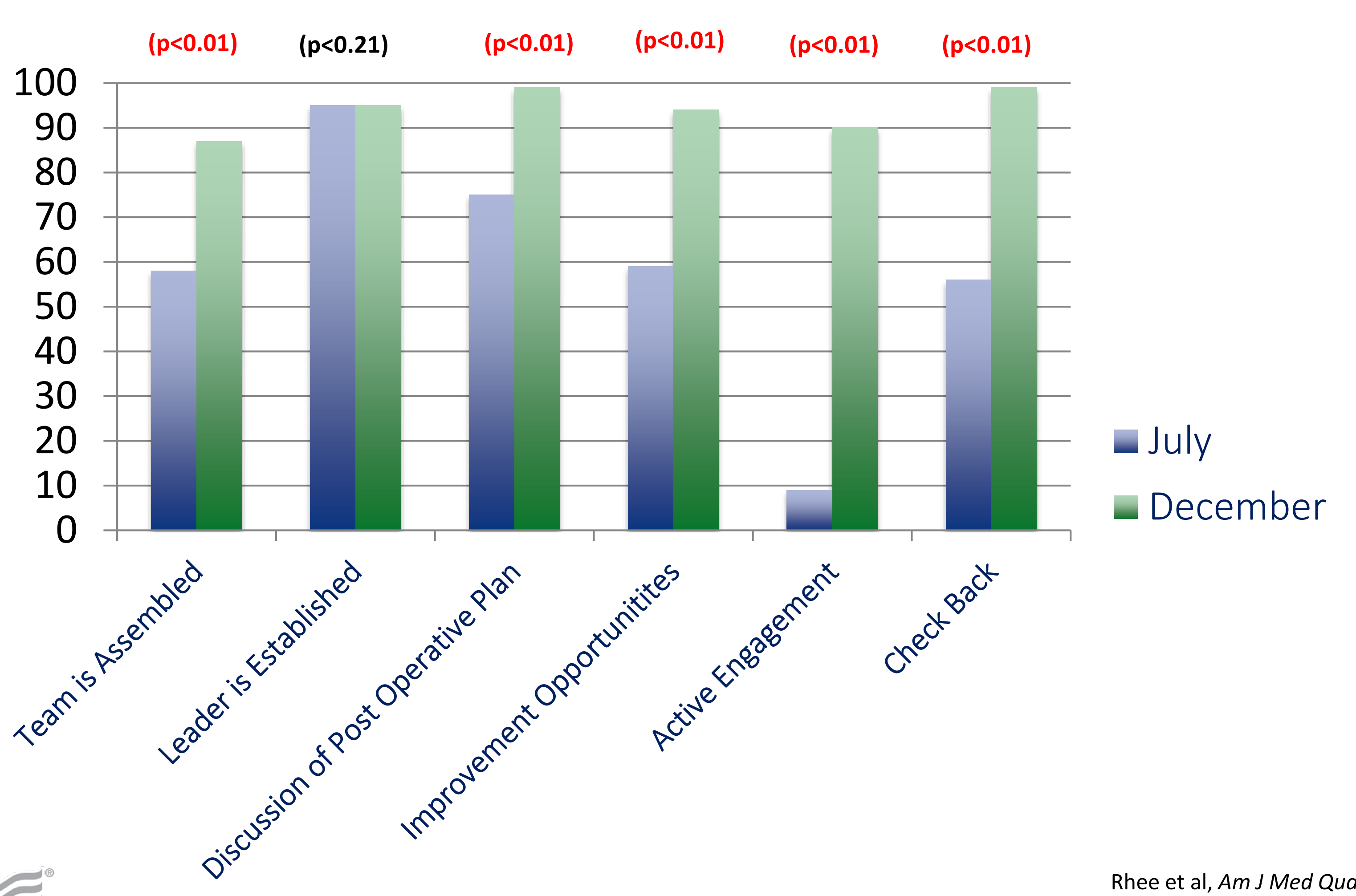
Video vs. live observation

	Total #	Live	Video	P value
Time Out	1410	325	1085	
Compliance		30.5%	15.3%	<.001
Sign Out	1398	166	1232	
Compliance		28.3%	21.8%	.075

AHA Team Training

Bui et al, Surgery, 2018

TIME OUT AUDIT PERFORMANCE



Rhee et al, *Am J Med Qual*, 2017

AHA Education | AHA Team Training

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INTERFACES AFFECT WORKFLOW EFFICIENCY

Worse

Improved

LABELS - FONTS, COLORS, CONTRAST

Worse

Improved

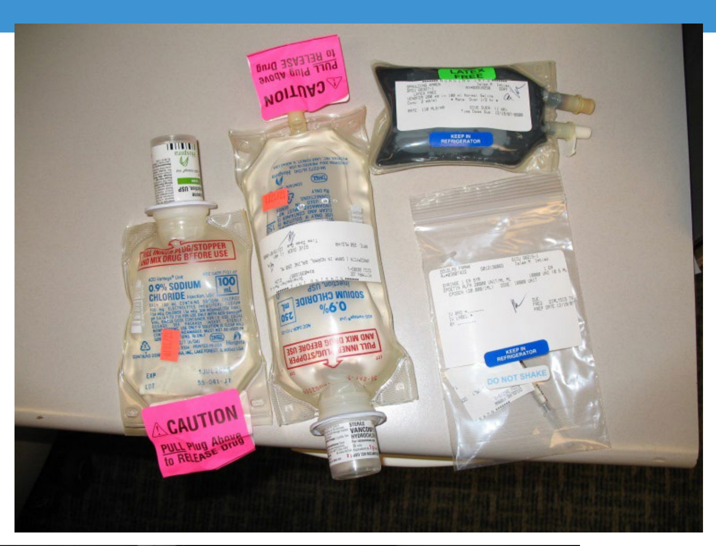
EPInephrine kit

***Prefilled* EPInephrine 1 mg/10 mL syringes currently UNAVAILABLE**

Directions:

1. **Draw up 1mg/1mL EPInephrine from ampule with filter needle.**
2. **FLUSH with 10mL normal saline after administration.**

CAUTION: LABEL FATIGUE



VISUAL CONTROLS - CLOSE TO HOME

Which dial turns on the burner?

Stove B

Stove A

VISUAL CONTROLS IN THE OR

5S Anesthesia "Shadow Board" - Before

5S Anesthesia Shadow Board - After

HUMAN FACTORS ENGINEERING

Radiofrequency

Bar Coding

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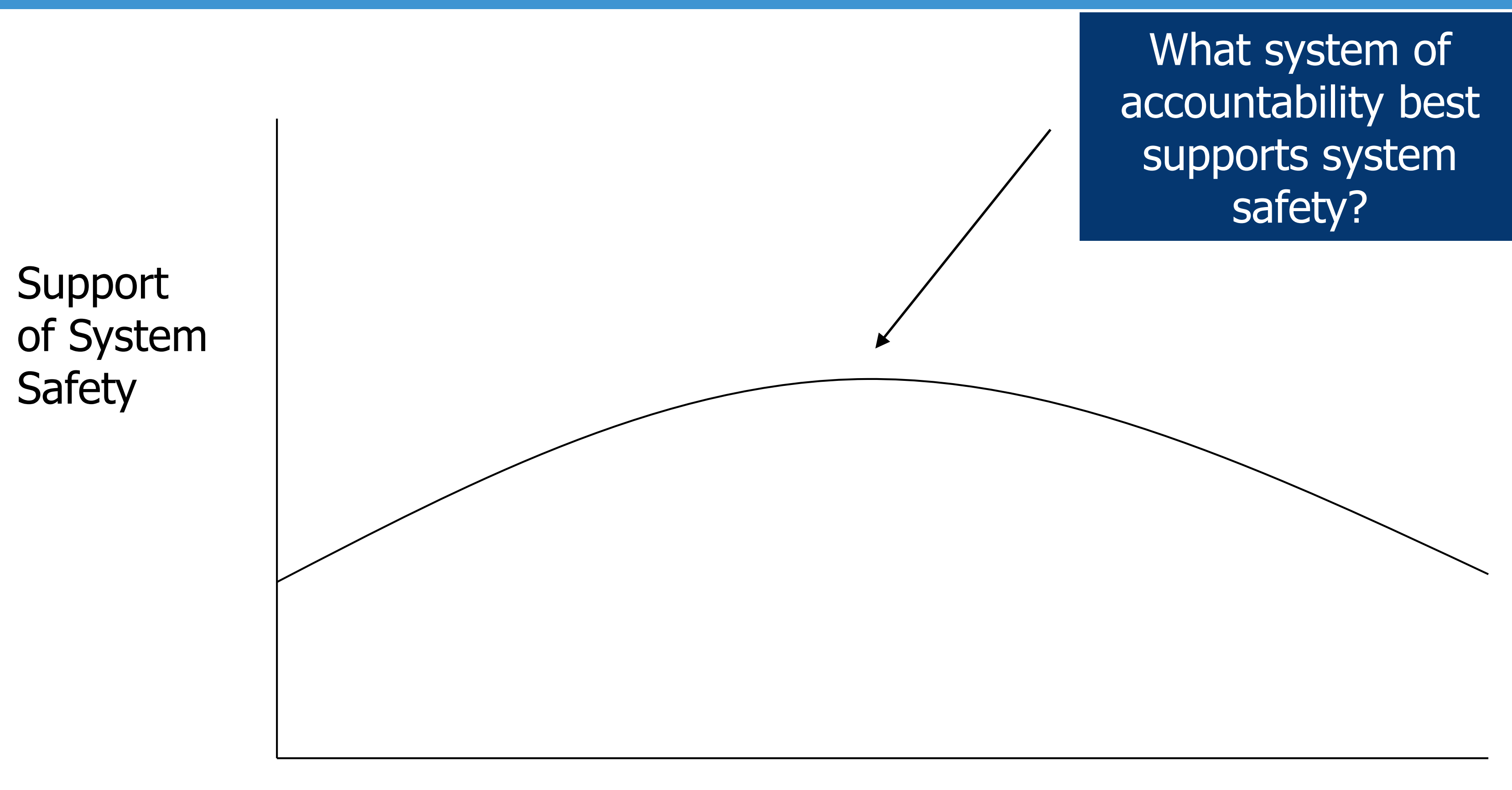
WHAT IS A JUST CULTURE?



ACCOUNTABILITY FOR OUR BEHAVIORS

Human Error	***At-Risk Behavior***	***Reckless Behavior***
Manage through changes in: ✶ Processes ✶ Procedures ✶ Training ✶ Design ✶ Environment	Manage through: ✶ Removing incentives ✶ Creating incentive for healthy behavior ✶ Increasing situational awareness	Manage through: ✶ Remedial action ✶ Disciplinary action
Console	**Coach**	**Punish**

SCENARIO

A surgery resident accidently contaminates an instrument in the OR. No one notices. The instrument is critical to the procedure and the resident knows if the instrument has to be re-sterilized it will delay the procedure by at least 20 minutes to either re-sterilize, or call for a replacement. Knowing the attending surgeon has a history of being abusive to residents, the resident says nothing.

AUDIENCE POLLING QUESTION

Question:

Do you think this was:

Answer choices:

Human Error - Console

At-Risk Behavior - Coach

Reckless Behavior - Punish

JUST CULTURE

"Just Culture" Decision Tree

START HERE

Was the job understood?
- *No → Pass substitution test?
- Yes ↓

Were the actions as intended?
- No → Knowingly violating procedures?
- Yes ↓

Were the results as intended?
- No → Knowingly violating procedures?
- Yes ↓

Sabotage or Malevolent Act

Knowingly violating procedures?
- *No → Pass substitution test?
- Yes ↓

Were procedures clear and workable?
- *No → Pass substitution test?
- Yes ↓

Reckless Violation

Pass substitution test?
- *Yes → History of violating procedures?
- No ↓

Defective Training or Selection Experience?
- No ↓

Negligent error

History of violating procedures?
- *Yes ↓ Repeated Incidents with Similar Root Causes?
- No ↓ No Blame Error

Repeated Incidents with Similar Root Causes?
- ↓ QA Check

Diminishing Individual Culpability →

Severe Sanctions	Final Warning and Negative Performance Evaluation	First Written Warning + Coaching + Greater Supervision	Console if Necessary + Provide Training + Document to Track and Increase Awareness

*Indicates a Systems Error: Corrective and Preventive Action is Required

Adapted from The Just Culture Community (2016)

David, *J Pat Saf*, 2019

JUST CULTURE

"Tragedy followed by injustice, once again."

David Marx on

Reckless Homicide at Vanderbilt?

A JUST CULTURE ANALYSIS

OUTCOME ENGENUITY

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QUESTIONS?

- Stay in touch! Email teamtraining@aha.org or visit www.aha.org/teamtraining